THE WHITE HOUSE

WASHINGTON

January 13, 1993

Dear Mario:

I just want to thank you for your very kind letter of December 23.

Having the opportunity to serve our nation during what I think was a remarkable time of change in the world has been a great privilege for me. Your generous comments about my efforts during those years of public service are deeply appreciated.

I've enjoyed the occasions we've had to work together on various issues, Mario, and I hope that our paths will continue to cross.

With appreciation and warm regards,

Sincerely,

James A. Baker, III
Chief of Staff and
Senior Counselor to the President

Mario G. Obledo
Leauge of United
Latin American Citizens
Post Office Box 1026
Sacramento, CA 95812

all the best
to you + yours.

THE WHITE HOUSE

WASHINGTON

January 13, 1993

Dear Pascale:

The letter that you recently sent to me certainly brightened my day.

It is good to know that students like you are concerned about current issues and the events that touch the lives of people all around the world. I hope you will continue your good work in school and let's both continue to do what we can to contribute to a world at peace.

Thank you for your kind and thoughtful message.

With best regards,

Sincerely,

Jim Baker

James A. Baker, III
Chief of Staff and
Senior Counselor to the President

Miss Pascale Nicolas
48 Sunset Drive
Hempstead, New York 11550

bcc: David Paton

Dear: Mr. Secretary of State James Baker

I think it was an excellent idea to send the troops to Somalia. Now the people over their can eat. I alway's go to bed at night and pray that one day I will wake up to world peace, a cure for AIDS, and a cure for Cancer. I go to school at St. Thomas The Apostle and I'm in the 7th grade. My class collected books for the children in Florida who were victims of hurricane Andrew. We sent them books as Christmas presents. I hope you and your family had a wonderful Thanksgiving, we had a great one! I wish you and your family a wondeful Christmas, I'm going to Haiti for Christmas, are you going anywhere? Bye!

Increase the Peace!

P.S. write back!

my address is: 48 Sunset Dr.
Hempstead N.Y. 11550

Peace,
Pascale Nicolas

Central Files

THE WHITE HOUSE

WASHINGTON

January 13, 1993

Dear Gemal:

I was very touched by your kind and gracious letter of December 21. Your generous comments about my tenure as Secretary of State are deeply appreciated.

Gemal, I also want to thank you for your outstanding service to me, to the Department, and to the nation. From my meeting in Geneva with Tariq Aziz to our marathons with President Assad, your interpretation skills were invaluable to our efforts to promote peace in the Middle East. I have enjoyed working with you very much.

Thank you again for your thoughtful letter. Susan joins me in wishing you and yours a happy and prosperous New Year.

Sincerely,

Jim Baker

James A. Baker, III
Chief of Staff and
Senior Counselor to the President

Gemal R. Helal
A/OPR/LS -- Room 2212
Department of State
Washington, D.C. 20520

James A. Baker III
Chief of Staff
The White House

December 21, 1992

Dear Mr. Secretary,

Almost two years ago, I first had the privelege of meeting you and serving as your Arabic interpreter at the decisive meeting with Tariq Aziz in Geneva, and to continue in that capacity ever since.

In the intervening time I have had the rare honor to observe close at hand how you restored in the hearts and minds of the Arab people and their leaders their long-lost faith and trust in the United States. Many in the region had thought only a miracle could accomplish this feat. Over the last two years, Mr. Secretary, I was a witness to your crafting of this miracle. The Arabic press and people, from kings to the common man have come to appreciate your intellect, sincerity, and integrity.

I grew up in the Middle East (Egypt), where the Arab-Israeli conflict was a fact of daily life embedded in the minds of the young. You were able to persuade centuries old mentalities, to defy precedent and change their frame of reference for conflict resolution. Thus you have written a fresh chapter in the history of the region, engendering new expectations of peace for generations to come. Your efforts allowed logic to prevail in a region where emotions often predominate. It has been a privelege to serve as the interpreter of your words and thoughts, thus permitting me to learn the art of negotiation from one of its masters.

Mr. Secretary, you will be missed, but history will always record your deeds and accomplishments. Thank you for giving me the opportunity to work with you. I wish you the best of luck in your future endeavors, and may God bless you and yours this Christmas.

Sincerely,

Gamal R. Helal

Gamal R Helal.
A/OPR/LS
Room 2212
U.S.DEPARTMENT OF STATE
WASHINGTON D.C. 20520

THE WHITE HOUSE

WASHINGTON

January 13, 1993

Dear Neal:

Your letter of January 7 was very generous and I appreciate your gracious comments about my government service more than I can tell you.

Neal, I share your commitment to public service and your belief that it's important to do what you can to make this world a better place. I'm grateful for the opportunities I've had to serve our country these past twelve years -- and I'm grateful for fine friends like you.

Many thanks again for the kind words -- and all the best.

Sincerely,

Jim

James A. Baker, III
Chief of Staff and
Senior Counselor to the President

The Honorable Neal Smith
U.S. House of Representatives
Washington, D.C. 20515

Congress of the United States
House of Representatives
Washington, D. C. 20515

Neal Smith
Fourth District, Iowa

January 7, 1993

Honorable James A. Baker III
The White House
West Wing, 1st Floor
Washington, D.C. 20500

Dear Mr. Secretary:

I join the many thousands who thank you and the millions who should be thanking you for the great contributions you have made the past four years toward establishing a more stable and peaceful world. Although there are still great problems in world affairs, at least they are more localized and involve a much reduced threat of mass destruction.

Your skillful work involving the United Nations in both military and humanitarian activities has gone a long way toward restoring faith that the U.N. will eventually become the effective instrument that was intended for collective action.

You could have spent the past four years in a more enjoyable and financially rewarding way, but it is much more important to know that you have made the

kinds of contributions to our country and mankind that few people have ever had an opportunity to make and even fewer succeeded in accomplishing.

Thanking you for your courtesies and with very best wishes always, I remain

Sincerely,

Neal Smith

Neal Smith
Member of Congress

THE WHITE HOUSE

WASHINGTON

January 13, 1993

Dear David:

This is just a short note to thank you for the photographs you sent from election night and from my first day on the job at the Treasury Department.

Please don't worry about the photograph that Newsweek used -- I realize that you did not intend to see it run that way and as you may know Newsweek subsequently sent me a written apology about it.

I appreciate your thoughtfulness and wish you and yours all the best in 1993.

Sincerely,

Jim Baker

James A. Baker, III
Chief of Staff and
Senior Counselor to the President

Mr. David Woo
The Dallas Morning News
Communications Center
Post Office Box 655237
Dallas, Texas 75265

THE WHITE HOUSE

WASHINGTON

January 13, 1993

Dear Van:

This is just a word of thanks for your December 28 note and for your generous comments regarding my government service.

Many thanks also for your thoughtfulness in sending me a copy of your book -- which I will read with great interest.

Best wishes to you and yours for a happy and prosperous 1993.

Sincerely,

James A. Baker, III
Chief of Staff and
Senior Counselor to the President

William Van Dusen Wishard
1805 Wainwright Drive
Reston, Virginia 22090

THE WHITE HOUSE

WASHINGTON

January 13, 1993

Dear Bill:

Thanks very much for your gracious and thoughtful letter.

I share your view about the dramatic changes the world has witnessed during the past few years. There's no doubt that we were presented with remarkable challenges, but each challenge was also an opportunity. I'll always be grateful to have served our nation during such a momentous time.

I really appreciate your generous comments about my record of public service, Bill. Susan joins me in sending you and Gretchen our warm regards,

Sincerely,

James A. Baker, III
Chief of Staff and
Senior Counselor to the President

William F. Gorog
U.S. Order
13873 Park Center Road
Suite 490
Herndon, Virginia 22071

Thanks, Bill, for your friendship.

THE WHITE HOUSE

WASHINGTON

January 13, 1993

Dear Peb:

Thanks very much for your thoughtful letter of January 5.

I'm grateful to have had the opportunity to serve our nation during what I think has been a rather remarkable time of change in the world. Your generous comments regarding my years of public service are deeply appreciated and I will certainly convey to Susan your kind words regarding her as well.

With appreciation for the work you are doing at Focus on the Family and with best regards,

Sincerely,

James A. Baker, III
Chief of Staff and
Senior Counselor to the President

Thanks, Peb.

Peb Jackson
Senior Vice President -- International
Focus on the Family
420 North Cascade Avenue
Colorado Springs, CO 80903

420 North Cascade Avenue • Colorado Springs, CO 80903 • (719) 531-3400

January 5, 1993

Mr. James A. Baker, III
2415 Foxhall Road
Washington, D.C. 20007

Dear Jim,

Have been thinking about you so much recently and felt led to write a note. Its obvious that the clock is running down on this phase of your life. And before January 20, I wanted to write a note to you to tell you how much I have admired the past twelve years of extraordinary service that you have given to this country and I believe, to God. Rarely have we had an opportunity to witness such quality in service that you, in this period of time, have represented. I for one hope that even though there may be some bitterness over the result over the last election, that you were able to take great consolation and satisfaction in what has occurred.

As you may know, a significant part of my attention has been directed in the past two years to the international scene. Its apparent that we have come through one of the most exciting and confusing times in recent world history. Nevertheless, I frankly felt that in a lot of ways there was a period of confidence in having your hands at the levers of influence. Some people have disagreed with some aspects of your tour as Secretary of State, but I believe that whether it was in Russia or even South Africa amidst an unbelievably complex series of events, that you had a grasp of what was going on, and performed at as high a standard as any mortal man could have. Therefore, in your own reflection over the past twelve years, and while you're out casting for some beautiful browns or rainbows in Wyoming among other things, I hope that you will have a powerful sense of satisfaction that you did your best. And many people who you don't even know that well, will say, "well done." In addition, if I may be so bold, I would like to say that

the reality of superlative small stuff as you contemplate God's own approval on what we do for Him and how there would be pure satisfaction in hearing Him say, "Well done thou good and faithful servant." I pray both of those statements will ring in your ears.

May I close by saying that it has been a pleasure to have known you mostly from a distance, but occasionally from up close, and I look forward to hearing about what the next adventure in your life is going to be.

Sincerely,

Peb

Peb Jackson
Sr. Vice President
International

PJ/tp
010-93-1

A big hello to Susan -
We sure miss her involvement
at Focus

THE WHITE HOUSE

WASHINGTON

January 13, 1993

Dear Michael:

Thanks very much for your thoughtful letter of December 29.

I'm grateful to have had the opportunity to serve our nation during what I think has been a rather remarkable time of change in the world. Your generous comments regarding my years of public service are deeply appreciated and I will certainly convey to my wife, Susan, your kind words regarding her efforts as well.

With best regards,

Sincerely,

Jim Baker

James A. Baker, III
Chief of Staff and
Senior Counselor to the President

Michael Marcoux
4615 Rodman Street, N.W.
Washington, D.C. 20016-3232

J. MICHEL MARCOUX
4615 RODMAN STREET, N.W.
WASHINGTON, D.C. 20016-3232

December 29, 1992

Dear Mr. and Mrs. Baker,

Bill Tully would call this a "mash" note.

Thank you both for your work in Washington to date. James Baker is the most effective and impressive public servant of this Country's domestic and foreign affairs I have seen. Mrs. Baker's efforts to reduce the pornography in our childrens' entertainments is thoroughly commendable.

I wish you, and the Presidents you served, the best in the future.

Yours sincerely,
Michel Marcoux

For Central Files

(Thanks, ya'll.)

csj

C. FILES

JMR INVESTMENTS

January 13, 1993

The Honorable James A. Baker
The White House
1600 Pennsylvania Avenue, N.W.
Washington, D.C. 20500

Dear Jim,

Please forgive my last minute advice, but I think it is a serious enough subject to bother you at this time. I sincerely believe that my following recommendation will help the Republican Party overall in 1996 and will help George Bush today. I am certain God will not forget that he spoke for the unborn.

Enclosed is some correspondence I received today from some friends of mine here in Nashville that urges President Bush to consider issuing a proclamation similar to Proclamation No. 5761 issued by President Reagan on January 14, 1988. The draft proclamation would affirm the "personhood" of the unborn and stop all federal funding of abortion. Such an action by the President may have the impact America 21 hopes it will, and my request is simply that he receive the information so he can evaluate the option. As you know, I feel very strongly about the issue and urge President Bush to issue the proclamation. It does draw a line in the sand. If Clinton does not cross it, the President will have left a significant legacy, and if he does, his true colors will be made very clear to a large segment of voters who did not really know where he stood on this issue.

Thank you very much for your consideration of my request.

Sincerely,

Joe M. Rodgers

JMR/krg

Enclosures

P. O. Box 158838 • Nashville, Tennessee 37215-8838
2000 Glen Echo Road • Suite 100 • Nashville, Tennessee 37215 • (615) 383-8600 • FAX (615) 383-8693

America 21

Family Values for the Twenty-First Century

January 12, 1993

CONFIDENTIAL

Honorable Joe M. Rodgers
P.O. Box 158838
2000 Glen Echo Road, Suite 100
Nashville, Tennessee 37215-8838

Re: A Presidential Proclamation Affirming The Personhood of the Unborn by President Bush

Dear Joe:

Enclosed is a "Proclamation Affirming Personhood" drafted by Tom Smith and Professor Michael C. McClintock for President Bush's signature before he leaves office in the next few days. It is substantially revised from the first similar proclamation you saw. It would affirm President Reagan's Proclamation No. 5761 and stop all federal funding of abortion. Its a long shot, but if issued, it would draw a line in the sand on the abortion issue for Clinton.

Technically, Clinton could revoke it, but out of respect for the office, very few, if any Presidents have revoked the acts of their predecessors. Further, Clinton's 42% popular vote that includes 20% or more evangelical Christians, might cause him to leave it in place; especially if its only impact is to cut off federal funds for abortion. There has been a consensus that there should be no federal funding of abortion because the American public is so divided on the issue. Pressure on Clinton and Congress to find every possible cut in the budget will help.

The Bush Proclamation might also be helpful in arguments to the U.S. Supreme Court in the Tennessee "7 Embryo Case" in a currently pending petition that the Court review the Tennessee Supreme Court decision. A response is expected in February. It might also serve as a preemptive strike in the pending battle over the Freedom of Choice Act and possibly the fetal research bill.

Marilyn Quayle has a copy sent to her through Frances Smith's connection with Marilyn's sister, Nancy Northcott in Tullahoma. Pat Robertson, Ricky Skaggs, and Wynonna Judd are also being contacted and asked to call either George Bush or Dan Quayle. Please prayerfully consider calling President Bush or Vice-President Quayle, fax them a copy and urge the President to issue it. Pray with us that he will.

Best Personal Regards and May God Speed Your Efforts.

Sincerely,

TLC/tbm

Thomas L. Cummings, Jr.

NATIONAL SANCTITY OF HUMAN LIFE DAY, 1993 ***DRAFT NO.2 1/12/93***

By the President of the United States of America

A PROCLAMATION AFFIRMING PERSONHOOD

In the Declaration of Independence, the founding fathers of America established this nation with God-given wisdom on the immutable principles of the laws of nature and nature's God. To the founders and their contemporaries, the meaning of these terms, together refered to as the Natural Law, were binding on every government. The laws of nature were those moral laws that not only held the universe together but also were written on the hearts of every man regardless of whether they were men of great faith or had no faith at all. The laws of nature's God was a reference to the Holy Scripture of the Christian faith - the Bible. All civil law and governmental acts were to conform to both, because the laws of nature were imperfectly understood by man, and the law of nature's God served as an immutable point of reference. We, as a yet unborn nation, judged the government of King George III by these standards in our Declaration of Independence and declared his government dissolved for its sanction of acts we enumerated as violations of the Natural Law.

The writings of our founders also show that many knew in their hearts that slavery was also a violation of the Natural Law. During the Civil War, America itself was judged by these same standards as the dissolution of the Union was almost accomplished in a bloody war which Abraham Lincoln described as the judgment of God on both sides for the sin of slavery. For thirty years prior to that judgment, the abolitionists warned that the laws of the nation had become violations of the Natural Law and the "equal creation" principles of the Declaration of Independence. The national law had failed to protect "all humanity" by permitting one class of humanity to be treated as "non-persons" or "chattel"- and had sanctioned or overlooked a widespread denial of due process involving the acts of private individuals buying and selling the life and liberty of others. This violation of the Natural Law was remedied first by the Emancipation Proclamation of President Lincoln and then by the Thirteenth and Fourteenth Amendments to the Constitution.

Today we see another violation of the Natural Law permitted by the decision of the Supreme Court of the United States in Roe v. Wade creating another class of non-persons. For twenty years, this decision has sanctioned the denial of equal protection and due process for the most defenseless and innocent class of humanity - the unborn child. The Declaration of Independence speaks of the ongoing and individual creation of every man and the endowment of certain rights by the Creator himself in that creation process. These rights are unalienable, meaning they cannot ever be transfered to another and by definition are extended to the unborn. Chattel can be bought or sold - it is subject to alienation. The right of every human being to live is not. Our founders knew that each life had a plan known to God before it began. At any point in its creation and development, it was sacred, belonging only to God and made in His image. It is endowed by right to its owner in trust, not to be sold or taken by any other person before it began in birth, or ended in death. Like slavery, abortion desecrates the image of God in man by permitting a multimillion dollar trade in the lives of the unborn. That the unborn are protected by the "equal creation" principles of the Declaration of Independence is revealed in these words of Abraham Lincoln :

"The authors of that nobel instrument...did not intend to declare all men equal in all respects. They did not mean to say all were equal in color, size, intellect, moral developments, or social capacity. They defined with tolerable directness in what rights they did consider all men created equal-equal in certain unalienable rights, among which are life, liberty and the pursuit of happiness."

Our people know in their hearts that abortion is wrong, and polling data shows that many believe that abortion is not only immoral, it is murder. Advances in medical science photograph and demonstrate the life of the unborn from the first moments in the womb, and one secular publication of these images described them as the " first moments of creation" and "sacred." DNA research has established the existence of an individual life at conception as an indisputable scientific fact. Confirming this evidence of the law of nature written on the hearts of man and confirmed by science is the revelation of the Bible. The Old Testament prophets tell us that God knows every life before it begins and, however unintended by man, has a plan for that life. The New Testament affirms that the unborn child is a person from conception. John the Baptist, as an unborn child of six months "leapt" for joy in the womb of his mother, Elizabeth, upon her entry into the presence of Jesus, then only an embryo in Mary's womb. Elizabeth, hearing the news of Mary's conception, affirms Mary's motherhood and the "Lordship" and personhood of Jesus. The intentional taking of any person's life and shedding innocent blood is a violation of the law of nature's God.

America must either remedy this continuing violation of the Natural law or face inevitable judgment. Despite the issuance of Proclamation No. 5761 declaring the "unalienable personhood" of the unborn by President Ronald Reagan in 1988, the abortion trade continues its grizzly business. Many voices would urge the federal government to provide financial or other support for this holocaust. Even those with a different moral view about abortion believe that our government can ill afford at this critical time to spend funds or encourage an activity about which Americans are so deeply divided.

NOW, THEREFORE, I, GEORGE BUSH, President of the United States, by virtue of the authority vested in me by the Constitution and the laws of the United States of America, including but not limited to faithfully enforcing the law of the land, as well as the provisions of the Family Planning and Population Reasearch Act of 1970, 84 Stat. 1504 [the "Family Planning Act"], including Title X, Section 1008, 84 Stat. 1508., do hereby:

(1) Proclaim and affirm by incorporating herein by reference each and every word of President Reagan's Proclamation No. 5761 (January 14, 1988), published in 53 Fed. Reg. 1464 (1988) and codified at 3 C.F.R. 3-4 (1988 Comp.); and I further reaffirm that the "unalienable personhood of every American, from the moment of conception to natural death" is a right of every person in the United States inherently protected by the due process clauses of the Fifth and Fourteenth Amendments, and the equal protection clause of the Fourteenth Amendment to the United States Constitution.

(2) In futherance and not in limitation thereof, proclaim and declare that any act of the United States Government permitting the use of federal funds, directly, or indirectly through economic incentives or otherwise, to encourage, support or sanction in any manner whatsoever, as a means of family planning, or otherwise, the practice of abortion of any unborn child at any gestational age is contrary to the laws of nature and nature's God and prohibited by this Proclamation and the Constitution of the United States; unless such act is in the form of an Amendment to the Constitution of the United States.

(3) Proclaim Sunday, January 17, 1993 as National Sanctity of Human Life Day. I call upon all Americans to join in a day of thanksgiving for their God-given, unalienable right to life and the protection of the sanctity of that life for all classes of humanity and every human life.

IN WITNESS WHEREOF, I have hereunto set my hand this 15th day of January, in the year of our Lord nineteen hundred and ninety-three, and in the Independence of the United States the two hundred and seventeenth.

The Honorable and Mrs. James A. Baker, III
Chief of Staff to the President
The White House
1600 Pennsylvania Avenue, NW
Washington, DC 20500

Hoover Institution
Stanford, California 94305

1/12 - mailed regret card

Chairman and Mrs. Paul L. Davies, Jr.
and
Director and Mrs. John Raisian
of the Hoover Institution
cordially invite you to a reception and buffet honoring

The Board of Overseers
of the Hoover Institution
Stanford, California

Wednesday, February 3, 1993
Dolley Madison Ballroom
The Madison Hotel
15th & M Streets, N.W.
Washington, District of Columbia
6:30 – 8:30 P.M.

◆

RSVP (415) 723-4163
or return enclosed card
Business Attire

STATE OF ILLINOIS

OFFICE OF THE GOVERNOR

SPRINGFIELD 62706

JIM EDGAR
GOVERNOR

October 1, 1992

James A. Baker, III
Chief of Staff
The White House
Washington, D.C. 20050

Dear Jim:

I wish to bring to your attention a matter of utmost concern to Illinois' Medicaid program.

This summer, after prolonged and difficult negotiations, the Illinois General Assembly approved modifications to our Medicaid provider assessment program. These changes were required in order to conform with legislation the Congress passed last autumn. I understand that the Office of Management and Budget is expected to finalize regulations tomorrow, October 2, implementing this legislation.

Illinois has been informed that the regulation includes a formula test to determine when states are using federal matching funds on taxes to "hold harmless" providers from paying more than they get back. Our understanding of the formula is that no more than 75 percent of providers can get back more than 75 percent of their tax payments if the tax rate is more than six percent. This formula will invalidate part of our assessment on nursing homes and long-term care facilities for the developmentally disabled.

OMB recognizes that some states have already enacted changes to their programs without knowing the specifics of this formula and has agreed to allow those states to have until April 1, 1993, to comply with this test, instead of January 1, 1993, as the regulation otherwise requires. However, Illinois' legislature does not meet until the spring. While I am pleased that OMB recognizes the difficulties states often have in making "good faith" efforts to comply with the letter and spirit of federal legislation in the absence of implementing regulations, April 1 does not do much for Illinois. I therefore ask that you direct OMB **to grandfather until July 1, 1993, changes to state Medicaid provider tax programs that may violate the "hold harmless" formula test.**

The assessment program in Illinois is controversial, and it is set to expire on June 30, 1993, which is also the end of our fiscal year. The program does not need any further negative publicity, particularly at this time. I greatly appreciate your concern and empathy for the Medicaid situation in Illinois.

Warmest regards,

Jim Edgar

Jim Edgar

STATE OF ILLINOIS
OFFICE OF THE GOVERNOR
SPRINGFIELD 62706

James A. Baker, III
The White House
Washington, D.C. 20500

VIA HAND

Central Files

I believe this was handled orally.

Cozetta 1/13/93
2533

BATLANT
BATTLE OF THE ATLANTIC
HISTORICAL SOCIETY, INC.
Box 290298 Homecrest Station
Brooklyn, N.Y. 11229-0005
(718) ES 7-0713

Defense - 30 days from 9/3/39 - 11/3/46
Merchants
longer term 180 days

After 1 Jan. 88 Ct Decision of 180 days

10 November 1992

→ 73,000 processed by the Air Force
→ 5,000 didn't qualify

HR 44 JACK FIELDS Sponsored

Office of the Chief of Staff
The White House
Washington, D.C. 20500

Attn.: Ms. Linda Tripp

THEY WERE FEDERAL EMPLOYEES

Dear Ms. Tripp:

Enclosed please find the text of our proposed executive order which, if signed by the President, could mitigate much of the needless harm visited upon a group of forgotten heroes, the U.S. Merchant Mariners.

Please note that the provisions of the order are by no means a Treasury raid. It merely provides just recognition for a group of America's sons who were wrongfully denied such recognition as a result of enemy misinformation, ignorance, bigotry, and prejudice, and bureaucratic inertia and indifference.

Section I, Paragraphs 1-4 directs the Secretary of the Air Force (the administrator of PL 95-202) to make appropriate findings to include Merchant Mariners who served in the periods of conflict to be recognized on the same basis as other service groups during the same time period. American Merchant Mariners died in the service of our country during the periods listed, but many have yet to receive proper recognition.

Section II orders the American Battle Monuments Commission (the Federal agency whose mandate from Congress is to memorialize ALL of America's war dead) to place the names of American Merchant Mariners killed in action or missing and presumed dead on its existing monuments, utilizing the same criteria as any other service group. To date the ABMC refuses to consider any such proposal. They have stated to us that if we desire a monument to go build our own. That attitude is indicative of their prejudice and gross neglect of duty. An ABMC brochure notes that civilian noncombatants who accompanied the troops, such as Red Cross workers, USO entertainers, correspondents, and others are remembered in the ABMC monuments, but there are no merchantmen remembered by them. This exclusion is a purposeful distortion of the public record and an attempt to change history.

MARAD JOHN WARREN LEBACK

Section III provides the means to establish official histories and documentaries as to the service, sacrifice, and valor of U.S. Merchant Mariners. This was afforded to all other service groups, but to date there is no official history of the Merchant Marine's wartime exploits.

* BATTLE MONUMENTS COMM. -

* AIR FORCE SEC'R. MAKES DETERMINATION

*

Section IV, Paragraph 1 directs the Secretary of Defense and the Secretary of Transportation to have their service bands play on appropriate patriotic occasions the Merchant Marine song, "Heave ho, my lads, heave ho," along with those of the other services in the salute to the services medley. The song, written in 1943, was deeded over to the U.S. Maritime Service, and all royalties belong to the successor agency in the Federal Government, so there is no copyright problem, and expanding the time of the salute to the service medley by less than a minute would not appear to be such a terrible burden.

Paragraph 2 provides some measure of equity regarding the awards that are due Merchant Mariners, and seeks equity with that of other service groups. Recently the former Soviet Union awarded to U.S. Merchant Mariners decorations for valor for their service on the North Russian convoys half a century ago. As terribly hard up as that country is for Western currency, they gave them gratis to those who deserved them, unlike our Government which just recently got around to issuing decorations and charges the recipient $20 plus postage and handling for each award due. Frankly, this is rather tacky.

As you can see, our proposals are rather modest. They provide equity and justice and recognition where they have been wrongfully denied, and set right the record of history.

The letter of 30 October 1992 from the Undersecretary of the Department of Veterans Affairs (see enclosures) indicates to us that instead of appropriate action being taken, more bureaucratic indifference is the current routing of our appeal. The Department of Veterans Affairs:

1. Does not have the administrative authority to determine eligibility of individuals and service groups under PL 95-202. That responsibility lies with the Secretary of the Air Force.

2. They have no authority over the American Battle Monuments Commission.

3. They have no authority over the Departments of Transportation or Defense.

The only person who can cut through decades of bureaucratic inertia and indifference is the President, who by use of an executive order can set things right.

We would hope that the White House staff would permit the President the opportunity to advance the cause of justice before he retires, rather than allowing the entrenched bureaucracy to perpetuate injustice.

House Subcommittee
-Greg Lambert

Sincerely yours,

B.D. Hammer

B.D. Hammer
Exec. Dir., BATLANT

Enclosures

Central Files

I believe Tom Scully took care of this,
either orally or in writing, though
I have no copy of a written response.

Cozetta 1/13/92
2533

BATLANT
BATTLE OF THE ATLANTIC
HISTORICAL SOCIETY, INC.
Box 290298 Homecrest Station
Brooklyn, N.Y. 11229-0005
(718) ES 7-0713

30 September 1992

Hon. George H.W. Bush
President of the United States
The White House
Washington, D.C. 20500

Mr. President:

We need your help in order that at long last justice and recognition for a group of forgotten heroes of World War II--the U.S. Merchant Marine--may be achieved.

Their story is that of valor, service, and sacrifice. Sadly, they were never remembered by their country, which they so ably served, until very recently--and even then inadequately so.

We've gone through channels and found that bureaucracy is usually disposed to do nothing unless they are compelled to do so. You may remedy this situation by means of an executive order, a proposed draft of which we've enclosed. You will please note that it remedies long-standing injustices and provides a measure of equity and recognition, long overdue. It is by no means a Treasury raid.

* How much can it possibly cost to provide Merchant Marine vets or their next of kin with honorable discharge certificates, a flag for their coffins, and a grave marker as testimony of their true and faithful service to the nation?

* How much to carve 7,000 names in U.S. Government granite?

* How much can it cost to issue battle honors and decorations, already won with their blood and never awarded? (The ex-Soviets, strapped for cash, awarded them for free. The U.S. charges them $20 plus postage and handling for each award due.)

* How much to have any of the service bands play their song, "Heave ho, my lads, heave ho" when those of the other services are played on patriotic occasions?

* How much can it cost to task Government historians to create an official history of the wartime Merchant Marine's exploits, and in collaboration with filmmakers to make a suitable documentary, as was done with all the services?

* What will it cost to award the Congressional Medal of Honor posthumously to an 18-year-old Engineer Cadet Midshipman from the U.S. Merchant Marine Academy at Kings Point whose valorous actions certainly deserve it?

If these questions are foolish, it is only that for the past half century none of these basic civilities were afforded to nearly 240,000 of America's sons who served just as bravely as any other servicemen and women. Nearly 7,000 of them died just as bravely,too! And their loss pains many half a century later, to no less a degree than any other.

Mr. President, it is within your power to set right the course of history, to mitigate much of that harm done to Merchant Mariners and their families over the years, to enfranchise those long excluded, and to recognize those long deserving.

For all of your other worthy accomplishments you would long be remembered in the hearts and minds of Merchant Mariners, their families, survivors, and friends as a just and honorable man and win their everlasting gratitude.

Sincerely yours,

B.D. Hammer
Exec. Dir., BATLANT

Background info
Enclosures

cc: Mr. William Caldwell, White House Staff
Mr. Rex Williams, Veterans for Bush

BATLANT
BATTLE OF THE ATLANTIC
HISTORICAL SOCIETY, INC.
Box 290298 Homecrest Station
Brooklyn, N.Y. 11229-0005
(718) ES 7-0713

PROPOSED TEXT OF EXECUTIVE ORDER "JUSTICE FOR AMERICA'S FORGOTTEN HEROES, THE U.S. MERCHANT MARINER"

I. The Secretary of the Air Force (who is the administrative officer for PL 95-202, the "G.I. Bill Improvement Act") is hereby directed to find:

7,000

GI Bill Improvement

1. U.S. Merchant Mariners who served between 8 September 1939 and 31 December 1946 inclusive with 30 days honorable service to have qualified within the context of PL 95-202 to be veterans and will issue the necessary documents recognizing their status accordingly.

2. U.S. Merchant Mariners who served between 6 April 1917 and 11 November 1918 (extended to 30 March 1920 for Merchant Mariners who supported U.S. military operations in north Russia and Siberia) similarly should be recognized within the context of PL 95-202 as veterans.

3. U.S. Merchant Mariners who participated in the Korean sealift between 27 June 1950 and 27 July 1954 similarly should be recognized as veterans within the context of PL 95-202.

4. U.S. Merchant Mariners who participated in the Vietnam sealift between 1 July 1958 through 28 March 1973 will also be considered to be veterans within the context of PL 95-202.

The above is done to conform to existing service groups to achieve equity and justice.

II. The Chairman of the American Battle Monuments Commission is hereby directed without further delay or obfuscation to place the names of some 7,000 U.S. Merchant Mariners killed in action or missing in action/presumed dead on its existing memorials that it maintains in the United States and overseas using the same criteria for other service personnel, pursuant to its mandate to memorialize ALL of America's war dead.

III. The Secretary of Transportation is hereby directed to have MARAD commission official histories of U.S. Merchant Marine operations in World War II, World War I, the Korean sealift, and the Vietnam sealift, and suitable documentary films as well.

IV. 1. The Secretaries of Defense and Transportation are hereby directed that all U.S. service bands on all appropriate patriotic occasions will play, with their salute to the services medley, the Merchant Marine song, "Heave Ho, My Lads, Heave Ho," in the medley as well.

2. They are further directed that Merchant Mariners who serve and otherwise distinguish themselves shall be eligible to receive service decorations and awards for valor on the same basis as other service personnel.

DEPARTMENT OF VETERANS AFFAIRS
Veterans Benefits Administration
Washington DC 20420

October 30, 1992

In Reply Refer To:

Mr. B.D. Hammer
Executive Director
Battle of the Atlantic
Historical Society, Inc.
Box 290298
Homecrest Station
Brooklyn, NY 11229

Dear Mr. Hammer:

Your letter to the President was referred to me for response.

I have asked my staff to review your letter. When this review is completed, I will write again.

Sincerely yours,

D'Wayne Gray
Under Secretary for Benefits

THE WHITE HOUSE

WASHINGTON

October 13, 1992

Dear Mr. Hammer:

On behalf of President Bush, thank you for your recent message.

The President appreciates your bringing your concerns to his attention. Due to the specific nature of your correspondence, I have forwarded it to officials at the appropriate agency for their review. Please be assured that your message will receive every consideration consistent with the law and with applicable regulations.

With the President's best wishes,

Sincerely,

Shirley M. Green

Shirley M. Green
Deputy Assistant to the President
for Presidential Messages
and Correspondence

Mr. B. D. Hammer
Executive Director
Atlantic Historical Society (BATLANT), Inc.
Post Office Box 290298, Homecrest Station
Brooklyn, New York 11229-0005

SUGGESTED FOR PUBLICATION ON OR ABOUT 27 SEPTEMBER 1992

Sunday, 27 September 1992, marks the 50th anniversary of a little-known but nonetheless significant sea battle of World War II. The Liberty Ship s/s STEPHEN HOPKINS was steaming independently on a northwesterly course from Cape Town en route to Paramaribo, Dutch Guiana. The HOPKINS was one of a new class of Liberty Ships, an innovative mass-produced freighter that was eventually to number 2,770 ships produced by American shipyards for the war effort. Franklin D. Roosevelt would refer to them as "ugly ducklings." They would carry, in his words, "the sinews of war from the arsenal of democracy to where and when they were needed." The Liberty Ship had a top speed of 11 knots. Later models would be better armed, but this ship had to make do with a motley collection of discarded obsolete Naval ordnance: on the bow a pair of one-pounders from before the turn of the century; on the top of her midship house were four water-cooled Browning .50 caliber machine guns; and on each wing of her bridge a .30 caliber Lewis machine gun left over from World War I. Her main battery, located atop the after house, was a 4"/.40 caliber rapid fire gun. It was originally designed for the torpedo boat destroyers from the turn of the century. Those vessels long since scrapped provided many merchant ships with their only effective protection.

The HOPKINS' long voyage in the South Atlantic was thus far relatively uneventful. The ship's routine of the crew doing normal maintenance and standing endless sea watches were punctuated by the traditional uneventful entry in her log--"Under way as before. No remarks." And so the voyage went until the morning of the 27th of September. The Third Mate who pursuant to standing orders called the Master, Capt. Paul Buck, to the bridge, when two unidentified vessels were sighted. Coming out of the mist, they quickly bore down on the HOPKINS. To the casual observer they bore a resemblance to any of the old ubiquitous freighters that plied the waters of the world's oceans, but any resemblance to a merchantman engaged in innocent passage ended when both ships simultaneously ran up a red, white, and black flag surcharged with a black swastika--the battle ensign of the Nazi Kriegsmarine. The two ships that the STEPHEN HOPKINS had encountered were the Hilfshif Kreuzer (auxiliary cruiser/commerce raider) STEIR and her supply ship the TANNENFELS. The STEIR was armed with six 5.9" guns and an assortment of smaller weaponry, the supply ship TANNENFELS with a number of 20 mm. Both were considerably faster than the HOPKINS. From the first shot that ranged across the HOPKINS' bows, the outcome was a dead certainty. Capt. Buck could have hauled down his colors and abandoned ship--it would be no major disgrace for a merchantman outgunned, outranged, and outnumbered to do so...they were sorely mistaken. He would fight. Capt. Buck sounded the general alarm, calling the HOPKINS' crew of 41 and 15 Naval armed guard gunners to their battle stations. The fight would be bitter, brief, and to the death.

The 5.9" projectiles from the STEIR burst into the unarmored hull and superstructure of the HOPKINS, starting numerous fires and leaving them a shambles. Her decks were raked with withering fire, from which many were killed. The inexperienced gunners of the HOPKINS fired back as best they could. The 4" gun at the stern fired. A shell exploded in the STEIR. Again and again the HOPKINS' 4" gun fired, the shells exploding in the raider. The other guns in the HOPKINS one by one were silenced. The guns' crews of the Navy armed guard

and merchantmen lay dead beside the ruined mounts, but still the 4" gun on the stern continued to fire again and again into the STEIR. The next salvo of 5.9s from the STEIR found the range of the 4" gun aft. The magazine exploded, leaving the after deck a mass of twisted wreckage and flames, killing or mortally wounding the remainder of the gun's crew. Simultaneously, a projectile from the STEIR found the HOPKINS' starboard boiler. It exploded, killing or wounding nearly all in the ship's engine room and leaving the HOPKINS nearly dead in the water, without power. Most of the HOPKINS' boats and rafts were shot away. Many of her crew were cut down by machine gun fire. The STEIR and the TANNENFELS moved in for the kill. At that moment the HOPKINS' 18-year-old engineer cadet-midshipman, injured but miraculously alive after escaping the carnage in the engine room, made his way aft to the 4" gun. He was on his first voyage as a cadet from the U.S. Merchant Marine Academy at Kings Point. Despite the fire that still raged in the magazine below, he entered the gun tub, finding it littered with the dead gun's crew and its splinter shield shattered and deck a twisted, smoldering wreck. He found the gun miraculously appearing to be in working order. There were 5 rounds left in the ammunition ready service box. Clearing the dead away from the gun, the cadet loaded, elevated, trained, and fired the piece at less than 1,000 yards range. Again and again and again and again the 4" fired. The shells tore into the vitals of the STEIR and the TANNENFELS, causing them to break off their attack into the cover of the nearby mist and fog. In a parting shot, one of the raiders fired again and cut the cadet down just as he was leaving the gun tub.

The master surveyed the damage. With the ship dead in the water, engine room a shambles, the midship house burning, every gun out of action, and with a pronounced list to starboard and sinking rapidly, it was time to go. A few of the survivors of the 20-minute battle were able to launch a damaged lifeboat and clear away a couple of balsa Cairley floats. As the HOPKINS sank, its surviving crew members noted a massive explosion some distance away. The raider STEIR had suffered mortal wounds at the hands of the 18-year-old engineer cadet. The fires out of control, the STEIR had blown up. The TANNENFELS had suffered lesser damage and escaped.

The bravery of the HOPKINS' master and crew had made history. The only Nazi surface vessel sunk by U.S. forces in World War II was sunk by an American merchant vessel. Sadly, few would survive a month-long voyage in the battered lifeboat which finally made a landfall on the coast of Brazil. Capt. Buck was observed climbing out of the water into a raft, but was not picked up.

In the early spring of 1942, Pres. Roosevelt had ordered the Secretaries of War and the Navy to recognize Merchant Mariners who distinguished themselves with appropriate citations and decorations. This order was ignored. The Army and Navy had other things to occupy themselves, and did not worry about recognizing merchantmen. In response to the Army and Navy's inaction, the War Shipping Administration

proceeded with the concurrence of Congress to issue service bars and medals for valor in 1943. The Chairman of the U.S. Maritime Commission, Adm. Emery S. Land, cited the STEPHEN HOPKINS as a "gallant ship." Her Master, Paul Buck, and her engineer cadet, Edwin J. O'Hara, were awarded posthumously the Merchant Marine's highest award, the Distinguished Service Medal.

Some 7,000 American merchant seamen were killed in action in World War II. They suffered the highest per capita loss of any service group with the exception of Marine assault troops in the Pacific, who exceeded them by 1/10 of 1%! 142 cadet midshipmen from the U.S. Merchant Marine Academy at Kings Point were killed in action--no other service academy sent its undergraduates to die in war.

In spite of their courage, sacrifice, and service, the American Merchant Mariner of World War II's story remains largely unrecognized and forgotten. You won't find an official government history of their exploits, nor their names listed amongst the fallen on the gleaming memorials that our government maintains. You won't hear their song played with those of the other services in a medley salute on Memorial Day, Veterans Day, or other patriotic occasions. Perhaps if enough citizens knew their story, they would be sufficiently outraged by the injustice they needlessly suffered and at long last for those living and dead, a grateful nation would extend its recogntion and thanks.

After half a century, the nation has yet to honor our forgotten heroes of World War II, the United States Merchant Mariners, with the respect and recognition long overdue them. Quoting Franklin D. Roosevelt, "The Merchant Marine carried the sinews of war from the arsenal of democracy to where and when it was needed," to our beleaguered allies and our own forces, often without proper escort or protection.

They sustained the highest per capita casualties of any service group, exceeded only by the U.S. Marine assault troops in the Pacific by 1/10 of 1%. Not only had they to suffer the fury of the enemy's bombs, bullets, mines, shells, and torpedoes, but the neglect and indifference of the government and people of the United States, and their unjustified bigotry, discrimination, prejudice, and outright hostility visited on them as well. Much of it was due to a highly successful enemy misinformation campaign; the lies and calumnies persist to this day.

Excluded from service clubs and recreation facilities, subjected to all forms of pettiness and harassment; "There's a war on" was the excuse to justify their ill-treatment. They continued to sail and deliver the goods even when America's coastal cities and resorts refused to dim out their lights, making them perfect targets silhouetted against the glow for the U-boats offshore. Dimouts were bad for business. The night skies off our coasts were illuminated by burning ships and dying men.

The Army, Navy, and Coast Guard, woefully unprepared, compounded the problems of coastal defense and merchant ship protection by not adopting a cental command and control structure and not using proven methods to fight the U-boats. They established their own "learning curve"; as a result, more men and ships died needlessly.

The only German surface warship sunk by U.S. forces was sunk by a merchant vessel. In September 1942 the auxiliary cruiser STEIR intercepted the Liberty Ship STEPHEN HOPKINS, steaming without escort. After numerous hits from the STEIR, the HOPKINS was ablaze and sinking. Her Navy guns crew were killed; her crew tried to abandon ship. The raider started to shell the lifeboats. A 19-year-old cadet-midshipman from the U.S. Merchant Marine Academy manned the 4" gun and proceeded to load, aim, and fire repeatedly into the STEIR until the ammunition was exhausted. His firing into the raider gave the opportunity for ONE of the lifeboats to make good their escape. The raider, as a result of his well-placed shots, caught fire and eventually blew up. In the exchange, he was mortally wounded.

142 cadet-midshipmen from the U.S. Merchant Marine Academy were killed in action against the enemy. The Merchant Marine Academy was the only service academy which sent its undergraduates to die in war.

The United States was the only maritime nation of World War II which made no provision for its Merchant Marine veterans. They did not receive any benefits under the GI Bill of Rights, and for 42 years received no recognition.

In January 1988 the Secretary of the Air Force, pressured by a wise decision of the Federal District Court, allowed American Merchant Mariners who could document honorable service of 180 days between Pearl Harbor and V-J Day to be recognized as veterans by the issuance of an honorable discharge certificate, issued either by the Coast Guard or the Army, a transcript of service (DD 214), and for service-connected injuries, admission to Veterans Administration hospitals on a pay-as-can-afford basis was authorized as well. They are also entitled to a flag for their coffins and a grave marker. Hardly a Treasury raid!

Since January of 1988 the Coast Guard has processed approximately 83,000 applications, of which 73,000 were approved. 5,000 were referred to the Army and were subsequently approved. Some 5,000 applicants did not meet the arbitrary requirements set by the Secretary of the Air Force.

It should be noted that members of the other services who have as little as 30 days honorable service or were killed or wounded between the 8th of September 1939 and the 31st of December 1946 are considered to be veterans of World War II. It should further be noted that if the criteria for other services had been applied to these 5,000, they would have been approved as well.

You won't find Merchant Mariners' graves amidst the manicured gardens and lawns of Arlington. Their bones lie scattered on the floor of the world's oceans, forgotten.

The American Battle Monuments Commission has refused to remember some 7,000 Merchant Mariners killed in action and has refused to place their names on the appropriate existing war memorials it maintains here and overseas, in spite of their mandate to memorialize all of America's war dead.

You won't hear the Merchant Marine's song played with the other service songs on patriotic occasions by U.S. military bands, nor can you read any government-sponsored history of the Merchant Marine's service, valor, and sacrifice in World War II, unlike the other services. Nor will you find media personalities discussing the slaughter of Merchant Mariners off our Eastern seaboard or the gross negligence of our Navy in the destruction of convoy PQ 17 to North Russia (4 July 1942).

Recently the Government announced that World War II Merchant Mariners who could document their service would be eligible to receive medals in testimony of their wartime service, 50 years after the fact. The U.S.A. says thanks--and charges the recipient $20 plus postage and handling for each award due. Unlike all the other services, Merchant Mariners must pay for their awards!

While many have been celebrating in this holiday season of backyard barbecues, department store sales, long weekends, and other displays of hyper-patriotism, some of us who study history find that the "official" and "popularly accepted" lines ring hollow, and the rampant hypocrisy is unbearable.

Little has been done after half a century to close the gaping wounds that to this day still bleed.

B.D. Hammer
Exec. Dir., Battle of the
Atlantic Historical Society
(BATLANT), Inc.
P.O. Box 290298, Homecrest Sta.
Brooklyn, New York 11229-0005
(718) ES 7-0713

DAILY NEWS

220 E. 42d St., New York, N.Y. 10017

JAMES P. WILLSE, *Editor and Publisher*
MATTHEW V. STORIN, *Executive Editor* ELLIS COSE, *Editorial Page Editor*
DEBBY KRENEK, *Managing Editor*

Invisible patriots

Today is a joyful anniversary, but also a sad one. It was exactly 50 years ago that a 37-ship Merchant Marine convoy, bound for Russia, was ambushed by German forces. Because of a foulup in assignments, the convoy had no Navy escort and was virtually destroyed, with the loss of hundreds of lives.

A Brooklyn-based organization, the Battle of the Atlantic Historical Society, cites that as one of many disasters Merchant Marines suffered during World War II. But only recently has the nation begun to recognize their sacrifices. Even so, not one of the 7,000 merchant mariners killed in action is listed on any U.S. war memorial. Are not their contributions worthy of note?

OFFICIAL SONG OF THE U. S. MARITIME SERVICE

HEAVE HO! MY LADS, HEAVE HO

(SONG OF THE MERCHANT MARINE)

Words and Music by
JACK LAWRENCE, Lt. (jg) U. S. M. S.

Leeds Music
CORP.
RKO BUILDING, RADIO CITY - NEW YORK

Phil Lacy

SO THAT SHIPS MIGHT GO TO SEA WITH ABLE HANDS

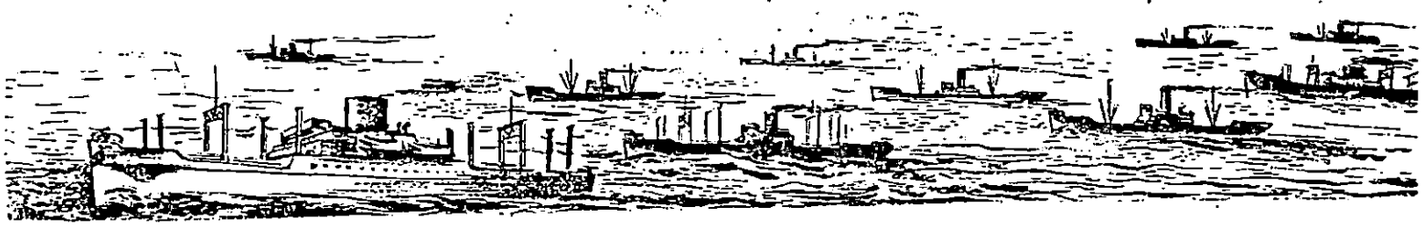
They come—from every point of the compass, from 48 states, Alaska, Hawaii and Uncle Sam's possessions, in city clothes and rural clothes, in zoot suits and cowboy boots—thousands of them of all colors and creeds to man the ever-growing fleet of Liberty ships that carry the goods to the men on the fighting fronts of this global war.

At the world's largest United States Maritime Service Training Station at Sheepshead Bay, Brooklyn, New York, more than 10,000 are studying the elements of seamanship, are acquiring knowledge about life boats and life saving that will protect them along the sea lanes menaced by Axis U-boats.

Today, trained men—men who have the know-how—are going out from this United States Maritime Service Training Station and its counterparts throughout the country to win the battle of the seven seas against the submarine, the dive bomber and the surface raider.

Upon these men, deck hands, engine room men, ship's cooks, messmen, ship's clerks and pharmacist's mates, rests the task of passing the ammunition, braving the sub and dive bomber.

To these men, this song, written at the United States Maritime Service Training Station, Sheepshead Bay, Brooklyn, New York, is dedicated.



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Key of C (C-E)

Words and Music by
JACK LAWRENCE
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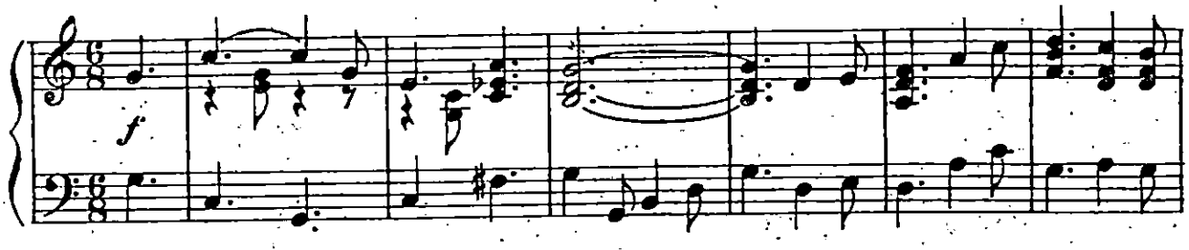
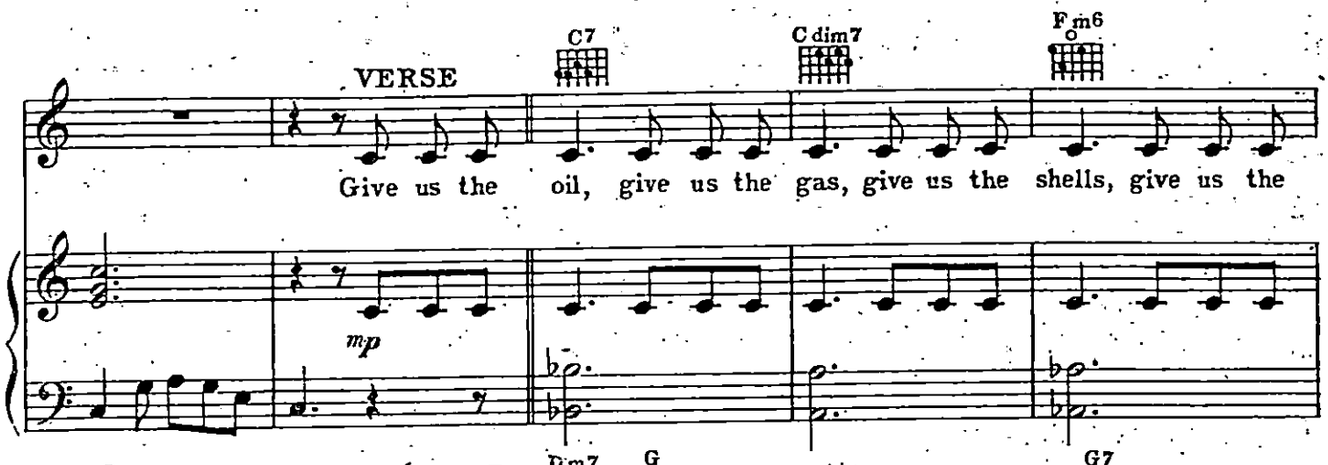
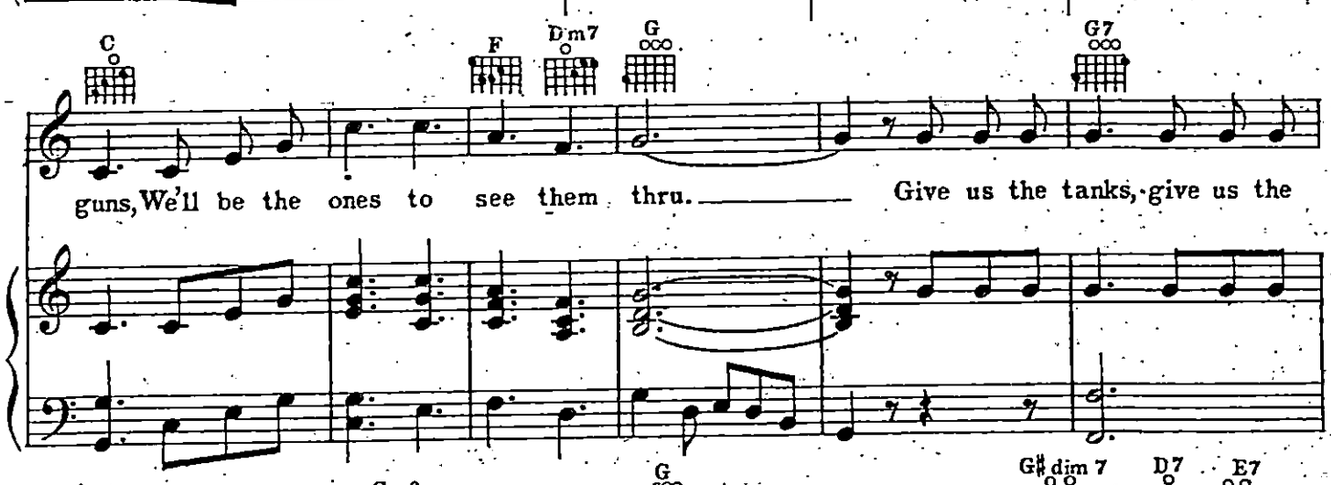
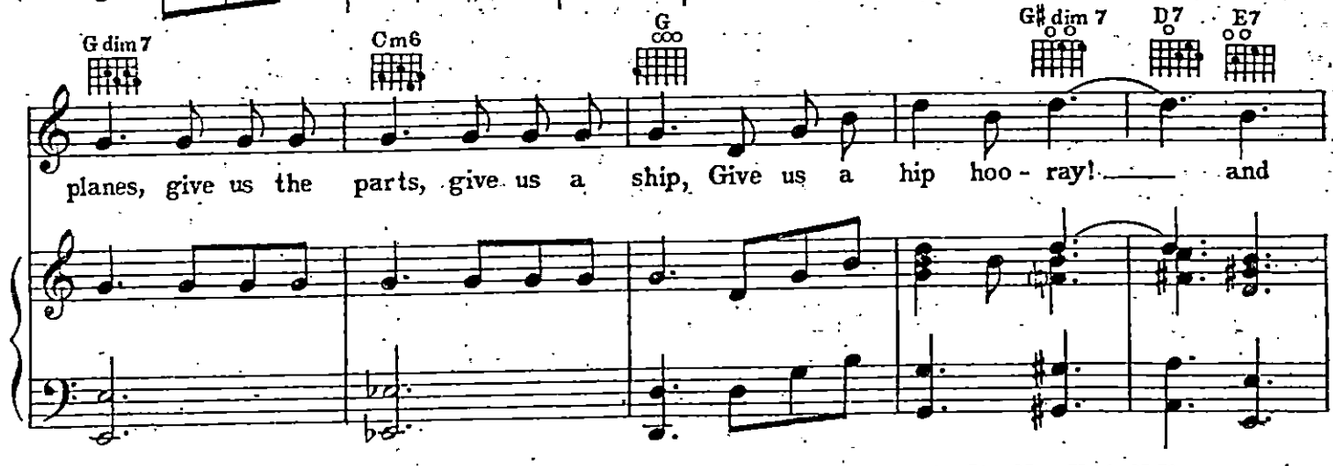
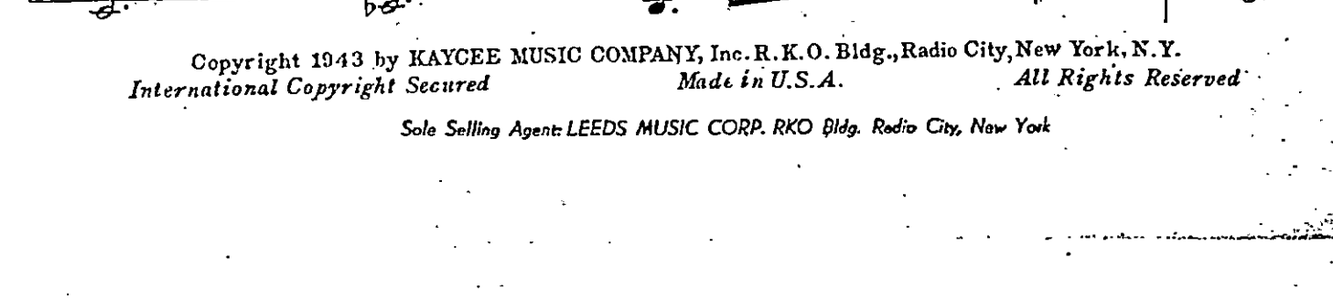


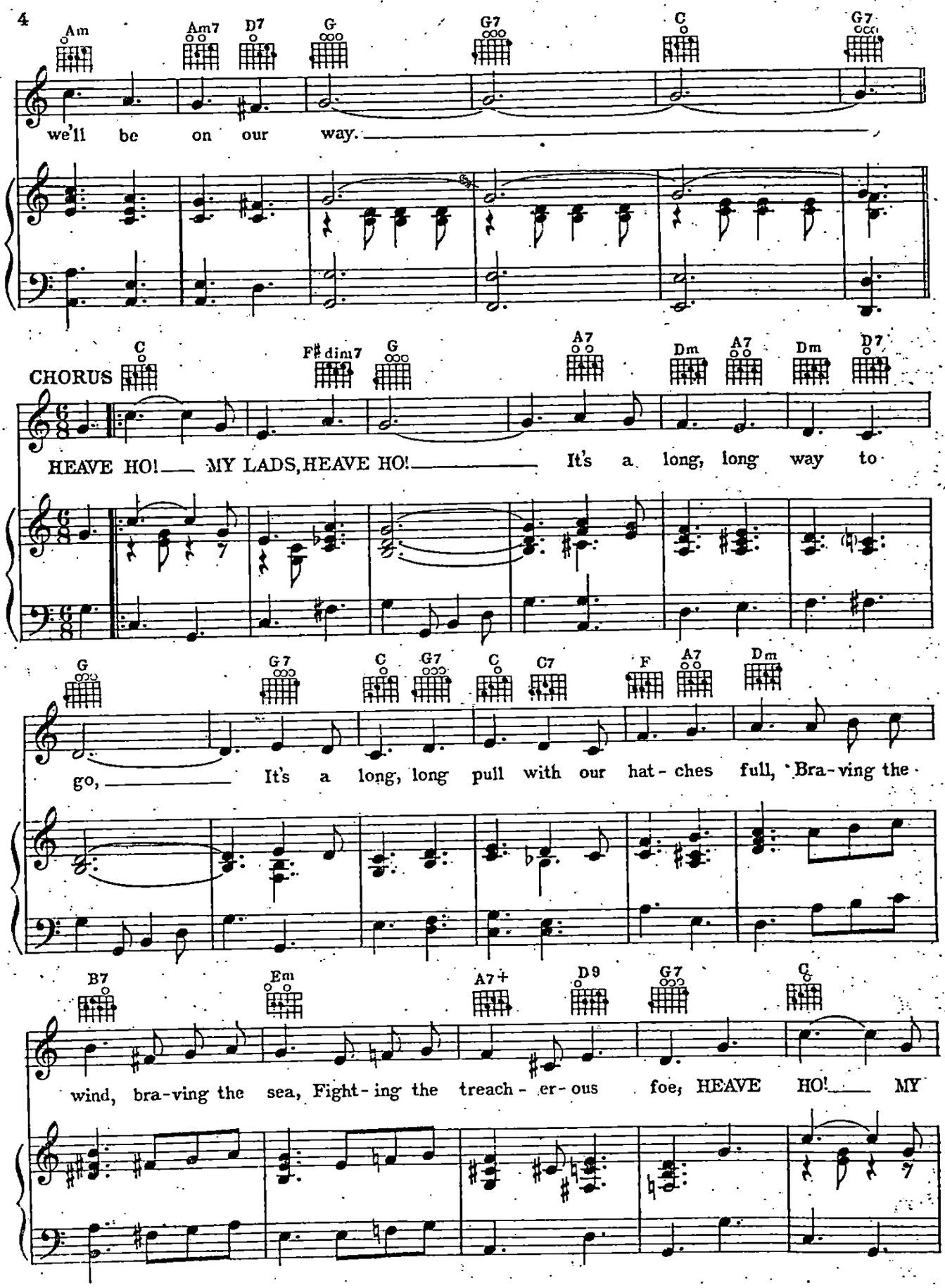








Sole Selling Agent: LEEDS MUSIC CORP. RKO Bldg. Radio City, New York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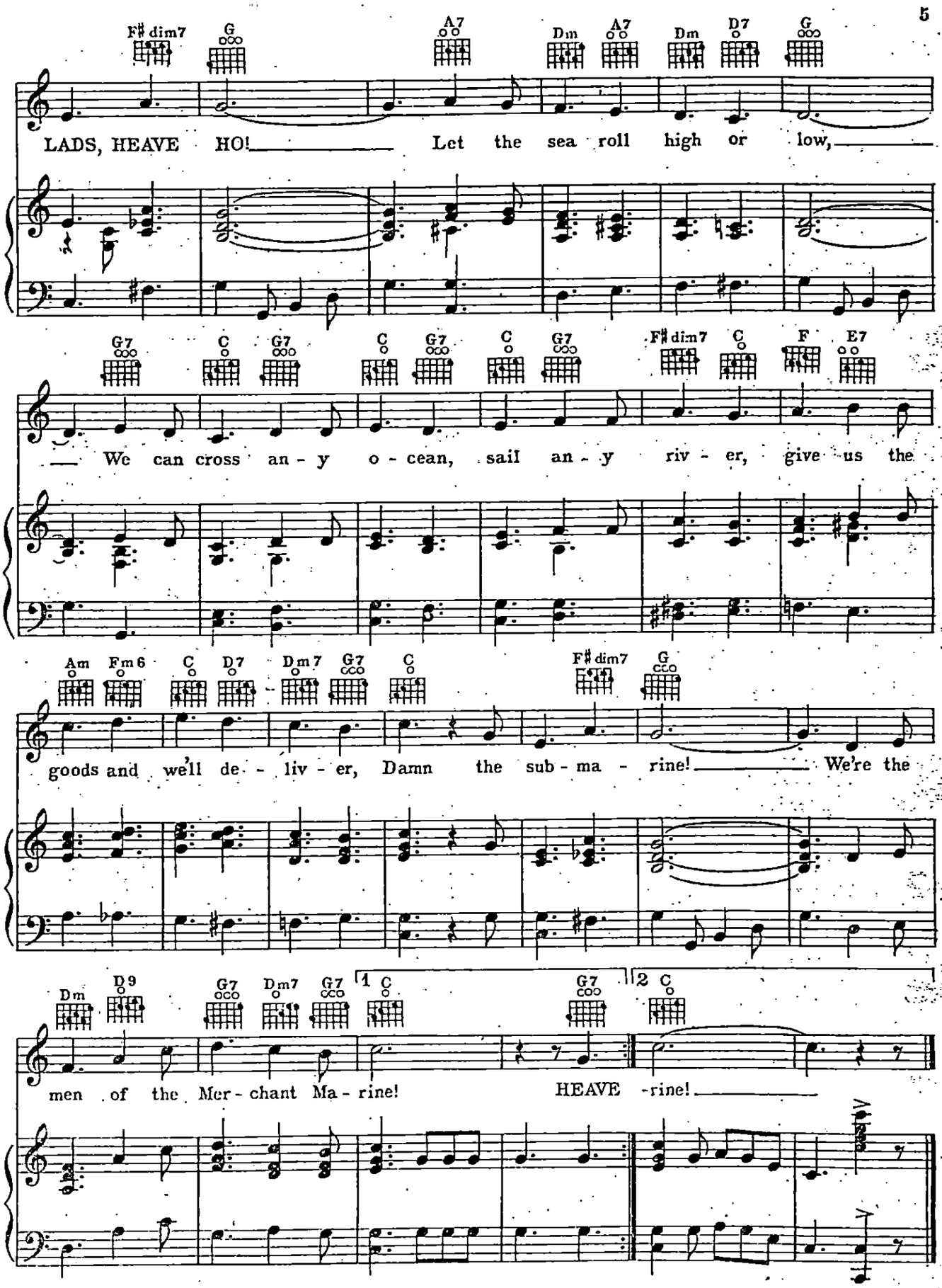
wind, bra-ving the sea, Fight-ing the treach-er-ous foe, HEAVE HO! MY



Tom Scully

Tom, Mr. Haber of the Combat Merchant Marines called today wonder why RBZ/you had not gotten back to him with his request that restitution be given to this group of people.

I noted that times were busy, RBZ had asked one of his assistants to look into this, and hopefully that assistant would be able to get back to him soon.

POC: 914/623-6411

Tom, I forwarded his letter to you earlier, asking that you respond. (I did not give him your name; just noted that I would tell you of his call.)

Cozetta 10/12 Mon 9:15 AM

THE WHITE HOUSE

WASHINGTON

September 25, 1992

Dear Mr. Haber:

Thank you for your letter on behalf of Merchant Seamen of World War II.

I've passed on your thoughts to Tom Scully. As Associate Director for Human Resources, Veterans, and Labor he would be best suited to follow through on the feasibility of your request.

With best regards,

Sincerely,

Robert B. Zoellick

Robert B. Zoellick
Deputy Chief of Staff

Mr. Kermit Haber
Executive Officer
Combat Merchant Mariners
World War II
14 Castle Drive
Chestnut Ridge, New York 10977

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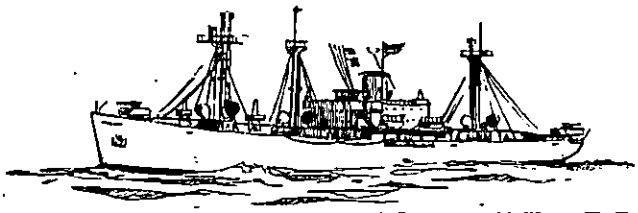
Incoming & outgoing correspondence

copies to
RBZoellick/Cozetta
~~Tom Scully262~~ OEOB

thanks

Cozetta



COMBAT MERCHANT MARINERS
World War II

14 Castle Drive
Chestnut Ridge, New York 10977
(914) 623-8484

September 10, 1992

Mr. Robert Zoellick
Staff
The White House
Washington, D.C. 20500

Dear Mr. Zoellick:

Just a short note to be helpful to the Campaign of President Bush.

There are over one million votes available to the reelection of President Bush if he will issue an Executive Order granting full veterans benefits to the Merchant Seamen of World War II (see my letter to the President in the enclosed newsletter).

Not only did this group make victory possible by winning "The Battle of the Atlantic" but as senior citizens they came out of retirement forty years later to man the ships of the decades old Reserve Fleet to bring triumph at Desert Storm.

The one million votes will help put President Bush over the top.

Contact Ron Kaufman, Political Officer, for our file.

You may call me at (914) 623-6411 for any additional information.

Best wishes,

COMBAT MERCHANT MARINERS WW II

Kermit Haber
Executive Officer

KH:jh.
enclosures

How many people? — over 1 million?

COMBAT MERCHANT MARINERS
World War II
14 Castle Drive
Chestnut Ridge, New York 10977
(914) 623-8484

June 6, 1992

Dear Mr. President

The purpose of this letter is to ask you to issue an Executive Order granting the merchant seamen of World War II the same veteran status as given to the other armed forces after their victory against the axis powers.

Possibly this can be done as an addendum to the D.O.D. Decision of January 19, 1955 by Secretary of the U.S. Air Force, Edward Aldridge Jr. who granted the seafarers the honor of being called veterans, discriminated by restricting the benefits to the use of the Veterans Administration Hospital System and burial in a military cemetery.

The basis for the foregoing is that President Franklin D. Roosevelt to signing the G.I. Bill in June of 1944 stated, "I trust Congress will soon provide similar opportunities to members of the merchant marine who have risked their lives time and time again during this war for the welfare of this county."

This promise was not kept! It is not how a great nation should act.

I therefore write to respectfully ask you to right this wrong because I know you to be a decent and compassionate man who will not stand still for injustice.

Along with the foregoing act, I ask for reparations for the denial of the G.I. Bill which excluded most of us from a college education with the increase in income which such credentials bring.

Therefore, may I suggest your support for our program of $40.00 every Friday, which is $2,000/year and a one time grant of $90,000 which is the foregoing amount times 50 years.

My DD214 comes with a Combat Ribbon with 2 stars, and I tried to get into the U.S. Army Air Corps Flying Cadet Program but was rejected for not being able to pass the physical (copy of that letter is

available).

In conclusion, the men of the Merchant Marine sustained the same rate of death as the U.S. Marines. Judge Louis Oberdorfer in his Summary Judgement in favor of the seafarers stated he had looked into the claim that we were paid more than equivalent ratings in the Navy and found the income was comparable when taxes, and food charges, gear, clothing allotments to families etc. were balanced off along with a Death Benefit one half of that of the Navy men ($5,000).

Further after hostilities ended, War Shipping Administration wrote to the seamen of record requesting that we stay at sea to bring home the troops and help feed Europe - copy of a WSA Flyer is enclosed and I cannot understand why our cut-off date of service is August 15, 1945 (end of hostilities) When post hostility draftees were given a cut-off date of December 31, 1946) - 16 months later - and were never in combat.

With best wishes and warmest regards,

I remain

Sincerely,

Kermit Haber
Executive Officer

cc: Ron Kaufman

APPLICATION

This organization was formed because forty years after World War II no recognition was given to the brave men, who as volunteers joined the Merchant Marine, and carried war supplies through hazardous waters to make our victory possible!

The membership consists of seafarers who sailed in war zones during the period 1941 through 1946 and were awarded Combat Bars and/or War Zone Bars by the War Shipping Administration.

YES, I WISH TO JOIN THE COMBAT MERCHANT MARINERS WORLD WAR II:

NAME: _____

ADDRESS: _____

_____

Enclosed is check or money order for annual dues $20.00 (DO NOT SEND CASH)
Make Check payable to: COMBAT MERCHANT MARINERS WW II
14 CASTLE DRIVE, SPRING VALLEY, N.Y. 10977

I CAN HELP WITH:

____ Writing to my Congressman
____ Writing to my 2 U.S. Senators
____ Writing a letter to my local newspaper
____ Speakers Bureau
____ Have interesting war story
____ Fundraising
____ Finding new members
____ Attending meeting in Restaurant
____ Attending meeting in Rockland/Bergen
____ Publicity Committee

Send Copy of Combat/War Zone BARS

WHAT'S NEW?

Shipmates:

The FIFTH Annual Dinner/Reunion was a smash Hit! We gathered at West Point, a historical Revolutionary War site and home of the nation's oldest service academy. The Academy cooperated with us 100%. They provided an Honor Guard, a trumpeter, and a flag. The meal was outstanding featuring New York Steak or Baked Salmon ending with Chocolate Mousse, tea and coffee. Dancing and music by the Smith Street Dixieland Band, and a 20's Dancing Girl to pep things up. Headquarters has received a bundle full of letters from attendees expressing their thanks for a memorable evening.

Here is the program; Invocation by member Reverend Richard Carley, an official of the Presbyterian Church, New York State. The Pledge of Allegiance was followed by member Irving Dietscher reciting a poem he has written about our love for country and flag. An amusing and interesting talk by Richard Murray about how he got to go to the war in Desert/Storm. A recollection of his 3 years as a Prisoner of War by member Stanley Willner who was 2nd mate captured by the Japanese when his ship was torpedoed in the Far East. Hit story of survival under the tender mercies of the Japanese Army brought tears to the eyes of most of the audience.

Inasmuch s my family did not feel that my health would permit me to last out the evening if I tried to M.C. the extensive program. My two college professor sons volunteered to help my carry the ball. They received a round of applause for their contribution to the success of the function. Everyone agreed I had a wonderful family and the boys did an outstanding job.

The U.S. Navy Department has honored us by sending Vice Admiral Stephen Loftus to address the group. Assignments: Former Commander Maritime Air Forces, Mediterranean - August 1981/July 1987; Carrier Airborne Early Warning Squadron Twelve; Office of CNO (Deputy CNO, Logistics OP-04 - October 1990 to date; A few of the Medals and Awards: Distinguished Service Medal; Legion of Merit with Two Gold Stars; Distinguished Flying Cross; Navy Commendation Medal with Combat "V" and two Gold Stars; Armed Forces Expeditionary Medal; Vietnam Service Medal with four Bronze Stars; Sea Service Deployment Ribbon; Republic of Vietnam Gallantry Cross Unit Citation and the Republic of Vietnam Campaign Medal. Naval Service: Designated Rear Admiral - September 1984; Vice Admiral - January 1991.

The highlight of the evening was the presentation of the Plague to Four Star General H.T. Johnson honoring him with the Honorary Commander of the Combat Merchant Mariners WWII Award. General Johnson, Commander-in-Chief, U.S. Transportation Command who was in full charge of Logistics for Operation Desert Shield/Storm prevented a possible catastrophe in the Saudi Desert by implementing the use of WWII Reserve Ships to bring war material to our troops. He also accepted the offer of the senior citizen former WWII Merchant Seamen to come out of retirement to repair and sail these decades old ships to the War Zone. These acts insured our victory in the Desert and made possible the liberation of Kuwait. General H.T. Johnson will be remembered by all seamen forever.

The enclosed letter of support on (page 3) from President George Bush was sent Express Mail July 24th. It was unsolicited and represents his sincere feelings for Merchant Seamen. My letter to the President (enclosed) is the next project for the organization. Write letters of support to the White House and to the Editorial Page Editor of your local paper. I have not let you down. I know you will not let me down.

With best wishes for good health for you and your family. Till we meet again, I hope to continue serving the membership.

Sincerely,

Kermit Haber
Executive Officer

THE WHITE HOUSE

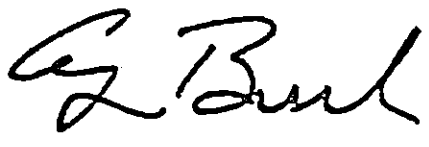
WASHINGTON

July 22, 1992 ,

I am delighted to send warm greetings to the Combat Merchant Mariners of World War II as you gather at West Point for your Fifth Annual Dinner. It is a privilege to have been nominated as your "Honorary Commander."

The liberties that we enjoy as Americans have been won at great cost, and our Nation owes a lasting debt of gratitude to our Merchant Mariners, who have repeatedly risked their lives to secure those freedoms. During World War II you made a critical contribution to the Allied victory over tyranny, courageously ferrying war supplies to our Armed Forces through hazardous, enemy-infested waters. During Operation Desert Storm, you once again answered our Nation's call to service, delivering millions of tons of equipment and spare parts to the Persian Gulf within a few short months. I know that many of you volunteered for duty, and I salute you for your service to our country.

Barbara joins me in sending best wishes for an enjoyable and memorable dinner. God bless you.



COMMANDER IN CHIEF
AIR MOBILITY COMMAND
SCOTT AIR FORCE BASE, ILLINOIS 62225-5001

27 July 1992

Mr. Kermit Haber
14 Castle Drive
Chestnut Ridge, NY 10977

Dear Mr. Haber

Linda and I very much enjoyed our time with the Combat Merchant Mariners of World War II last evening. You were most gracious to honor the men and women of the United States Transportation Command by making me an Honorary Commander of the Combat Merchant Mariners of World War II. I was in awe among your distinguished group as I listened to the challenges you faced during World War II. Certainly I am proud of the tremendous job our merchant mariners did during the DESERT Operations. Our feats may have been comparable; however, the dangers and challenges were insignificant when compared to your accomplishments.

We were pleased and impressed that members of your World War II veterans like Richard Murray came back to operate our ships during DESERT SHIELD. As always, when our nation needs help, the patriotic men and women of our great country step forward to serve with immense distinction. Stanley Willner's story combined the atrocities with the strength and determination of our POWs into an emotional but powerful and moving portrayal. We truly have a rich heritage of great, heroic Americans!

The members of the Combat Merchant Mariners of World War II are indeed fortunate to have you at the helm. Over time and even now, we have not treated our merchant mariners properly. They have always answered the call to duty in defense of our country. Duty has exposed them to hostile fire but not integrated the mariners into our armed forces. As I mentioned, we are slowly making some inroads by sponsoring legislation to provide the first step to "reserve-like" status by guaranteeing "rehire rights." We hope this will be the first step to gaining full military and veteran status for future and past combat merchant mariners.

It was a privilege and distinct honor to meet you, Mrs. Haber, Steve, and Mark. I share your immense pride in your family. Steve and Mark showed their utmost respect and love for their father in assisting you with the program and throughout the evening. It was a tremendous joy to talk with and gain enormous respect and admiration for Steve. He has combined history and economics to not only understand the past but affect the future. He must be a greatly sought after professor. I was sorry I did not get to know Mark as well--I understand he is also uniquely gifted as a computer data base librarian. He must also be a standout in his field.

Thanks so very much for a truly memorable evening, honoring me with your award, and most importantly for your leadership of our Combat Merchant Mariners of World War II.

Linda joins me in sending our very best wishes to you and your family for good health, great joy, and fulfillment in all your activities and interests. You will have to take better care of yourself --we need your continued leadership.

With great respect and admiration

H T Johnson

HANSFORD T. JOHNSON
General, USAF

General H T Johnson
Combat Merchant Mariners World War II
West Point, NY
25 July 1992

I am proud to be here this evening to accept the Honorary Commander Award from you gallant mariners who served America during WWII and all the deployments since. You can take special pride in knowing that you and your comrades who are no longer with us have made great sacrifices for America when the need for sacrifice was greatest.

You here tonight know too well the capability and the sacrifices put forth by merchant mariners through the years. By the end of WWII, 731 American merchant ships had been sunk, 5,638 merchant seamen were dead or missing in action, thousands more of your number were wounded or permanently crippled, and 609 taken as prisoners (like Stanley Willner [to attend: 3yrs WWII POW in Burma, worked river Kwai bridge]).

During the war . . . one out of every 32 merchant mariners died in battle . . . as Vice Admiral Loftus pointed out, that is a casualty rate second only to the US Marine Corps. You weren't soldiers, but -- like Kermit Haber, whose 20mm gun shot down a Luftwaffe torpedo plane -- you manned the guns when needed and sailed the ships that delivered American power. You are patriots.

I salute your contributions to American freedom. You fought side by side with American troops. You participated in the invasions of Normandy, North Africa, Sicily, Anzio, the Philippines and Okinawa, and in every beachhead assault from Guadacanal to Iwo Jima. You built the strategic bridges that carried our troops to the enemy's doorstep, sustained them in battle, and brought them home after victory was won.

We have had the same goals . . . deliver the troops, sustain them, and bring them home. That is why it is especially meaningful for me to receive this recognition from you tonight. Like you, I share your pride in our transportation community and the role it performed during Desert Shield and Desert Storm.

The word pride has taken on renewed meaning for all Americans . . . pride in the role we played in the Persian Gulf crisis . . . pride in the ideals for which our nation stands . . . and pride in our men and women in uniform who served with great courage, skill and dedication.

But you know it was not just the men and women in uniform who served our nation in this most recent time of national crisis . . . Americans from all walks of life, and particularly Americans from all sectors of our transportation community stepped forward to conduct one of the largest military deployments of all time.

One young civilian employee at the port in Savannah certainly knew the meaning of pride. She had just spent several 16 hour days preparing for deployment of the 24th Infantry Division. When she finally had an evening off, she and some friends headed to a restaurant on River Street. As they arrived, she noticed a group of people in front of a cafe watching a ship moving down the channel.
With great pride, she walked up to the group and said: "That's the first ship headed to the Gulf. I just finished loading it. Its called the Altair." One of the women in the group was wiping away tears . . . it was an emotional moment . . . at least until the ship turned so that everyone could see the name . . . it wasn't the Altair . . . it was the Del Monte . . . a pineapple ship!

The tears turned to laughter, but the pride was still there. It united Americans during the crisis. It enabled America's transportation community to pull together as a team and meet the challenges of the Desert Shield deployment.

I use the word team whenever I talk about this deployment because our success came from an incredibly wide array of military and commercial transportation assets. Many people outside the defense transportation community are surprised to learn just how dependent we are on the commercial sector. In total, 85 percent of America's defense transportation capability is in the commercial sector. More than half of our airlifters and virtually all land and rail assets come from the commercial sector. On the sealift side, the Department of Defense today owns only eight ships, the remainder of the 200 ships used in the Desert Shield deployment came from other sources-- primarily commercial.

Operation Desert Shield was the first major test of America's newest unified command, the U.S. Transportation Command. When USTRANSCOM was activated on October 1, 1987, for the first time, all defense transportation assets were aligned under a single command: the Air Force's Military Airlift Command, now Air Mobility Command; the Army's Military Traffic Management Command; and the Navy's Military Sealift Command

These commands form a triad composed of air, sea, and land transportation assets. Each leg of the triad provides unique capabilities critical to our success in Desert Shield.

America's maritime community was the life line for our armed forces in Southwest Asia. In the early days of Desert Shield, this life line was maintained almost exclusively by airlift. It was an incredible feat unparalleled in history. But when the first two fast sealift ships arrived in Saudi Arabia, they carried more tonnage than the entire airlift up to that point.

For years, we in the Department of Defense have stated that airlift will be the first to arrive in crisis or contingency, but in a large-scale operation, 90 percent of materials and equipment will be carried by sealift. It is a fact that has remained unchanged since WW II and will not change for the next fifty years: Sealift will remain the bedrock of America's defense transportation system, and the defense transportation system will remain the foundation of America's armed forces.

Now, many of you may be concerned about the massive reorganization that is taking place within the Department of Defense; the FY95 DoD budget will be 45 percent less than the FY85 budget. By 1995 the number of personnel in our armed forces will be fewer than anytime since the late 1930s. DoD spending in 1995 will be 18 percent of the federal budget as opposed to the early 1950s when it was 57 percent.

However,I assure you that one organization that will not change much is US Transportation Command. The value of placing one command in charge of all transportation is a lesson we will not have to learn again.

We also learned that a defense transportation system primarily based in the commercial sector can respond to a large scale crisis in a timely manner. Many aspects of this system, such as the Ready Reserve Fleet that Admiral Loftus discussed had never been tested, but all of the players in the commercial sector responded with the same attitude as Bill Masters, port manager at Beaumont, who, during the early days of the deployment, greeted my representative with: "The answer is yes, now what is the question?"

We have, without question validated the need for a unified transportation command. In the early days of Desert Shield, the priorities changed rapidly. It was a tense and highly fluid situation. Whenever General Schwarzkopf needed to make a change in the flow of personnel and equipment, it only took one phone call.

We proved that America's defense transportation system can enjoy the cost benefits of being primarily dependent on the commercial sector, and at the same time, still have the capability to meet the fast paced and massive demands of a major contingency such as Desert Shield.

We demonstrated that our Afloat Prepositioned Ships and Maritime Prepositioned Ships will be a superb method of maintaining our global reach as we reduce the size of our forward deployed forces.

In the Ready Reserve Force we have learned several lessons. Most importantly, we learned that the system worked. We also learned that we need to place more roll on/roll offs in the RRF, and we need to place a higher priority on the readiness of the RRF.

We also demonstrated to the American public what we have been preaching for several years . . . the status of America's merchant marine force is in a downward spiral. Unless we are going to man our ships with 90 year old mariners, we won't be able to rely on old hands like Robert Wilson and Richard Murray much longer. The question is, who will be there to replace them?

President Bush has given us the blueprint for this revival . . . the National Security Sealift Policy. It is up to us make it a reality. It is vital to our economic health, our defense, and our national security.

Last month, Secretary of Transportation Andrew Card laid out a plan for revitalizing the nation's maritime strength. He identified several areas that apply directly to the Department of Defense. Most significant is that DoD will not pursue any build-and-charter programs for the lease of ships that would be detrimental to US liner operators or distort the commercial market.

This is an issue that has my whole-hearted support. If America is to remain the world leader beyond the 1990's, America must maintain its strength . . . economically, diplomatically, and militarily.

To maintain this strength . . . to maintain our political and economic freedoms . . . America must have a strong and viable merchant marine.

I leave you with the words of President John F. Kennedy . . . words that he wrote for a speech he was scheduled to deliver at the Dallas Trade Mart on November 22, 1963.

If we are strong, our strength will speak for itself.
If we are weak, words will have little meaning.

We must all work together to ensure that the America you have served so unselfishly and heroically in the past remains strong and free in the future. As your honorary commander, I will do all that is within my power to remain true to the ideals upon which you Combat Merchant Mariners of WWII have pledged yourselves.

LRT,

FYI, long ago we heard about this same issue for the US Merchant Mariners. I passed it to Tom Scully and never heard back, other than he took care of it.

CDJ 11/16

Thanks, Tom! I have held a copy here & will attach it w/ your response for file.

THE CENTER FOR SECURITY POLICY

NRN

Date: 1/12/93

To: HON. JAMES BAKER

Company:

Fax Phone Number: 94562883

CC:

From: Center for Security Policy

Subject:

# of Pages (including this cover sheet) 5

Message:

General inquiries concerning the Center and specific name or fax number changes should be directed to extension 268 at the number below.

If you do not receive all pages, please call back immediately.

Voice: (202) 466-0515 FAX: (202) 466-0518

THE CENTER FOR SECURITY POLICY

D E C I S I O N B R I E F

DECISION BRIEF
For Immediate Release

No. 93-D 4
12 January 1993
Contact: John Kyl
(202) 466-0515

THE TRIUMPH OF HOPE OVER EXPERIENCE: THE NEW CHEMICAL WEAPONS TREATY IS A DANGEROUS DELUSION[1]

Samuel Johnson once said that second marriages represent "the triumph of hope over experience." The same applies to much of the experience with arms control -- particularly of the multilateral variety. Rarely has that been more true than with the Chemical Weapons Convention (CWC) due to be signed by the United States and scores of other nations in Paris tomorrow.

The Center for Security Policy believes **the United States is now poised to repeat the mistakes of the 1972 Biological Weapons Convention.** As with the CWC, the U.S. entered into the earlier convention **because it did not wish to maintain the relevant military capability and thought it would be better off signing up other nations to a ban -- *even one that was wholly unverifiable and unenforceable*.** The result was graphically illustrated in the course of the war with Iraq: Notwithstanding the Biological Weapons Convention, the enemy was equipped with lethal viruses and the United States was forced to rush hastily ginned-up and inadequately tested antidotes and less-than-effective defensive systems into the theater of operations. America had no option whatsoever to threaten in-kind retaliation.

The new Chemical Weapons Convention, and the fact that it enjoys official American support despite its fatal flaws, is -- as much as anything -- the result of U.S. President George Bush's personal obsession with "ridding the world of chemical arms." However desirable this goal is, as a practical matter, *it simply is not an achievable one*. **Such weapons are simply too easily manufactured, with too readily available technologies and ingredients and too concealable to be susceptible to international prohibitions.**

Reckless Presidential Myopia

Chemical arms control is hardly the only area where the personal predilections of the President have prevented "the facts from getting in the way" of U.S. policy. Indeed (as the Center for Security Policy has assiduously documented over the past four years), the Bush practice of "personal diplomacy" has involved one astonishing example after another of subordinating realistic assessments of international problems -- to say nothing of long-term U.S. interests -- to Mr. Bush's strongly-held, *but fundamentally misguided*, notions. Consider the following examples:

- **Preserving ties with the PRC despite the Tiananmen Square massacre and subsequent pervasive repression.** The net effect has been no appreciable

- more -

[1] This *Decision Brief* is adapted from remarks by Director Frank J. Gaffney, Jr. at the 1992 U.S. Army Scientific Conference on Chemical Defense Research, Aberdeen Proving Ground, Maryland, 17 November 1992.

diminution in the brutality of the Chinese regime and a $15 billion trade deficit (including illegal import of products made with Chinese slave labor).

- **Betting on Mikhail Gorbachev** -- with, among other things, $3.75 billion in taxpayer-underwritten credit guarantees and sensitive dual-use technology. This was done long after it became apparent that he was an *impediment to* radical reform in the Soviet Union, not its champion and after it became clear that the loans would prove unrecoverable.

- **Failing to provide vital support to the real reformers in the Soviet successor states** until it was effectively too late, then failing to condition such aid *as was given* on wholesale structural change and institution-building. We are now confronted with the prospect of the complete cooption and/or elimination of the Russian democratic and free market movement by Old Guard forces coalescing behind organizations like "Civic Union," "National Salvation Front," etc.

- **Coddling Saddam Hussein** -- even after the U.S. government knew that he was bent on acquiring an immense arsenal of offensive weaponry including weapons of mass destruction, some of which he was prepared to use even against his own people. Worse yet, such support for Saddam continued despite the fact that U.S. taxpayer funds were being used to underwrite some of these purchases.

- **Toadying to the Syrian version of Saddam Hussein, Hafez Assad** -- a far smarter and more dangerous actor than the Iraqi despot.

Interestingly, all of these examples of misbegotten Bush investments in personal diplomacy have one other thing in common: Each of the aforementioned beneficiaries of U.S. protection and largesse during Mr. Bush's tenure engaged in systematic efforts to amass large inventories of offensive chemical weaponry. In fact, **every one of the foregoing nations is *still* building chemical arms** -- as are probably a dozen or more others.[2] That fact is a particularly inconvenient one in light of perhaps the most insidious instance of Mr. Bush's wishful thinking -- namely, his personal crusade to "ban chemical weapons from the face of the earth."[3]

An Ill-Conceived and Poorly Executed Accord

The result of President Bush's monomania on chemical arms control is that the United States is about to become legally committed to a treaty that is **neither "global" nor "verifiable,"** the two claims typically made on its behalf. In fact, it is basically an accord that will require the elimination of *all U.S.* chemical arms -- even though others, including the world's pariah states, may continue to possess them. The Convention will also likely exacerbate the present inadequacies of the United States' chemical defensive posture.

- more -

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[2] The Yeltsin government recently incarcerated, in a manner reminiscent of the communists' repression of Andrei Sakharov and other dissidents, a scientist -- Prof. Vil Mirzayanov -- who had the temerity to reveal that Russia was continuing to develop and produce deadly chemical warfare agents.

[3] The genesis of Mr. Bush's monomania about using arms control to eliminate chemical weapons has been documented in numerous Center for Security Policy papers, notably *"Bush's Myopia on Chemical Weapons Keeps Him From Seeing the Handwriting on the Arms Control Wall,"* (No. 91-P 37, 13 May 1991).

The critical groundwork for such a dubious achievement was laid when, in May 1991, the Bush White House capitulated on two fundamental points. It announced that:

- **"The United States will foreswear the use of chemical weapons for any reason, including retaliation in-kind with CW,** against any state, effective when the CWC enters into force."

- **"The United States will drop its position that we must be allowed to keep two percent of our CW stockpile (500 tons [of chemical agent]) until all CW-capable states have joined the convention."**

These and other American concessions made it possible, after decades of negotiation, to find at last the lowest-common-denominator: a Chemical Weapons Convention essentially bereft of verifiability, equitability or practical utility. As a result, the treaty which will shortly be submitted to the United States Senate for its advice and consent is unquestionably the most ambitious and overreaching arms control agreement of all time. While there are innumerable technical points that materially contribute to the defective character of this Convention, there are three overarching issues that argue against its ratification:

First, **the security of U.S. citizens and military personnel will, in all likelihood, be jeopardized -- later, *if not sooner* -- if this country is denied the right and the ability to deter chemical attack by the credible threat of in-kind retaliation.** Historically, chemical agents have been used almost exclusively where such an in-kind deterrent threat was not present; in its absence, the use of the "poor man's atomic bomb" has proven irresistible to a number of nations. Notwithstanding Saddam Hussein's restraint in using CW in the Persian Gulf war (the cause of which can at this point only be surmised), it is likely that such a temptation will occur in the future if similar conditions pertain.

Second, thanks in part to the inherent nature of chemical weapons, in part to the myriad flaws in the CWC, virtually any other nation that wishes to do so can, and probably will, retain the capacity to conduct militarily significant CW attacks. **The loopholes, circumvention options and verification problems inherent in the treaty will guarantee only that law-abiding nations like the United States will comply fully with its prohibitions.**

Finally, **the inevitable effect of the CWC will be to reduce still further the level of effort going into *defenses* against chemical weapons.** The truth of the matter is that the U.S. military did not take the threat posed by chemical weapons seriously enough when it was an acknowledged danger from a monolithic and unremittingly hostile adversary like the Soviet Union. Without deprecating the valiant efforts of those who have struggled to provide American troops with quality CW protective gear, antidotes, reconnaissance, detection and analysis equipment, etc., there is no disputing the fact that these programs have suffered from the low priority traditionally accorded this threat by the United States armed forces. One can only imagine what priority they will enjoy -- particularly over time -- when *there is not supposed to be any such threat at all!*

The Bottom Line

The passing of the Bush Administration from the scene may have come in the nick of time. If a President whose monomaniacal attachment to wishful thinking is replaced by a man and an Administration prepared to reckon with the world as it ***really*** is -- not just as we wish it to be -- then the United States may yet be spared further travel down the dangerous road toward effective unilateral chemical disarmament.

It can only be hoped that President Clinton will recognize that *far from enhancing the international arms control regime*, agreements like the Chemical Weapons Convention actually serve to debase the value of that regime. Collecting signatures from renegade leaders of pariah states -- instead of policing and enforcing existing, *and violated*, agreements like the 1925 convention banning first-use of chemical arms or the 1972 Biological Weapons Convention -- is irresponsible escapism. The fact that some such states are now trying to manipulate Western interest in their enrollment in the CWC to catalyze international pressure against a peaceable democracy, Israel, and coerce it to abandon its alleged stockpile of nuclear weapons is but the latest evidence of the mischief that will be made of this treaty.

Unfortunately, both the new President and the Senate will be under immense pressure to honor the commitments to CW arms control made by the outgoing Bush Administration. Still, both have a responsibility to understand that any hope this country has of deterring and, if necessary, of defeating chemical attack will lie not in wishing the threat away but in remaining prepared to deal with it -- both through defensive measures and through the credible threat to respond in kind.

- 30 -

NRN

Frank J. Ball
4 Atlantic Street
Charleston, South Carolina 29401

Mr. James Baker

Dear Mr. Baker,

Thought you would be interested in comments of Dr. James McLaren and post thermonuclear danger; and of the pertinence of certain micronutrients relative to present and future health.

Many, many thanks for your contributions!!!

Frank J. Ball

January 7, 1993

4 Atlantic Street
Charleston, SC 29401

President George Bush
Mr. James Baker
Mrs. Barbara Bush

The White House
Washington D. C.

Dear Mr. President, Mr. Baker, and Mrs. Bush,

The president spoke in his excellent address to the cadets yesterday about incredible accomplishments; and also mentioned "getting on with the rest of my life."

Correction of Personal Magnesium Deficiencies

After hearing of the presidents atrial fibrillation while flying back from a California symposium on Magnesium in Clinical Practice; a series of letters over the past year and a half persistently attempted to alert the president and his staff as to his critical cardiovascular dangers and their apparent very simple correction. Understandably, I do not yet know if the president and his wife are supplementing with adequate (500 mg) levels of critically needed magnesium or with high levels of natural antioxidants. This final attempt to possibly catch some personal attention seemed merited considering the previous arrythmia warning and your coming personal responsibilities for your own health.

At this juncture it seems quite important that all three of you appreciate the striking protection to your hearts and arteries from increased oral magnesium to correct widespread deficiency; and also to realize that very extensive foreign medical evidence demonstrates marked prompt improvement following heart attacks or arrythmias from prompt adequate intravenous injection of magnesium salts. This is well covered in the enclosed Oct. 29, 1992 letter and attachment to Doctors Burton Lee and James E. Edwards (now president of M.U.S.C. and previously Energy Secretary). Just quickly (half a minute) running your eyes over some of the enclosed underlined abstracts from five Cardiology sessions at this latest European Magnesium Conference is very likely to indicate why this area merits your personal attention and action.

Antioxidants, Evening Primrose Oil, Arthritis and Cancer

Brief contact with Dr. James O. Mason at the International Cancer Conference in Charleston, prompted the enclosed Nov. 3, 1992 letter and attachment to him. That letter covered the first successful U. S. double-blind trial presented earlier that week in Atlanta at the annual rheumatology meeting; which successfully employed the same natural essential fatty acid that had completely controlled my very severe rheumatoid arthritis without drugs since 1980. The last paragraph of the first attached letter copy to interested rheumatologists mentions potential future applicability of this approach to the president's right hip joint. Other attached letter copies deal mainly with provocative similarities between rheumatoid arthritis and cancer; and the apparent effectiveness of high levels of the antioxidant Vitamin C and the gamma-linolenic acid in evening primrose oil in achieving sustained control of both these degenerative diseases.

Dr. James McLaren, Thermonuclear Weapons, and You

You three just returned from Moscow after the all important mutual agreement

to further massively reduce our thermonuclear weapons. President Truman as you know had ordered production of any possible hydrogen bomb in 1950 after the Russians surprised us by exploding their first nuclear fission bomb four years earlier than expected; and during the same week Klaus Fuchs was found to be passing our nuclear secrets to the Russians.

You should thus find interest in the thermonuclear physicist, whose five year control of bone cancer and bone pain with very high levels of Vitamin C was discussed on the last two pages of the James Mason attachment. Based on five years (1980-85) of phone conversations with him he believed in 1947-54 that the "hydrogen bomb" should be based on Lithium-6; and apparently contributed very significantly when the Russians exploded the first transportable thermonuclear bomb in 1953.

Dr. James McLaren (B.S. at Syracuse) obtained his Ph.D in Scotland in 1933 on the separation of Lithium-6 from Lithium-7. He also then helped construct the equipment and beryllium target with which Sir James Chadwick produced and detected the first neutron; and thereby obtained the Nobel Prize.

Our race to quickly isolate bomb quantities of Lithium-6 occured when the August 1953 Russian thermonuclear bomb exploded with 25 times more power than at Hiroshima; and subsquent atmospheric analysis showed it had contained Lithium-6. With Dr. McLaren's background on Lithium-6 isolation and also being an electro-chemist; he apparently was deeply involved in proper utilization of an electochemical counter-force amalgam at the Oak Ridge plant to rapidly isolate the required Lithium-6 from lithium.

This Lithium-6 was then reacted with deuterium gas to form a solid Lithium-6-Deuteride nuclear fusion core. Detonation in one millionth of a second by neutrons from adjacent Uranium-235 fission; produced the massive fusion energy and also sufficient additional neutrons to double again the explosive power by causing fission of a cheap Uranium-238 casing.

This extremely small Lithium-6-Deuteride thermonuclear fusion bomb apparently demonstrated at Bikini in March 1954 half again more explosive power than the sixty-three ton liquid deuterium bomb (cooled to almost absolute zero) that exploded at Einewetok in November 1952; and fifty times greater explosive force than the Russian bomb seven months earlier.

The whole world surely owes Presidents Reagan and Bush incredible gratitude for so quickly and massively rebuilding our military capability and markedly reducing our nuclear danger even if it cost two trillion dollars. Timely, very quick and successful movement at an apparent critical period forty years ago could also merit our thanks and recognition. I remember his comment that the deuterium bomb cost twenty billion and was not usable; while theirs was achieved for fifty million. Of the six who worked together from 1949 to 1952, two had bone cancer, two had leukemia and two were dead.

Why Do We Age

If you are not yet convinced your vital organs need significant increased antioxidants as we age, then please look at the third paragraph of the enclosed Dec. 15, 1992 response to Dr. Peter Greenwald (NCI Director of Cancer Prevention and Control) and the table at the end of the attachment showing how much Vitamin C seems to drop in different vital organs over your life.

With hope that you might see this and find personal benefit or pertinent information, since all of us have benefited so tremendously from your combined twelve year effort.

Most sincerely,

Frank J. Ball

Frank J. Ball

FJBkaj

cc: Dr. James E. Edwards
Dr. Peter Greenwald
Dr. Dr. Burton J. Lee, III
Dr. James O. Mason
Senator Ernest F. Hollings
Senator Strom Thurmond
Representative Arthur Ravenel

PS: January 11, 1993

Since I couldn't get the typist to quite complete corrections on Friday, Monday's Post & Courier write up covering the quite significant progress on ovarian cancer with the natural product Taxol by Dr. William T. Creasman is enclosed. He spoke to and possibly attracted the 8th International Cancer Conference that Dr. Mason also spoke to in Charleston.

I am not a medical professional, do not know Dr. Creasman or the medical university oncologists and the enclosed picture with comments was attached to my 26 page 1978 letter on Vitamin C and cancer to indicate my situation.

Enclosed is the 1983 letter to the vice-president on non-toxic control of cancer that I briefly discussed with him in Charleston and a letter to Dr. Jan Van Eys at the same time. I retired a few months later and have been mainly interested in and have pushed the very deterimental effects of deficiencies of magnesium, gamma-linolenic acid and antioxidants in degenerative diseases since there was a much more receptive medical response.

I have since had an old Weimramer dog who weakened and almost quit eating; and was found to have a bladder tumor the size of a grapefruit, not recommended for removal. It turned out his bowel tolerance point for the oral half salt of Vitamin C in his food was about forty grams per day. His quality of life and weight returned to normal and his tumor progressively shrunk until it could no longer be detected by the veterinarian even with x-rays.

In early October my 12 year old English Sheep dog at her annual shots and check up, was reported to have a large mammary tumor, along with arthritis and an operation with subsequent radiation treatments were recommended. I found however that her bowel tolerance for Vitamin C was 32 grams which she has taken daily in her food along with some evening primrose oil since then. Progressive shrinkage of the tumor is evident; and there has been recent need to reduce the Vitamin C level to about half.

cc: Dr. William T. Creasman
Dr. Samuel Broder, NCI Director
Dr. Jan Van Eys

The Westvaco managers pictured on the four cover pages of this report have responsibilities in the key areas of forest resource management, technological research, manufacturing and marketing. Scott Wallinger (front cover), who holds a master of forestry degree from Yale, is manager of our Timberlands Division. Now 36 years old, he assumed responsibility for the management of nearly 1,200,000 acres of Westvaco forestland three years ago. He has been associated with Westvaco for eleven years. Dr. Frank J. Ball (below) has been a research scientist with Westvaco for 31 years. He is now associate corporate research director and director of our Charleston, South Carolina, research center, which concentrates on the development of high technology products that have accounted for the rapid growth of our specialty chemicals business. Now 56 years old, Dr. Ball has a Ph.D. degree from the University of Rochester.

WHO'S WHO IN THE WORLD

(1978-79)

BALL, FRANK JERVEY, chemist; b. Charleston, S.C., Jan. 29, 1919; s. John Coming and Annie Arden (Jervey) B.; B.S., U. of South, 1941; Ph.D., U. Rochester, 1944; m. Mary Elizabeth Furtwangler, Feb. 16, 1950; children—Frank Jervey, Stuart Furtwangler, Bruce Devon, Steven Moultrie. Research chemist Westvaco Corp., Charleston Research Center, 1944-46, group leader, 1946-53, dir., 1953-75, asso. corp. research dir., 1975—; dir. Tyrone Research Lab., 1958-60. Pres., Empire State Paper Research Assos., 1970—. Mem. Am. Chem. Soc., T.A.P.P.I., Charleston C. of C. (chmn. higher edn. com. 1969-74). Phi Beta Kappa, Sigma Xi, Omicron Delta Kappa. Episcopalian. Clubs: South Carolina Soc., St. Cecilia Soc., Carolina Yacht Contbr. articles profl. jours. Patentee in field. Home: 4 Atlantic St Charleston SC 29401 Office: PO Box 5207 North Charleston SC 29406

BALL, GEORGE WILDMAN, lawyer, investment banker; b. Des Moines, Dec. 21, 1909; s. Amos and Edna (Wildman) B.; B.A., Northwestern U., 1930, J.D., 1933; m. Ruth Murdoch, Sept. 16, 1932; children—John Colin, Douglas Bleakly. Admitted to Ill. bar, 1934, D.C. bar, 1946, with Gen. Counsel's Office, Treasury Dept.,

October 29, 1992

Dr. Burton J. Lee, III, Physician to the President
Dr. James E. Edwards, President, Medical University of South Carolina
Dr. Peter C. Gazes, Distinguished University Professor of Cardiology, M.U.S.C.
Dr. James F. Spann, Director, Department of Cardiology, M.U.S.C.

Dear Doctors Lee, Edwards, Gazes, and Spann,

During the past year and a half you four have been exposed to continuing letters and literature emphasizing the wide-scale critical dangers of arrythmias and heart attacks caused by inadequate maintenance of our cellular magnesium. Diet-induced, stress-induced and running-induced magnesium deficiencies occur particularly in the heart, cardiovascular and cerebrovascular arteries and specific concern was expressed throughout this period because of the potential dangers from President Bush's very high stress levels and his arrythmia warning.

Doctors Edwards, Gazes, and Spann and their M.U.S.C. colleagues had been repeatedly written and contacted over the previous five years; as clinical evidence became progressively more impressive on 1) our serious chronic cellular magnesium deficiencies brought about largely by industrial preparation of foodstuffs, 2) the progressive resulting cardiovascular health problems and 3) the demonstrated major beniefit from intravenous magnesium supplementation in various cardiovascular crisis without detrimental side effects.

I came close to attending the IVth European Congress on Magnesium in Geissen, Germany last month; but couldn't finally get past the $ 1,650 plane ticket. Dr. Sighart Golf, Conference Chairman, however fortunately very kindly just sent me all of the 129-Magnesium abstracts. The 27 enclosed underlined abstracts from the five Cardiology Sessions decidedly merit perusal by all cardiologists; and by those of us who want to avoid, put off, or control deadly heart attacks. Just running your eyes over the titles would seem to suggest personal supplementation to lower chronic deficiency; since your likely intake appears to be half that desired.

Extensive intravenous magnesium supplementation in both heart attacks and arrythmias may begin in 1993 following completion of the 18 month Fourth International Study of Infarct Survival (ISIS-4) which ends in December; and which my Dec. 5, 1991 letter tried to get M.U.S.C. to join.

This week's November Harvard Heart Letter comment More on Magnesium (enclosed) covers the recent Lancet paper by K. L. Wood et al on a five year double-blind trial using 1776 mg of intravenous magnesium or placebo on 2316 randomized patients with suspect acute myocardial infarction. The magnesium group evidenced both a 28 day mortality reduction of 24% and a left ventricular failure reduction of 25% that were independent of thrombolytic or antiplatelet therapy and with no detrimental side effects. The ISIS-4 trial finishing in December uses 2000 mg of intravenous magnesium on half of the perhaps 40-50,000 randomized, double-blind acute myocardial infarction patients on hospital arrival; with end points at the first month and the end of the trial.

Enclosed are four underlined abstracts dealing with magnesium and the heart from the October American College of Nutrition annual meeting in San Diego; which had one day mainly on magnesium, zinc and selenium. Incidentally, two weeks earlier I also attended most of the excellent week-long Intensive Review In Emergency Medicine in

Charleston. The first talk on Monday by Dr. Bruce Usher covered Emergency Management of Myocardial Infarction; that prompted a final question on possible magnesium use, which he surprisingly referred to me. Several other questions on magnesium use were asked at this conference but with no answers. Dr. Robert Leman's quite interesting, late Friday afternoon talk on Emergency Management of Ventricular Tchycardia mentioned my presence; and that 2-4 grams of intravenous magnesium sulfate was now a good drug to use in certain acute heart problems. He later commented in his talk that where bradycardia converted to ventricular tachycardia this problem was magnesium responsive as were torsades de pointes arrythmias.

The Magnesium abstract in the STRESS session, Noradrenergic Activity in Panic Disorder: The Effect of Magnesium Salt Administration, that happened to be copied with the last of the 27 Cardiovascular Abstracts; seems another quite pertinent indication of the importance of adequate magnesium and clinical amelioration. Hopefully such encouraging abstracts and trials will accelerate acceptance of both daily magnesium supplementation to correct our wide-spread diet-induced, stress-induced and genetic magnesium deficiencies; and the intravenous use of magnesium in arrythmia and cardiovascular crises.

Most sincerely,

Frank J. Ball

Frank J. Ball

P.S. Enclosed is my August 1992 response and the July 29 New York Times story sent to me about Dr. Curtis Hames' long term efforts to demonstrate that the very much higher stroke death rate across the South (highest in South Carolina) was because eons ago, selenium was largely washed out of our soil (as was magnesium). Low soil level cellular selenium (reduced antioxidant capability) and low level cellular magnesium (reduced metabolic, enzymatic, synthetic and energy capabilities) thus certainly must be avoided. The amount of the readily absorbed magnesium in drinking water at various locations in industrial countries becomes critical and decidedly relates to cardiovascular death; because industrially prepared foodstuffs are so very low in magnesium.

cc: President George Bush,
Mrs. Barabara Bush,
Vice-president Dan Quayle
James Baker
John Sununu
Secretary for Health Loius W. Sullivan
Assistant Secretary for Health James O. Mason
Senator Ernest Hollings
Senator Strom Thurmond
Representative Arthur Ravenel
Dr. Curtis Holmes
Dr. Robert B. Zurier
Dr. Sighart Golf

M.U.S.C. Personnel

J. C. Allen	A. J. Crumbley	E. C. LeRoy
M. E. Assey	R. H. Gadsen	W. M. Newberry
J. C. Ballenger	L. M. Haddad	W. M. Simpson
W. H. Barnwell	H. G. Hempling	C. P. Summerall, III
B. A. Carabello	E. L. Hogan	B. W. Usher
J. A. Colwell	J. E. Keil	F. Tecklenburgh
F. A. Crawford, Jr.	R. B. Leman	W. C. Worthington

clinical basis. Severity of coronary sclerosis was quantified according to the Kaltenbach' score and patients were divided into 4 groups (I. mild CHD, n=20; II. medium CHD, n=22; III. severe CHD, n=22; IV. very severe CHD, n=9). Leftventricular ejection fraction was used to evaluate pump function. Furthermore we assessed the influence of digitalis or diuretic therapy and also of the presence of arterial hypertension or myocardial infarction. For statistical analysis we used Student 's t-test and Mann and Whitney's u-test . Magnesium content of erythrocytes decreases significantly with rising severity of coronary sclerosis (I.- 2, 55 SEM 0.24; II.2, 44 SEM 0.30; III.- 2,40 SEM 0,24; IV.- 2, 00 SEM 0,44) . There was no significant difference between patients with normal or impaired pump function. Considering the presence of hypertension or myocardial infarction, we could not find any difference. The results were not influenced by digitalis or diuretic treatment. Plasma magnesium did not show any difference in all cases. The decrease of erythrocyte magnesium in patients with coronary heart disease is a phenomenon which is primarily related to severity of coronary sclerosis and which does not depend on digitalisation, diuretic therapy, myocardial infarction or arterial hypertension.

13 **Magnesium and Hypertension**

Wester, P.O
Internal Medicine, University of Umeå, Sweden

In experimental work magnesium (Mg) has been established to be an important regulator of vascular tone and in some studies hypertension has developed in Mg deficient rats. The evidence from epidimiological studies of a role for Mg in the development of human hypertension is inconsistent. Dietary intake of Mg and also Mg in serum are reported to be inversely related to blood pressure (BP) in several investigations but urinary Mg excretion is unrelated to BP in most studies. A BP fall in relation to i.v. Mg infusion is often observed. The results of peroral Mg substitution to hypertensive patients are inconsistent. Peroral Mg added in physiological doses to hypertensive patients seems not to affect BP unless the patients have a Mg deficiency which often is the case after several years of diuretic treatment. However, the administration of Mg in pharmacological doses seems to lower BP dose dependently without any uncomfortable side-effects. The pathophysiological background may involve several mechanisms such as interference with the sodium, potassium, pump function, the calcium transport mechanisms, the renin-angiotensin-aldosteron system and also the prostacyclin and inositol metabolism.

14 **The Dose-Dependent Reduction in Blood Pressure through Administration of Magnesium - A Double Blind Placebo Controlled Crossover Study**

L. Widman, P. O. Wester, B. Stegmayr
Internal Medicine, University of Umeå, Sweden

Seventeen patients with a diastolic blood pressure over 90 mm Hg were recruited from a running health screening programme to a double blind crossover study with 15 mmol Mg 2+/day (Emegsan)® for three weeks, followed by a 30 mmol Mg2+/day for another three weeks with 40 mmol Mg2+/day for a final three weeks. A significant decrease in the mean systolic blood pressure was recorded from 154±10.7 mm Hg to 146±16.9 mm Hg (p=0.031) and the mean diastolic blood pressure decreased from 100.2±4.2 mm Hg to 92±6.6 mm Hg (P=0.0001).

15 **Influence of vascular endothelium on Mg-induced relaxation in isolated aorta from DOCA-Salt hypertensive rats.**

P. Laurant, A. Berthelot
Laboratoire de Physiologie Pharmacie, Faculté de Médecine et de Pharmacie, Place St Jacques, 25030 BESANCON Cedex, France

Few investigations have been focused about the relationships between extracellular Mg (Mg e.c.) and endothelium in arterial hypertension. The present study was designed to determine whether increasing Mg e.c. leads to endothelium-dependent relaxation in noradrenaline-precontracted isolated aorta from 12 weeks-old deoxycorticosterone acetate salt (0.9% NaCl) hypertensive (DOCA) (n = 10) and normotensive (NT) (n = 10) Sprague-Dawley rats. Mg-induced relaxation was lesser in intact aorta from DOCA as compared to NT rats with increased IC_{50} value to Mg (1.22 ± 0.19 vs 0.12 ± 0.01 mM, P < 0.001). Removal of endothelium depressed the Mg-induced relaxation in aorta from both DOCA (IC_{50}: 2.33 ± 0.26 vs 1.22 ± 0.19 mM; P < 0.01) and NT rats (IC_{50}: 1.00 ± O.23 vs O.12 ± O.01 mM , P < O.01). The same observation was made in presence of L-NAME (inhibitor of endothelial NO biosynthesis) (IC_{50}: 0.52 ± 0.11 vs O.11 ± 0.01 mM, P < 0.01 in NT rats; IC_{50} : 3.87 ± 0.51 vS 1.09 ± 0.15 mM, P < 0.001 in DOCA rats). However the Mg-induced relaxation following contraction with noradrenaline was significantly less in intact aorta treated with L-NAME or in aorta with disrupted endothelium from DOCA rats than those from NT rats. It is concluded that Mg-induced vasorelaxation on noradrenaline precontracted aorta can be mediated by endothelium-dependent mechanism implicating NO. The influence of NO on the impaired Mg-induced relaxa-

tion is more pronounced in aorta from DOCA rats. These differences could be related to the impaired endothelial function from hypertensive rats which seems ameliorate by Mg e.c.

Influence of a Magnesium Supplementation on Serum Lipids and blood Pressure.

K. Kisters, C. Kaiff, K. H. Rahn, W. Zidek
Med. Univ. Poli[illegible]nik, 4400 Münster, Albert-Schweitzer-Str. 33, Germany

The effect of an oral Mg^{++} supplementation on serum lipids in patients with hyperlipidemia of Frederickson type IV and IIb and on blood pressure was examined. In 65 patients with normal renal function, on cholesterol-poor and calorie restricted diet, blood pressure, serum cholesterol, triglyceride, HDL- and LDL-cholesterol as well as plasma and intracellular magnesium concentrations were measured before and 4 weeks after therapy. 35 patients received 500 mg Mg^{++} daily additionally. The results show that a Mg^{++} supplementation in addition to the usual dietary measures is beneficial with regard to serum triglycerides (values, means±SD, decreased from 197, 57±47,12 to 163,80±40,73, $p<0,05$), but exerts no positive effect on blood pressure and serum cholesterol. Furthermore intracellular magnesium concentration increased significantly under Mg^{++} supplementation (values, means± SD, increased from 1 ,73±0,23 to 1,90±0.19 mmol/1, $p<O,05$) .
This study has shown that a peroral magnesium therapy can alter blood lipid composition and therefore be of use in reducing atherogenic risk factors, but further investigations, especially with regard to a long-term Mg^{++} therapy, still remain to be settled.

16 **Reduction of Blood Pressure with Oral Magnesium Supplementation in Women with Mild to Moderate Hypertesion**

J.C.M. Witteman (1), D.E. Grobbee (1), F.H.M. Derkx (2), R. Bouillon (3), A.M. de Bruijn (1), A Hofman (1).
(1) Department of Epidemiology & Biostatistics,
(2) Department of Internal Medicine I, Erasmus University Rotterdam, The Netherlands.
(3) Laboratory of Experimental Medicine and Endocrinology, Catholic University of Leuven, Belgium.

486 g. Mg In a double-blind controlled trial, 91 middle-aged and elderly women with mild to moderate hypertension who were not on anti-hypertensive medication were randomly assigned to treatment with magnesium aspartate-HCl (20 mmol magnesium per day) or placebo for 6 months. Magnesium aspartate-HCl in the given dose was well-tolerated and was not associated with an increased frequency of diarrhoea compared to placebo. At the end of the study, systolic blood pressure had fallen by 2.7 mmHg (95% confidence interval -1.2 to 6.7) and diastolic blood pressure by 3.4 mmHg (1.3 to 5.6) more in the magnesium group than in the placebo group. The presence of a low plasma renin or a high plasma parathyroid hormone level at baseline enlarged the effect on systolic but not on diastolic blood pressure. Urinary magnesium excretion significantly increased in the magnesium compared to the placebo group. No changes were seen in other biochemical parameters. The findings suggest that oral magnesium supplementation with magnesium aspartate-HCL may be a safe and effective measure for lowering blood pressure in subjects with mild to moderate hypertension, who are not receiving anti-hypertensive treatment.

17 **The role of Magnesium in Glucose Intolerance and Insulin Resistance in Patients with Essential Hypertension**

K. Sebeková, V. Spustová, R. Dzúrik
Dept. Clin. Pharmacol; Inst. Prev. Clin. Medicine; Bratislava, CSFR

Decreased free erythrocyte magnesium (fErMg) concentrations associate with and even appear to be a common cause of both essential hypertension and glucose intolerance and/or insulin resistance (GI/IR). The prevalence of GI in patients with essential hypertension (n=98) could be predicted (95% confidence limits) to 26-35%, and rose even to 39-59% if both GI/IR were considered. The parameters characterizing Mg metabolism [Mg-S, Mg-U, total (atomic absorption spectrophotometry), fErMg (31P NMR spectroscopy) and bound Mg (calculated) were studied in 25 patients with essential hypertension during standard oral glucose tolerance test (oGTT) under basal conditions and aftr i.v. load of 2 g Mg sulfate. It was found that GI/IR was significantly more frequently associated with low fErMg>200, chi2, $p<0,001$. No difference was found in other parameters of Mg metabolism, therefore the shift of fErMg towards the bound fraction seemed to result from its increased intracellular binding. I.v. Mg load prior to oGTT improved GI/IR in patients with low fErMg, and 3/7 patients completely normalized their glucose tolerance. It is concluded, that low fErMg associates with GI/IR, and both improve after acute i.v. Mg load.

18 **Magnesium Reduces Mortality in Acute Myocardial Infarction Patients Unsuitable for Thermbolytic Therapy**

M.Shechter, H.Hod, E.Kaplinsky, B.Rabinowitz.
Heart Institute, Sheba Medical Center Tel-Hashomer and Tel-Aviv University, Israel.

The effects of intravenous magnesium (Mg) were evaluated in 181 pts with acute myocardial infarction (AMI) unsuitable for thrombolytic therapy, in a randomized, double-blind placbo controlled study. Gr I, 98 pts received 48-hour Mg infusion while 83 pts, Group II, received isotanic glucose as placebo. In-hospital mortality was significantly reduced in Gr I pts compared to Gr II [2 pts (2.2%) vs 12 pts (15%), p<0.021]. Thirty per cent of pts (51/181) were > 70 years old (range: 71-86, mean 77±4): 24 pts from Gr I (subgroup A) and 27 pts from Gr II (subgroup B). Analysis of multiple factors showed good randomization.

Results	Gr I N = 98 N (%)	SubGroup A N = 24 N (%)	Gr II N = 83 N (%)	SubGroup B N = 27 N (%)
Major arrhythmias	21(21)	11(46)	34(41)	19(70)
Conduction disturbances	8 (8)	5(20)	12(14)	5(19)
Heart failure	15(15)	5(20)	18(22)	10(37)
Mortality	2 (2)	2 (8)	12(14)	6(22)

No significant side effects were seen during the trial. We found that intravenous Mg is an effective alternative therapy in AMI pts unsuitable for thrombolysis and is associated with reduced in-hospital mortality, possibly by reduction in major arrhythmias and in incidence of heart failure. These effects are particularly seen in patients > 70.

19 **Leicester Intravenous Magnesium Intervention Trial (LIMIT-2): A Double Blind Study of the Use of Magnesium Sulphate in Suspected Acute Myocardial Infarction.**

Woods, K.L., Fletcher, S., Roffe, C., Haider, Y.
Department of Pharmacology and Therapeutics, University of Leicester. Coronary Care Unit, Leicester Royal Infirmary, Leicester, England

Magnesium salts have been reported to protect myocardial tissue in experimental model of ischaemia and reperfusion. Several small clinical trials in suspected acute myocardial infarction, have suggested thatearly mortality can be reduced by intravenous magnesium salts in the acute phase, but none have been of sufficient size to be conclusive. The Leicester Intravenous Magnesium Trial (LIMIT-2), a double blind, placebo controlled study was undertaken randomising 2316 patients with suspect acute myocardial infarction. Patients recieved either intravenous magnesium sulphate (8 mmol over 5 min followed by 65 mmol over 24 h) or physiological saline. This protocol was designed to double serum magnsium on admission to the coronary care unit in order to maximize benefit of treatment.

1774 mg. mg

The primary outcome of interest was 28 days mortality, by intention to treat, which is not susceptible to bias providing good randomization and high follow up was acheived. These criteria were met. The result showed, on analysis of morality from all causes, a reduction of 24% in the magnesium group (95% confidence interval 1. 43%). The overall morality in the magnesium group was 7.8% and 10.3% in the placebogroup (2p = 0.009). The two groups were well matched in all aspects. Myocardial infarction was confirmed in 65% in both groups with similar cardiac enzyme elevations. No differences were found between the groups in antiarrhythmia treatments, heart block, direct-current cardioversion or temporary pacing.

Side effects of magnesium treatment were transient flushing, related to the speed of injection of the loding bolus and an increased incidence of sinus bradycardia (2p = 0.02). Experience in a large and representive group of patients has shown that is a simple and safe treatment, which can be generally used for suspected myocardial infarction. The efficacy of magnesium sulphate in reducing early morality of myocardial infarction is comparable to, but independent of, that of thrombolytic therapy or antiplatelet therapy.

20 **Die Ermittlung der therapeutischen Wirksamkeit von Magnesiumadipat bei Patienten mit einem akuten Myokardinfarkt**

Th. Hildebrandt, R. Thiele, K. Winnelfeld und H. Dawczinski
Universität Jena, Germany

In eine placebokontrollierte Doppelblindstudie wurden 51 Patienten mit einem akuten Myokardinfarkt (34 Männer und 17 Frauen von 49 bis 80 Jahren) über einen Zeitraum von 1/4 Jahr integriert. Von diesen Patienten erhielten 25 (49%) täglich 2 x 150 mg Magnesiumadipat (Verumgruppe) der Firma APOGEPHA Arzneimittel GmbH Dresden und 26 Patienten (51%) ein entsprechendes Placebopräparat (Placebogruppe) per os. Die mittels Atomabsorptionsspektrophotometrie am 1., 2., 3. und 20. Tag sowie nach 1/4 Jahr gemessenen Magnesiumkonzentrationen im Serum, im Vollblut und im Erythrozyten zeigten bei Patienten der Verumgruppe ein gutes Resorptionsverhalten des Präparates. Dabei ließen sich bei diesen Patienten im Vergleich zu denen der Placebogruppe insgesamt deutlich

den. Dem Präparat Magnesiumadipat käme generell bei Herzinfarktpatienten bereits in der vorgenommenen Dosierung eine kardioprotektive Funktion zu.

21 **Plasma Mg, Zn and Cu in Acute Myocardial Infarction (AMI)**

C. Zeana, Z. Chirulescu, A. Suciu, R. Pirvulescu, C. Carseli, C.C. Zeana
Medical Clinic. Emergency Hospital (1, 5, 6) and Medical Clinic Colentina Hospital (2, 3, 4). Bucharest, Romania.

150 AMI cases were studied in comparison with a control lot of 50 healthy individuals. Magnesemia was repeatedly determined using Merck kits in 50 patients not receiving Mg supplements. Zn and Cu plasmatic levels were determined by atomic absorbtion spectrophotometry and ceruloplasmin level was determined enzymatically in all 150 pts. In AMI, a lowering of Mg was registered especially within the first week of infarction: 0.76 ± 0.09 versus 0.92 ± 0.06 mmol/l. In the same time Zn level went down from 96.56 ± 15.96 to 85.02 ± 47.34 µg/dl. Cu raised from 100.22 ± 15.96 to 161.3 ± 61.14 µg/dl. The Cu/Zn ratio which is close to 1 in normal people grows up to 2.5 in AMI (greatest values about 6) and becomes normalised during convalescence. The Cu/Zn ratio has not only a diagnostic but also a prognostic value.
The serum ceruloplasmin level goes down to approximatively half of the normal level in some cases, becoming normalised during the next 3 to 4 days and then tends to overtake the normal level. Plasma ceruloplasmin in control lot: 26 ± 1.2 mg/dl. Ceruloplasmin in plasma within the first 3 days: 16±4.05 mg/dl, AMI lot.

CARDIOLOGY V

22 **Oral Potassium/Magnesium Therapy in chronic stable ventricular ectopy.**

K. Glänzer and D. Stolberg
Med. Univ. Poliklinik. University of Bonn, 5300 BONN

Potassium and magnesium supplements are effective in cardiac arrythmias in acute myocardial infarction and in definitivly magnesium-depleted states. The antiarrhythmic effect of magnesium and/or potassium supplements in chronic stable ventricular ectopy is still controversial. Methods: We investigated in this open, not blinded pilot study the antiarrhythmic effects of potassium/magnesium aspartate (Trommcardin Forte 2 tabl tid) in patients on benign ventricular arrhythmias in a total of 13 patients (mean age 48.8 years). Other antiarrhythmics drugs were not allowed. All patients suffered from ventricular premature ectopic beats since many weeks or years. Exclusion criteria: known malignant ventricular tachycardia, ventricular fibrillation and other states of successful cardiopulmonary resuscitation. Two 24-h-ECGs were recorded in two consecutive days before and after 14 days of treatment with magnesium/potassium aspartate. Statistical evaluation of the data was done by Wilcoxon- Rank- sum- test. Results: Mean serum potassium and magnesium values remained unchanged during treatment. The frequency of ventricular ectopic beats was reduced in almost all patients, but due to the large mean variation the difference was not statistically significant. All patients noted a marked relief of their complaints under therapy. Conclusions: Magnesium/potassium supplements may be useful in patients with PVC's. Therefore larger, controlled studies should be carried out to prove these preliminary results. Since there is no risc in therapy, harmless ventricular ectopy should be treated with Mg/K- supplements before treatment with conventional Class I and II antiarrhytmics.

23 **Möglichkeiten und Grenzen des Einsatzes von Kalium und Magnesium bei Erkrankungen des Kreislaufes Ein Überblick**

W. Zidek
Medizinische Fakultät Poliklinik Münster

Die Wirkungen von Kalium- und Magnesiumionen auf die Kreislaufregulation sind sowohl aus experimentellen Untersuchungen als auch aus klinischen Beobachtungen gut bekannt. Sowohl Kalium als auch Magnesium wirken vasodilatierend. Die gefässerweiternde Wirkung von Kaliumsalzen wurde bereits 1929 in Untersuchungen an essentiellen Hypertonikern nachgewiesen und seither mehrfach bestätigt. Der Mechanismus der vasodilatierenden Kaliumwirkung besteht möglicherweise in einer Stimulation der Natrium-Kalium-Pumpe. Dieser Vorgang führt zu einer Senkung des intrazellulären Natrium und zu einer Zunahme des intrazellulären Kalium. Die Abnahme des intrazellulären Natrium in der Gefässmuskelzelle führt zu einem verminderten Calciumeinstrom über den Natrium-Calcium-Austausch. Durch die verminderte Calciumaufnahme nimmt auch die cytoplasmatische freie Calciumkonzentration in der glatten Muskelzelle ab. Dies dürfte ein wesentlicher Mechanismus der vasodilaterierenden Kaliumwirkung sein. Hinsichtlich des Magnesium ist die vasodilatierende Wirkung vor allem bei Patienten mit Präeklampsie klinisch bekannt. Im Vergleich dazu ist die blutdrucksenkende Wirkung bei essentiellen Hypertonikern wesentlich geringer ausgeprägt. Die Mechanismen der Magnesiumwirkung auf das Gefässsystem können unter anderem in einem der Calciumwirkung entgegengesetzten Effekt auf das kontraktile System der glatten Muskelzellen liegen. Ferner ist bekannt, dass bei hoher extrazellulärer Magnesiumkonzentration vermehrt Calcium aus den Zellen

ausgeschleust wird. Da Magnesium auch ein notwendiger Kofaktor der Natrium-Kalium-ATPase ist kann auch ein Mechanismus wie oben für das Kalium dargestellt für die Vasodilatation eine Rolle spielen.

24 **The Role of Potassium and Magnesium on Cardiac Glycoside Toxicity in the Human Myocardium**

R.H.G. Schwinger and E. Erdmann
Universität München, Medizinische Klinik 1, Marchioninistr. 15, 8000 München 70

Electrolyte alterations may be due to the pathophysiological conditions seen in the heart failure state and due to the complications of drug therapy with diuretics, ACE inhibitors and cardiac glycosides. Several studies have documented lower Mg^{2+}-levels in patients with heart failure. Mg^{2+} is essential for maintainance of intracellular K^+. In patients with low Mg^{2+}-levels, the treatment of heart failure with cardiac glycosides is complicated by an increased incidence of arrhythmias. In addition to extracardiac actions, Mg^{2+} may also have direct effects on the myocardium. We studied the influence of Mg^{2+} (1-3 mM) on contractility and on force-frequency-relationship (FFR) as well as on the positive inotropic (PIE) and toxic effects (TOE) of ouabain (OUA) on electrically driven human right auricular trabeculae (AUT, aortocoronary bypass operation, nonfailing, no cardiac glycoside treatment, n = 16, age = 60.1 ± 1.7 years). The maximal PIE of OUA (+5.9±0.9 mN, 1 mM Mg^{2+}) was preserved after increasing Mg^{2+} (+5.8±0.9 mN, 2 mM Mg^{2+}). Time until TOE occurred after OUA was significantly ($p<0.05$) longer with higher Mg^{2+}-levels. In AUT the force of contraction increased with increasing frequency (0.5-3 Hz) of stimulation (2 Hz: 146±8% basal). The FFR becomes negative after elevation of extracellular Ca^{2+}. Mg^{2+} was effective to restore the normal FFR in the presence of enhanced Ca^{2+}-concentrations (2.4 mM Ca^{2+}, 2 mM Mg^{2+}; 2 Hz: 145 ± 16% basal). Mg^{2+} increased concentration-dependently the affinity of ^{3}H-ouabain to its receptor ($p<0.05$).
In conclusion: (1) Mg^{2+} acts directly on human myocardium to diminish OUA-induced toxicity but preserves the maximal PIE of OUA; (2) the antagonistic action of Mg^{2+} is not due to a reduced receptor-binding, but may be due to an alteration of the sensitivity to intracellular Ca^{2+}-changes. Therefore, when treating congestive heart failure, one must take care to prevent depletion of electrolytes or to replete K^+ and Mg^{2+} in deficiency states.

25 **The Influence of Aspartate Anions on Contraction of Isolated Myocytes**

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External Ca^{2+} and Mg^{2+} have opposite effects on the contractile force of the heart muscle (Ca/Mg-antagonism). But only little is known about the influence of the anions applied together with Mg^{2+}. Thus the aim of this investigation was to test the effect of aspartate-anions in combination with Mg^{2+} on contraction of isolated ventricular myocytes of the Guinea pig. Shortening of isolated cells was measured optically in an inverted microscope. Increasing of external $MgCl_2$ decreases shortening in a dose dependent way (from 120% at O mM $MgCl_2$ to 25% at 20 mM). The influence of external $MgCl_2$ is especially pronounced in the physiologically relevant concentration range. The negative inotropic effect of $MgCl_2$ is superimposeable to that of $MgSO_4$. But if Cl^- is exchanged for DL-hydrogenaspartate (MgAsp), the negative inotropic effect of Mg^{2+} is largely suppressed in the concentration range between O and 5 mM. Only at concentrations higher than 5 mM a negative inotropic effect can be recorded. To suppress shortening by about 30 % 15 mM Mg-Asp are necessary but only 5 mM $MgCl_2$. The difference between $MgCl_2$ and Mg-Asp can be explained by a positive inotropic effect of DL-aspartate itself. In the case of ß-stimulation the negative inotropic power of Mg-Asp exceeds that of $MgCl_2$ by a factor of two i.e. 5 mM Mg-Asp have a stronger suppressing effect than 10 mM $MgCl_2$. In isolated ventricular cells stimulated with adrenaline application of 5 mM Mg-Asp result in an effect comparable to 10 -15 nM propanolol. Thus exchanging the Cl^- for aspartate-anions transforms a Ca^{2+}-antagonistic substance to one with ß-antagonistic force at low concentrations and Ca^{2+}-antagonistic force at high concentrations.

26 **Parenteral Application of Magnesium and Potassium as an Adjuvant Treatment-Possible Clinical Approaches**

R. Hardt, M. Hubmann, E. Lang
Waldkrankenhaus St. Marien, Carl-Korth-Institut für Herz-Kreislaufforschung, Erlangen

There are various reasons for the lack of intracellular potassium and magnesium in patients treated in intensive care unit. Acute myocardial hypoxaemia or myocardial infarction are followed by a loss of both cations. States of cardiopulmonary resuscitation and hypoxic metabolism are often accompanied by a dcreasing serum potassium level, especially after substitution of sodium bicarbonates. In the diuretic therapy of chronic heart failure substitution of potassium is usual, while the depletion of magnesium often remains unregarded. The benefit of magnesium is already well known in the treatment of "torsade de pointes", a special form of ventricular tachycardia. Clinical experience shows, that parenteral application of potassium and magnesium improves the effect of antiarrhythmic drug also in other forms of ventricular and supraventricular arrythmia, especially when a deficit must be taken into consideration. So in one of the reported cases defibrillation of a patient with ventricular tachycardia was not successful until

500 mg of potassium/magnesium aspartates were administered intravenously. In other patients with atrial fibrillation a stable sinus rhythm could be achieved after magnesium/potassium-aspartate was added to the standard therapy with digoxin, verapamil and quinidine.

27 **Mg-Deficiency and the Effects of Mg-Protection of the Heart. a Problem of Quantative Evaluation**

O. Leder
Anatomisches Institut der Universität. D-7800 Freiburg i. Br.

It is frequently assumed that Mg deficiency induces several morphological damage of heart muscle. On the other hand it is likewise supposed that Mg protects the heart against catecholamine and other damage. Such effect should never be denied. However, reports may be of minor significance or even risky if there is no quantative evaluation. For such efforts stereological techniques have been developed years ago. Using such methods it comes out that all morphological damage of heart muscle is modest in comparison to biochemical alterations and possible acute disturbances in excitation. Because Mg deficiency is highly critical, when catecholamines are applied, it is not improbable that some of the morphological effect might be caused rather by an additional stress than by the Mg deficiency per se. Likewise, even so-called infarct-like, isoprenaline inducible necroses consist in the rule only of some volume percent of heart muscle, where repeated lower doses are more effective than one mighty injection. The necrosing effects of Mg in experiments is not very impressive. Functional aspects may be more important than histological effects. In addition, it should be pointed out that a quantative experimental evaluation of the pathological anatomy of ß-sympathomimetics could help to avoid such long term side effects of antiasthmatics that were noticed recently in some countries.

STRESS

Noradrenergetic Activity in Panic Disorder: The Effect of Magnesium Salt Administration

E.Martigoni, F.Blandini, G.Sances, G.Fizotti, G.Sandrini, G.Nappi
Dept. of Neurology III, Neurological Institute "C. Nondino", University of Pavia, ITALY.

Panic disorder (PD) is a syndrome characterized by unexpected and unprovoked attacks of psychic and somatic anxiety symptoms. Althougb the exact pathogenesis of PD is unknown, the existence of an unbalanced noradrenergic activity has been suggested. On the other hand, panic attacks can easily occur in patients suffering from neuronal hyperexcitability syndrome (NHS), the so-called "spasmophilia", whose pathogenesis may be related to a primitive magnesium (Mg) deficiency. Thus, a clinical (and pathogenetic?) overlapping of these two pathologies could be hypothesized. In this study we evaluated the influence of magnesium administration on the noradrenergic activity in 10 patients suffering from PD. For this purpose, we measured the plasma levels of Norepinephrine (NE) in response to a Cold Pressor Test (CPT): immersion of one hand in ice-cold water for 5 minutes) and to the infusion of sodium lactate (Lactate Test, LT), highly effective in inducing a panic attack in PD sufferers. The same tests were performed in a group of 10 age-matched healthy controls. In the PD patients, the tests were repeated after a two-month treatment with Mg pidolate (4.5 g/die per os): they were also studied from a neurophysioloqical point of view by evaluating the basal and after-treatment skin conductance response (SCR), used as an additional index of autonomic excitability.

As regards CPT, PD patients showed significantly higher NE levels than controls in basal conditions (m+/-sem: 210+/-30 vs 131+/-18 pg/ml; $p<0.05$), a reduced response to the stimulation and the absence of a recovery phase. The LT had no effect on the controls, whereas it induced a panic attack in 9 out of 10 patients, with a significant rise in NE levels, that maximized at the 20th minute of lactate infusion (0' vs +20': 217+/-42 vs 328+/-48 pg/ml: $p<0.001$). Mg therapy determined a normalization of the NE response to the CPT and a decreased noradrenergic response to LT, although the lactate infusion induced a new panick attack in the same 9 patients. Moreover, the treatment induced a significant increase of the SCR threshold (2.4+/-0.5 vs 4.0+/-0.9 mA; $p<0.05$). The treatment was able to significantly reduce the number of spontaneous panic attacks per month (10.6+/-2.9 VS 5.2+/-1.8: $p<0.05$).

These data, while confirmEing the existence of a noradrenergic hyperactivity, show a dysregulation of the sympathetic stress response in PAD patients: they also suggest that Mg pidolate may play a role in correcting this dysfunction determining, at the same time, a clinical amelioration.

American College of Nutrition, San Diego

PLENARY SESSION II, SATURDAY

Abstract 36

MAGNESIUM, MYOCARDIAL INFARCTION AND ARRHYTHMIAS. *Brodsky M.A.* Cardiac Arrythmia Service. University of California, Irvine, College of Medicine, Orange, CA 92668 USA.

Magnesium (Mg) is the fourth most abundant cation in the human body and the second most abundant cation in intracellular fluids. It has an important role in the activation of many enzyme systems. Mg deficiency is estimated to occur in 20–80% of the population. Yet Mg is commonly ignored by clinicians because its level is not usually measured; its deficiency is not always revealed; the association of its deficiency to pathology is not always obvious; and its use in research and clinical situations is not commonly promoted.

Mg has an important role in cardiovascular pathophysiology. The development of experimental atherosclerosis is potentiated by magnesium deficiency through many different mechanisms. The level of Mg is also related to coronary vascular tone, and hypomagnesemia has been associated with clinically significant angina secondary to coronary vasospasm. In the setting of acute ischemia and/or myocardial infarction, magnesium therapy has been shown to reduce the incidence of life-threatening ventricular tachyarrhythmia. Seven separate trials evaluated 1301 patients and, taken in total, documented a 55% reduction in the odds of death in the group given Mg therapy. The principal mechanism of action was through a reduction in the incidence of ventricular tachyarrhythmia. Mg has both primary and secondary electrophysiologic action. By itself Mg delays AV nodal conduction and decreases early afterdepolarization and triggered activity. It interacts with potassium ions and may allow for repletion of hypokalemia with secondary benefits in reducing arrhythmia. Intravenous Mg was initially reported to have antiarrhythmic action in 1943. Since then multiple reports have detailed its efficacy in supraventricular tachycardia, atrial fibrillation, ventricular premature depolarizations, both monomorphic and polymorphic ventricular tachycardia and ventricular fibrillation. It has also been beneficial in treating arrhythmia related to digitalis toxicity and coronary artery spasm.

In conclusion, Mg is an important component in cardiovascular pathophysiology. Recognition of its therapeutic potential should help reduce morbidity and mortality associated with cardiovascular disease.

PLENARY SESSION II, SATURDAY

Abstract 39

LOW MAGNESIUM: A COMMON DENOMINATOR IN PATHOLOGIC PROCESSES IN DIABETES MELLITUS, CARDIOVASCULAR DISEASE AND ECLAMPSIA. *Seelig MS*, Altura BT, Resnick LM, Handwerker SM, Altura BM. Community and Preventive Med, NY Med Coll, Valhalla, NY and Nutrition, Sch of PH, Univ of N Carolina, Chapel Hill, NC; SUNY, Bklyn, NY, Cornell Univ NY Hosp, NY, NY, Booth Mem Med Ctr, Flushing, NY USA.

Microcirculatory disorders of diabetes mellitus (DM)—a disease that when poorly controlled was early identified with Mg loss—have characteristics in common with those of experimental Mg deficiency. Low blood Mg (in concert with high Ca) increases platelet aggregability and blood coagulation—which have been implicated in the pathogenesis of DM, myocardial infarction (MI) and eclampsia. Low serum Mg, though present at phases of the disorders in many cases, is an unreliable index of Mg deficiency. Low ionized Mg in erythrocytes (determined by utilizing nonmagnetic resonance) is present in all, as well as in hypertension (HT) unrelated to DM or toxemias of pregnancy. Using a new ion-selective electrode specific for the Mg ion, we have found that low levels of the biologically active ionized Mg is present in whole blood, as well as in plasma and serum, of patients with HT, with or without DM, of patients scheduled for open-heart surgery, and of preeclamptic patients. Recent studies by others have shown that there is also endothelial damage in DM, and in cardiac and preeclamptic patients. Low Mg concentration influences endothelial integrity and its production of prostacyclin (PGI)—the vasodilating, antiaggregating prostanoid, mediating its activity, and increases release of thromboxane (TXA)—the vasoconstricting, platelet aggregating prostanoid. Other endothelial derivatives (endothelium-derived relaxing factor [EDRF], endothelin, and fibronectin may also be affected by Mg. Low Mg favors a high TXA/PGI ratio. It is suggested that imbalance of the prostanoids and that of the other endothelial derivatives may be linked to the low Mg reported in these diseases. With the new Mg ion-selective electrode, which uses a neutral carrier-based membrane to provide readings in 60–90 seconds, it will be possible to resolve the problem of laboratory diagnosis of Mg deficiency. With growing recognition of the roles of the endothelial factors, this should improve understanding of the vulnerability of diabetics to HT and other vasospastic and structural arterial diseases, and to cardiomyopathy and MI and other thromboembolic conditions, as well as to preeclampsia.

POSTER SESSION II, SATURDAY

Abstract 40

ADVERSE STRESS REACTIONS IN MAGNESIUM DEFICIENCY: PREVENTIVE AND THERAPEUTIC IMPLICATIONS. *Seelig MS.* Community and Preventive Medicine, New York Medical College, Valhalla, NY; Department of Nutrition, School of Public Health, University of North Carolina, Chapel Hill, NC USA.

Stress hormones (catecholamines and corticosteroids) that evoke responses allowing for increased survival in life-threatening situations, can increase the risk of sudden cardiac death (SCD) in the presence of Mg deficiency. They mediate release and utilization of substrates for production of energy and for improved skeletal and cardiac muscle performance, and mobilize tissue Mg. The resultant (transitory) increase of serum Mg protects against arrhythmias and intravascular coagulation in the short-term. However, plasma Mg at levels exceeding the renal threshold is excreted, and free fatty acids that are released through the lipolytic effect of catecholamines, inactivate Mg. Both stress hormones mobilize bone minerals, with resultant increase in the plasma Ca/Mg ratio, which increases risks of both intravascular coagulation, and arrhythmia. High Ca/Mg ratios also stimulate, and high Mg/Ca ratios suppress catecholamine secretion by the adrenal medulla and by secretory granules at nerve endings and in the myocardium. Low Mg also increases output of mineralocorticoids, which in turn directly enhance urinary excretion of Mg and intensify cardiopathogenicity of both Mg deficiency and catecholamine excess. Furthermore, reduced arterial tissue Mg can lead to coronary constriction—directly and through humoral vasopressors. Reduced myocardial Mg increases vulnerability to cardiac damage. With marginal Mg intakes, athletes undergoing exhausting physical exertion and athletic competition, experiencing stress-induced Mg loss can exhibit impaired performance and endurance, and muscle cramps. Adolescent athletes may be at high risk because they require more Mg for development and growth. Genetic differences in Mg homeostasis may be responsible for differences in susceptibility to pathologic reactions to stress. Mg deficiency and stress mutually enhance one another.

POSTER SESSION II, SATURDAY

Abstract 41

MAGNESIUM STATUS IN PATIENTS WITH CORONARY ARTERY DISEASE ADMITTED TO NEW HANOVER REGIONAL MEDICAL CENTER. *Montano CE*, Seelig CB, Ranney JE. Internal Medicine Training Program, New Hanover Regional Medical Center, Wilmington, NC and the University of North Carolina School of Medicine, Chapel Hill, NC USA.

Retrospective chart review of 98 consecutive patients, admitted with known coronary artery disease (CAD), to New Hanover Regional Medical Center (NHRMC), a 500-bed community teaching hospital (in a low Mg-water area), from January to June 1991, was undertaken to ascertain the behavior of practicing physicians with regard to surveillance for, and treatment of, hypomagnesemia. Patients with creatinine >2.0 mg/dl or with acute myocardial infarction were excluded. Patients averaged 65 years of age. Twenty-six were diabetic, 3 alcoholic; 24 were on digitalis, 22 on diuretics, and 7 on antiarrhythmics. Thirty-nine had arrhythmias (18 ventricular, 26 atrial). Sixty-eight were admitted by cardiology; 34 had cardiac surgical consultation. Nine were admitted for cardiac surgery. Twenty-one were admitted by others. Serum magnesium (Mg) was ordered only for 49 patients (50%). Thirty-nine (79%) were ordered by cardiac surgeons, 8 (16%) by cardiologists, and 2 (4%) by others. All but two were ordered on a routine basis. Nineteen patients (38% of those tested) were hypomagnesemic (<1.8 mg/dl), with an mean of 1.5 mg/dl (SD = 0.5). Potassium level was significantly associated with Mg level. Mean potassium in the hypomagnesemic patients was 3.9 mEq/l; it was 4.4 mEq/l in the normomagnesemic patients ($p < 0.001$). Eleven of the 19 hypomagnesemic patients (57%) received suboptimal treatment, with an average dose of 1.25 g of intravenous $MgSO_4$. The remaining 8 patients received no Mg. Only 3 hypomagnesemic patients (8%) had a second determination. In conclusion, despite the known importance of Mg, it was only rarely determined by physicians at NHRMC. When checked, there was high prevalence of hypomagnesemia (38%). Even when identified, hypomagnesemia was not treated effectively, nor were follow-up determinations requested. In contrast, potassium was checked on admission in 100% of patients with only 4 being found to be mildly hypokalemic (3.3–3.4 mEq/l). Our study indicates that determination of serum Mg should be considered for inclusion in the routine panel of tests ordered for patients admitted to the hospital.

the Effects of Aging in Middle-Aged Women," they were not suggesting that walking can turn back the clock. However, perhaps regular physical activity can make the clock go more slowly. For many who wish to embark on a new exercise program, a walking regimen that will reduce cardiovascular risk may be the best way to start. And once they are walking a couple of miles a day, they may even stop to smell the roses. ❑

Heart Line

More on Magnesium

Evidence regarding the importance of magnesium for cardiovascular health continues to accumulate (see the *Harvard Heart Letter*, August 1991). Seven previous trials involving a total of 1,300 patients with suspected heart attack showed that magnesium supplements reduced the number of deaths. Now, a large study from England has confirmed this finding: when magnesium was given during the early hours after suspected heart attack, survival improved by 24% over the first four weeks.

1994 ?

At the Royal Leicester Infirmary, 2,316 patients admitted to the coronary care unit were randomly assigned to receive either intravenous magnesium or a placebo. Heart attacks were ultimately diagnosed in 65% of the patients. After 28 days the death rate was 10.3% among those receiving the placebo and 7.8% among those given magnesium. This difference indicates that magnesium might lower mortality by about 25 deaths per 1,000 patients treated. Moreover, magnesium therapy reduced the incidence of left ventricular failure — an important predictor of survival and long-term quality of life.

The use of other drugs, such as aspirin or thrombolytic ("clot-busting") agents, did not diminish magnesium's benefits. Although in some cases the magnesium infusions caused side effects, such as flushing of the skin or a slowed heart rate, none of these problems were serious.

Based on this study, magnesium may become routine therapy during heart attacks, especially since the benefits of magnesium infusion are about the same as those afforded by other heart-attack medications (such as aspirin or beta blockers) but with less risk involved. Additional research will be needed to determine the mechanism responsible for magnesium's beneficial effects and how this mineral may interact with other proven therapies in order to target specific patient populations likely to be helped. (Woods KL, et al: Intravenous magnesium sulfate in suspected acute myocardial infarction: Results of the Second Leicester Magnesium Intervention Trial. *Lancet*, June 27, 1992, pp. 1553–1558.)

Smoking After Bypass Surgery

Some cigarette smokers who undergo coronary artery bypass grafting (CABG) refuse to quit after their operation, perhaps believing that the treatment has cured them. However, vein grafts placed during CABG tend to fail more readily if the patient keeps smoking. Now a long-term study has shown that regardless of whether they have undergone CABG, patients with coronary disease who continue to smoke have a higher mortality than their nonsmoking counterparts.

During the 1970s, in a trial called the Coronary Artery Surgery Study, 780 patients with coronary artery disease were randomly assigned to either medications or CABG to relieve their symptoms. After ten years, patients who were initially randomized to medical therapy with the option of later bypass surgery had a somewhat higher survival rate if they quit smoking than if they continued to smoke.

However, after CABG, a large difference was noted in survival rates between quitters and smokers. Those who gave up cigarettes had a ten-year survival rate of 84% compared with 68% for those who continued smoking. In other words, giving up cigarettes after CABG decreased deaths by about half.

Compared with persistent smokers, people who gave up cigarettes were less likely to have angina and more likely to be employed. In addition, they were in better physical condition. Continued smoking is harmful for anyone with coronary disease, but this study emphasizes that people who give up cigarettes after CABG are especially likely to get a new lease on life. (Cavender JB, et al: Effects of smoking on survival and morbidity in patients randomized to medical or surgical therapy in the Coronary Artery Surgery Study: 10 year follow-up. *Journal of the American College of Cardiology*, August 1992, pp. 287–294.)

 Enclosed Magnesium Congress abstract (19) covers Leicester Trial

4 Atlantic Street
Charleston, SC 29401

November 3, 1991

James O. Mason, M. D., Dr. P. H.; Assistant Secretary for Health
Head of U. S. Public Health Services
U. S. Department of Health and Human Services
200 Independence Avenue, S. W. Room 716-G
Washington, D. C. 20201

Dear Dr. Mason,

I enjoyed very much both hearing your really excellent closing address at the 8th International Symposium on Cancer Research; and briefly meeting you immediately afterwards as we happened to be seated together. I had just mentioned an apparent provocative relationship between cancer and rheumatoid arthritis; and had pulled some letters from my coat pocket when Doctors Layton McCurdy and Peter Fischinger understandably whisked you from the room.

Those attending this conference were certainly as you stated the giants in cancer research around the world; and you indicated your job was to clear the path and help translate their findings into better health for all people. You expressed however, disappointment by the way we use our don't use what we already know.

The local newspaper that day featured Dr. Bruce Ames' previous days talk which had emphasized that peroxidative attacks on DNA were major factors in cancer generation; when one's antioxidant supply or antioxidant capabilities were insufficient to beat back the attack. With Dr. Ames and others very substantial contribution and influence in this area over the past decade, we now realize the truly major health importance of deficient, RDA, or higher levels of antioxidants (particularly Vitamin C, E, beta-carotene and selenium). This now provides such potential for rapid and effective progress in control of cancer and other degenerative diseases, if you and others in public health adequately support this area.

The trials using beta-carotene and other antioxidants against cancer are certainly a good start; but so much more financial support, based on benefit to cost ratios and lack of toxicity, now seem merited.

I am attending the Adjuvant Nutrition in Cancer Treatment conference in Tulsa on Friday and Saturday of this week sponsored by the American College of Nutrition and Cancer Treatment Centers of America (program enclosed). The American College of Nutrition annual meeting in San Diego was also attended the week-end before the rheumatology and your conferences.

On returning to Charleston after attending the American College of Rheumatology meeting in Atlanta, Bruce Ames' newspaper story was noted; and I immediately attended the last afternoon sessions, not realizing until afterwards that it was an invited conference.

My attendance at the Rheumatology Conference that week and my spontaneous move to pass on to you the enclosed underlined stapled letters I had taken to that conference was because twelve years ago I was the first in this county (perhaps the fifth

in the world) to cure very severe rheumatoid arthritis by use of gamma-linolenic acid the precursor of the anti-inflammatory cellular hormone Prostaglandin E-1. On Monday in Atlanta Dr. Robert Zurier, head of Rheumatology at the University of Massachusetts Medical in Worchester, presented the first double-blind trial in this country successfully using gamma-linolenic acid on 37 rheumatoid arthritis patients and his abstract is shown just below.

TREATMENT OF RHEUMATOID ARTHRITIS (RA) WITH GAMMALINOLENIC ACID (GLA). Lawrence J. Leventhal, Eric G. Boyce, Robert B. Zurier. Univ. of PA, Presby. Med. Cent., Phila. Coll. Pharm., Philadelphia, PA. 19104 and Univ. MA, Worcester, MA 01655.

A randomized, double-blind, placebo (Primrose oil)-controlled, 24-week trial of GLA (as borage seed oil) treatment of active RA was conducted to determine its clinical efficacy, tolerability and safety. Patients (pts) maintained pre-entry dose of NSAID and/or low dose corticosteroids. No pts took 2nd-line agents within 3 months of entry; 37 pts enrolled (19-GLA, 18-P). Demographic, pre-study treatment, clinical, and laboratory variables for the 2 groups were similar. 5 pts in each group withdrew from the study due to: inefficacy (3-GLA, 2-P), toxicity (1-P), and protocol violations (2-each). No pt went into remission. In intention-to-treat analysis, GLA demonstrated improvement from baseline in platelet count, joint tenderness and swelling scores (p .05). Compared with P, GLA was superior in physician global assessment, pt global pain assessment, joint swelling score and platelet count reduction (p .05). Of the study completers (GLA-14, P-13) GLA demonstrated improvement from baseline in physician global assessment, pt global pain assessment, morning stiffness, and both joint tenderness and swelling counts and scores, and platelet count reduction (p .05). Compared with P, GLA showed improvement in physician global assessment, pt pain assessment, and both tenderness and swelling counts and scores (p .05). No GLA pt. withdrew from the study due to adverse reaction. 1 P pt withdrew due to rash. Adverse effects included soft stools (GLA-2, P-1), constipation (P-1), flatulence (GLA-1) and belching (GLA-1). We conclude that GLA is a safe, well-tolerated and effective treatment for active RA.

EVIDENCE FOR PROFOUND ANTIOXIDANT DEPLETION IN THE SYNOVIAL COMPARTMENT IN RHEUMATOID ARTHRITIS (RA). [1]A.Bal, C.Chaloner, D.Schofield, G.Mel, [1]AH.Thompson, JM.Bregman, [2]JL. Holt. University Departments of [1]Rheumatology & Medicine (Gastroenterology), Royal Infirmary, Manchester, U.K.

Oxidative stress, has been proposed as a pathogenetic mechanism in RA. We have analysed a free radical marker and 4 micronutrient antioxidants in paired samples of synovial fluid (SF) and serum from 11 patients with classical RA (Table). MI% is the molar ratio of 9 cis-11 trans linoleic acid to the parent 9 cis-12 cis fatty acid, a validated marker of free radical activity. In RA sera, a shortfall in ascorbic acid acid and selenium-conferred anti-oxidant protection is accompanied by enhanced free radical activity, ie oxidative stress prevails. This problem is magnified in their SF by 50% decrements in selenium, α-tocopherol and β-carotene. Thus antioxidant supplementation should ameliorate the inflammation.

Material	MI(%)	Selenium (uM)	Ascorbic Acid (uM)	α-Tocopherol (uM)	β-carotene (uM)
Control Serum	1.80 (0.80 -3.90)	1.43 (0.76 -2.04)	62 (29-89)	22 (13-34)	180 (71-473)
RA Serum	3.20[a] (2.15 -5.29)	0.93[a] (0.72 -1.27)	23[a] (2.80 -59)	25 16-33	128 (13-417)
RA Synovial Fluid	3.15 (2.14 -6.05	0.46[b] 0.33 -55)	31 (<2.40	12[b] 8.0-20	48[c] (9-205)

Medians with ranges; [a] = $p<0.05$ vs controls; [b] = $p<0.05$ vs RA serum; [c] = $p<0.10$ vs RA serum.

The other rheumatology conference poster abstract shown just above presents really striking evidence of the profound depletion of antioxidants and the enhanced free radical activity found in both the serum and the synovial fluid of rheumatoid arthritis patients. Under such conditions the gamma-linolenic acid produced in synovial and other cells by delta-six desaturation of cellular linoleic acid would be decidedly reduced. This highly unsaturated acid which is precursor of the PGE-1 cellular hormone that inhibits cellular division would also tend to be oxidized and destroyed. As I understand it the cells in these joints (synovium) are not supposed to begin dividing, but do before we run into rheumatoid arthritis problems.

My substantial supplementation for the past decade of gamma-linolenic acid present at 9% levels in authentic evening primrose oil (EFAMOL); plus high levels of ascorbic acid, beta-carotene, Vitamin E and selenium now seems (as discussed in the enclosed letters taken to the rheumatology convention) to make even more sense.

The enclosed 1981 one-page "memory jogger" on my presentation Pertinent Inter-Relationships Between Cancer, Rheumatoid Arthritis, The Evening Blooming Primrose and The Green-lipped Mussel now seem to stand up well. Also relevant is the enclosed Jan. 17, 1985 letter to Doctors Linus Pauling and Ewan Cameron on the five year bone-cancer experience of an atomic scientist, who was a very major contributor as to the time achieved and the very small size of our first real thermonuclear bomb. He controlled his pain and cancer with 24-35 grams of Vitamin C per day throughtout this five year period with the additional use of gamma-linolenic acid in the last two years.

MEDLINE search last week on my home computer turned up 42,177 medical papers on rheumatoid, 4,046 on antioxidant and only 29 combined. These abstracts were printed out (half since 1988) and were very supportive. MEDLINE on cancer turned up 161,915 medical papers; and when combined with antioxidant showed only 115 medical papers.

These abstracts were again printed out with two thirds since 1988 and again extremely supportive. Cardiovascular had 63,379 medical papers and with antioxidant combined again gave only 29 medical papers. Twenty-four of the 29 abstracts were since 1988 and all were since 1984. Heart at 359,662 showed 328 when combined with antioxidant and was not checked further.

There has properly been considerable treatment in the media in the past year on the decidedly beneficial effects of vitamins, antioxidants and magnesium on the heart; and were going to see a lot more because it is right.

Yesterday the New York Academy of Science Vol. 669, Beyond Deficiency, New Views on the Function and Health Effects of Vitamins, was received in a surprisingly short time since I attended that superb conference on Feb. 9-12, 1992. This book largely covers studies around the world on the beneficial use of vitamins and antioxidants at higher than usual (or the RDA level) in this country. It is very up-to-date, pertinent, often surprising and certainly merits serious consideration by public health leaders in our country.

Another serious but little realized health problem in this country has been the chronic detrimental effect of magnesium deficiency on the heart, cardiovascular and cerebrovascular artieries of most of us. The enclosed additional letter written last week to Doctors Lee, Edwards, Gazes, and Spann contains very pertinent information from the latest European Magnesium Conference which may prompt you to consider the need and benefits of personal and hospital magnesium supplementation, if you don't now.

In hopes this too long letter might possibly get through to you and prove of some value in moving toward such simple and inexpensive approaches to improved health.

Most sincerely,

Frank J. Ball

Frank J. Ball

cc: December 15, 1992
Those copied on October 29, 1992 letter to Doctors Burton Lee, James Edwards Peter Gazes and James Spann

Frank J. Ball
4 Atlantic Street
Charleston, S. C.

PERTINENT INTERRELATIONSHIPS BETWEEN CANCER, RHEUMATOID ARTHRITIS, THE EVENING BLOOMING PRIMROSE AND THE GREEN-LIPPED MUSSEL

(Memory Jogger for Presentation: May 19, 1981)

CANCER TISSUE

Completely different from normal cells in that 60-99% of nutrients are fermented to lactic acid rather than almost total oxygenation to carbon dioxide.

Cancer invasivness promoted by:

1. High continual release of collagenase enzyme by cancer tissue breaks down the external collagen ropes that enmesh near-by cells.
2. The semi-rigid gelled water which binds together adjacent cells and collagen ropes is made fluid by release of hyaluronidase enzyme which can depolymerizes the soluble hyaluronic polymer gell.

Recent evidence indicates cancer tissue is composed of up to 85% activated, but incompetent defensive macrophages (very large white cells). These produce collagenase, hyaluronidase, lactic acid, and toxic superoxide; and could be a major part of the problem.

Recently found that the protective enzyme (SOD) that destroys superoxide was very low or absent in cancer cell mitochondria where nutrients must be oxidized.

Cancer patients exhibit extremely low Vitamin C blood levels and are low in zinc.

Prostaglandin E_2 (PGE2, an inflamatory cellular hormone) runs quite high in cancer patients. Cancer cells appear to lose the capacity to convert polyunsaturated fats to gammalinolenic acid. This precursor of PGE1, appears to be needed to inhibit excessive PGE2 formation.

RHEUMATOID ARTHRITIS JOINTS

Involved joints produce high lactic acid levels which may be one cause of pain.

Joint problems partially involve:

1. Collagenase release attacks the collagen lining of the joint.
2. Detrimental thinning of the jelled joint lubricant by depolymerization of the dissolved hyaluronic polymer gell.

Macrophages activated by injesting uric acid crystals in joints appears to be the cause of gout. High levels of activated macrophages, which live for months are in rheumatoid joints.

Superoxide dismutase (SOD) enzyme from cattle gave reduced inflamation and pain on rheumatoid patients.

Rheumatoid patients run quite low in Vitamin C levels and their blood is often one-third down in zinc and histidine.

Inflamatory PGE2 in the joints is generally acknowledged as the main cause of swelling and pain in rheumatoid arthritis. Pain reducing aspirin and similar drugs inhibit the oxygenation of arachidonic acid which otherwise is converted to the inflammatory PGE2.

Evening Blooming Primrose Seed Oil

Dr. David Horrobin, a leader in prostaglandin research and thinking, showed PGE1 can inhibit PGE2 formation and may correct immune T lynphocyte defects, but its half life is only about a minute and its effectiveness occurs only over a precise ultra low concentration range.. He postulated beneficial use of the only available gammalinolenic source (Evening Primrose Oil) to boost continuous PGE1 formation in possible treatment of arthritis, scleroderma, cancer, multiple sclerosis, or selected collagen and autoimmune diseases.

Dr. Robert Zurier, Chairman of Rheumatology, Univ. Pennsylvania Medical, demonstrated the ability of PGE1 to reverse the severe symptoms (identical to the arthritic disease, systemic lupus) which are spontaneously generated in the hybrid cross of New Zealand black and white mice (NZB/W). He also showed that the presence of PGE1 could prevent the usual arthritic symptoms developed in mice on injection of Freund's adjuvant.

Horrobin and others showed that at physiological blood concentrations Vitamin C, Vitamin B_6, zinc, histidine and ethyl alcohol selectively promote formation of PGE1 from gammalinolenic acid. There is significant research and medical literature suggesting some benefits from each of the first four of these in rheumatoid arthritis. Vitamin C also appears most important in promoting cancer control.

Vitamin C strongly inhibits collagenase formation, is required for collagen fiber formation, is a necessary cofactor in over 50 enzymes and decomposes toxic superoxide. Promotion of PGE1 formation, however, may constitute a major mode for many of its beneficial actions.

Extract of the Green-Lipped Mussel (Perna Canaliculus)

Last month, on an Australia-New Zealand trip, a freeze dried extract (SEA TONE), which was produced from a local mussel extract was noted to be marketed in drug stores as a food supplement. The 1979 book "Relief from Arthritis - A Safe and Effective Treatment from the Ocean" covering this green-lipped mussel extract gave no convincing evidence, but a reliable physiotherapist there reported observing a surprising beneficial response in two patients taking it.

A computer search of the medical literature turned up no pertinent literature studies on shell fish extract in control of arthritis, but some impressive demonstrations of cancer control in animals using extracts from clams (mercenaria mercenaria). Clams had been selected for evaluation as they were found surprisingly free of any cancer growth. Clinical studies were not conducted, but experiments on various cancer cells and oral use in various animal cancer studies seem to show quite encouraging efficacy.

4 Atlantic Street
Charleston, SC 29401

April 29, 1992

Dr. J.J.F. Belch, University Medical School, Dundee, Scotland
Dr. J. Booyens, Semi-retired, MEDUNSA, Pretoria, South Africa
Dr. Wilbur H. Caney, Retired, Vermont and upper South Carolina
Dr. David Horrobin, Efamol Research Institute, Kentville, Nova Scotia
Scotia Pharmaceuticals, Surrey, England
Dr. E. Carwile LeRoy, Medical University of South Carolina, Charleston, SC
Dr. R. D. Sturrock, Center Rheumatic Diseases, Glasgow University Medical, Scotland
Dr. Robert B. Zurier, University of Massachusetts Medical, Worchester, Mass

Dear Doctors Belch, Booyens, Caney, Horrobin, LeRoy, Sturrock and Zurier,

I would like to pass on to you one additional small personal experience that occured this month in my twelth year of completely successful control of severe rheumatoid arthritis using authentic evening primrose oil without other drugs. Results have been very satisfactory over the past three years using 15 gelcaps (7½ g.) per day of evening primrose oil, as discussed in my long Jan. 23rd, 1989 letter sent to you.

That letter was prompted when I successfully controlled the pain and swelling of my 1988 relapse without the usual 12-14 aspirins and 4 Motrins needed throughout 1980; and during the months required to initially build up adequate gamma-linolenic acid products in my membranes during initial control at the end 1980, and also following my first relapse in 1984. As discussed in my 1989 letter; the 1988 gamma-linolenic build up without aspirin or Motrin was achieved by tripling my normal 12 gelcaps of EFAMOL to the 36 used in South Africa by Doctors Booyens and Van der Merwe in their effective control of certain acute cancer patients for a period of three years.

As discussed in the 1989 letter; both the 1984 and 1988 relapses apparently were caused by inadvertent lack of gamma-linolenic acid for about a month during which time my pain, swelling, and locomotion capability returned to the severe 1980 status.

This month I induced in my low back; muscular or joint pain and spasm, which had happened only several times before in my life. This was painful standing, lying down or getting up and decidedly limited activity to prevent spasms. Over several days it progressively worsened in both spasms and pain; and very seriously interfered with sleep. After several days the knuckles on my hands swelled up to the extent observed whenever the 12-14 aspirins were reduced one-third for a day or two throughout 1980, or when reduced in a similar manner during the 1980 and 1984 months while gamma-linolenic products were being built up.

As my back spasms and pain seemed to be detrimentally interacting with my rheumatoid and getting worse; I tripled the level of evening primrose oil after a sleepless night from 15 to 45 gelcaps per day. Fortunately this was very effective in reducing knuckle swelling, pain and spasms within 24 hours. When dropped to the 36 used in the 1988 relapse for the following day, the knuckles went down to almost normal by the next day and back problems were significantly reduced further. With use of 25 to 15 per day the spasms were stopped and my situation has returned to about normal in a week at 20 and will be reduced to 15. In my few previous low back pain and spasms, increasing pain and spasm

wasn't evident; but the serious pain and spasms lasted very much longer despite available drugs.

The last paragraph of the enclosed March 29, 1992 letter to President Bush covered some most encouraging information obtained in the past month on the striking success of one retired doctor, Dr. Wilbur H. Caney, over the past five or more years in helping control arthritis on over 200 personal contacts having arthritis problems in the Southeast, New England, and Bermuda by their use of evening primrose oil, some vitamins and magnesium. His interest had been stimulated by the success first on his wife's arthritis and then on friends and retirement contacts.

My letters to the president and his physician over the past year involved my six year realization that heart arrythmia and heart attack problems can be decidedly caused by stress-induced, diet-induced and running-induced magnesium loss from the heart, cardiovascular and cerebrovascular arteries. The enclosed Feb. 5, 1992 letter to the president and Dr. Burton Lee, his personal physician, also discussed in the middle paragraphs of The Executive Summary; my experience and the recent progress and understanding in the use of gamma-linolenic acid for control of rheumatoid and other arthritis. It was my hope this provocative area might increase the odds of the letter getting through and being considered.

It is thus of possible future interest that our newspaper reported on April 19th during the president's Maine visit that following a vigorous morning walk, he had indicated to reporters that he would feel it in his right hip joint at 2 AM; but had asked at his recent physical if he would eventually have to have the hip replaced, and was told "not for a long time."

Over all these years it has been most impressive that no detrimental side effects have been caused by such extensive and successful use of gamma-linolenic acid in various difficultly handled diseases. It has been a God-send to me for the past decade; and hopefully large numbers with various inflammatory and bone degenerative problems will get to benefit during this decade.

All the best,

Frank J. Ball

FJB:kaj P.S. April 30, 1992

My Feb. 6th and Mar. 29th letters and attachments to the president emphasized recently demonstrated very marked health benefits from high level antioxedent supplements, particularly beta-carotene; thus the even more concise and definitive presentation on this subject in the just received May 5th U.S. News and World Report is enclosed.

4 Atlantic Street
Charleston, SC 29401
December 22, 1980

(32)

Dr. Martin Eastwood
Wolfson Gastrointestinal Laboratories
Western General Hospital
Edinburgh, Scotland

Dear Martin:

Had one hell of a year, but informative and finally encouraging. Came down with rheumatoid arthritis in January, following a severe throat infection while on a trip; and was in hospital and at home about six weeks. Spent the rest of the year on 12-16 coated aspirins (Ecotrin) and 6 (2.4g) Motrin with pain mainly in hands, wrists and varied in feet (earlier all over); and in all joints and muscles if tried to lower these. Read about as much in this area and prostaglandins as I did cancer in past two years, and some surprising similarities. Protected collagen and hyaluronic acid in joints, I hoped, with high C and B-complex vitamins; and joints progressively improved over the year. Terribly tired and was 1/2-2/3 time at work until about 3-4 months ago when went to full time. Took on my own, zinc and histidine throughout year, since these seem to be about one third down in blood of rheumatoid patients. Blood sedimentation rate went down progressively from 50 range to normal, but stamina very low an ouldn't take down aspirin and Motrin. Tried during summer to convert to higher l.noleic in my lecithin using polyunsaturated fats and did get the Motrin down. For the past 3 1/2 months I have been taking 1-6 capsules (0.4g each) a day (in addition to the vitamins, zinc, and histidine) of the seed oil of the evening blooming primrose (Efamol, which I bought in Canada); and which contains about 10% gamma linolenic acid. It comes from England and is called "Naudicell" there. J. N. McCormick and W. A. Neill at Northern General reported encouragment on rheumatology using 2g per day for 3 months, in the Lancet, Sept. 3, 1977, p. 508. I called him but he was on a months vacation and I succeeded in getting in touch with Dr. Robert Horrobin in Montreal, a brilliant doctor who has written extensively in this area as related to prostaglandins; and Dr. Robert Zurier, now head of Rheumatology at University of Pennsylvania Medical, who had worked with Prostaglandin E1 and subsequently with this oil in inhibiting induced arthritis in rats. Horrobin told me McCormick didn't get money for his planned additional tests. Tell him about 3 weeks ago, for the first time, I succeeded over a three-day period in bringing down the aspirin from 12 to 0 and have taken no e aspirin. Never before was I able to bring it down to 8 because of increased swelling and pain in the joints. Horrobin knew of encouragement in Copenhagen and Barcelona on arthritis, but felt not if taking aspirin, Indomethacin, etc. and thus not on rheumatoids. He seemed interested and pleased. Me too!!

The gamma linolenic acid is converted by the cells of the body as needed to Prostaglandin E1 which Horrobin indicates apparently controls the excessive formation of Prostaglandin E2 which is very excessive in rheumatoids and a factor in inflammation. We may run low or out of Prostaglandin E1 in the joints and thus get into this self-generating arthritic problem.

Best of luck in your work in Edinburgh and stop by Charleston again when you get a chance. Haven't written any further letters in cancer area this year except the recent enclosed one to Senator Hollings; and it looks like the hydrazine sulfate and Vitamin C are really demonstrating efficacy and being progressively accepted and understood for cancer control without toxicity.

Sorry so long, but thought you would be interested. With hope!

Merry Christmas.

Frank J. Ball

FJB/dr
Enclosure

May 12, 1992

4 Atlantic Street
Charleston, SC 29401

Dr. Burton J. Lee, III Physician to the President
The White House
Washington, DC

Dear Dr. Lee,

Many thanks for your thoughtful letter responding to my March 29th letter to the president that strongly reemphasized the serious cardiovascular dangers of stress-induced and diet-induced magnesium deficiency; and the major health benefits possible from substantial magnesium and anti-oxidant supplementation.

I most enjoyed reading the really superb long interview The President's Physician Speaks Out, in the April 1 - April 14 INTERNAL MEDICINE WORLD REPORT covering your White House Medical approach, very positive assessment as to the health of the president, and your quite active thoughts and participation relative to the U. S. Health-Care System. One certainly left it mighty impressed and much better informed.

The very next issue of INTERNAL MEDICINE WORLD REPORT contained the attached very convincing section on the extent and the major health effects of magnesium deficiency on chronic diseases; from Part 3 of a series on Chemical Sensitivities by Sherry A. Rogers, M.D. Reading the underlined part of the section, Magnesium Leads the Way, (less than five minutes) certainly strongly suggests both the need and the wisdom to daily replace the major fraction of dietary magnesium removed by industrial processing of our foodstuffs. In a phone call from Senator Hollings after the last letter to the president, he felt the president would now be taking magnesium, but many people do not like any extra pills particularly long term.

A couple of weeks ago I wrote the enclosed letter and attachment to six U.S. and foreign physicians familiar for most of the past decade with my completely successful control of severe rheumatoid arthritis without drugs by use of adequate gamma-linolenic acid present in authentic evening primrose oil. This polyunsaturated fatty acid is supposed to be adequately produced in all our cells as precursor of a critically important prostaglandin cellular hormone. When inadequately produced in our joint cells then inflammation, arthritis and other problems such as bone degeneration can occur; and adequate oral supplementation then appears most desireable. The end of that letter included the president's comment on his right hip joint at 2 AM following vigorous morning walking; and his recent question about his hip.

My letter P. S. and the attached US News and World Report covering recent major benefits from natural antioxidants, was topped this past week by the study showing that several hundred milligrams daily of Vitamin C may increase the lifetime of men by five to six years and women one year. Women now live seven years longer, but their plasma Vitamin C levels are as high as men taking 400-500 mg more Vitamin C than women. This is seen in the attached 1987 graph by P.G. Garry et al, and would thus seem wise for men to catch up.

Most Sincerely,

Frank J. Ball

FJB:kaj

March 29, 1992

4 Atlantic St.
Charleston, SC 29401

President George Bush
The White House
Washington, D.C.

Dear Mr. President

The TV presentation this week of you and Dr. Burton Lee leaving your annual physical with an overall perfect health report was truly great news; but I believe it was also great a year ago about a month before your atrial fibrillation. The brief newspaper report on your check-up referred three times to Dr. Burton Lee's concern that you need more "time off from his stress-filled job", he had recommended without success "him to go away for three weeks" and was trying to protect Bush from the pressures of the job because "stress hurts everybody". You owe it to Barbara, yourself and the country to take his advice; which I surely hope also included adequate daily (500mg) of oral magnesium to replace stress-induced magnesium lost most particularly from your heart, cardiovascular and cerebrovascular arteries that can decidedly induce heart arrythmias, vasospasms, heart attack and stroke.

Attached is a convincing page taken from the January 1992 medical journal Circulation supplement on Sudden Death, in a paper ELECTROLYTE ABNORMALITIES UNDERLYING LETHAL AND VENTRICULAR ARRYTHMIAS BY Leonard S. Gettes, M.D. at UNC Chapel Hill. Lethal arrythmias generated by magnesium deficiency and its correction by magnesium supplementation are briefly but well treated. Sixty percent of acute myocardial infarction patients die before reaching the hospital; but the last of seven large overseas double-blind tests showed that the half of the AMI patients who got 2225 mg of magnesium on arrival had in-hospital mortality one-sixth of the placebo patients. In all these hospital trials arrythmias and mortality showed very major reductions with intravenous magnesium. Therefore it certainly seems very likely that the double-blind half of the 40-50,000 acute myocardial infarction patients about the world who will fortunately get 2000 mg of intravenous magnesium when they arrive at the hundreds of hospitals participating in the Fourth International Study of Infarct Survival (ISIS-4) will definitively demonstrate the critical importance and efficacy of sufficient magnesium when this trial is completed at the end of 1992.

You have had a personal arrythmia warning which likely means your heart magnesium level was low at that time partially due to stress and partially to upset thyroid. It is terribly easy to remove the danger of magnesium deficiency; and all important to keep you healthy. Fritz Hollings' recent letter indicated he surely hopes you are following the advice; and on sitting next to Representative Arthur Ravenel at a recent South Carolina Society dinner; he mentioned he now regularly takes magnesium. He had told our newspaper at the time of your atrial fibrillation that he also had an atrial fibrillation problem; and we discussed magnesium and the heart at that time.

Last night at our supper club I met a delightful guest couple from Boston. When magnesium deficiency came up she told of the daughter of a doctor friend who was a very ardent runner and in the progessive festivities before her marriage had an arrythmia which was checked, ceased and she went on with the marriage plan. On the honeymoon flight to Hawaii over the Pacific she had a heart attack and died. This tragic event seems to me very likely due to magnesium deficiency from both running and sustained stress. From West Germany I have seen an estimate of 4000 heart attack deaths per year among their runners; which they estimate would be reduced very substantially by adequate

Congenital folic acid deficiency resulted in the spinal bifida of Ezra Adkins who you were hugging in my Feb. 11th letter; and probably caused the lack of the baby's brain in this past week's TV newsstory on planned baby death and organ supply. The New York Academy of Science is having a San Diego conference in May on Maternal Nutrition and Pregnancy Outcome which deals mainly with the terrible effects of folic acid deficiency; but discusses the decidedly detrimental effects of zinc, selenium, and Vitamins A, B_6 and B_{12} deficiency.

This month a retired M.D., Dr. Wilbur H. Caney and his wife visited with some most encouraging news relative to arthritis control using authentic oral evening primrose oil; discussed earlier in the middle of the Executive Summary of the Feb. 6th letter to Lee, Sununu, and Bush. The Caneys first visited a few years after my sustained success with oral evening primrose oil on severe rheumatoid arthritis; and she left taking the oil with Vitamins B_6, B_2, C and magnesium to try and control her severe arthritis. Two years later on passing through she was in great shape; and he reported 20-30 others with arthritis had found similar relief. Now several years later they reported over 200 with arthritis in the Southeast, New England and Bermuda had followed this same advice with 8 - 9 out of every 10 succeeding. Their only payment was theirs and their contacts satisfaction;and it went from a terribly pleased vascular surgeon to a Bermuda friend who went from her wheelchair back to tennis; and this convinced a number of arthritic contacts to try successfully.

With the hope and belief that by one means or another your health will continually improve with minimal stress degradation; and that the health of our country likewise continually improves over the next four years under your extremely able direction.

Most Sincerely,

Frank J. Ball

ps/ April 2, 1992

The attached April 6, 1992 TIME cover story The Real Power of Vitamins, just in is another surprisingly powerful presentation that speaks to the basic significance that has been increasingly evident ever since my 1983 letter was briefly discussed with you in Charleston. The TIME cover story should convince many Americans to improve their health by increased supplementation; and with hope that it may also beneficially influence Barbara and you.

FJB:kaj

cc: Barabara Bush
Vice-president Dan Quayle
Secretary Louis W. Sullivan
Dr. Burton Lee
Dr. John Sununu
Shirley M. Green
Senator Strom Thurmond
Senator Ernest F.Hollings
Representative Arthur Ravenel

February 6, 1992

Dr. Burton J. Lee

The Honorable John Sununu

President George Bush

EXECUTIVE SUMMARY

This letter was initiated to reinforce and transmit additional evidence about stress-induced magnesium loss and the resulting heart arrythmias sent to the Governor eight months ago (pages 1 and 2). I was concerned that despite the comments in Dr. Lee's letter to me, our high-stressed president might not be supplementing with magnesium.

Enclosed are December letters and literature trying to get the Medical University in Charleston, SC to quickly join the Fourth International Study of Infarct Survival definitively assessing the clinical efficacy of intravenous magnesium in heart attacks (page 2). The last of seven foreign double-blind studies just in covering patients treated on the day of their acute myocardial infarction showed a drop in the mortality to one sixth among the magnesium treated as compared to the placebo patients.

Since the May and June 1991 letters to the Governor also covered the recently established marked benefits to the heart from high level oral beta-carotene, additional evidence of similar benefits from high levels of Vitamin E and Vitamin C; and the program of a New York Academy of Science Conference covering these opportunities next week in Arlington are discussed on pages 2 and 3.

As I happened to have collapsed and had to spend at doctor's orders a month in the hospital and at home blamed on sustained extreme exhaustion (page 3), a possiblity is suggested that stress and exhaustion might also have been a contributing factor in the president's collapse.

I happened to be the first in this country (1980) and perhaps the fifth in the world to correct very severe rheumatoid arthritis with no further use of high level drugs by oral use of evening primrose oil. My situation and recent successful demonstration in double-blind studies are covered on pages 3 to 5. The likely medical reason for success and subsequent use on cancer are covered on pages 5 and 6.

The present encouraging status of several effective, available and non-toxic cancer therapies that were briefly discussed and given to the vice-president during his Charleston visit in 1983 is covered on pages 6 and 7.

An existing provocative potential to inexpensively and relatively quickly reduce the major burgeoning health costs of the elderly by massively supporting further clinical demonstration of the considerable effectiveness of pharmacological levels of certain vitamins, antioxidants and other micronutrients on various major degenerative diseases of the elderly is discussed on page 9.

Dr. Virgil Brown's courageous comments are striking; and I have over most of the past decade been taking daily 800 units of Vitamin E, six grams of Vitamin C, 45 mg of beta-carotene, and 500mg of magnesium; in addition to a powerful multi-vitamin with minerals, because the evidence of benefit seemed sufficient to me.

Today Dr. George C. Rios' (Chairman Medicine, George Washington Medical) CARDIAC ALERT, (Feb. 1992) arrived and the eighth page under the title Breakthrough - Vitamin C Against Cholesterol Plaque dealt with Dr. Jialal's findings just above. Vitamin E, beta-carotene, and Vitamin C were reported respectively 45%, 90% and 95% effective in stopping the growth of LDL plaque in the laboratory; with Dr. Jialals' conclusion that "these dietary antioxidants prevent cholesterol accumulation and plaque build up."

Also today I was sent the enclosed two pages from a "recent" HARVARD HEALTH LETTER, which I have underlined, as reading this is very likely to further convince anyone our age to promptly start building up our antioxidant levels if you haven't already.

BEYOND DEFICIENCY: NEW VIEWS ON THE FUNCTION AND HEALTH EFFECTS OF VITAMINS

Enclosed is the program of a very pertinent New York Academy of Science Symposium being given in Arlington on February 9-12, 1992. Dr. Charles Hennekens is chairing a session, Effects of Vitamins on Cardiovascular Disease and Cardiovascular Risk Factors and is speaking on Beta Carotene Therapy for Cardiovascular Disease. Dr. I. Jialal's presentation Influence of Antioxidant Vitamins on LDL Oxidation (see clipping above) is in the same session, and I have made my reservations to attend.

Dr. Gladys Block (discussed middle of page 7), who examined 90 epidemiological studies on the role of Vitamin C and Vitamin C-rich foods on prevention of cancer and found the vast majority showed statistically signifigant protective effects; is speaking on Vitamin C and Cancer: Epidemicologic Evidence of Reduced Risk.

Incidentally, Dr. Charles Hennekens just above is also U.S. National Coordinator of the Fourth International Study of Infarct Survival assessing the efficacy of intravenous magnesium in acute myocardial infarctions, as discussed on the middle of page 2.

PERSONAL EXPERIENCE OF SUSTAINED EXCESSIVE STRESS, COLLAPSE AND HOSPITALIZATION

Of possible relevance to the president's collapse in Japan, at one time in my life in April 1979, I collapsed at work and spent a week in the hospital and three weeks at home at doctors orders; after a diagnosis of bradycardia of the heart blamed on sustained extreme exhaustion. This is mentioned on page 22 of my enclosed May 1980 "memory jogger" for presentation, Two years trying to aid in the understanding and presentation of natural generation and natural control of human cancer. I never had any heart problems before then or subsequently, other than a possible mid-systolic click. The increase in excessive stress and effort that apparently brought this on was that in addition to my job, (directing for thirty years a research laboratory of 100 plus, with 20-25 Ph. D.'s and 10-15 M. S.'s) I became involved in an overwhelming spare time effort trying to help understand and encourage certain non-toxic cancer therapies as evident in the enclosed memory jogger. These therapies were summarized in the 1983 letter that was very briefly discussed and given to the vice-president during his visit to Charleston at that time. That 1983 letter was attached to the Governor's letter with hopes it might improve the chance my letters would get through to the Governor.

PERSONAL EXPERIENCE WITH RHEUMATOID ARTHRITIS AND ITS CONTROL USING NATURAL GAMMA-LINOLENIC ACID WITHOUT DRUGS

In January 1980 in the month following a very severe throat infection on a business trip, I came down with very acute rheumatoid arthritis. Following hospitalization, partial

control of my arthritis required 12-14 aspirins (ECOTRIN) and 6 Motrins per day throughout 1980 to reduce the pain and swelling; but I still could not drive a car or tolerate more than two hours per day at work.

Very fortunately, I was apparently the first in this country and perhaps the fifth in the world to completely correct my rheumatoid arthritis in December 1980 without continued use of any aspirin and Motrin by continuous use of EFAMOL evening primrose oil containing gamma-linolenic acid along with an equal amount of Vitamin C. This same oil was subsequently shown by Doctors J. Booyens, C.F. Van der Merwe and I.E. Katzeff in South Africa to effectively control a large number of human cancer cell lines and to have an amazing effect against primary liver cancers. This was discussed in my 1983 letter to the vice-president and my enclosed 1983 letter to Dr. Jan Van Eys at M.D. Anderson. I later met Doctors Booyens and Katzeff at the 1984 George Washington Medical International Symposium on Prostaglandins and Leukotrienes in Washington.

Incidentally, the Mother Superior Emeritus with intestinal and liver cancer, on the last page of the 1983 letter to the vice-president and discussed in more detail in the enclosed 1983 letter to Dr. Jan Van Eys; continued further improvement using gamma-linolenic acid and high Vitamin C. She lived happily for an additional three more years, well into her eighties. She was sister-in-law of my wife's cousin, Rodney de Kay, who mentioned at the time he was a year ahead of George Bush at Andover and Yale, and is a cousin of Senator Pell.

Before coming down with rheumatoid arthritis, when looking for reasons why Vitamin C might be effective in cancer, I had come across a paper by Dr. David Horrobin relating Vitamin C and gamma-linolenic acid; and discussed it on page 25 of an August, 1979 letter to Doctors Ewan Cameron, Joseph Gold, and Harry Gregorie, shown in my enclosed May 1981 "memory jogger" on the presentation Pertinent Interrelationships Between Cancer, Rheumatoid Arthritis and the Evening Blooming Primrose. When searching the medical literature in August 1980 for possible approaches on rheumatoid arthritis, I happened to note a short 1977 paper in the The Lancet where a Dr. J.N. McCormick in Scotland had used evening primrose oil and claimed to have achieved apparent success after three months on four rheumatoid arthritis patients. I called there, but he was out for a month and had not gotten support for further work, so I called Dr. David Horrobin in Montreal and got him to send me this "vegetable oil for experimental purposes".

Dr. Horrobin however did not believe the gamma-linolenic acid in the evening primrose oil would help me unless I could very substantially reduce my quite high levels of aspirin and Motrin. I wouldn't agree to do this because I felt I couldn't do it and still spend my two hours per day at work. These particular drugs are now known to inhibit the excessive conversion of arachidonic acid (which we obtain from meat and fish) to our inflammatory cellular hormones (two-series prostaglandins) which keep us from bleeding to death on injury, etc. The same drugs however also inhibit the conversion of gamma-linolenic acid to the one-series prostaglandin, PGE-1 which resists inflammation.

Fortunately the EFAMOL evening primrose oil in conjunction with equal Vitamin C, and with the same level of drugs; to my surprise progressively increased my stamina so that full time at work was achieved after a month. One third reduction in aspirin for a day; however would markedly increase pain and swelling by the next day so was not reduced. After three and a half months; elimination of all aspirin and Motrin was achieved over a week with no swelling or pain at the end of 1980.

Two very severe relapses occured in 1984 and 1988. In both relapses I apparently inadvertently did not get the gamma-linolenic acid for a period of about a month. In the 1984 relapse I again required the same high level of drugs to partially reduce the

renewed severe arthritis symptoms, but was able to reduce the drugs to zero again after three months; but required somewhat higher levels of evening primrose oil. In the 1988 relapse the same high levels of drugs were required, but were so unpleasant on my stomach that I called South Africa and tried using the very high levels of gamma-linolenic acid that they used in control of primary liver cancer; as described in my 1983 letter. This controlled both pain and inflamation without drugs; and was successfully reduced back after about three months; but again somewhat higher levels were required.

I attended a presentation in London in November 1986, by J.J.T Belch, R.D. Sturrock et al at the annual British Society of Rheumatology meeting covering the first successful double-blind trial on 49 rheumatoid patients; where EFAMOL evening primrose oil (and that along with fish oil) were demonstrated to be fairly effective in controlling the arthritis compared to a placebo in an 18 month trial. Dr. Robert B. Zurier, Chief of Rheumatology at University of Massachusetts School of Medicine in Worchester, was also at that meeting; and has actively studied the effects of gamma-linolenic acid and PGE-1 on cells, animals and rheumatoid patients for more than a decade. He has just completed but not yet published, a very successful double-blind trial evaluating gamma-linolenic acid compared to placebo on 27 rheumatoid arthritic patients . Dr. David Horrobin, who initiated and pushed the potential use of gamma-linolenic acid in arthritis, cancer and other diseases has now just started a multi-location double-blind trial on 500 rheumatoid arthritis patients; but results may not be available for two years.

It may also be of interest to a highly stressed president and his physician that oral gamma-linolenic acid in evening primrose oil has been shown to attenuate stress response as does oral or intravenous magnesium. Several chapters in David Horrobin's 1990 book, discussed just below, deal with this opportunity. I found that the magnesium and evening primrose oil must be taken at different times of the day to achieve adequate absorption.

PROGRESS IN UNDERSTANDING AND USE OF GAMMA-LINOLENIC ACID IN THE MEDICAL FIELD

Dr. David Horrbin, a truly brillant and dynamic metabolic research scientist who postulated and pioneered this whole area, sent me the 600 page book, Omega-6 Essential Fatty Acids: Pathophysiology and Roles in Clinical Medicine, that he edited in 1990. There are 44 chapters that mainly cover the beneficial effects of oral intake of gamma-linolenic acid in evening primrose oil in an increasingly wide number of difficultly cured diseases.

This critically important gamma-linolenic acid is supposed to be produced in all our cells by 6-desaturation of the essential linoleic acid that is present in the polyunsaturated fats that we must eat. The cells convert the gamma-linolenic acid (γ-linolenic acid, GLA) to dihomo-gamma-linolenic acid (dihomo-γ-linolenic acid, DGLA) which is incorpated at low levels into the cellular membrane. This latter vital organic acid when needed is released in the cell and reacts with oxygen in the cell's cyclo-oxygenase enzyme to form the one-series cellular hormone, prostaglandin E1 (PGE-1). If PGE-1 or other cellular prostaglandin hormones (such as the two-series prostaglandins produced from arachidonic acid) leak from the cells into the blood they are immediately destroyed on passing through the lung, to minimize any effect on other cells.

Arachidonic acid in the platelets that swirl about in our blood are converted under certain stresses to the two-series prostaglandin, thromboxane (TXA2). This causes the platelets to clump together and the arteries and capillaries to contract thereby preventing our bleeding if injured. We take aspirin and Motrin to inhibit the detrimental excessive conversion of arachidonic acid to thromboxane or other two-series prostoglandins (cellular hormones). PGE-1 that cells can produce from gamma-linolenic acid has an effect directly opposite to thromboxane. As PGE-1 leaks into the blood, it causes the platelets to disaggregate and the arteries and capillaries to dilate.

PGE-1 thus influences aspects very important to us such as inflammation, vascular tone, cellular function, and cellular division. Certain cells of ours however can lose or partially lose the capability to make gamma-linolenic acid which can be directly influenced by our aging, our particular genetics, certain retroviral invasions, cancer, diabetes, etc. Adequate oral intake of gamma-linolenic acid then seems mighty smart when particular cells and tissue are deficient. This natural fatty acid has very little if any detrimental effect on cells that produce normal levels of gamma-linolenic acid; but has a tremendous effect on those cells whose activity has changed because of its deficiency.

In rheumatoid arthritis, certain cells in our joints start dividing (that shouldn't be dividing) before we encounter pain or swelling. Most of the cells in our body only divide several times in our lifetime; nerve and heart cells never divide; while skin, gut and blood cells divide constantly. I apparently was taking enough aspirin and Motrin to cut back stimulated arachidonic conversion to inflammation prostaglandins in my cells by perhaps 85%, which may have been required because of inadequate gamma-linolenic acid production in certain joint cells. I take orally about as much gamma-linolenic acid from evening primrose oil as the amount of arachidonic acid that I would be expected to iniest as a carnivore. A research scientist, Dr. L.J. Zeitlin, from Scotland, who spent about six months in research studies at our medical university, controlled his previously severe psoriatic arthritis by completely giving up all meat or fish in his diet.

In retrospect, I now believe that gamma-linolenic acid deficiency may have been brought about by a retrovirus which could have caused my very sore throat infection just prior to my progressive development of acute rheumatoid arthritis over the following month. When I was put in the hospital, an in depth look was made by an infectious diseases M.D. for evidence of a viral infection; but none was found. Retroviruses can however, take over the genetics and transform certain cells so they begin continually dividing without leaving any evidence of the virus. PGE-1 produced from gamma-linolenic acid is a stand-out performer in kicking up cyclic-AMP, which at increased levels inhibits cell division. Whatever the reason there is certainly considerable satisfaction from the enjoyment of good health instead of being severly crippled for the past decade, and I have no doubt where to give credit.

After five successful double-blind placebo controlled trials, that tested oral evening primrose oil, the British Health Service now pay's for evening primrose oil (EPOGAM) to effectively control the very troublesome childhood and atopic eczemas which are very inadequately controlled with available drugs. EPOGAM has already become the most used prescription for that purpose in England and Germany; and its use is now underway in several other European countries and Australia. I know what a benefit that would be to both the child and family; since I had a brother (nine years younger) who had but grew out of severe childhood eczema.

PRESENT STATUS RELATIVE TO 1983 LETTERS TO BUSH AND VAN EYS

Although there has been extremely little government support over the past decade for any of the effective, available, and non-toxic cancer therapies discussed nine years ago in my 1983 letters to the vice-president and Dr. Van Eys; it has been satisfying to see that some substantial progress has nonetheless occured.

Inexpensive hydrazine-sulfate shown to be beneficial by Dr. Joseph Gold is now used all across Russia to prevent cachexia weight loss on cnacer patients after a Phase II study on 740 patients in Russia. There are now the first indications of NIH acceptance in this country; despite the very negative comments made by the NIH as indicated in my December 27, 1979 letter to Senator Hollings (pages 32 thru 34 in "memory jogger") and subsequently.

An earlier successful double-blind study on lung cancer by Dr. R.T. Chlebowski at Harbor UCLA Medical; and a recent Phase III double-blind trial headed by Dr. M.P. Kosty (at Scripps Clinic in San Diego) on 290 advanced lung cancer patients indicated survival of patients receiving hydrazine-sulfate was "far superior" to those not using it and side effects were "negligable".

David Horrobin now has various people conducting pertinent encouraging studies in England on the effects of gamma-linolenic acid on cancer; and there are forty pages discussing this area in his above book.

Lack of support stopped the very encouraging directed-hyperthermia treatment of cancer by Dr. Harry Le Veen in Charleston; although he is a featured lecturer at Cancer Hyperthermia Conferences overseas including Italy and Russia recently. His physician son, Dr. E.G. Le Veen is just now setting up in Charleston his father's highly effective hyperthermia equipment which Dr. Le Veen designed, built and used at MUSC. This will permit needed treatment of an eight year survivor following her hyperthermia treatment of inflammatory breast cancer which this same equipment treated way back then. I heard recently that Senator Cranston's prostate cancer is being treated at Stanford University in a research program studying the effects of directed-hyperthermia on cancer.

Following my retirement in 1984, for various personal reasons, I progressively disassociated myself from the extremely active spare time interst and too close involvement as to the beneficial effects of quite high Vitamin C, gamma-linolenic acid, hydrazine sulfate, and directed hyperthermia on cancer patients covered in my 1983 letters. While still attending meetings and reading that literature, my interest, activity and comnputer searching shifted to the apparent, very detrimental health effects on our hearts and arteries resulting from chronic deficiencies of magnesium or various antioxidants; and the apparent striking benefits of supplementation.

PERSONAL RECENT EXPOSURE TO VITAMIN C AND CANCER

Dr. Ewan Cameron, a cancer surgeon for thirty years and a brillant metabolic scientist (Hyaluronidase and Cancer, 1966) first demonstrated twenty years ago that high levels of intravenous or oral Vitamin C were markedly beneficial for terminal cancer patients. Dr. Linus Pauling aided in getting the work published in the Proceedings of National Academy of Science and both have worked dedicatedly over this period to get governmental support and acceptance from the medical establishment. Considerable progress has been made considering the level of resistance to medical publication and government support of Vitamin C and cancer. The last time I talked on the phone with Dr. Cameron he had completly rewritten the book, CANCER AND VITAMIN C (1979) but hadn't a suitable publisher. His death in 1991 is a real tragedy and setback; but his impact will live on as bowel-tolerance levels of Vitamin C takes it proper place in the control of human cancer.

In December a Supplemental Issue of The American Journal of Clinical Nutrition came in to the medical library with all 219 pages completely devoted to forty papers covering: "ASCORBIC ACID: BIOLOGIC FUNCTIONS AND RELATION TO CANCER" from a September 1990 conference at the National Institue of Health and sponsored by the National Cancer Institue. This conference and its complete publication permitted by the new NCI head, Dr. Samuel Broder, is by far the most encouraging step I've seen in the past decade since it might result in it now being respectable to conduct studies using Vitamin C on cancer; and also that the NCI might start providing truly adequate support to accelerate such studies.

The Forward to this compilation of papers relating Vitamin C and cancer is by Gladys Block, Donald E. Henson and Mark Levine of the National Cancer Institute and contains an amazingly encouraging statement to have come from the NCI.

"Evidence is presented on the role of ascorbic acid in cancer, including its effect on delaying tumor onset, delaying tumor growth, prolonging survival, reducing toxicity as a result of treatment, and increasing the efficacy of concomitant treatment"

Early last week I was in California and heard Gladys Block (who is now at the University of California at Berkley) make a presentation on her current work with Vitamin C to Dr. Linus Pauling and his staff as part of an interesting exchange of recent developments at both institutions, as indicated by the enclosed copy of that program. Discussions at the Institute about Vitamin C and AIDS with R.J. Juriwalla; and Vitamin C and human mammary tumor with C.S. Tsao followed up their presentation on these subjects at the above NCI conference.

A two hour lunch the next day with Gladys Block at Berkley left a most favorably impression and a belief that she may have been the major, but quiet sparkplug that brought to effective fruition this historic meeting that Doctors Pauling and Broder initiated.

A January 17, 1985 letter is enclosed that deals with a retired nuclear scientist who had severe bone and later spinal cancer; who had approached me five years earlier. He had visited Dr. Cameron in Scotland, took 10 grams per day of Vitamin C, and was quite pleased when this stopped his pain. Sometime later when the pain returned he called from Huntsville, Alabama and said Dr. Cameron had suggested that he visit me if he got into further trouble. I suggested that we just talk on the phone; and that he use his scientific skills to spread out his Vitamin C as much as possible so he could maximize it; and to use tasteless crystals of the half sodium salt of Vitamin C dissolve in orange juice. Fortunately as discussed in the letter, he got to 25 g of Vitamin C; and thus effectively controlled his pain and cancer for three years.

Unfortunately, he called me after he had just become bedridden with paralysis of the legs; and in our discussion of his situation it turned out he had reduced his Vitamin C to half. He shortly found that he could take his spread-out Vitamin C up to 35 g without bowel problems; and also took evening primrose oil. This stopped the pain and improved the quality of his life again; but unfortunately didn't correct the paralysis of his legs. He lived at home with his sister and over the next two years over the phone he still sounded great.

PRESIDENTIAL AND CONGRESSIONAL APATHY ABOUT ACUTE RUSSIAN THREAT

I happened to have seen the above H-Bomb scientist for the first time in October 1984 on a Dan Rather news program dealing with atomic-radiation induced cancer, which didn't mention that he had been taking Vitamin C. Three months later as discussed in my January 1985 letter, I again saw him on a Dan Rather program discussing his long term success with a gram per hour of Vitamin C every hour of the day. This was on the day the Mayo Clinic declared for the second time that Vitamin C was without question worthless on cancer. During the following year his sister wrote to me when he died in bed at home of an acute kidney infection brought on by catheter treatment.

I was very pleased to have possibly assisted this research scientist and also so inexpensively for more than five years. In our phone chats as two chemists, I came to the conclusion that his independent approach to the H-Bomb using Lithium 6 (he had gotten his Ph. D 20 years earlier on its isolation and properties) may have aided in a truly major and timely way in our very close race with the Russians for the H-Bomb in 1952-53. Very many called our participation in that race immoral; but we only beat the Russians to an H-Bomb by months, which is mighty scary in retrospect.

Twenty-five years after that explosion, almost inexcusable presidential and congressional apathy about the acute danger from Russia's greater and much faster growing thermonuclear

January 17, 1985

Doctors Linus Pauling and Ewan Cameron
Linus Pauling Institute of Science and Medicine
440 Page Mill Road, Palo Alto, CA 94306

Dear Doctors Pauling and Cameron,

Last night, as you know, NBC's Tom Brokaw reported that the Mayo Clinic had once again shown in this weeks New England Journal of Medicine that Vitamin C was worthless against cancer; while Dan Rather's CBS news program additionally reported this debate was not yet over, as some doctors think it can help cure cancer. Their interview of a patient with cancer of the spine, who took 24 grams of Vitamin C per day; and of Dr. Pauling, who stated the Mayo Clinic study was not a test of the value of Vitamin C against cancer, were most encouraging.

I was particularly intrigued to see that the patient interviewed was a retired atomic scientist in Alabama, who called me five years ago about the use of Vitamin C for control of bone cancer pain. By going to 24 grams spread evenly over the day, he was able to control the pain. This and subsequent events were described in the last paragraph on page 4 of the 1983 letter to Dr. Jan Van Eys, in the last paragraph on the opposing page(1982 letter), and on the second page of last months letter to Dr. Cathcart.

Although he and I chatted on the phone many times over these years, I first happened to see him a few months back in a Dan Rather news program concerned with cancers induced by exposure to atomic radiation. That CBS interaction presumably prompted their use of this provocative Vitamin C aspect and angle at this time. His expressed conviction of the cancer contol and better feeling, while dissolving his gram of "C" per hour; plus the Zoom blow-up of him reading the Cameron-Pauling CANCER AND VITAMIN C presents one side of the picture. It was surprising to also hear CBS estimate that over 100,000 cancer patients in America now take Vitamin C; but if some are doing it in place of traditional treatment, that could be a mistake.

This cancer patient and the mother with inflammatory breast cancer(also discussed in the same three letters) apparently both seriously reactivated cancer growth or worsened immunological control(after doing well on one or more years on high "C") when they lowered the dose from around 25 grams a day to about half. Subsequently reraising the "C" to previous levels or higher(along with some gamma-linolenic acid) apparently induced and maintained a second marked breast cancer regression in the mother. But did not adequately control her induced brain metastasis. This also seems a likely reason why the cancer induced spinal paralysis has not advanced for the last couple of years.

Lowered to 25g.

Dr. Peter Greenwald, Director
Division of Cancer Prevention and Control
National Cancer Institute
Bethesda, Maryland 20892

December 15, 1992

4 Atlantic Street
Charleston, SC 29401

Dear Dr. Greenwald,

I appreciated very much your response to my Nov. 3rd letter and attachments to Dr. James O. Mason, Assistant Secretary of Health and Human Affairs, that had followed my contact with him after his concluding talk at the 8th International Symposium on Cancer Research in Charleston. Your discussion of dietary approach and studies on cancer prevention in your letter; and in your opening talk that I heard in Tucson in June at the 4th International Conference on Nutrition and Chemoprevention were certainly informative and encouraging. The 2nd International Conference in 1989 was in Charleston.

Almost all studies and particularly recent ones seem to indicate increased intake of antioxidants (Vitamin C, Vitamin E, beta-carotene and selenium) reduce cancer, cardiovascular and other degenerative diseases; with progressive improvements up to substantial multiples of our Recommended Dietary Allowance (RDA)values.

The supplemental 25mg per day of beta-carotene taken for six years by a random half of the 22,000 physicians (earlier also on aspirin in Dr. Charles Henneken's study) proved stunningly beneficial in lowerering to half the heart attacks, cardiac deaths, strokes and by-pass operations among the 1½% of these physicians whose double-blind was broken in 1990 instead of 1995. This higher level of beta-carotene added to check its decided beneficial effect against cancer, is fifteen times as much carotene as the rest of us average in our diet. I and many others have however, taken almost twice this amount of beta-carotene for years.

Extremely few of us, as you know, consume sufficient levels of the pertinent foods to even reach our RDA values. It is thus hard to understand why our public health officials do not now also encourage further beneficial use of available inexpensive vitamins and micronutrients; which particularly improve the health of the elderly.

Superoxide, Superoxide Dismutase and Cancer

This month's Scientific American has nine pages on Why Do We Age with decided emphasis on the critical importance of oxidative free radical attack. As seen in the enclosed two underlined pages, the main detected difference in fruit flies recently bred to survive twice as long was in the capability of their antioxidant enzyme, superoxide dismutase. Doctors Michael Rose and Thomas Johnson pictured and featured in this enclosure on the genetic interaction between survival increases and superoxide dismutase; and Dr. Bruce Ames, whose presentation Oxidants and Antioxidants in Aging and Cancer was discussed in the letter to Secretary Mason, were quite active participants in a 1988 conference The Biological Basis of Aging that I attended in San Francisco. Dr. Richard Cutler on the bottom of the second enclosed page, headed that conference and showed that among mammals; humans exhibit both the longest maximum life span potential and decidedly the highest superoxide dismutase levels.

Enclosed are some pages from a 1979 twenty-six page letter on Superoxide, Superoxide Dismutase, and Cancer written hopefully to assist in our understanding of why ten to fifty grams per day of oral Vitamin C administered by Dr. Ewan Cameron in Scotland to large numbers of terminal cancer patients had proven so surprisingly effective in control of pain, tumor growth, quality of life and time to mortality.

This literature search and letter evolved over a two week vacation (a very tolerant wife); largely prompted by L. Oberley's publication that had just showed very marked reduction of the superoxide dismutase levels in the energy producing mitochondria of cancer cells.

Copies of this letter were sent to well over a hundred scientists and physicians; and Dr. Linus Pauling kindly wrote back thanking for the letter copy and its references. Three months later he sent a brief publication covering his discovery of the superoxide radical in 1933. He had brillantly deduced based on quantum mechanics, that an oxygen molecule with an extra electron should have enough stability to exist. A student was told how to prepare and isolate it; and how to demonstrate its validity by paramagnetic measurements. Pauling named it superoxide and his student E. W. Neuman published the findings which were largely ignored for almost twenty-five years. The 1968 discovery of our antioxidant enzyme, superoxide dimutase; demonstrated the extreme importance of superoxide dismutase in protecting us from released superoxide radicals everywhere in our body; and in aerobic cells throughout all life processes. Vitamin C also protects us by reducing released active superoxide radicals back to oxygen.

Enclosed are some underlined pages from that 1979 letter with pertinent points that are still not common knowledge in the cancer field. Also the table showing precipitate drop of Vitamin C levels in our various tissues as we age; and the graph showing drop of our white blood cell ascorbate down to scurvy levels in conjunction with various cancers (with resulting severe collagen degradation to hydroxy proline) still merit serious consideration.

Fortunately for me, the botton half of page 25 was picked up just before sending out that letter; as it later turned out to be the key lead (beneficial interaction between increased levels of gamma-linolenic acid and Vitamin C to increase depleted anti-inflammatory cellular hormone, Prostaglandin E-1) that at the end of 1980 cured; and has continued to completely control my earlier extremely severe rheumatoid arthritis without drugs. Very severe relapes in 1984 and 1988 were apparently caused by month long inadvertent lack of the 9% gamma-linolenic acid in authentic evening primrose oil.

Dr. Robert Zurier's abstract (on page two of the letter to Secretary Mason) first demonstrated in the U. S. the double-blind efficacy of natural oral gamma-linolenic acid in control of rheumatoid arthritis. It was among only eleven of about 350 poster presentations that day picked at the American College of Rhematology meeting of 3000 rheumatologists for oral presentation and questions in the final 90 minute period in the auditorium.

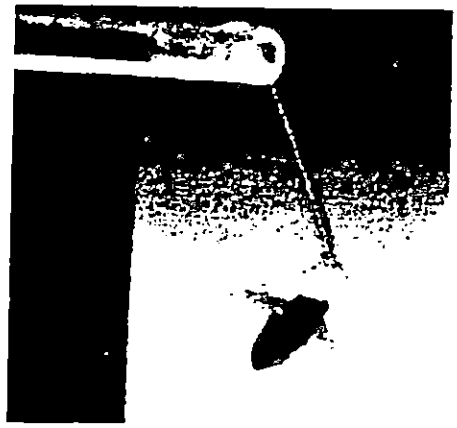
With hope that rheumatoid arthritis and cancer patients in the coming decade might progreessively get to effectively use high level, non-toxic ascorbic acid and gamma-linolenic acid to help control their devastating diseases. I surely appreciated simple, non-toxic complete control of my severe arthritis with no side effects over the past decade; and even more when I noted poster studies at the Atlanta meeting showing severe rheumatoid arthritis actually increases mortality comparable to severe heart problems.

Most sincerely,

Frank J. Ball

Frank J. Ball

cc: Those copied on October 29, 1992 letter to Doctors Burton Lee, James Edwards, Peter Gazes and James Spann



MICHAEL R. ROSE of the University of California at Irvine has significantly extended the life span of the fruit fly *Drosophila melanogaster* (*far left*) by selective breeding. The insect here, shown in flight, was tethered to fishing line by a drop of Duco Cement for an experiment in which Joseph L. Graves, now at Irvine, demonstrated that the long-lived flies are stronger than normal specimens: they can keep themselves airborne longer under a range of temperatures and humidity levels.

other evolutionary hypotheses will lie in identifying the genes, perhaps hundreds of them, that actually control the molecules that thwart or promote senescence. Many laboratories are now busy attempting to tease out some of the more influential genes.

Genetic Clues

Several investigators—among them Rose, Jazwinski and Thomas E. Johnson of the University of Colorado—are meeting that challenge by seeking genes that can prolong life in relatively simple organisms. "Aging is a puzzle you can understand only if you can compare normal with postponed aging," Rose says. "That tells you what the normal animals are missing. With humans, you don't have a control group."

After Rose created his hardy fruit flies, he and his colleagues compared the proteins made by the experimental and normal insects. One clear difference turns out to be that many of the long-lived flies produce an unusually active version of the antioxidant enzyme superoxide dismutase, which means they harbor a variant of the normal enzyme-specifying gene. Specifically, they produce a highly efficient version of the form of the enzyme typically found in the cytoplasm of cells. In fruit flies, as in humans and other organisms, superoxide dismutases defend against oxidative damage by helping to neutralize a dangerous free radical called superoxide. The genetic difference implies that one reason normal fruit flies age more quickly is that their free radical defenses are not as effective as those of the specially bred flies.

Of course, the variant of superoxide dismutase manufactured by fruit flies is sure to be just one of many factors that influence how quickly such flies age. Rose and Joseph L. Graves and their co-workers at Irvine have found, for instance, that the long-lived flies are more resistant to starvation because they store more fat. (Rose says the insects are so hefty that they spray fat in all directions if they are touched even lightly.) The flies are also less likely to dehydrate, in part because they stow more of the carbohydrate glycogen.

"The work on *Drosophila* is trial-run stuff for doing the same thing in mice," Rose says. "If we can create long-lived mice, specific genes, enzymes and cell processes involved in longevity should be revealed." As mammals, mice are genetically closer to humans than are fruit flies, and so they should have more to reveal about how people age. Mouse research should be more informative, that is, if someone will foot the bill for long-term studies, which Rose estimates would cost about $10 million.

Findings related to Rose's are coming out of Johnson's laboratory at Colorado. Johnson and his colleagues have wielded selective breeding to produce long-surviving versions of a tiny soil-dwelling worm known as *Caenorhabditis elegans*. They have also managed to prolong life in the species by generating random genetic mutations.

Like Rose's group, Johnson's team is attempting to identify the genes that are differentially expressed in long-lived and normal groups (differentially transcribed from DNA into messenger RNA, which is then translated into protein). In 1988 he reported that mutation of a single gene called *age-1* can increase the average life span of *C. elegans* by about 70 percent. Strikingly, the mutant worms produce elevated levels of antioxidants (both cytoplasmic superoxide dismutase and an enzyme called catalase) and are more resistant to the toxic effects of paraquat, a herbicide that leads to generation of the superoxide radical.

The mutation in the *age-1* gene seems to inactivate that gene, which means the encoded protein is no longer made. If the protein's elimination leads to increased production of antioxidants, then it is possible that the normal protein inhibits production of those substances.

THOMAS E. JOHNSON of the University of Colorado, who is examining petri dishes with a technician in his laboratory, has prolonged the life of another multicellular organism: the small, soil-dwelling worm *Caenorhabditis elegans* (*far right*). Johnson and his colleagues achieved the feat in two independent ways—by selectively breeding for longevity and by introducing a mutation in a single gene, called *age-1*. The group is now attempting to clone the *age-1* gene.

Why would an organism deliberately inhibit synthesis of such critical compounds? "I don't think its purpose is to kill the worm at a certain age," Johnson says. Rather he speculates that the inhibition may well be an undesirable effect of some other important function that has not yet been discovered. In other words, he thinks antagonistic pleiotropy is probably operating.

Once Johnson has cloned the *age-1* gene—which he hopes to accomplish soon—he plans to search for a counterpart in mice. If mice harbor a similar stretch of DNA, he might be on the track of a specific gene that could also be involved in human aging. Johnson is fond of a line from *Thus Spoke Zarathustra*, by Friedrich Nietzsche: "You have made your way from worm to man, and much in you is still worm." He is hoping Nietzsche's observation extends literally to the genetics of aging, although he realizes that the causes of senescence in *C. elegans* may be quite different from those in humans.

Jazwinski, aware that we have many genes in common with an even more primitive, single-celled organism, has focused his attention on baker's, or brewer's, yeast (*Saccharomyces cerevisiae*). He has identified several genes that prolong the yeast's life. The best studied of these, *LAG1* (*longevity assurance gene 1*), is more active in young cells than in old ones. Inducing extra *LAG1* activity in older cells, after expression has normally declined, extends their life by about a third. Most important, elderly yeast cells bearing the extra-active gene do not become immortal (as cancerous cells in multicellular organisms do); they simply operate youthfully longer.

Jazwinski does not know the function of the corresponding protein yet. Nevertheless, he has discovered that a similar gene is expressed in certain human cells. He is now isolating the human gene to determine whether it affects the life span of any human cells. He also intends to overexpress two other longevity assurance genes along with *LAG1* to see whether the combined effects are additive, synergistic or, possibly, destructive. And he expects to evaluate several other genes that his group has reason to believe might influence life span.

Radical Discoveries

Although the function of *LAG1* remains a mystery, the discovery that the antioxidant superoxide dismutase seems to affect longevity in both Rose's fruit flies and Johnson's worms dovetails intriguingly with growing enthusiasm for Harman's free-radical theory. Johnson notes that 25 years ago the theory was accepted as "an interesting hypothesis, perhaps true." Now increasing numbers of investigators are seriously entertaining the possibility that free radicals might indeed be a significant factor in aging.

Much of the evidence for free radicals is still based more on correlation than on clear demonstrations of cause and effect. For instance, if unrepaired damage caused by free radicals were a cause of aging, animals with a high metabolic rate—that is, who burned oxygen relatively quickly—would likely have shorter life spans than would species that consumed oxygen more slowly. The faster metabolizers, after all, would produce free radicals more rapidly. Indeed, the basal, or resting, metabolic rate of a species is inversely related to its life span; mice have a much higher rate than do humans, and they rarely live more than three years.

Cutler of the National Institute on Aging has uncovered other support. He finds that tissues of humans and other long-lived species produce more superoxide dismutase overall and are more resistant to oxidation. Cutler thinks humans age in part because their superior protection against oxidation is nonetheless insufficient to protect them forever. The reactive oxygenated molecules

4 Atlantic Street
Charleston, South Carolina
August 13, 1979

Dr. Ewan Cameron, Linus Pauling Institute of Sci. & Med., Calif.
Dr. Joseph Gold, Syracuse Cancer Research Institute, New York
Dr. Harry B. Gregorie, 37 King Street, Charleston, S. C.

Dear Doctors Cameron, Gold and Gregorie:

As you know, last summer and fall I wrote and distributed a series of letters discussing some biochemical literature evidence that seemed to help explain the decided efficacy of oral Vitamin C in cancer control that Dr. Cameron has been demonstrating in Scotland since 1972. Major attention was directed at the little realized extensive collagenase release characteristics of cancer tissue since ascorbic acid inhibits collagenase release and promotes new collagen formation. The two-page summary on Collagenase and Cancer, which was at the beginning of sixty typed pages and graphs in two of the letters to Dr. Gregorie, is attached for possible referral. All subsequent reading seems to support the thoughts expressed in this summary, but since it now appears that animal cancer tissue can consist of half or more unsuccessful defending macrophages, particularly in the growth zone, then the detrimental collagenase release may be largely coming from them, as will be discussed later. It would thus be even more important to provide adequate ascorbic acid to the defensive cells, since it has been quite definitely established that although macrophages already concentrate relatively high levels of ascorbic acid, they become progressively more successful with increasing blood levels of ascorbic acid. It is very satisfying to note during 1979 the increasing acceptance of the significance and medical value of oral Vitamin C in cancer and other applications; and the beginnings of highly merited grant support.

Literature evidence indicated cancer cells are progressively more damaged in their capability to produce energy by oxygenation; consequently from 60% to 99% of their nutrients end up in the blood as lactic acid, instead of the usual carbon dioxide. I had thus looked for any control approaches that recognized and took effective advantage of this situation. Dr. Gold's approach which used relatively nontoxic levels of oral hydrazine sulfate to decidedly prevent the continuous energy draining cyclic reconversion of lactic acid to glucose in the liver; and thus reversed the drastic weight loss (cachexia) of cancer patients seemed the most ingenious and most effective. Particularly now that Russian medical reports also show cachexia reversal using hydrazine sulfate on two-thirds of 225 evaluable patients with metastatic cancer (where all other therapy had failed); it seems totally inexcusable that Dr. Gold's grant requests for continued basic studies have not been approved or supported; and no supported clinical trials are underway in this country.

Dr. Manfred Von Ardenne's opposite approach which induced the cancer tissue to produce extremely high levels of lactic acid by raising the glucose level of the blood five fold for several hours had seemed equally brilliant. The resulting more than ten fold increase in the acidity of the cancer cells and their blood capillaries when combined with tolerable increases in body temperature resulted in cancer kill throughout the animal; and clinical follow-up was apparently getting underway in Dresden, East Germany. When what seemed our already critical and very seriously worsening military situation; prompted me this winter to twice send long concerned letters to all Senators and Representatives, it then seemed prudent, in consideration of Dr. Von Ardenne, to discontinue any further contact. This was most regretted as he sent English translations and his techniques, approach, and productivity in cancer metabolism were perhaps the most advanced I noted in the literature.

When looking up the Cameron-Pauling excellent 19-page review paper, "Ascorbic Acid and Cancer," in the February Cancer Research, I also came across L. W. Oberley and G. R. Buettner's seemingly very significant paper in the March issue of that journal. The latter paper clearly demonstrated that cancer cells no longer possess the protective superoxide dismutase enzyme in their mitochondira. This was intensely interesting; since as indicated in last year's letters, cancer cells have lessthan half as many mitochondria as the cell from which they were derived. Progressive damage to a cell's mitochondira would result in a progressive loss of the cell's ability to oxidize to carbon dioxide all of the pyruvic acid which is produced from glucose sugar or fatty acids in the cytoplasm of the cell. Since the cytoplasm can convert any excess pyruvic acid to lactic acid, this acid would then be excreted into the blood, as happens with all cancer cells. Progressive destruction of the protective superoxide dismutase in the mitochondria, by various feasible methods would result in a build up of superoxide radicals in the mitchondria. These radicals can reduce and thus inactivate the ferric iron in all the oxidative enzymes of the mitochondria, but they can be decomposed by reacting with ascorbic acid.

Earlier interest in superoxide and superoxide dismutase was briefly covered on page 16F of my July 24, 1978 letter to Dr. Gregorie; so I distributed some copies of this superoxide dismutase paper by Oberley with appended handwritten comments.

My somewhat excessive spare time reading was stopped when I collapsed at work; and spent a week in the hospital and three weeks at home during April at doctor's orders, with a diagnosis of bradycardia of the heart from sustained extreme exhaustion.

In the month or so before then, using recent books, I had attempted to simultaneously understand the relative metabolism and hormonal aspects of 1) cancer cells which continually divide, 2) brain cells which never divide, as compared to 3) certain body cells and most plant cells which can fluctuate wildly in division or energetics. I was then mainly interested in brain energy metabolism and the relative effects of the major hormones, such as the epinepherines (Adrenalin) and

6. The epithelium of the eye is exposed to higher oxygen levels and exhibits higher dismutase levels. Cataracts seem to form in this region and analyses of eyes with cataracts seem to be lower in dismutase. You may also remember last year an indication that eyes with cataracts appeared to have low ascorbic acid contents. Both superoxide dismutase and ascorbic acid convert superoxide radicals to hydrogen peroxide which is decomposed by our catalase enzyme.

Absence of Superoxide Dismutase in Cancer Cell Mitochondria

1. Early analysis methods assessed the superoxide dismutase level of cells by the efficacy exhibited for destruction of superoxide radicals. Conversion of normal cells to cancerous form did not change the indicated dismutase level very much; and it might either increase or decrease.

2. When it was realized that the superoxide dismutase in the cytoplasm contained copper-zinc catalyst, as opposed to manganese catalyst in the mitochondria dismutase; methods were devised to determine them separately.

3. Oberley's paper (Cancer Research 39, 1141; April 1979) now gives clear indication that the manganese superoxide dismutase is diminished in all tumors analyzed. The manganese dismutase has been indicated to be actually absent in the tumor cell lines of rat H 6 hepatoma, mouse L 1210 leukemia, mouse C 3H mammary carcinoma, mouse S 91 melanoma, and Morris hepatoma 3924 A. Human leukemia cells in Japan also exhibited low levels or absence of manganese superoxide dismutase.

4. Isolated mitochondria fragments from cancer cells gave indirect indication of substanial superoxide radical formation which was reduced to zero by superoxide dismutase addition. Superoxide dismutase will not penetrate through cell membranes, but when added does decompose any superoxide in the serum.

5. Since the superoxide radical appears to be an intermediate in many enzymatic oxygenation reactions, superoxide dismutase control of leakage or excessive concentrations that might damage other portions of the mitochondria should be most important. It would be expected that as mitochondria lost their superoxide dismutase capability, the superoxide and resulting hydrogen peroxide or hydroxyl radicals could attack the mitochondria membrane phospholipids, DNA, or RNA. If the cells which were being subjected to sustained slow mitochondrial damage had progressively built up sufficient capability to produce energy by glycolytic conversion of pyruvic acid to lactic acid in the cytoplasm, they might then survive and become cancer cells. This generally seems to take a long, long period involving at least 30 - 50 divisions over the years for most of our body cells, which derive their energy basically from the mitochondria.

Molecular and Cellular Biochemistry 84: 147–153 (1988)

Invited Paper

Role of antioxidant enzymes in cell immortalization and transformation

Larry W. Oberley[1] and Terry D. Oberley[2]
[1]*Radiation Research Laboratory, Department of Radiology, 14 Medical Laboratories, The University of Iowa, Iowa City, IA 52242, USA;* [2]*Pathology Service, William S. Middleton Veterans Memorial Hospital, 2500 Overlook Terrace, Madison, WI 53705, USA*

Accepted 29 May 1988

Key words: superoxide dismutase, catalase, glutathione peroxidase, immortality, cancer, mitochondria

Summary

The role of antioxidant enzymes, particularly superoxide dismutase (SOD), in immortalization and malignant transformation is discussed. SOD (generally MnSOD) has been found to be lowered in a wide variety of tumor types when compared to an appropriate normal cell control. Levels of immunoreactive MnSOD protein and mRNA for MnSOD also appear to be lowered in tumor cells. Tumor cells have the capacity to produce superoxide radical, the substrate for SOD. This suggests that superoxide production coupled with diminished amounts of MnSOD may be a general characteristic of tumor cells. The levels of MnSOD in certain cells correlates with their degree of differentiation; non-differentiating cells, whether normal or malignant, appear to have lost the ability to undergo MnSOD induction. These observations are used to elucidate a two-step model of cancer. This model involves not only the antioxidant enzymes, but also organelle (particularly mitochondria and peroxisomes) function as a dominant theme in carcinogenesis.

Introduction

The hypothesis that free radicals are important in carcinogenesis is not a new one. Enthusiasm for this idea has waxed and waned over the years. Definitive evidence on this hypothesis has been difficult to obtain because of the elusive nature of free radicals. Recent advances in techniques and understanding have resulted in a clearer picture of the role of free radicals in cancer. It is the purpose of this paper to critically review the current state of our knowledge as well as suggest new avenues of study.

Antioxidant enzymes in tumor cells

Because of the difficulty in accurately measuring free radicals in living cells, investigators of the relationship between free radicals and cancer have focussed on measurements of antioxidant enzyme activities of normal and tumor cells. These enzyme activities will give an indication of how well a cell is protected against active oxygen species. Moreover, in normal cells, since the antioxidant enzymes are inducible, the levels of the antioxidant enzymes reflect the levels of their substrates – the active oxygen species. As we will see later, the latter assumption may not be true in tumor cells.

The data on the levels of antioxidant enzymes in tumor cells has been reviewed a number of times [1, 2, 3]. The general picture that has emerged is that tumor cells have abnormal activities of the antioxidant enzymes when compared to an appropriate normal cell control. In this paper, antioxidant enzymes will mean the superoxide dismutases (SOD), catalases (CAT), and peroxidases, of which

7. As mentioned in the previous letters, J.U. Schlegel (Tulane Medical et.al., J. Urol., Baltimore 103: 155-59 (1970) believed that the irradiation from chemilumiscent urine might be a factor in bladder cancer; and found that ingestion of 1-2 g. of ascorbic acid stopped chemiluminesence; and was beneficial in the prevention of bladder carcinoma. This irradiation was accelerated by bladder carcinogens, such as nitrosoamines or the natural 2-hydroxy anthranilic acid. It would now appear the observed chemiluminesence probably came from superoxide released as the body attempted to oxygenate carcinogens or from macrophages attempting to handle incipient cancer nodules. Sufficient ascorbic acid should remove escaped superoxide radicals in solution and stop chemiluminesence. Cancer prevention and control may also have come from improved macrophage vitality and kill capability which accompanies high blood ascorbic acid levels (Book 6, pages 81-82)

8. This chemiluminescence recalls a book by Albert St. Gyorji related to bioelectronics and cancer which was perused last year. This twenty year old book described and interpreted a series of simple but ingenious experiments where he dissolved into solvents various vitamins, biological co-factors, biologically active chemicals such as 2,4-dinitrophenol, etc. that he felt were involved in electron transfer reactions. By freezing the solvent solutions to the very low temperatures of liquid nitrogen; he was able to excite electrons to high energies by irradiation, and then follow the return of the sufficiently slowed electrons to their normal state by observing the immediate fluoresence or delayed phosphoresence in varying colors. His interpretation of these phenomena and their relationship to life processes and animal experiments was quite fascinating. Superoxide radicals would be right in line with his bioelectronic thinking, but I am not up on that area.

Potential Cause and Significance of Falling Ascorbic Content of White Cells and Increasing Ascorbic Content of Cancers

1. The level of ascorbic acid in the white cells of cancer patients progressively drops to quite low levels as is partially indicated in the graph on the following page from my July 7, 1978 letter to Dr. Gregorie.

2. This graph plots the increasing level of hydroxyproline excreted in the urine of mainly cancer patients compared to the decreasing ascorbic acid content of their white blood corpuscles. Hydroxyproline comes basically from decomposed collagen fibers; and apparently results in cancer patients, because the collagenase enzyme released from growing cancer tissue breaks down the collagen fibers that enmesh the cells of adjacent normal tissue. Hydroxyproline release would be expected to rise much faster when the collagenase releasing cancer cells grow on the bone, as the bone is mainly collagen fibers and mineral.

3. The dramatic effect of 1 g. ascorbic acid in reducing hydroxyproline excretion is shown in Table 2, alongside the graph. This is presumably due to the capability of ascorbic acid to turn off collagenase release; and promote collagen

Doctors Cameron, Gold, and Gregorie

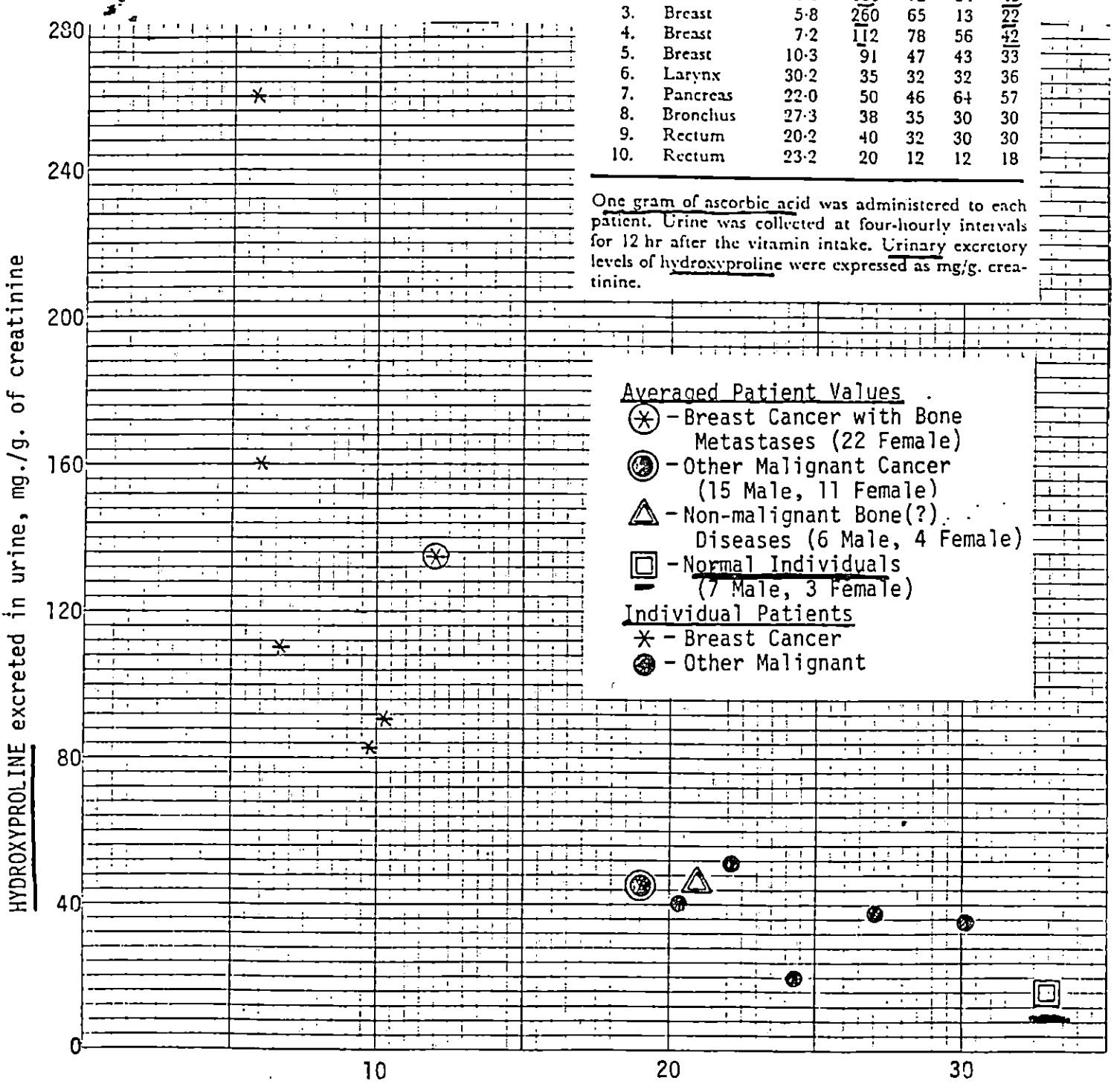
RELATIVE LEVELS OF LEUCOCYTE ASCORBIC ACID AND URINARY HYDROXYPROLINE
(with effects of 1g. ascorbic acid injestion on urinary hydroxyproline levels)

Basu, Raven, Dickerson, and William's Data
European Journal of Cancer 10, 507-09 (1974)

Table 2. Urinary excretory levels of hydroxyproline after a loading dose of ascorbic acid

Case no.	Site of tumour	LAA level (μg/10^8 W.B.C.)	UHP level (hours after a dose of ascorbate) 0	4	8	12
1.	Breast	9·8	84	50	46	52
2.	Breast	6·0	160	72	54	49
3.	Breast	5·8	260	65	13	22
4.	Breast	7·2	112	78	56	42
5.	Breast	10·3	91	47	43	33
6.	Larynx	30·2	35	32	32	36
7.	Pancreas	22·0	50	46	64	57
8.	Bronchus	27·3	38	35	30	30
9.	Rectum	20·2	40	32	30	30
10.	Rectum	23·2	20	12	12	18

One gram of ascorbic acid was administered to each patient. Urine was collected at four-hourly intervals for 12 hr after the vitamin intake. Urinary excretory levels of hydroxyproline were expressed as mg/g. creatinine.



FALLING VITAMIN C CONTENT OF VITAL ORGANS AND CELLS WITH INCREASING AGE

Book (4) Pages 78-79

Table 4.1. Ascorbate content (mg/kg wet weight) of human tissue (averaged values from the references)

Tissue	Fetuses	Newly born	Children	Adults	Old people	Reference
Adrenals			1190			Bessey and King (1933)
	1820	700	500	400	100	Giroud (1938)
		780	760			Ingalls (1939)
		581	540	393	230	Yavorsky *et al.* (1934)
		(4000 → 5000, unspecified age)				Roston (1962)
Leucocytes (white cells)		(250 → 350, unspecified age)				Masek and Hruba (1964)
		(250 → 350, unspecified age)				Lowry *et al.* (1946)
Brain		460	310		110	Yavorsky *et al.* (1934)
(For contents of cerebral cortex and cerebellar cortex see section 4.6)						
Pituitary		889 (0–9 yrs); 950 (10–14 yrs)		770 (20–29 yrs)		
				488 (30–39 yrs)		
				447 (40–49 yrs)		
				521 (50–59 yrs)		Schaus (1957)
				511 (60–69 yrs)		
				497 (70–79 yrs)		
				455 (80–89 yrs)		
(Hypophysis)		750 (24 yrs, female); 650 (48 yrs, male)				Melka (1936)
Eye lens		(5–55 with cataracts)		310		Euler and Malmberg (1936)
(For extensive analysis of eye tissues see Tables 4.2 and 4.3)						
Pancreas		365	265	152	95	Yavorsky *et al.* (1934)
			300 (20 mnths)			
Thymus		304	255		46	Yavorsky *et al.* (1934)
Kidney		153	110	98	47	Yavorsky *et al.* (1934)
	350	100	70	50	30	Giroud (1938)
Liver		149	155	135	64	Yavorsky *et al.* (1934)
			370 (20 mnths)			Bessey and King (1933)
			200	150	40	Giroud (1938)
		385				Ingalls (1939)
Spleen		155	135	127	81	Yavorsky *et al.* (1934)
Myocardium		73 (0–9 yrs) decreasing to 49 (80–89 yrs)				Schaus (1957)

The blood level stays around 10mg/kg in health even on aging. Increased ascorbic acid intake increases its level in vital organs.

Vitamin C and immunity: an assessment of the evidence

W. R. THOMAS & P. G. HOLT* *Division of Immunological Medicine, Clinical Research Centre, Watford Road, Harrow, Middlesex, and *Department of Microbiology, University of Western Australia, Perth Medical Centre, Shenton Park, Western Australia*

Clin. exp. Immunol. (1978), 32, 370-379

SUMMARY

The high concentration of ascorbate in leucocytes and its rapid expenditure during infection and phagocytosis suggests a role for the vitamin in the immune process. Evidence published to date shows an involvement in the migration and phagocytosis by macrophages and leucocytes, as well as the induction and expression of delayed hypersensitivity. Its effect on antibody production and complement levels is controversial but probably minimal. This study suggests there is room for further investigation into the effect of ascorbate on immunity, particularly with defined populations, but cautions the use of megadose therapy.

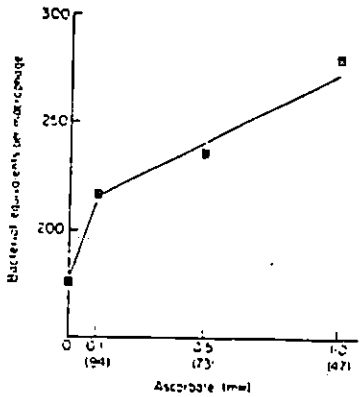


FIG. 1 Phagocytic activity of peritoneal macrophages after incubation with media supplemented with ascorbate. Monolayer cultures of mouse peritoneal macrophages were incubated for 20 hr with the concentration of ascorbate shown. Media containing fresh ascorbate was then added and after 1 hr their ability to phagocytose heat-killed radiolabelled *Pseudomonas aeruginosa* was measured. Results are the mean of three cultures and show the amount of radioactivity, in bacterial equivalents, accumulated after 2 hr incubation in media containing $18{\cdot}8 \times 10^7$ bacteria per ml. Details of the method used have been published (Thomas, Holt & Keast, 1974). Some cell death occurred during the incubation and the percentage viability of the cultures is shown in parentheses.

Vitamin C Regulation of Prostaglandin E1 Hormone Formation

While looking for the latest information on macrophages in human cancer, I looked into the August 1979 issue of Medical Hypotheses, and found (p. 849-58) an article by D. F. Horrobin, et. al., entitled THE REGULATION OF PROSTAGLANDIN E1 FORMATION: A CANDIATE FOR ONE OF THE FUNDAMENTAL MECHANISMS INVOLVED IN THE ACTIONS OF VITAMIN C. Dr. Horrobin is at the Clinical Research Institute of Montreal and wrote the book, Prostoglandins: Physiology, Pharmacology and Clinical Significance (1978). He reviewed in this paper as indicated in the abstract below the potential significance of his recent publication (Prostaglandins Med. 3: 129-37, 1979) which showed that ascorbic acid enhances the formation of prostaglandin hormones, such as PEG1.

ABSTRACT

Vitamin C stimulates the formation of PGE1 in human platelets. The effect occurs over the physiologically relevant range of concentrations. PGE1 is required for T lymphocyte function and plays a major part in the regulation of immune responses. PGE1 is also important in the regulation of collagen and ground substance metabolism, in cholesterol metabolism and in regulation of responsiveness to insulin. It is proposed that defective formation of PGE1 could account for many of the features of scurvy and for many of the reported therapeutic effects of vitamin C. If correct, vitamin C will be of value only in conjunction with an adequate supply of dihomogammalinolenic acid, the precursor of PGE1. Essential fatty acids, pyridoxine and zinc are all required to achieve this.

4 Atlantic Street
Charleston, S. C. 29401
May 12, 1983

The Honorable George Bush
The Vice President of the United States
Executive Office Building
Washington, D. C. 20501

Dear Mr. Vice President:

The level of dynamic movement, short-term clinical potential, and increasing public awareness of certain effective, available, and nontoxic cancer therapies (which are based on sound scientific and medical principles) have now reached such a degree of medical and possibly political significance that proper executive understanding and handling of this vitally important situation actually merits your attention.

Just reading the enclosed one and a half-page letter to Dr. George Keyworth II, will briefly aquaint you with earlier attractive nontoxic cancer therapies which are being tragically neglected. It will also permit some understanding of the enclosed astounding clinical results on liver cancer obtained this week from South Africa, which resulted (as postulated several years previously) from oral administration of an available nontoxic natural fat containing gamma-linolenic acid.

This week on May 11 the Public Broadcasting System TV presented for one hour a very different "War on Cancer" than is normally seen. I fortunately got to see the second half, which presented both the clinical potential of Dr. Joseph Gold's hydrazine sulfate for control of cancer cachexia (acute weight loss) and Dr. Ewan Cameron's approach using very high oral Vitamin C to restore immune capability and quality of life in terminal cancer patients. Nobel Laureates Linus Pauling and Albert Szent-Gyorgyi emphasized the National Cancer Institute's sustained acute deficiency in recognizing or supporting attractive nontoxic approaches to cancer therapy. Dr. Vincent DeVita pleasantly kept trying to justify NCI decisions. I heard the first half presented convincing biostatisics to demonstrate that the NCI's ten-year massive toxic approaches were largely losing not winning the cancer war, while causing extensive needless patient distress.

During this week exactly five years ago, the enclosed three letters were written to Dr. Ewan Cameron in Glasgow, Scotland, Dr. Joseph Gold in Syracuse, New York, and Dr. Manfred Von Ardenne in Dresden, East Germany. These letters were to encourage what had seemed the three most hopeful nontoxic cancer therapies noted in the medical literature; and to send each of them the medical literature of the other two. Dr. Cameron had pioneered the use of very high oral levels of Vitamin C to stimulate the immune system and thereby improve the quality of life and longevity of 500 terminal cancer patients per year in a Scotland District General hospital. Dr. Gold, Director of the Syracuse Cancer Research Institute, had brilliantly deduced the actual simple cause of the drastic and accelerating weight loss (cachexia) that kills more than half of cancer patients; and discovered that nontoxic levels of available hydrazine sulfate minimized weight loss and thereby benefited thousands of cancer victims. Dr. Von Ardenne was a very noted German atomic physicist with his own Institute, who had shifted his emphasis to become the most advanced European scientist in both local and whole animal body hyperthermia, which specifically killed just cancer tissue with properly induced heat. He also ingeniously combined both high body heat with five times normal blood glucose levels for some hours. This caused both the animal cancer and its metastases to produce such excessive cancer derived lactic acid, that they were more effectively destroyed.

These nontoxic cancer therapies (high oral Vitamin C, hydrazine sulfate, and hyperthermia) are being specifically brought to your attention at this time, because they constitute both available and effective nontoxic approaches to cancer therapy which separately and in combination seem to offer such striking present clinical potential to the 450,000 Americans who each year discover serious cancers, and the roughly similar number who die of it. If you get to look at the attached letters sent to Doctors Wyngaarden, Keyworth and DeVita and the thirty senators on the committees that control the funding and activity of the National Cancer Institute, I hope you will appreciate why they are being repeatedly approached.

Since these relatively effective and nontoxic cancer therapies (Vitamin C, hydrazine sulfate, and hyperthermia) have been tragically undersupported, often condemned, and thus underutilized over the past five years I, like others, have persistently attempted to arouse greater understanding and support at Senatorial, National Cancer Institute, and Executive levels. Senator Hollings has also written letters during this period relative to the NCI's total lack of support of Dr. Joseph Gold's grant requests to extend his brilliant studies on cachexia control. The NCI's consistent refusal of scientific or clinical support on hydrazine sulfate and their negative interpretation of successful Russian studies seriously retarded acceptance of this available and effective nontoxic product. The American Cancer Society, however, removed Dr. Gold and hydrazine sulfate from their "unproven methods" blacklist in 1980 and their recent financial support of studies underway at the UCLA School of Medicine has resulted in the positive paper, Association Between Improved Carbohydrate Metabolism and Weight Maintenance in Hydrazine Sulfate Treated Patients with Cancer Cachexia, (enclosed summary), by R. T. Chlebowski et al, to be presented at the May 22-24 meeting of the American Society of Clinical Oncology.

Senator Hollings also wrote Dr. Vincent DeVita and HHS Secretary Richard Schweiker about the NCI's continuing refusal of grant support to Dr. Harry H. LeVeen, who pioneered nontoxic clincal hyperthermia therapy in this country throughout the past decade; and who in conjunction with Dr. Ronald Pethig in England developed the most advanced and successful radiofrequency hyperthermia equipment, clinical techniques, and electronic prediction and evaluation methods. With the removal of hyperthermia from the American Cancer Society's "unproven methods" blacklist in 1980, NCI support was markedly increased over the next two years, as discussed in the letters to Dr. Wyngaarden and others. Dr. LeVeen's and the Medical University of South Carolina's brilliantly advanced proposals, equipment, and clinical techniques, were presented in their responses to the five-year NCI Phase I Request for Proposals - Evaluation of Equipment for Hyperthermic Treatment of Cancer awarded to five separate centers by the end of 1982; and the follow-up five-year RFP - Hyperthermia Quality Assurance Program being now awarded; but these were totally rejected. This occured despite the fact that his equipment and techniques were the most advanced and successful in this country for treating deep cancers, such as lung, and his sustained effort without any NCI support was a major factor in medical acceptance of the clinical potential of cancer hyperthermia therapy.

The enclosed letters to Doctors Wyngaarden, Keyworth, and DeVita, and a visit last October to Dr. Chabner at the NCI also implored support for the grant request of Dr. Nicholas DiLuzio, Chairman of Physiology at Tulane Medical, to accelerate broad acceptance in cancer control of his highly encouraging nontoxic natural immune stimulant, beta-1,3-glucan, but this grant request has just also been turned down by the NCI.

Finally, these letters and one to Dr. Jan Van Eys were to bring to their specific attention the likely major nontoxic cancer control potential inherent in natural and available gamma-linolenic acid which is the precursor of our "one" series prostaglandins (cellular hormones). Since October 1982, five medical reports and letters have been published on test tube studies in three South African medical universities that clearly demonstrated the striking capability of natural gamma-linolenic acid to induce "reversibility" or marked growth inhibition on both mouse and seven human cancer cell lines with no effect on comparable normal cells.

Now the enclosed published letter (mentioned at the beginning of this letter) shows major shrinkage of distended cancerous livers in liver cancer patients following use of oral gamma-linolenic acid for just one day or for two months, plus substantial pain reduction. In this first clinical test, both patients still died quickly like the 46 other liver cancer patients. On the other side of this "reversibility of cancer" letter is copied the INTRODUCTION and SUMMARY from the section on liver cancer in the definitive 1982 book on cancer, which realistically presents the almost complete lack of effective medical therapy for liver cancer. Of interest, a Mother Superior Emeritus with earlier intestinal cancer was told she apparently had developed metastatic liver cancer a year ago, but right away she took high oral levels of Vitamin C and evening primrose oil, which contains gamma-linolenic acid. This week, a year later, she is apparently in much better shape.

With one-fourth of us now expected to get cancer, we deserve much more executive consideration and encouragement of these viable nontoxic cancer therapies to more quickly minimize our extensive personal financial costs and grief and to reduce the likely tremendous federal health care expenses due to cancer. Four-fold reduction in our earlier worst cancer killer from increased use of Vitamin C is now widely acknowledged, as discussed in the letter to Dr. Van Eys; so why not promote much more extensive and quicker evaluation of such approaches in cancer therapy.

Since the odds are low that this letter will get through to you, it is also being sent to others with some potential and interest in beneficially influencing this situation.

Most sincerely,

Frank J. Ball

Frank J. Ball

FJB/dr
Enclosure

cc: Pres. J. B. Edwards
Dr. H. H. LeVeen
Dr. Ewan Cameron
Dr. N. R. DiLuzio
Dr. Jan Van Eys
Dr. Joseph Gold
Dr. D. R. Horrobin
Dr. W. P. Leary
Dr. Linus Pauling
Dr. Ronald Pethig
Dr. J. Booyens
Dr. J. H. Foster
Dr. C. F. van der Merwe
Dr. Mille H. Wiley

HHS M. Heckler
Mr. L. Mosedale
Dr. B. Chabner
Dr. V. T. DeVita
Dr. G. A. Keyworth, II

Sen. O. G. Hatch
Sen. E. F. Hollings
Sen. C. Pell
Sen. S. Thurmond
Sen. L. Weicker

Senators on Full and Appropriations Committees on Health & Human Services

Gov. R. W. Riley

Mr. Armand Hammer
Dr. William P. Longmire
Dr. John A. Montgomery

May 24, 1991

The Honorable John H. Sununu
Chief of Staff to the President
1600 Pennsylvania Avenue
Washington, D. C. 20500

Dear Governor,

Enclosed is a letter written today to Senator Hollings and a series of letters written in haste to Senator Thurmond, Senator Hollings, Representative Arthur Ravenel, and Dr. James E. Edwards, President of the Medical University of South Carolina. These letters all deal with the distinct possibility that President George Bush's atrial fibrillation and hyperthyroidism may have been brought on by chronic magnesium deficiency which was induced by sustained high-level stress and further aggravated in the short term by greater exercise than normal. Today's letter to Fritz also brings up recent evidence of the interaction of thyroxin and Vitamin C, and the recommendation that all patients with Grave's Disease be given ascorbic acid supplements.

Sustained stress thus not only can cause decidedly increased urinary excretion of your critically needed magnesium, but also consumes our limited body supply of ascorbic acid. How much you're affected by such losses is influenced by your own biochemical individuality, but it sure seems wise to have increased levels of such critical co-factors when there are no negative side effects.

In 1983 my wife and I met George and Barbara Bush at a reception for 50 couples at the home of Dr. John Hawk around the corner from us. Barbara and her sister attended Ashley Hall in Charleston, as did Mib. The Charleston visit may have been a screen since I believe I later heard he went directly to the Caribbean and helped arrange the Grenada success. The only reason I payed $500 to attend was to meet him and briefly bring up cancer control opportunities and to pass on the enclosed letter. He expressed interest and put the letter in his coat pocket, and I got the satisfaction of trying.

I hope these letters might possibly get through to you since you too may want to read about and give consideration to the likely potential cardiovascular benefits from high oral beta-carotene.

With the hope and belief that some good may come from all this,

Frank J. Ball

Frank J. Ball

cc: Senator Ernest Hollings
Senator Strom Thurmond
Representative Arthur Ravenel
Dr. James E. Edwards
Dr. Marcus Newberry
Dr. Peter Gazes

Feb 6. 1992 letter to Doctors Burton Lee and John Bennett and President Bush

capability prompted acute fear and my first ever letters to Congressmen (top of page 1 and pages 39-46 of "memory jogger" Two Years Trying to Aid...) These long letters to Senator Hollings which discussed mainly the Russians threat, but partially on cancer, were sent to all Congressmen and hand delivered to very many Senator's offices; and got a much greater response than expected. This week a Senator Moynihan Letter To New York on Payback Time came in which got started coming down here way back then.

Courageous executive assessment and adroit marshalling of support to solve by far the most acute problems of the past decade, were magnificently handled by Presidents Regan and Bush. Almost the whole world now benefits from their determined and sustained steps with just adequate Congressional support that solved our acute Russian Communist and Mid-East problems. It was never truer: NEVER IN THE HISTORY OF MANKIND HAS SO MUCH BEEN OWED BY SO MANY TO SO FEW.

POTENTIAL FOR REDUCTION OF BURGEONING HEALTH COSTS FROM DEGENERATIVE DISEASES IN THE ELDERLY POPULATION

The President in his State of the Union message to congress has just focused on the mind-boggling 800 billion and expected 1600 billion annual health costs; and particularly the critical need to reduce present costs and restrain rapidly rising costs.

The biggest cost and the biggest opportunity to reduce cost will likely be among the various degenerative diseases which cause such havoc and cost to the elderly population. The cost to die of cancer in the US is now astronomical and you are subjected to much unpleasant chemotherapy and radiotherapy. We elderly are also smitten with a number of other degenerative diseases such as arthritis, osteoporosis, heart attacks, strokes, diabetes, arteriosclerosis, emphysema, etc. These are generally brought on by metabolic derangements induced by aging and by deficiencies that accompany aging. Such diseases have been minimized by proper supplementation with inexpensive micronutrients.

Recent studies indicate that in most degenerative diseases a peroxidative attack on the cell membranes of the tissue involved is occuring which makes them leaky. Other essential parts of the cell are also being attacked by the excessive oxidants. High levels of various anti-oxidants which are generally low in the elderly then usually seem to be decidely beneficial.

You won't find many medical professionals in this country who believe in or even know about the effective use of the micronutrients discussed in this long letter. However, if what is presented is valid (and it seems to be) and if the clinical demonstrations were supported to the extent they deserve (based on its evident potential) then very significant reductions in private and public health costs should be achievable with a much happier elderly population. Pharmacological levels of natural supplements are low cost; and when demonstrared effective do not have to wait a decade or more for approval as is the case with drugs.

It may even be worth while for a very busy president to look over parts of the information enclosed; to make up his own mind whether certain areas discussed (some of which are just now receiving some public attention) may merit consideration for personal use by himself and his wife. Executive support, if justified, would very materially shorten the time to widespread proper use, could substantially reduce health care costs, and improve public health.

If you just briefly look over the titles of the enclosed program (behind the stressed donkey) that is being given next week in Arlington covering the health effects of pharmacological levels of vitamins and antioxedants; you can quickly appraise the state of the art and its possible relevances.

4/11/93 This is discussed on last page of James Mason letter; and a copy of the program and abstracts for your Two was given at the White House gate to Dr. Burton Lee's secretary, along with handwritten letter to president relative to story that day on [illegible] and boy with spinal bifida during conference. GJB

7 Atlantic St.
Charleston, S.C. 29

(Typed copy of handwritten letter)

August 8, 1992

Dear John and Molly,

Many thanks for your August 2 letter which enclosed a copy of the New York Times July 29 story on selenium deficiency; and the much higher levels of stroke deaths for men and women that is so evident across the South. The stroke death rate is also twice in the lower half of Georgia and South Carolina compared to the upper; likely because the vital minerals selenium and magnesium have been washed from the soil and waters.

This identical presentation (New York Times Service) ran the same day in our Post & Courier and featured Dr. Curtis Hames in Georgia who I happen to know; but did not include the last paragraphs discussing Dr. Herbert Langford. I had met him several times; but did not know he had died from stroke last year. Also the Charleston paper did not include the great maps showing state death rates in all states.

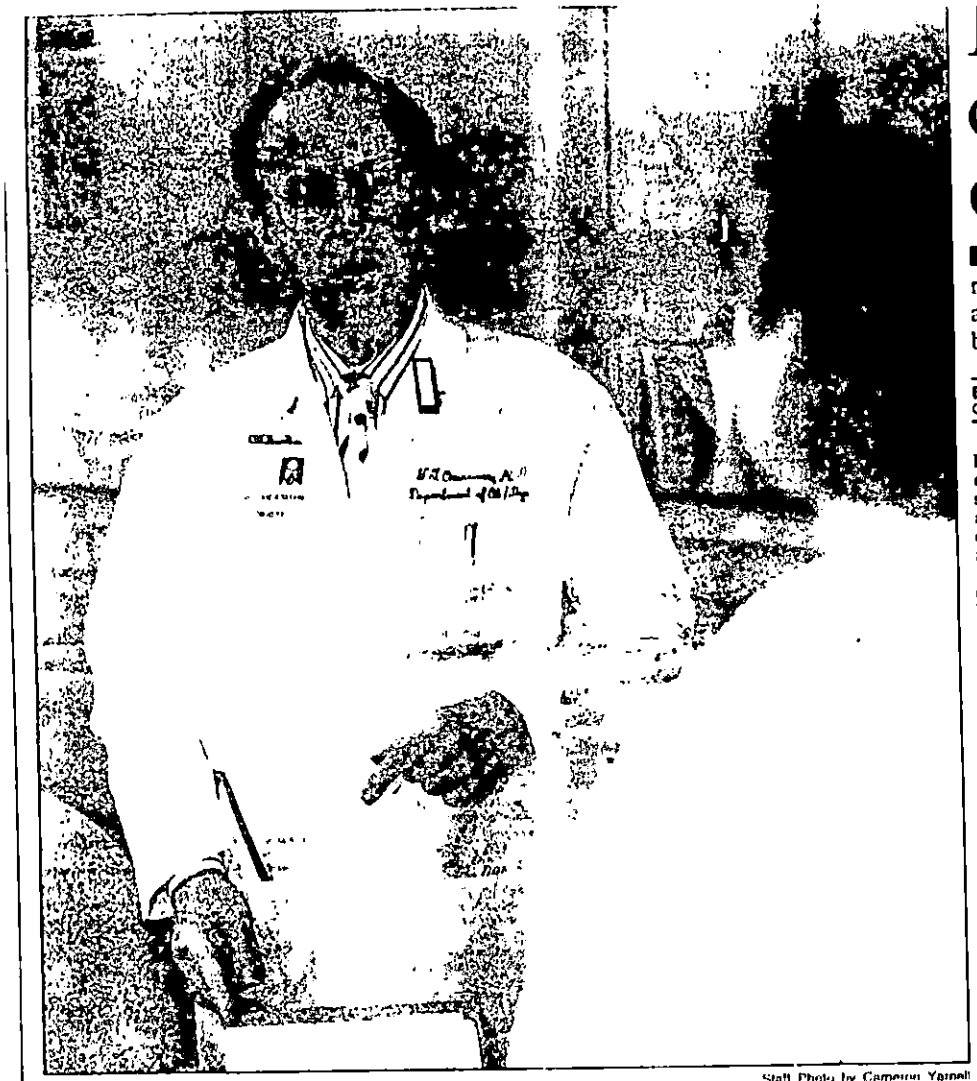
This story really brought back memories of the past decade since it was attendance after my retirement at a 1985 lecture by Dr. Herbert Langford at the Medical University on Calcium, Potassium, Sodium and Hypertension; that happened to progressively spark my later consuming interest in magnesium deficiency and the heart. After his talk I met and talked with Dr. Langford about some studies in Scotland and Japan; where low calcium markedly affected the properties of desmosome cells in the gut lining, resulting in increased colon cancer. This was his first talk at the Medical University; and we had never met. He amazingly remembered we had dated the same girl; and he wrote requesting my information as he was pushing the possible importance of low calcium on hypertension.

When digging into the medical literature on calcium and magnesium using computer searching the detriments of low magnesium seemed really important; so he was called and pertinent medical literature sent up to Dr. Langford, who was head of Endocrinology at Mississippi Medical.

The MUSC library 1963 book The Role of Magnesium in Biological Processes by J. Aikawa was copied and read. Then his 1972 The Relationship of Magnesium to Disease in Domestic Animals and in Humans and his 1982 Magnesium: Its Biological Significance were found in the library in Denver (where visited a son on fellowship) copied, read, and then Aikawa visited in Denver in early 1986. He gave me the 1980 Royal Society book, Environmental Geochemestry and Health from which I have copied page 195; which very clearly indicatres the importance of selenium which you two had stopped taking.

Dr. Curtis Hames, featured in The Times story, introduced himself to me at a 1987 Conference on Cardiovascular Epidemiology; because Dr. Peter Gazes, MUSC head of Cardiology, had sent him a copy of my thirty page 1986 letter on the serious dangers to our hearts from our chronic dietary magnesium deficiency and almost no magnesium in our water. We had a long discussion and some subsequent interchange of literature. He had won the MacArthur Award back then; and usefully pushed the real danger of selenium deficiency particularly in the South and on increased stroke death.

It was most upsetting to see about Dr. Langford's stroke death; since he and his charming wife seemed so vibrant and healthy when I last saw them at the 1990 Hypertension Conference in Jackson. He had invited Dr. Edward J. Rocella (quoted in this story) and I to supper at their home the night before the conference.



Staff Photo by Cameron Yarnell

Charleston oncologist Dr. William Creasman talks with a nurse recently at MUSC.

Local physician on front lines in cancer research

■ TAXOL ON WAY: Dr. William T. Creasman's research efforts have brought about the federal approval of the cancer-fighting drug taxol, which will be available this week.

By LYNNE LANGLEY
Of The Post and Courier staff

If not for Charleston oncologist Dr. William T. Creasman, the new cancer-fighting drug taxol might still be confined to laboratories and a few research centers. Instead, the drug will begin flowing to doctors and patients this week.

In record time, the federal government approved the use of taxol based in large part on research by Creasman and a medical group he founded.

Studies by Creasman and the Gynecologic Oncology Group have revolutionized the treatment of endometrial and vulvar cancer. Less-deforming operations helped as many women as radical surgery. Medicine gained a new understanding of the disease process.

His studies paved the way for endometrial cancer patients to take once-feared hormones, which can relieve menopausal symptoms and prevent osteoporosis and heart disease, he said.

The professor and chairman of the Medical University of South Carolina Department of Obstetrics and Gynecology credits the work of the entire group rather than his own. Some studies have made major contributions and others will have a major impact, he said.

"You are happy to see something you do come to fruition. You do not hit a home run every time. It is nice to think about (the successes), but you do not dwell on them. You go forward."

And he has.

He helped plan and develop the comprehensive cancer center at Duke University and is helping to found the Hollings Oncology Center at MUSC. He has written 240 published scientific papers, 13 book chapters, six abstracts and 10 audio-visual productions.

He has served as a chairman or officer in a long list of medical and scientific organizations and has addressed or moderated international gynecologic cancer meetings all over the globe.

His list of awards and honors fills two pages and includes recognition as one of this country's best physicians by magazines such as Town and Country and Good Housekeeping, as well as books such as the 1992 volume, "The Best Doctors in America."

Born in Miami, Ariz., Creasman graduated from Baylor University College of Medicine in 1960. He became interested in gynecologic oncology, all the cancers of the female pelvis, and specifically surgery during his residency at the University of Rochester Medical Center.

In those days, less than 1 percent of residents pursued a fellowship. He tackled a series of fellowships and advanced study at Rochester and later at the University of Texas M.D. Anderson Hospital and Tumor Institute in Houston.

His wife and two children took it in stride, he said with a smile. "There was a running joke around our house: 'What's one more year?'"

He returned to Rochester to teach in 1966, then to the tumor institute to teach surgery.

In 1970, he became director of gynecologic oncology at Duke University Medical Center, served as full professor and ran the gynecologic oncology division.

He could have spent his career there, he said. Then with a smile he added, "I need a new challenge now and then."

He looked at medical centers around the country and in 1986 chose MUSC, he said, because he liked Charleston and prospects at MUSC.

"I saw the potential for this place to take off. In the last four years, it has been exponential.

"Being on the ground floor of two cancer centers has been exciting. It's also been fun."

Please see DOCTOR, Page 4-B

Taxol offers promise in cancer battle

By LYNNE LANGLEY
Of The Post and Courier staff

Taxol expert Dr. William T. Creasman is looking for more answers.

"Everyone has jumped on taxol as the silver bullet," the Medical University of South Carolina professor said.

"In the last 20 years, platin was the most exciting cancer drug we had. At this point, taxol is equivalent to platin. Whether or not it will work out in the end awaits studies. It may very well be an extremely important drug, but the data is preliminary."

Studies he conducted at MUSC showed taxol markedly shrank tumors in one-third of ovarian cancer patients. That is very good, he said, considering none of those patients was improving on platin.

Most women are or become resistant to platin and no chemotherapy had been found to help them, he said.

Taxol is not a cure but does give a patient more time, he said. The drug is expensive and has side effects, including possible heart and bone marrow problems, he added.

"Ovarian cancer has been called

Please see TAXOL, Page 4-B

State agency workers earn

DOCTOR

from Page 1-B

Creasman helped Duke plan for and gain the coveted National Cancer Institute designation as a comprehensive cancer center one of 28 in the nation. Now he serves on the steering committee as MUSC seeks that designation for the Hollings Oncology Center.

MUSC's bid only can be helped by his taxol research and membership in the Gynecologic Oncology Group he helped found 20 years ago, he is convinced. The studies here prove MUSC is on the cutting edge of cancer work, he said. "It shows we have a track record. That is extremely important."

The group, sponsored by NCI, now has accepted about three dozen institutions, including Duke and recently MUSC.

A single center might need eight or 10 years to complete a study but a cooperative group like GOG helps institutions work together and gain information much more quickly, he said. That means a new drug might be available years sooner or a new surgical treatment tested and accepted much faster, he said.

The GOG taxol studies on ovarian cancer, in which he takes part, played a key role in the U.S. Food and Drug Administration's approving and releasing the drug so quickly for treatment of resistant ovarian cancer, he said.

"The group has made a major, major impact on the way we treat gynecologic cancers. Therapies have been changed considerably.

"For me, the advantage of belonging to the group is I have access to drugs that are not otherwise available," he said, adding that only NCI has supplied taxol until now. "That puts us on the cutting edge. It allows us to do things we could not do otherwise."

Lowcountry patients benefit by receiving medicine and treatment offered only at a few places in the country, he pointed out.

"Some people might say, 'You are experimenting.' But it gets us further along the information curve. That is why we are as far along with taxol, because of the GOG studies. Hopefully, the patients of tomorrow will benefit from the patients of today."

TAXOL

from Page 1-B

the silent cancer," Creasman said of 20,000 to 21,000 cases diagnosed in this country each year.

Because symptoms such as indigestion and pelvic pressure are subtle, most cases are not diagnosed until they are very advanced, he said. That means the cure rate is very low and up to three-quarters of patients die, he said.

Taxol also may fight other types of cancer. Creasman noted. MUSC is studying taxol in endometrial cancer, breast cancer and solid tumors, he said.

So far, studies have shown taxol only effective against resistant ovarian cancer, cancer that has not responded to state-of-the-art drugs such as platin and its compounds, he said.

In four to six weeks, Creasman hopes to know whether taxol will help newly diagnosed ovarian cancer patients as a "first-line treatment."

First-line treatment now is not justified, he said, because of toxicity, thus side effects, expense and potentially limited supplies.

The average cost of a cycle of taxol is $695.25, according to Bernie Mogelever, spokesman for taxol manufacturer Bristol-Myers Squibb Co. He had no figures for a course of treatment, but doctors have estimated it might run $24,000 to $36,000.

Taxol will be available to physicians in Charleston and across the country by Tuesday, Mogelever said. There is and will continue to be enough taxol to meet the demand of patients and clinical studies such as Creasman is conducting, Mogelever added.

In the 1960s, the National Cancer Institute first tested a crude extract from the bark of the relatively rare Pacific yew tree and saw anti-cancer activity in the test tube. "It has a unique mechanism of action, completely different from any we had seen," Creasman said.

The extract was tremendously toxic and in short supply, he said. Phase 1 studies in humans, which usually demand 12 to 18 months, instead took 10 years.

NCI began Phase 2 research on specific cancers in the late 1980s. The studies, including Creasman's work at MUSC, tested only cancer patients who had failed on other treatments. The studies, completed in late 1991, showed the drug particularly promising in ovarian cancer, with a 30 percent to 35 percent success rate in resistant cancer.

Creasman then began a Phase 3 study of newly diagnosed patients. NCI, the sole source of taxol at the time, authorized the study by Creasman and other institutions belonging to Gynecologic Oncology Group, which he helped found.

Results from MUSC and the other centers went to GOG where a computer is analyzing the data and running quality control checks. Results will be announced when GOG meets early next month, he expects.

Last spring, he began a study to compare the success of taxol with other drugs in newly diagnosed ovarian cancer patients, he said. The first 150 of 600 expected patients are being treated with various combinations of drugs including platin, its compounds and taxol.

Answers from one study form questions for the next one, a process Creasman calls leap-frogging.

He also is looking at taxol dosage. Higher doses affect bone marrow, he said, but molecular technology has provided a new drug that stimulates bone marrow and could help fight that side effect. A double dose of taxol appears more promising than anything yet seen, he said.

"We have not found the magic bullet (for gynecologic cancers). But taxol is one step along the way."

4 Atlantic Street
Charleston, S. C. 29401
February 4, 1983

Dr. Jan Van Eys, Chairman
Department of Pediatrics
M. D. Anderson Hospital and Tumor Institute at Houston
The University of Texas
Houston, Texas 77030

Dear Dr. Van Eys:

I very much appreciated the opportunity in December to talk with you in Houston about aspects of your 1982 publication Tumor-Host Competition for Nutrients and the timely 1982 book, Molecular Interrelations of Nutrition and Cancer that you co-edited. Your comment in the preface that thirty years had elapsed since one of these annual M. D. Anderson Symposiums on Fundamental Cancer Research had earlier focused on Nutritional Factors in Cancer Research seemed quite germane.

Our discussion, which was shortened by needs relating to the tragic shooting at M. D. Anderson, briefly covered a series of topics involved with nutrition and cancer. It seemed worthwhile to emphasize some of these in more detail, since better understanding may increase the potential for earlier broad acceptance. Since my spare time scientific interests over the past five years have been deeply involved in the metabolic interactions of ascorbic acid, hydrazine sulfate, or gamma-linolenic acid with human cancer, rheumatoid arthritis or diabetes our discussion with reference to your book and paper touched on these interrelationships as covered below.

The Effect of Dietary Vitamin C Levels on Carcinogenesis

The increasingly informed acceptance that Vitamin C, particularly from uncooked vegetables and by direct supplementation, may have been of major importance in the progressive four fold drop over the past fifity years in the death rate of the earlier worst cancer killer (stomach) seems most encouraging. There has been a steady drop in the death rate for men from stomach cancer, which in 1930 was about twice that of the next worst cancer killer (colon and rectum), and is now almost one-third of colon and rectum cancer, even though there has been no drop since 1930 in the high case fatality rate if stomach cancer occurs. Deaths from colon and rectal cancer in men and women rose steadily and substantially from 1930-45, then remained about the same for men, but have dropped steadily by about one fourth for women since 1945.

It was thus most encouraging to see the enclosed couple of pages of comments from the chapter, The Influence of Nutrition on the Development of Cancer Immunity and Resistance to Mesenchymal Diseases, by Dr. Robert A. Good (Research Director of Memorial Sloan-Kettering Cancer Center) making the case, that stomach cancer has likely been dramatically reduced by increasing levels of dietary Vitamin C and possibly Vitamin E. Cancer forming nitrosoamines, which result from microbial conversion of dietary nitrite constituents may be scavenged by Vitamin C in the diet, as postulated by J. H. Weisburger et al in 1977. Robert Good's recommendation that Vitamin C trials, alone or combined with Vitamin E, be conducted in China and elsewhere in the Far East where stomach cancer is still the number one killer (about ten times our present stomach cancer rate); and where oesophageal cancer may be their second cancer killer thus seems most appropriate. His favorable comments were also noted on the potential prophylatic importance of W. R. Bruce's findings that the mutagenic nitrosamines were present in the feces and colon contents of about 40% of the persons tested on the usual American or Canadian diet; and the indicated ability of Vitamin C to completely eliminate these nitrosamines from the gut contents and feces if larger amounts of Vitamin C (400-1000 mg/day) are taken. W. R. Bruce's chapter, On Early Measures of the Effects of Diet Change with Relation to Cancer Incidence indicated a number of provocative approaches he is employing to clarify in a short time the effect of fecal mutagens on colon cancer formation and the effects of intervention with Vitamin C and Vitamin E on this development. His studies following the appearance of colonic polyps reminds me of Dr. J. U. Schlegel's studies of the development of bladder polyps and their control with oral Vitamin C.

malignancies, and spontaneous malignancies. Dietary restriction, however, must be understood in fundamental molecular, cellular, endocrinological, or immunological perspective if these dramatic experimental observations are to be translated to practical application in man. Already, progress is being made in this direction.

Dietary manipulations that of themselves may be useful in addressing cancer are those in which a nutriment or dietary constituent may be added to the diet. One example is vitamin C. Vitamin C administration may provide a powerful approach to cancers of the gastrointestinal tract. Before the mid-1930s, stomach cancer was the most frequent cause of death from cancer in the U.S. Almost miraculously, in the mid-30s stomach cancer began to decline in frequency in the U.S., until, at present, it represents a cancer of relatively low frequency. When it occurs, however, it is still a highly lethal cancer, having essentially the same case fatality rate that it did in the early 1940s.

The dramatic decrease in deaths from this form of cancer and the increase in deaths from lung cancer represent the most dramatic change to occur in cancer incidence in modern medical history. There is little question that, if cigarette smoking could be stopped, most cases of lung cancer would gradually disappear. However, in spite of solid knowledge concerning the etiological role of cigarette smoking in pathogenesis of lung cancer, little progress has been made in decreasing the carcinogenic habit—the smoking of cigarettes. This would involve deprivation of something considered desirable by some, and it is not occurring, at least for the population in general.

In contradistinction to that pertaining for lung cancer is the situation with respect to stomach cancer. The case can be made that stomach cancer has been dramatically influenced by a dietary additive, vitamin C. The decline of stomach cancer in the U.S. began about 10–15 years following the advent of universal refrigeration and the introduction of widespread refrigerated shipping of food. These changes made possible the present American diet, which puts fresh fruits and vegetables on most American tables at almost every meal. This dietary change, coupled with promulgation of widespread use of vitamin C as a routine for children by pediatricians and general practitioners, may have led to the decline of stomach cancer.

By inhibiting the formation of nitrosamines high in the gastrointestinal tract, vitamin C may have led to the prevention of stomach cancer (Weisburger et al. 1977). This postulate can and should be tested in controlled studies in China and other areas of the Far East where stomach cancer is still rampant. In the Far East and in China in particular, stomach cancer continues to be the number one killing cancer. Further, over all of China the number 2 or number 3 killing cancer is esophageal cancer. Here too, formation of nitrosamines from dietary constituents by microbial catalysis of nitrosamine formation may be the crucial pathogenetic mechanism (Hsia et al. 1981). Administration of vitamin C alone or together with vitamin E to prevent this critical nitrosation and thus the formation of chemical carcinogens seems one reasonable approach to inhibition of both esophageal and stomach cancers. Surely this very safe and inexpensive nutriment, often in short supply in the regular diet in Eastern countries, could be tried as prophylaxis against one or two of the most common cancers in the world. Hopefully, if this approach is taken, the attempt at prophylaxis will be made in the form of a properly controlled clinical trial.

Recent studies by W. R. Bruce in Toronto have generated another set of observations (Bruce et al. 1977) that might be translated into an effective prophylactic approach to the most common cancer in America—colon cancer. Bruce discovered that feces and colon contents of persons on the usual American (or Canadian) diet frequently contain a somewhat labile N-nitroso compound—a nitrosamine—that he has shown to be mutagenic. This substance can be completely eliminated from the gut contents and feces if larger amounts of vitamin C (400–1000 mg/day) are taken as part of the diet. Vitamin E supplementation is also effective in inhibiting formation of this potential carcinogen. It is thought that, as oxidizing agents in sufficiently large amounts, these substances can inhibit the formation of the potential carcinogen that is usually produced by action of the microbial flora. If this is the case, prevention of polyp formation, abnormal differentiation of the gut epithelium, and cancer formation should follow appropriate nutritional therapy.

Perhaps trials to prevent cancer by these nutritional manipulations could be carried out in families with high frequencies of colon cancer. Alternatively, patients with primary immunodeficiencies who have high frequencies of cancer of the upper as well as lower GI tract and in whom action of microorganisms might be pathogenetically important, or even patients who have been subjected to partial or complete gastrectomy or vagal nerve operations for treatment of peptic ulcers, would be good subjects. GI cancers occur in very high frequency in these populations. Thus, it can be reasoned that sound dietary approaches to inhibition of cancers may be developed and that this line of inquiry can generate much important information in approaching several cancers of high frequency in different parts of the world.

NUTRITION AND IMMUNITY

The relation of immunity to nutritional state has received much attention in recent years. Indeed, considerable concern has focused on the immunodeficiencies associated with the protein-calorie (PC) malnutrition syndrome, which is widely distributed over the world (Kulapongs et al. 1977). In most settings, protein and PC malnutrition have regularly been associated with profound defects of cell-mediated immunities. By contrast, hyperglobulinemia and hypergammaglobulinemia, quite regularly found in these syndromes in most areas, have been taken as evidence of a relative sparing of humoral immunity during protein and PC malnutrition. The analysis of the influence of individual nutriments and of protein or PC malnutrition per se on immunological functions from studies of these syndromes under field conditions has been hampered by the

He had noted that urine can glow in the dark, and this glow ceases when a person takes Vitamin C. Since he thought such irradiation might be a factor in causing bladder cancer, he checked the effect of sustained oral Vitamin C on the bladder wall and found a significant reduction in bladder polyp formation and even a reduction in existing polyps which in time tend to become malignant. The paper covering that work significantly influenced Dr. Ewan Cameron's decision to try high (10 g/day) oral levels of Vitamin C on terminal cancer patients in Glasgow, Scotland, beginning in 1972. Indication of this unique restorative capability of Vitamin C was also well brought out in the chapter, Inhibition of Transformation and Oncogenic Progression by Ascorbic Acid: A Possible Role in Chemoprevention, by W. R. Benedict and P. A. Jones. Cell lines that would transform to cancerous form when treated with carginogens did not do so when exposed to Vitamin C up to three weeks later. Cell lines that had already been transformed by the action of carcinogens could be irreversibly transformed back to normal type cells by Vitamin C exposure unless the transformed cells had gone through additonal passages.

"Reversibility of Cancer:" Gamma-Linolenic Acid Deficiency-Dependence of Cancer Cells

We got to discuss only very briefly the three enclosed October publications that I had just received supporting the apparent validity of Dr. David R. Horrobin's detailed 1980 predictions on the use of gamma-linolenic acid in cancer control, which seem to be of true breakthrough importance with regard to the specificity of cancer cell growth control, the lack of effect on normal cells and the potential practical clinical significance. In vitro experiments from three different medical schools in South Africa clearly demonstrated that gamma-linolenic acid supplemention at 1 to 60 parts per million in the growth medium of a mouse melanoma cell line, a human oesophageal carcinoma cell line, and a human liver carcinoma cell line progressively and dramatically reduced cancer cell growth and changed morphological features of these malignant cells while having no effect on the similar normal cell lines.

The enclosed brilliant 1980 paper by Dr. Horrobin marshalled the literature data and its significance, which indicated that transformed cells and malignant cells appear to have largely lost their delta-6-desaturase enzymatic capability. This enzyme normally converts the usual abundant linoleic acid to low levels of gamma-linolenic acid which is taken up by cells and then converted as needed to the "1" series of prostaglandins (cellular hormones). He thus postulated in detail why this specific deficiency could be a fundamental factor in malignancy; and why replacement of gamma-linolenic acid might reverse the malignant trend.

The critically designed in vitro experiments of the South Africans now appear to have clearly demonstrated that low levels of gamma-linolenic acid (1-60 mg/liter in the growth medium, and we have about five liters of blood): 1) reduced the growth rate of a cultured human hepatoma (liver carcinoma) cell line by up to 87% compared to the untreated hepatoma control over a period of four days, 2) induced over a period of seven days pronounced morphological changes in a human oesophageal carcinoma cell line which culminated in cell death, and 3) achieved excellent replication and confirmation of gamma-linolenic efficacy (including up to 70% reduction in growth rate) in 156 separate cultures of a mouse melanoma cell line assessing cell viability, proliferation, and rates of DNA and protein synthesis using radioactive thymidine and methionine. No effect of gamma-linolenic acid was noted on the normal cell lines, and would not have been expected since it should already be produced in adequate quantities.

Duplicated below are the two perceptive and presicent paragraphs on cancer in Dr. Horrobin's 1979 MEDICAL HYPOTHESES publication, The Regulation of Prostaglandin E1 Formation: A Candidate for One of the Fundamental Mechanisms Involved in the Actions of Vitamin C. This was expanded a year later into his 18 page MEDICAL HYPOTHESES paper, The Reversibility of Cancer: The Relevance of Cyclic AMP, Calcium, Essential Fatty Acids, and Prostaglandin E1; which prompted the South African studies:

CANCER

The relationship between vitamin C and cancer is of major scientific and public interest and has recently been the subject of a major review (43). Early descriptions of scurvy suggest that, contrary to what might have been expected, there is enhanced cell proliferation with lack of the normal lines of demarcation between organs. Not mentioned in the review was the relationship between vitamin C deficiency and Sjögren's syndrome (44). This is a notorious example of a situation where the lymphocyte proliferation in the salivary or other glands is often extremely difficult to distinguish from malignant change. For example the latest edition of Harrison's Principles of Internal Medicine states of those with Sjögren's syndrome: "These patients are considered to have a disorder falling between neoplasia and hyperplasia which is diagnosed as pseudolymphoma" (54).

The roles of vitamin C deficiency in the development of cancer and of high vitamin C intake in the treatment of cancer (43,55,56) are subjects of major controversy. However the case for an adequate trial of such a non-toxic substance is very strong. The concept that vitamin C enhances PGE1 formation strengthens this case in two major ways. First there is strong evidence that the mechanisms whereby the immune system may naturally eliminate cancer are dependent on effective T lymphocyte function. PGE1 activates T lymphocytes. Second it has recently been demonstrated that a number of transformed cell lines lose the ability to convert linoleic acid to gammalinolenic acid (35,36). Loss of this enzyme may be a marker of malignant change. One consequence of it is that cancer cells are unable to make their own GLA, DGLA or PGE1 because they cannot utilise precursor linoleic acid. The significance of this observation is only beginning to be explored but the possibility that it is related to defective GAG formation and excess proliferation is a real one. High vitamin C levels would be expected to counteract the defect, partly by enabling cancer cells to make the best of any residual DGLA available to them and possibly also by enabling non-cancer tissues to increase their formation of PGE1 which might possibly regulate cancer growth. At present it must be stressed that these are no more than plausible possibilities.

Personal Exposure to Interaction of Gamma-Linolenic Acid, Vitamin C, Arthritis and Cancer

Since early 1978, except for most of 1980 when I was incapacitated with rheumatoid arthritis, much of my spare time has been spent in very directed medical library reading using computer searching as necessary in an attempt to better understand and present natural metabolic generation and control of human cancer, with particular emphasis on the beneficial interactions of Vitamins C and B_1, hydrazine sulfate, radiofrequency hyperthermia, and gamma-linolenic acid as present in evening primrose oil. Early efforts were aimed at hopefully helping Dr. Ewan Cameron broaden his understanding of the metabolic aspects involved in his relatively successful clinical studies employing a 10g/day dosage of oral Vitamin C on about 500 terminal cancer patients per year at the District General Hospital outside of Glasgow, Scotland. Quite extensive personal attention was also directed at trying to promote NCI support of the very innovative and practical contributions evidenced in Doctors Ewan Cameron's and Linus Pauling's use of Vitamin C for cancer control, Dr. Joseph Gold's successful use of hydrazine sulfate to control the devastating weight loss (cachexia) of cancer, and Dr. Harry H. LeVeen's successful development of both equipment and clinical techniques to kill deep tumors by using radiofrequency hyperthermia without damage to normal tissue. While these efforts substantially expanded the knowledge and interest of some important legislative and executive persons in these fields, almost complete lack of NCI support continues. Dr. Pauling did finally arrange to get some support of animal studies using Vitamin C on his seventh grant request, and arranged for some NCI support of limited clinical trials on Vitamin C at Mayo.

My rheumatoid arthritis seems to have been controlled with no deleterious side effects for two and a half years by two to three grams of evening primrose oil containing about 8% gamma-linolenic acid (150-250 mg) and two to four grams of Vitamin C per day as discussed in last weeks letter to Dr. Carlton Hazelwood at Baylor Medical. I also knew a number of people in Charleston and elsewhere who have been taking this oil, (now available in General Nutrition Corporation stores in most shopping malls) in combination with Vitamin C for various types of arthritic pain, emphysema, multiple sclerosis, etc., with evident palliation in most instances and with no observable detrimental effects over the last year and a half. The risk as I understood it to cancer victims who were taking very high levels of Vitamin C to improve their quality of life seemed right low compared to possible benefit, if they also wanted to try some of this vegetable oil.

Combined Oral Use of Vitamin C and Oral Primrose Oil (Gamma-Linolenic Acid) on Human Cancer

Over the past three years I have been approached by intimate friends who had relatives or friends with cancer; and who were familiar with my active reading on cancer and Vitamin C. Several cancer victims have also called me from out of state. When it seemed propitious, I would suggest that they buy the Ewan Cameron-Linus Pauling book, Cancer and Vitamin C; which is still available along with H. L. Newbold's supporting book, Vitamin C Against Cancer in paperback form on shopping mall bookshelves. If that interested them, I suggested progressively increasing their Vitamin C to as high a level as feasible, as determined by the apparent tendency to get diarrhea at just above the necessary levels to substantially increase blood ascorbic acid. In the past eighteen months because of my familiarity and experience with gamma-linolenic acid, I have also suggested to some who had observed a benefit from Vitamin C that they might find a possible additional benefit from progressively taking from 1 to 8 evening primrose oil capsules since I had taken these levels. There has thus developed a small amount of anecdotal experience when taking this combination which may interest you, even though I have not even seen most of the individuals involved. As far as I know all these cancer patients continued their treatments, if they were being given any treatment at that stage. This I very much favored even though I personally felt in some cases it might be detrimental.

In October I happened to have written a letter to an out of state cousin prompted by a long phone conversation from her. A typed copy of this handwritten letter is enclosed as it discusses some anecdotal experience with Vitamin C and evening primrose oil. While I presume this combination is probably being tried by cancer patients somewhere else in this country and abroad; I have not seen, read, or heard anything about it. As is perhaps normal in cancer, there have been some significant patient changes in the three and half months since the October letter and one of those five have died as discussed below.

The 65-70 year old mother whose inflammatory breast cancer had seemed to be in remission had seizures in November; and a CAT Scan indicated metastasis to the brain. She was thus given radiation treatments of the brain and did not have any "C" or evening primrose for probably six weeks. It turned out she had earlier taken her "C" down to half or less because she was doing fine and it was salty in the water. It seems dangerous to take the "C" level down and metastases should be harder to control. I understand her breast became inflamed and black and blue again during the six weeks period. Growth problems were also noted in the other breast; and a double mastectomy was recommended but not taken. Early in January she progressively took her "C" back up to the 20's and progessively quadrupled the actual 1-2 capsules per day of evening primrose oil she had been taking for the previous year to 7-8 now. I am told that both breasts now look normal; and she is now walking over a mile a day. A surgeon I know who happend to have examined her breast at the beginning when it was inoperable; and then perhaps six months later when it had returned to normal appearance told me at that time that he believed her cancer had earlier been misdiagnosed; since he had never known or heard of an inflammatory breast cancer remission.

The 80 year old man with pancreatic cancer on Long Island continued to take the powdered "C" in juice, continued living alone without pain, and was visited off and on by his grandson who lived near. He would not take the capsules of evening primrose oil or hydrazine sulfate (at my suggestion they got him to rub some of the oil on his hands and knees); and he died "peacefully" in mid December at home without pain; but extremely thin.

The Mother Superior Emeritus according to her brother-in-law last week continues to do very well on the same dosages of "C" and evening primrose oil.

Over this period the partially paralyzed scientist in Alabama increased his level of crystalline sodium ascorbate-ascorbic acid to 35 g per day which is the highest with which I have been involved. This was giving him some edema and he has ordered and will try calcium ascorbate. He sounds in good spirits at home; but his recent paralysis continues with no return of feeling; and he planned to increase the 4 capsules of evening primrose to 6 or possibly more.

4 Atlantic Street
Charleston, S. C. 29401
October 24, 1982

(Typed copy of handwritten letter)

Dear Charlotte,

In trying to handle cancer, I feel present evidence indicates it's a smart move to immediately take Vitamin C beginning at 2 grams and progressively increase at 2g per day to as high as you can. If one gets into loose bowel problems, drop back for a day or so and then keep trying to move up. Depending upon your need, you may have to stop at 15, 20, 25, 30 or more grams (1000 mg) per day. Hold at that; but check periodically to see if you need more, and don't go back down unless loosening of the bowels indicates a need to move lower.

Vitamin C is normally present at 10 mg/liter in the blood serum; but high oral levels of "C" can force this up several fold. The Vitamin C in your white cells is concentrated about 40-80 times the level in the blood serum. When we have cancer the level of "C" in the blood goes way down, finally to levels close to scurvy, which is close to zero in the blood serum. Vital organs and white cells hang on to Vitamin C, but at much lower than normal levels. It isn't realized, but cancer tissue can be composed of 5-85% of incompetent white cells (mainly the large macrophages), which are trying to control the cancer; but which are not effective at too low levels of ascorbic acid. Dr. Ewan Cameron, in his studies in Scotland, showed it is possible to overload the body with dying cancer tissue, if one starts at 10g "C" per day, but found no problem if he started at 2g and increased progressively at 1-2g per day.

Ascorbic acid ("C") at physiologically feasible levels has also been shown to cause cancer cells to revert back (transform) in test tube studies. This depended on the ascorbic level and probably also the extent to which the cancer cell had become glycolytic (producing latic acid vs. carbon dioxide) since more advanced cancer cells did not revert back.

Biostatistics seem to indicate little, if any, long-term benefit of the various chemotherapies on tumors. On about 15% of cancers (childhood leukemia, Hodgkin's disease) and similar white cell diseases, such as Burkitt's lymphoma (mostly in South Africa) and in testicular cancer one can get fair efficacy with chemotherapy. The chemotherapy kills back the cancer and other dividing cells, so doctors prescribe it, and patients want it; but it plays hobbs with the body's immune system.

I have seen various people take Vitamin C in combination with chemotherapy and apparently do much better than expected. Dr. Ewan Cameron, who is responsible for this Vitamin C development, has kept the level constant at 10g Vitamin C/day to get more reproducible and acceptable data. For the about 500 terminal cancer patients per year he treats in a District General Hospital outside of Glasgow, Scotland, he says all cancer patients benefit in the quality of life; and a fortunate few undergo dramatic recovery.

Recent studies on rats in Japan indicate ascorbic acid prevents the very detrimental killing of heart muscle cells by the most widely used cancer drug, Adriamyacin. The Japanese were beginning to conduct clinical studies on this potential.

A mother of a friend had inflammatory breast cancer with swollen nodes above and below the shoulder, black and blue arm, and couldn't close her hand, showed cancer cells in the breast on diagnosis (that wound wouldn't heal) and the cancer was diagnosed as inoperable. Her medical son up

North requested she be given only low levels of chemotherapy, since this form of breast cancer goes quickly to termination. On her own she went up progressively to 25g "C" per day, and took Evening Primrose Oil at, I believe, 2g (4 capsules) per day. This was sodium ascorbate-ascorbic acid fine crystals from Bronson's Pharmaceuticals, La Canada, California (about $20 per 1000g, 2.2 lb). When a teaspoon of this (4g, heaping 8g) is dissolved in orange juice you can hardly tell it. When she went up to 25g of "C" her wound progressively healed, the black and blue left her arm, she could then use hand and arm, the nodes went down, and the breast apparently went from hard, hot, inverted nipple, etc. to, I heard, fairly normal. It's a year later and she walks four miles a day with her husband, continues the ascorbic, and wasn't interested in the mastectomy, when she improved sufficiently for them to recommend it.

I hear from the son of an 80-year old fellow on Long Island, who has cancer of the pancreas (with a bypass operation last year to reduce jaundice). He has been taking 10-15g of calcium ascorbate from Bronson's ($15 per lb.) which his son got for him when he got worse about six months ago. He briefly tried sodium ascorbate-ascorbic acid; but had some swelling in his legs (probably from water retention) and I suggested the calcium form, which he has stayed with, has felt much better and has been free of pain during this time, while staying by himself at home. He hasn't yet taken Evening Primrose Oil or the hydrazine sulfate, that his son in Albany bought for him. A Mother Superior Emeritus (sister-in-law of the son) who had earlier been operated on for cancer of the intestines, and recently had CAT Scan indication of liver cancer, decided to take 15g of "C" and 2g (4 capsules) of Evening Primrose Oil. She continues to do very well, and is really delighted to have also gotten rid of severe arthritis, particularly in the hands and feet. The son told me when they operated on the liver, they found no cancer.

I talked today with a scientist at NASA, in Alabama, who has now controlled bone cancer pain for three years with about 25g of "C" a day. He took it at a gram an hour all day at the beginning to minimize the pain. He became paralyzed from the waist down recently and is bedridden at home and it turns out he had lowered his "C" to half some time back. He has been taking 4g of Evening Primrose for the past month and thinks he's having some feeling coming back now in his legs. The wife of another friend who was operated on the second time for brain cancer and had irradiation earlier this year is now taking 20g of "C"; and I hope she will begin Evening Primrose. Adequate Vitamin C seems to improve the quality of life, minimize expense, and you may be really lucky. It seems metabolically sound why it should work.

Best of luck to your friend,

Cappy

P.S.
This ended up long and rambling, but when someone considers supplemental or alternate therapy, and he must make the decision on his own, he needs information. The doctors can't support such unexpected therapy, and don't yet understand why they should. This letter is called "anecdotal" and doesn't involve any doctor's information. I'm seeing and hearing about more and more that seems very provocative; and it fits what I metabolically expect from my literature reading on ascorbic acid, hydrazine sulfate, cancer hyperthermia, and B-1,3 glucan. The middle two of those were on the American Cancer Society's quack list (unproven methods) until the past couple of years. I just heard last week that the American Cancer Society finally has come around and is finally going to support the work on hydrazine sulfate at UCLA Medical that came through successfully on a double blind trial.

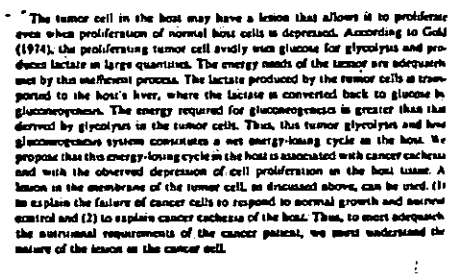
The friend's wife who had been operated on the second time for brain cancer, had been irradiated, and was then taking 20 g of "C" did start taking evening primrose oil at 2 capsules and raised it to 4 and now 6 capsules. She had lost thirty pounds and a week or so ago indicated she had gained five pounds, but told me on the phone today her doctor had just determined her weight had stabilized.

An additional friend who had prostate cancer with testicular removal and metastasized to the bone has worked up to 16 g of "C" over the past six weeks and has progressively increased the evening primrose oil from 2 to 4 to 6 capsules a day. He also takes a super B complex, 800 I.U. units of Vitamin E, and 10,000 units of Vitamin A. He is the first to have mentioned outside that he was also taking such unorthodox treatment at my suggestion, and a couple of his business acquaintances told me at a party this week that I better take out malpractice insurance, but that he looked better.

Hydrazine Sulfate and Human Cancer

An earlier anecdotal instance involved Vitamin C, evening primrose, and hydrazine sulfate and was that of an 82 year old man in Toledo who had had jaundice in the eyes, pain and debilitation, and had been opened and closed with the diagnosis of pancreatic cancer. He had phoned a distant surgeon, who had suggested he contact me; and I talked with him a dozen or more times over the five months until he died. He had immediately started the "C" and slowly took it up to 24 g, had gained some weight and felt better, then built up to 4 capsules of evening primrose and felt substantially better and more energtic so that he and his wife took trips and went to their vacation cabin in Canada. At some time (possibly halfway) he took the hydrazine sulfate at the levels recommended by Dr. Gold and felt this gave him still more stamina and the last I heard from him he had gained a total of fifteen pounds from his low point, and was still taking morning swims in Lake Erie. According to his wife he got progressively and very rapidly weaker over a period of one to two weeks and died I believe at home. She indicated over the phone that he had appreciated the improvement in stamina, etc., but what really mattered had been the ability to stop his pain. She also mentioned that in retrospect that his final rapid decline seemed to have coincided with his stopping the hydrazine sulfate. The data on page 577 in my 1982 copy of Cancer - Principles and Practice of Oncology indicates to me that when cancer of the pancreas is just opened and closed only about two percent get beyond six months. Since he seemed to be benefitting from 4 capsules of evening primrose oil per day and medical studies on scleroderma using 4, 8 and 12 capsules indicated progressive marked improvement; then higher levels might have helped him more also. I presume the hydrazine sulfate was a major factor in his weight retention.

The significance of Dr. Joseph Gold's widely accepted hypothesis that clarified the causes of the devastating weight loss of cancer are highlighted below in the last paragraph of George M. Padilla and Ivan L. Cameron's chapter, Nutrient Control of Proliferation in Normal and Tumor Cell Populations from your book.



"The tumor cell in the host may have a lesion that allows it to proliferate even when proliferation of normal host cells is depressed. According to Gold (1974), the proliferating tumor cell avidly uses glucose for glycolysis and produces lactate in large quantities. The energy needs of the tumor are adequately met by this inefficient process. The lactate produced by the tumor cells is transported to the host's liver, where the lactate is converted back to glucose by gluconeogenesis. The energy required for gluconeogenesis is greater than that derived by glycolysis in the tumor cells. Thus, this tumor glycolysis and host gluconeogenesis system constitutes a net energy-losing cycle in the host. We propose that this energy-losing cycle in the host is associated with cancer cachexia and with the observed depression of cell proliferation in the host tissue. A lesion in the membrane of the tumor cell, as discussed above, can be used: (1) to explain the failure of cancer cells to respond to normal growth and nutrient control and (2) to explain cancer cachexia of the host. Thus, to meet adequately the nutritional requirements of the cancer patient, we must understand the nature of the lesion in the cancer cell.

As pointed out in our discussion, Dr. Gold came up with both this novel and very viable hypothesis as to the cause of cancer weight loss (cachexia), and also demonstrated that hydrazine sulfate (virtually non toxic at the levels required) effectively inhibits this energy draining recycling of cancer derived lactic acid to glucose by the liver. Hydrazine sulfate has thus been able to reduce weight loss, improve the quality of life, and often retard tumor growth. The National Cancer Institute has amazingly refused to support Dr. Gold's animal studies at the Syracuse Cancer Research Institute or any clinical studies on hydrazine sulfate for the past five years. Fortunately

independent clinical work here and extensive clinical testing in Russia supported his hypothesis and data. A successful comprehensive double blind clinical test of hydrazine sulfate was recently completed at Harbour UCLA and has been partially reported. The American Cancer Society, which had hydrazine sulfate on its black list until 1980, have just announced substantial support of the UCLA hydrazine sulfate clinical studies. Senator Ernest F. Hollings aided in a sustained attempt over several years to encourage NCI approval and support of Dr. Gold's various grant requests so that he could further extend this novel approach to cancer control, but without any success. My enclosed March 5, 1982 letter to Senator Hollings summarized the NCI's current tragic position on this very effective and inexpensive approach to cancer therapy. A long and really excellent article on Dr. Gold and hydrazine sulfate therapy just issued in the January 1983 copy of Penthouse; and a copy is enclosed.

The Ability of Streptozotocin to Induce Diabetes or Cancer

Our brief discussion of the capabilities of the naturally occurring drug, streptozotocin, to induce either diabetes or pancreatic cancer in mice as covered in your 1982 paper, Tumor-Host Completition for Nutrients, clarified your proposals on the mode of interaction of the B Vitamin, nicotinamide, in this situation. I had not really realized that this naturally occurring microbial drug was a nitrosourea, which decomposes to a nitrosoamine. Its regular use to induce cancer in mice certainly strengthens for me the likely high significance of the first page of this letter which covered the inducement of gastric and intestinal cancers by natural nitrosoamines; and the ability of adequate oral Vitamin C to completely eliminate such nitrosoamines from ones digestive system.

Incidentally, I checked out and looked through the 1981 book, Streptozotocin: Fundamentals and Therapy, M. K. Agarwal, Ed. and found it quite interesting if by chance you have not read it. The papers by M. Schneir and L. Golub, The Effect of Streptozotocin - Induced Diabetes on Collagen Catabolism, and by R. Crouch and M. Buse, The Effect of Streptozotocin on the Enzyme Superoxide Dismutase were particularly interesting to me because of my previous interests.

Diabetes, Cancer, Superoxide, Superoxide Dismutase and Vitamin C

You might be interested in looking over the enclosed August 31, 1979 letter which discussed a 1977 paper by B. Matovics in Hungary showing human diabetics exhibit drastically lower superoxide dismutase enzyme levels in their red blood cells than normal persons; and that streptozotocin very much lowers this same critical enzyme in rat blood and other vital organs. The superoxide radical as you know is an oxygen molecule with an extra electron, which is enzymatically produced and used in cellular reactions throughout the body. The superoxide dismutase enzyme destroys any escaping toxic superoxide radicals. Ascorbic acid can destroy excess superoxide by being oxidized to dehydroascorbic acid. Diabetics who are very low in superoxide dismutase enzyme have extremely high ratios of dehydroascorbic to ascorbic acid, which would be expected. These unusual interrelationships seemed to me to offer one explanation for the very serious vascular and arteriosclerosis problems that almost all diabetics eventually are smitten with; and why Vitamin C and now gamma-linolenic acid might be effective additions to therapy.

You probably know that the very widely used cancer drugs Adriamyacin, Cis-platinum and others appear to work via superoxide production. Enclosed is an August 13, 1979 letter that discussed the significance of L. W. Oberly and G. R. Buettner's revelations that the mitochondria (respiratory centers) of cells that become cancerous contain little or none of this critically important superoxide dismutase enzyme. Incidentally, I met these two scientists while on vacation at a 1981 conference on The Effects of Copper and Other Essential Metals on Inflammation put on by John Sorrenson at Little Rock. Sorrenson has developed copper containing superoxide dismutases such as copper aspirinate and copper penicillinate which (unlike the copper containing natural protein superoxide dismutase) can penetrate membranes and will likely be most important in controlling inflammation such as in arthritis, ulcers, diabetes, cancer and others. Oberly is working closely with him and has just written the two volume book SUPEROXIDE DISMUTASE which has not yet arrived at the medical library.

Macrophages (which when competent can kill cancer cells) and other white cells concentrate the ascorbic acid 40 to 80 times above the level in the blood; and use it to produce superoxide from oxygen which is then converted to hydrogen peroxide to kill bacteria or cancer cells. There thus seems good reason not to let ones ascorbic acid go down significantly in sickness, or particularly in sustained cancer. It is very little realized; but cancer tissue containing high levels of macrophages that look just like cancer cells, excrete lactic acid just like them, but are not doing their job which is to excrete hydrogen peroxide to kill the adjoining cancer cells, which do not contain the catalase enzyme that other cells have present to break toxic hydrogen peroxide back down to oxygen and water. In definitive analyses of the tissue from all the brain cancers and a number of colon cancers in Kansas for a year, the macrophage content varied from 5 to 85%. High levels of ascorbic acid and gamma-linolenic acid would thus seem mighty important in a cancer patient.

If you have gotten this far there's surely nothing wrong with your stamina and many thanks for your time in December and now. As you can see I'm sending copies of this letter to those mentioned in it.

Most sincerely,

Frank J. Ball

Frank J. Ball

Attachments

P.S. Last night I went by the medical library to see if there were any letters relative to gamma-linolenic acid in later issues of the South African Medical Journal. The attached letter and the reply by Prof. Boogens and Mrs. Dippenaar are interesting in that the number of human malignant cells lines that have responded to the low doses of gamma-linolenic acid has now increased from two to seven. Indicative of their thoroughness, the first paper covering the mouse melanoma cell line embraced a total of over 400 cultures.

I was also intrigued when riding out to work this morning to hear on the morning news that a California researcher had just claimed that a hormone like fatty acid product would stop the growth of cancer cells. Calling the radio station and then United Press, Int'l. in San Francisco brought out that Kenneth Feingold at the University of California in San Francisco and Mille H. Wiley at the Veteran Administration hospital had conducted the studies. They were said to have demonstrated for the first time that the fatty acid type hormone, Prostaglandin E1, when added to lymphoma cells over a period of five days had stopped 90% of malignant cell growth; and that the NCI and the Veteran Administration had funded the study. Prostaglandin E1 (PGE1) is, of course, produced by cells from gamma-linolenic acid. David Horrobin had postulated that the deficiency of PGE1 which would result when gamma-linolenic acid was deficient; could be the major factor in malignancy. This report is thus useful additional confirmation; but I presume they had to continuously add PGE1 over the five days since as I remember PGE1 has a half life of only about a minute in serum. It may last longer in vitro, since it is the lungs that pretty effectively remove any PGE1 on each passage of the blood.

CCS: Dr. M. K. Agarwal
Dr. W. R. Benedict
Prof. J. Boogens
Dr. W. R. Bruce
Dr. G. R. Buettner
Dr. M. Buse
Dr. Ewan Cameron
Dr. Ivan L. Cameron
Dr. R. Crouch
Mrs. N. Dippenaar
Dr. Kenneth Feingold
Dr. Joseph Gold
Dr. L. Golub
Dr. Robert A. Good
Dr. Carlton Hazelwood
Senator Ernest F. Hollings
Dr. David R. Horrobin
Dr. P. A. Jones
Dr. Harry H. LeVeen
Dr. B. Matovics
Dr. H. L. Newbold
Dr. L. W. Oberly
Dr. George M. Padilla
Dr. Linus Pauling
Dr. J. U. Schlegel
Dr. M. Schnier
Dr. John Sorrenson
Dr. J. W. Weisburger
Dr. Mille H. Wiley
Dr. Bruce D. Ball
Dr. James B. Edwards
Dr. H. B. Gregorie
Dr. I. E. Katzeff
Dr. W. P. Leary

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OBE
Rec'd RBZ 11/19/93

November 20, 1992

Mr. Robert B. Zoellick
Deputy Chief of Staff
The White House
Washington, D.C. 20500

Dear Bob:

I know you are mindful of the importance to virtually everyone in the food industry of resolving the issues surrounding the regulations proposed under the Nutrition, Education and Labeling Act of 1990.

The soft drink industry alone is responsible for over 20,000 labels, every one of which will require modification under new FDA regulations. Needless to say, the extent and cost of this undertaking will be considerable, and the uncertainty as to just what the new labels will require in terms of format and content is exacerbating the dilemma we and other food and beverage groups are facing.

I hope you will remind those involved within the Administration of the urgency of getting this question resolved by either the President or his designee as soon as possible. Obviously, it is now more important than ever that adequate notification be given as to the final rules prior to their implementation.

There is, therefore, a compelling case to be made for at least a one-year delay in the compliance date so that affected companies, both large and small, may develop the necessary information and gather the resources to comply with the new rules.

Your continuing attention to the priority of this matter is greatly appreciated.

Best wishes.

Sincerely,

William L. Ball, III
President

C. Files

EMBASSY OF THE UNITED STATES OF AMERICA
PARIS

THE AMBASSADOR

December 15, 1992

Dear Mr. Bowsher:

When you visited us in Paris earlier this year, I raised with you the growing number of GAO study teams visiting France. As these teams always request Embassy assistance with appointments, transportation, hotels, and sometimes translation, their visits are adding significantly to this Embassy's workload.

We have reviewed the record of visits to France by U.S. Officials during 1992. We find that 25 GAO teams requested this Embassy's support during the year, up from 16 in 1991. Each of these teams consisted of two or more persons, and several stayed here at least a week. In some cases, their schedules were less than full. We also note some apparent duplication or overlap among teams, particularly in the health care area. A list of GAO visits to France in 1992 is enclosed.

This Embassy is operating under severe financial constraints and tight personnel ceilings. It can not continue to support a growing number of GAO study teams. I ask that you act to reduce the number of GAO delegations visiting France, and reduce the length of their visits. If this is not done, I regret to say that this Embassy will have to reduce its support for GAO visitors.

Sincerely,

Walter J.P. Curley

Enclosure

cc: Under Secretary for Management John F. W. Rogers

Mr. Charles A. Bowsher
Comptroller General
General Accounting Office
Washington, DC

bcc: Acting Secretary of State Lawrence Eagleburger
White House Chief of Staff James A. Baker III ✓
Chairman of Transition Team Vernon Jordan
EUR/WE - Craig Kelly

GAO TEAM VISITS TO FRANCE, 1992
SUPPORTED BY THE AMERICAN EMBASSY, PARIS

DATES	SUBJECT	PERSONS
2/5	FAA Aircraft Certification	2
3/8	French Court of Account	4
3/28-4/6	Health Care	3
4/8	Agricultural Trade Negotiations under the GATT	2
4/10-16	Comptroller General Bowsher	4
4/12	National Railroad Passenger Corporations	5
4/14	Surface Infrastructure	3
4/18-25	Child Health Care	3
5/11-15	Pesticides	2
5/19	Agricultural Trade Issues	3
5/20-23	International Efforts to Control Biological Weapons	2
5/28-6/6	Review EC Single Market Program for Insurance Services	3
6/10	Review of Patent Systems in Europe and Japan	2
6/22-26	Pharmaceuticals	5
6/23	U.S. Exports to CIS and Donor Assistance to CIS	2
7/20-24	Aeronautical Research	2
10/2-7	Inspection Standards for Dairy Products	2
10/5-9	Electric Cars	2
10/14-17	Counter Narcotics	2

DATES	SUBJECT	PERSONS
10/18-24	Nuclear Waste	2
10/19-23	Management of Derivatives Products Risk	2
10/27-30	Energy Conservation	3
11/4-7	Basel Committee on Banking Supervision	2
11/15-25	Health Care	3
12/3-4	Nuclear Safety	2

PARIS ANJOU
4-1-93
RUE D'ANJOU 8e

REPUBLIQUE FRANCAISE
0400
POSTES
F 945M

WASH.,D.C.200 GMF 01/10/93 DCR #C8

James A. Baker III
Chief of Staff
White House
1600 Pennsylvania Avenue, N.W.
Washington, DC 20500

The Ambassador

EMBASSY OF THE UNITED STATES OF AMERICA

PARIS

1/12 - cj called to explain that request must go thru Pardon Attorney @ Justice - gave him phone # - no further action needed.

Melvin J. Hinson
9603 Aster Circle
Garden Ridge, Texas 78266
(210) 651-5086

January 6, 1992

Honorable James Baker
The White House
Washington, D.C. 20500

Dear Mr. Baker:

Our Company, Sunjet in San Antonio, Texas, has had the honor and privelege to have you visit our facility on more than one occasion. I've enclosed a photograph of yourself, Congressman Lamar Smith, and my brother Jack Hinson.

I am asking that you read the attached letter, and I hope and pray that you might use your influence to get my brother Jack Hinson's sentence either commuted or pardoned.

There has been an injustice done and you can help us make it right.

Sincerely,

Melvin J. Hinson
USAF Retired SMS (E-8)
(210) 828-0551

attachments: letter
photographs

Melvin J. Hinson
9603 Aster Circle
Garden Ridge, Texas 78266

January 5, 1992

President George Bush
The White House
Washington, D.C.

Dear Mr. President:

I am appealing to you to commute my brother Jack's federal sentence to time served or give him a pardon.

Why should you do this?

1. Jack is not guilty of the crime he is charged with.

2. Jack and his wife Cindy ran a fixed base operation in San Antonio (called Sunjet) that included a jet charter service. We chartered aircraft to carry all kinds of people to any place they wanted to go.

3. We never asked our customers where they got their money. If we did, they would never use our services again.

4. Our pilots were the best: David Whitney, who was our Director of Operations, is still with us. He is a retired Army Chief Warrant Officer with a distinguished record. He had two tours in Vietnam and one in Germany. He flew General Haig in Germany. Pat Deegan, former chief pilot for Sunjet, distinguished himself in the U.S. Air Force as an instructor in T-37's and T-38's at Randolph AFB, Texas. He is now a captain with Southwest Airlines, flying 737's. Mike Milner, a former Sunjet Chief Pilot, now flies for Southwest Airlines. Mike is an outstanding person as well. Their sworn statements will attest to Jack's innocence.

5. Our company prides itself in the fact that we have been called on to charter some very important world figures, such as:

   President Gerald Ford
   James Baker, former Secretary of State
   Henry Kissinger, former Secretary of State
   HRH Princess Margaret of England.

6. Mr. President, we were also honored to have you, as Vice-President, use our facility when you were running for President (about 10 times). I must say you made us at Sunjet very proud.

7. One of the biggest moments in my life was while you were at Sunjet. You took time to meet Jack and Cindy, my niece Dara, my nephew Jack Jr., my wife Louise and myself. I had a chance to show you my airplane that my wife Louise and I built. You probably remember it was the Long-EZ (canard-type pusher).

Now you ask what my brother Jackie did to get a federal prison sentence? We had a customer named Mario Salinas that was using our charter service starting in 1986. It just so happens, as we learned 4 years later, that the DEA and Customs and FBI had Mario Salinas under surveillance for drug trafficking since 1983. Mario Salinas came into Sunjet at least 2 or 3 times a month, and it was also at the time you were visiting Sunjet as Vice-President.

Mario Salinas was there one time while you were there and asked my brother Jack if he could meet you and shake your hand. We thought it was a proper thing to do, so he stood in line and shook your hand. Please realize that we did not know that our government was investigating Mario Salinas, and the Secret Service agents, DEA, customs, and FBI thought it was alright for Mr. Salinas to be at Sunjet at the same time that you were on the premises. Who were we to question this? We thought he was a legitimate businessman from Mexico.

On March 16, 1989, my brother Jack was arrested, and my niece Dara was arrested a couple of weeks later (after she got out of the hospital). They were arrested along with 34 other people, and charged with drug trafficking and money-laundering.

I feel that my brother Jack and my niece Dara never had a chance for a fair trial.

1. Judge Hippo Garcia would not let Jack and Dara be tried separately from the other defendents for doing business with Mr. Salinas.

2. Jack's lawyer, Mr. Goldstein, did not try to appeal any of Judge Garcia's pre-trial rulings in the case.

3. The only reason Jack and Dara pleaded guilty to the money-laundering charge was that Mr. Goldstein told us that 97% of all Federal cases that came to trial are found guilty and that Jack and Dara could get 40 years in prison if they did not plead guilty.

My brother pleaded guilty to two counts of failing to fill out the right paper work on two money deposits that we received from Mr. Salinas for work or services that Sunjet rendered to him.

Mr. President, my brother is serving eight years for this. Jack is in El Reno, Oklahoma's Federal prison working in the woodworking shop, costing the taxpayers $45,000 per year to house and feed him. Why?

Mr. President, if we had done all the things that we were accused of, why didn't they shut down Sunjet? Why did they let you keep coming into our business with all these investigations going on if we were involved in anything illegal.

Mr. President, my brother has been punished enough - for nothing. He was arrested and thrown in jail like a criminal, which he is not.

He had to wait 3 years for a trial that he never got. All the while, he had to regularly report to pre-trial officers. Now he has been in Federal prison for nearly a year (since February 14, 1992).

Mr. President, Jack is 58 years old and we are asking you to please commute his sentence to time served or pardon him. I beg of you, please.

Sincerely,

Melvin J. Hinson

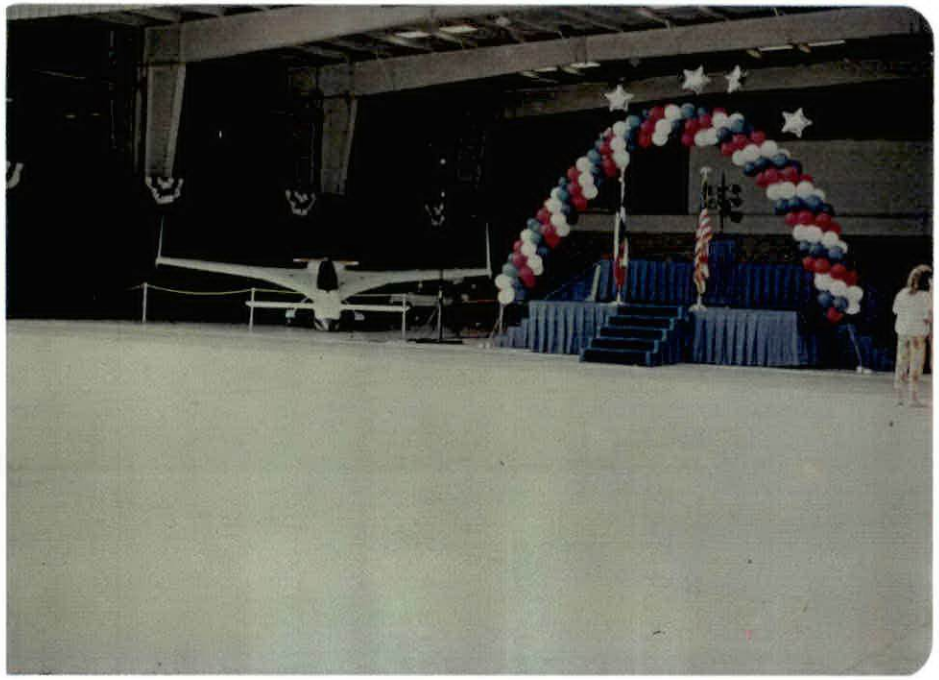
Melvin J. Hinson
USAF Retired SMS (E-8)

Note: Two bankers in San Antonio were tried for money-laundering in the same case. U.S. Federal Judge Lucius Bunton of Midland, Texas, threw out the case when the government concluded presenting their side of the case. He acquited the two men and dismissed the jury because he said the government did not prove that the money was from an illegal source. He said they only proved that "Salinas is a dirty, no-good rat fink."

MJH/ddh

cc: Senator Phil Gramm
Congressman Lamar Smith
James Baker

enclosures: photographs

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FEDERAL EXPRESS

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AIRBILL
PACKAGE
TRACKING NUMBER

0593006864

1114M 0593006864

1 Date 1/6/92

RECIPIENT'S COPY

From (Your Name) Please Print: Melvin J. Hinson
Your Phone Number (Very Important): (512) 828-0551
Company: SANJET INC
Department/Floor No.:
Street Address: 557 SANDAU RD
City: SAN ANTONIO State: TX ZIP Required: 78216

X-RAYED

2 To (Recipient's Name) Please Print: The Honorable James Baker
Recipient's Phone Number (Very Important): (202) 456-1414
Company: The White House
Department/Floor No.:
Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.): Pennsylvania AVenue
City: Washington, State: D.C. ZIP Required: 20500

YOUR INTERNAL BILLING REFERENCE INFORMATION (First 24 characters will appear on invoice.)

H IF HOLD FOR PICK-UP, Print FEDEX Address Here
Street Address
City State ZIP Required

3 PAYMENT 1 [X] Bill Sender 2 [ ] Bill Recipient's FedEx Acct. No. 3 [ ] Bill 3rd Party FedEx Acct. No. 4 [ ] Bill Credit Card 5 [ ] Cash/Check

4 SERVICES (Check only one box)

Priority Overnight (Delivery by next business morning†)
11 [ ] YOUR PACKAGING
16 [X] FEDEX LETTER *
12 [ ] FEDEX PAK *
13 [ ] FEDEX BOX
14 [ ] FEDEX TUBE

Standard Overnight (Delivery by next business afternoon†)
51 [ ] YOUR PACKAGING
56 [ ] FEDEX LETTER *
52 [ ] FEDEX PAK *
53 [ ] FEDEX BOX
54 [ ] FEDEX TUBE

Economy Two-Day (Delivery by second business day†)
30 [ ] ECONOMY

Government Overnight (Restricted to authorized users only)
46 [ ] GOVT LETTER
41 [ ] GOVT PACKAGE

Freight Service (for Extra Large or any package over 150 lbs.)
70 [ ] OVERNIGHT FREIGHT ** (Confirmed reservation required.)
80 [ ] TWO-DAY FREIGHT **

† Delivery commitment may be later in some areas.
*Declared Value Limit $100.
**Call for delivery schedule.

DELIVERY AND SPECIAL HANDLING (Check services required)

1 [ ] HOLD FOR PICK-UP (Fill in Box H)
2 [X] DELIVER WEEKDAY
3 DELIVER SATURDAY (Extra charge) [ ] (Not available to all locations)
4 [ ] DANGEROUS GOODS (Extra charge)
5 [ ]
6 [ ] DRY ICE _____ Lbs.
7 [ ] OTHER SPECIAL SERVICE _____
8 [ ]
9 [ ] SATURDAY PICK-UP (Extra charge)
10 [ ]
11 [ ] DESCRIPTION
12 [ ] HOLIDAY DELIVERY (If offered) (Extra charge)

PACKAGES	WEIGHT In Pounds Only
Total	Total

DIM SHIPMENT (Chargeable Weight)
[ ] _____ lbs.

Received At
1 ☐ Regular Stop 3 ☐ Drop Box
4 ☐ B.S.C.
2 ☐ On-Call Stop 5 ☐ Station

FedEx Emp. No.

5 Release Signature:
Date/Time

Emp. No. Date
[ ] Cash Received
[ ] Return Shipment
[ ] Third Party [ ] Chg. To Del. [ ] Chg. To Hold
Street Address
City State Zip
Received By: X
Date/Time Received FedEx Employee Number

Federal Express Use
Base Charges
Declared Value Charge
Other 1
Other 2
Total Charges

REVISION DATE 1/91
PART #137204 FXEM 3/91
FORMAT #068
068

MULTIPLE PACKAGE SERVICE

IF YOU ARE MAKING AN MPS SHIPMENT, APPLY THE SELF ADHESIVE MPS COPY HERE

TERMS AND CONDITIONS

DEFINITIONS

On this Airbill, we, our and us refer to Federal Express Corporation, its employees and agents. You, and your refer to the sender, its employees and agents.

AGREEMENT TO TERMS

By giving us your package to deliver you agree to all the terms on this Airbill and in our current Service Guide, which is available on request. If there is a conflict between the current Service Guide and this Airbill, the Service Guide will control. No one is authorized to alter or modify the terms of our Agreement.

RESPONSIBILITY FOR PACKAGING AND COMPLETING AIRBILL

You are responsible for adequately packaging your goods and for properly filling out this Airbill. Omission of the number of packages and weight per package from this Airbill will result in a billing based on our best estimate of the number of packages received from you and an estimated "default" weight per package, as determined and periodically adjusted by us.

AIR TRANSPORTATION TAX INCLUDED

Our basic rate includes a federal tax required by Internal Revenue Code Section 4271 on the air transportation portion of this service.

LIMITATIONS ON OUR LIABILITY AND LIABILITIES NOT ASSUMED

Our liability for loss or damage to your package is limited to your actual damages or $100, whichever is less, unless you pay for and declare a higher authorized value. We do not provide cargo liability insurance, but you may pay an additional charge for each additional $100 of declared value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your package.

In any event we will not be liable for any damages, whether direct, incidental, special or consequential in excess of the declared value of a shipment, whether or not Federal Express had knowledge that such damages might be incurred including, but not limited to, loss of income or profits.

We won't be liable for your acts or omissions, including but not limited to improper or insufficient packing, securing, marking or addressing, or for the acts or omissions of the recipient or anyone else with an interest in the package. Also, we won't be liable if you or the recipient violates any of the terms of our agreement. We won't be liable for loss of or damage to shipments of prohibited items.

We won't be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, acts of public enemies, war, strikes, civil commotions, or acts or omissions of public authorities (including customs and quarantine officials) with actual or apparent authority.

DECLARED VALUE LIMITS

The highest declared value we allow for FedEx Letter and FedEx Pak shipments is $100. For other shipments, the highest declared value we allow is $25,000 unless your package contains items of "extraordinary value," in which case the highest declared value we allow is $500. Items of "extraordinary value" include artwork, jewelry, furs, precious metals, negotiable instruments and other items listed in our current Service Guide.

If you send more than one package on this Airbill, you may fill in the total declared value for all packages, not to exceed the $100, $500 or $25,000 per package limit described above. (Example: 5 packages can have a total declared value of up to $125,000.)

If more than one package is shipped on this airbill, our liability for loss or damage will be limited to the actual value of the package(s) lost or damaged (not to exceed the lesser of the total declared value or the per package limits described above). You have the responsibility of proving the actual loss or damage.

FILING A CLAIM

ALL CLAIMS MUST BE MADE BY YOU IN WRITING. You must notify us of your claim within strict time limits. See current Service Guide.

We'll consider your claim filed if you call and notify our Customer Service Department at 800-238-5355 and notify us in writing as soon as possible.

Within 90 days after you notify us of your claim, you must send us all relevant information about it. We are not obligated to act on any claim until you have paid all transportation charges, and you may not deduct the amount of your claim from those charges.

If the recipient accepts your package without noting any damage on the delivery record, we will assume that the package was delivered in good condition. In order for us to process your claim, you must, to the extent possible, make the original shipping cartons and packing available for inspection.

RIGHT TO INSPECT

We may, at our option, open and inspect your packages prior to or after you give them to us to deliver.

NO C.O.D. SERVICES

NO C.O.D. SERVICES ON THIS AIRBILL. If C.O.D. Service is required, please use a Federal Express C.O.D. airbill for this purpose.

RESPONSIBILITY FOR PAYMENT

Even if you give us different payment instructions, you will always be primarily responsible for all delivery costs, as well as any costs we may incur in either returning your package to you or warehousing it pending disposition.

RIGHT OF REJECTION

We reserve the right to reject a shipment at any time, when such shipment would be likely to cause damage or delay to other shipments, equipment or personnel, or if the transportation of which is prohibited by law or is in violation of any rules contained in this Airbill or our current Service Guide.

MONEY-BACK GUARANTEE

In the event of untimely delivery, Federal Express will at your request and with some limitations, refund or credit all transportation charges. See current Service Guide for further information.

Part #137204/137205
Rev. 1/91

Withdrawal/Redaction Sheet
(George Bush Library)

Document No. and Type	Subject/Title of Document	Date	Restriction	Class.
02. Letter	From: Tim Lukasiewicz to James Baker Re: Job opportunities [Redaction of social security information] (1 pp.)	01/09/93	(b)(6)	

Collection:

Record Group: Bush Presidential Records
Office: Chief of Staff to the President, Office of the
Series: Baker, James A. III
Subseries: Public Correspondence Files
WHORM Cat.:
File Location: [Public Correspondence, Dec 1992 & Jan 1993]
[7]

Date Closed:	3/14/2003	**OA/ID Number:**	93020-003
FOIA/SYS Case #:	2000-0715-F	**Appeal Case #:**	
Re-review Case #:		**Appeal Disposition:**	
P-2/P-5 Review Case #:		**Disposition Date:**	
AR Case #:		**MR Case #:**	
AR Disposition:		**MR Disposition:**	
AR Disposition Date:		**MR Disposition Date:**	

RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

P-1 National Security Classified Information [(a)(1) of the PRA]
P-2 Relating to the appointment to Federal office [(a)(2) of the PRA]
P-3 Release would violate a Federal statute [(a)(3) of the PRA]
P-4 Release would disclose trade secrets or confidential commercial or financial information [(a)(4) of the PRA]
P-5 Release would disclose confidential advice between the President and his advisors, or between such advisors [a)(5) of the PRA]
P-6 Release would constitute a clearly unwarranted invasion of personal privacy [(a)(6) of the PRA]

C. Closed in accordance with restrictions contained in donor's deed of gift.

PRM. Removed as a personal record misfile.

Freedom of Information Act - [5 U.S.C. 552(b)]

(b)(1) National security classified information [(b)(1) of the FOIA]
(b)(2) Release would disclose internal personnel rules and practices of an agency [(b)(2) of the FOIA]
(b)(3) Release would violate a Federal statute [(b)(3) of the FOIA]
(b)(4) Release would disclose trade secrets or confidential or financial information [(b)(4) of the FOIA]
(b)(6) Release would constitute a clearly unwarranted invasion of personal privacy [(b)(6) of the FOIA]
(b)(7) Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]
(b)(8) Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
(b)(9) Release would disclose geological or geophysical information

[redacted] WHL at State Dept. responded w/ letter

NRN

Jan. 9, 1993
4:30 AM

2200 Novus St.
Sarasota, FL. 34236

Dear Mr. Baker,

Jim, have as yet to receive word on my confirmation to be ambassador to Vietnam of which Jay Allison was working on in the last few months.

Hope to achieve this goal and in serving within the State Department been enough and assist you in 1996 in a bid for President.

enclosed a copy of my resume in fulfilling this necessary appointment and obligation.

Sincerely,

Jim Lukaszewicz

[redacted]

P.S.

Inspector Generals office?!

TIMOTHY A. LUKASIEWICZ
~~611 S. Washington Blvd~~.
Sarasota, FL. 34236

957-3240
HOME: (813) ~~955-1620~~
WORK: (813) ~~355-5901~~
365-5465

PROFESSIONAL OBJECTIVE

A challenging and responsible position where excellent communication and office skills will have a valuable application.

SPECIAL SKILLS

Excellent supervisory, managerial skills, CRT experience, telemarketing experience, detailed oriented, well organized.

WORK HISTORY

STOCKMAN-CASHIER Dollar General Store, N. Trail Plaza, Sarasota, FL. 34234
- Unload truck shipments, Organize warehouse by product identification.
- Restock shelves by I.D. number, product, keep store clean, assist clients.
- Operate cash register, assist customers, meet and greet general public.

MANAGER Twin Motel 1750 N. Tamiami Trl. Sarasota, FL. 34234
- Responsible for all physical properties.
- Coordinated/followed up working shcedule for employees.
- Control ledger, journals, payroll, deposit money as necessary.
- Assist residents as necessary, meet and greet general public.

COLLECTIONS MANAGER Republic Airlines Credit Union, Bloomington, MN.
- Responsible for $800,00 delinquent accounts.
- Assist branch managers in resolving difficult accounts.
- Directed selling/repossession of vehicles, nationwide.
- Developed filing, skip tracing systems, heavy phone usage.
- Coordinated repayment shcedules w/delinquent clients.

MANAGER Atlas Temporaries, Inc. St. Paul, MN.

- Interview and place individuals for both permanent and part-time employment throughout twin cities. (INDUSTRIAL,ADMINISTRATIVE).
- Coordinated payroll, bookkeeping, billings, records, weekly, monthly reports.
- Resolved problems that developed, establish new accounts.

COORDINATOR U.S. Army, Worldwide

- Give orientation briefing, interview/place personnel for training by rank, job-title, security clearance.
- Coordinate housing and appointment for visiting digantaries.
- Assist unit coordinators resolving personnel, training, supply problems.
- Responsible for records, files, ledger, attend/coordinate training seminars.

EDUCATION

High School Graduate
Business Law, Economics, Campbell Univ. Fayetteville, NC.
Sociology, Pepperdine Univ. Santa Ana, CA.
Creative Writing, Central Texas College, (correspondence).
Manager, Education Center, Sinop, Turkey. U.S. Army.
Technical Instructor, (Communications-Electronics) U.S.M.C.

SARASOTA POLICE DEPARTMENT

CITIZEN'S CERTIFICATE OF MERIT

PRESENTED TO

MR. TIM LUKASIEWICZ

For outstanding services rendered to the community,
its police department, and the
City of Sarasota.

JANUARY 31, 1992

DATE

CHIEF OF POLICE

Tim Lukasiewicz
2200 Novus St.
Sarasota, FL. 34236

TAMPA, FL 336
FM
9 JAN
1993

THE WHITE HOUSE
(Executive Office of The President)
Washington, D. C. 20500

ATTN: James Baker III

MCN

THE
CENTER
FOR
SECURITY
POLICY

Date: 1/11/93

To: HON JAMES BAKER

Company:

Fax Phone Number: 94562883

CC:

From: Center for Security Policy

Subject:

# of Pages (including this cover sheet): 6

Message:

General inquiries concerning the Center and specific name or fax number changes should be directed to extension 268 at the number below.

If you do not receive all pages, please call back immediately.

Voice: (202) 466-0515 Fax: (202) 466-0518

THE CENTER FOR SECURITY POLICY

D E C I S I O N B R I E F

DECISION BRIEF
For Immediate Release

No. 93-D 3
11 January 1993
Contact: Jennifer W. Macdonald
(202) 466-0515

HOW *NOT* TO LEND TO A BANKRUPT RUSSIA: EXIMBANK ENERGY DEAL SHOULD BE ICED, REWORKED

(Washington, D.C.): The terms of a multi-billion dollar series of loan guarantees to the Russian oil and gas sector in preparation by the U.S. Export-Import Bank (Eximbank) is a disaster in the making. As presently structured, this deal threatens to create major new revenue streams likely to be tapped principally by the old Soviet military-industrial complex -- while exposing American taxpayers to vast new losses in Russia.[1] **Under no circumstances should such a deal be finalized prior to a critical evaluation by the incoming Clinton Administration of the strategic implications of aiding the Russian energy sector and the dubious precedent it would set for lending to a bankrupt Russia.**

As the Center first reported in a *Decision Brief* published on 22 December 1992[2], the impetus for a hasty and incompetently structured Eximbank energy-related loan guarantee program to Russia appears to have come from an interested party: the Bank's outgoing Acting Chairman, Eugene Lawson. The latter transparently hoped to complete this transaction prior to his departure on 8 January 1993 and his subsequent assumption of the presidency of the U.S.-Russia Business Council -- a Washington-based lobbying group recently established to expand bilateral trade, particularly in the energy sector. A number of the Council's members (e.g., Texas-based oil and gas equipment manufacturers) would be among the principal beneficiaries of this deal.

Formula for Disaster -- Strategic Trade Prior to Structural Reform

As the Center noted on the 22nd of December:

"In the hands of Communist Party alumni like the newly-appointed Russian Prime Minister, Viktor Chernomyrdin, $2 billion in taxpayer loan guarantees will produce a major new source of hard-currency revenues. Hardliners in Moscow can use these funds to consolidate further their power and expand the former Soviet Union's future economic leverage against countries heavily dependent on Russian energy supplies, such as Ukraine and the Baltics.

"In fact, the increasing success of these factions in blocking efforts to decentralize and privatize key energy production facilities has already contributed to recent interruptions in energy supplies to Ukraine and Eastern Europe. Should the pressure for such reforms now be relieved thanks to American capital infusions, it

- more -

[1] The Center for Security Policy has long warned of the dangerous uses energy resources can be put to by malevolent forces in the Kremlin -- either as a revenue stream to support militaristic activities or as an instrument for economic warfare. For example, see "Soviet Economic Leverage: Moscow's Tool for Denying Baltic Independence Without Force," (No. 90-D3, 8 January 1990).

[2] See "Revolving Doors; Eximbank Official's Scandalous Self-Dealing is a Blow to U.S. Taxpayers, 'Red Carpet' for Returning Russian Hardliners -- And Their American Friends" (No. 92-D 148).

is predictable that the Russian energy sector will simply serve once again as a multibillion-dollar annual revenue stream for the preservation of the military-industrial complex.

"Given the strategic importance of energy and the large-scale hard currency cash flow it could generate, **the importance of democratic and free market reforms being irreversibly in place *prior to* such assistance cannot be overstated.**"

Strategic Considerations Aside -- No Genuine Collateral, No Deal

In the process of trying to slam-dunk this "framework agreement" before he left office, Lawson appears to have run roughshod over Exim's professional staff -- bankers who understand that new loans to a bankrupt sovereign borrower *have to be* structured carefully if the Bank is to comply with its fiduciary and statutory responsibilities. Under present circumstances, this means establishing disciplined, transparent and carefully conditioned lending arrangements whereby the initial $2 billion (with the potential to increase to as much as $5 billion) in U.S. taxpayer-guaranteed funds would be *fully collateralized*.

Unfortunately, Acting Chairman Lawson's eagerness to close this deal seems to have promoted implementing arrangements that are far less disciplined, transparent, conditioned *or collateralized* than are clearly required. Importantly, while export revenues derived from selected oil and gas ventures in Russia are supposed to be specifically earmarked for repayment of Eximbank's principal and interest, the specific terms under negotiation raise serious questions as to whether repayment will be assured.

The obvious hedge would be for such revenues equivalent to the amount of loan disbursements to be deposited in an "offshore trustee" account (i.e., one outside of Russia) *in the charge of the lenders*. Initially, Lawson appears to have hoped to use a Potemkin "offshore" trustee -- the Russian- owned Moscow Narodny Bank in London. Even this approach evidently proved too stringent for the Russian government, however. When it indignantly complained that such an arrangement would suggest a (justified) lack of U.S. trust in Russia's ability to service these new credits, Lawson agreed to consider an "*on*shore trustee," instead.

The leading candidate for such an onshore trustee currently appears to be the International Moscow Bank (IMB). IMB is a three-and-a-half-year-old banking institution located in Moscow, conceived and established by Mikhail Gorbachev's communist regime to finance joint ventures.

The International Moscow Bank has the advantage of being *perceived* as other than a Russian-controlled institution. After all, IMB is only 40 percent-owned by Russian government banking institutions (Vnesheconombank-20%; Promstroybank-10% and Sberbank-10%). Other partners include Western financial institutions with long-standing banking and political ties to the former Soviet Union (such as France's Credit Lyonnais-12%; Austria's Creditanstalt Bankverein-12%; Germany's Bayerische Vereinsbank-12%; Italy's Banca Commerciale Italiana; and Finland's Kansallis-Osake-Pankki-12%).

Still, Russia appears to exercise practical control of IMB. For one thing, of course, IMB -- unlike Moscow Narodny -- is physically located in Russia. For another, according to

a 24 November 1991 report by Agence France Press, with the exception of five expatriate foreigners, *all* of the Bank's 100 staff members *including its chief executive officer* are citizens of the former Soviet Union. Sixty out of this hundred have spent time in the past working for IMB's European shareholders.

In short, utilization of institutions like Moscow Narodny and even more so IMB as trustees or agents for the Eximbank loans would appreciably reduce the confidence the United States government could have that funds ostensibly earmarked for repayment of U.S. loans would actually be retained by such institutions -- let alone accessible if the loans have to be called. Such an arrangement also lends itself to another, potentially even more troublesome form of abuse: **the use of the *same earmarked funds* to collateralize loans from other Western institutions.**

Previous Experience With Moscow's Double-bookkeeping on Energy Loans

In the late 1970s, the Soviet Union used precisely this scam to double-finance much of the costs of the $2.2 billion Orenburg gas pipeline project.[3] Moscow is believed to have hoped to perpetrate similar financial sleights of hand or bookkeeping irregularities in connection with its far larger Siberian gas pipeline initiative of the early '80s. Fortunately, the West was spared the substantial losses -- to say nothing of strategic vulnerabilities -- associated with this pipeline when, thanks to the Reagan Administration's forceful opposition and alliance leadership, it was substantially down-scaled.

Russian Default -- A Showstopper?

Unfortunately for Acting Chairman Lawson and his friends, the proposed Eximbank lending facility for the Russian energy sector cannot be implemented so long as Moscow is in default to Eximbank, as it is at present. As of 7 January 1993, some $2.5 million in payments due from Russia are in arrears (read, default). **Still, incredible as it may seem, once its own Russian account is squared away, Eximbank may proceed with further taxpayer-guaranteed lending to Moscow -- *even though Russia remains over $147 million dollars in default to another U.S. government lending institution, the Agriculture Department's scandal-ridden Commodity Credit Corporation.*[4]**

Even if Russia cleans up its arrearages with Eximbank, another problem confronts conscientious professionals at the Bank: **The Export-Import Bank is required by statute to determine that there is a reasonable assurance of repayment from the borrower.**

- more -

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[3] See, for example, "Follow the Money," an award-winning *American Interests* special which aired on the Public Broadcasting System on 12 July 1989, which was produced by the Blackwell Corporation and moderated by Morton Kondracke.

[4] According to a report issued by the Government Accounting Office on 5 January 1993 entitled, *Loan Guarantees: Export Credit Guarantee Programs' Costs are High* (GAO/GGD-93-45), the export lending programs of the Commodity Credit Corporation are exceedingly expensive to U.S. taxpayers because of exposure to such credit-risky countries as Russia and Iraq. What is more, the GAO was unable to substantiate USDA claims that the program is needed to boost U.S. exports of agriculture. Instead, the evidence appears to indicate that the CCC lending program merely reroutes existing trade flows.

To get around this obstacle, the Lawson "framework agreement" contemplates portraying these new energy-related credit guarantees as *other than* Russian sovereign risk that is currently on U.S. books to the tune of almost $6 billion. They would, instead, be construed as "self-liquidating" loans to purportedly "independent" Russian energy enterprises -- a notion that, for the most part, contradicts the facts on the ground.

Toward a New, Secured Precedent for Lending to a Bankrupt Russia

The Center for Security Policy believes that **the Clinton Administration must be given an opportunity to redress the serious flaws in the Lawson plan for Eximbank lending to Russia and to consider whether adding to Russia's estimated $80 billion external debt burden at this juncture is prudent policy.** As bolstering the Russian energy sector represents a *strategic* initiative, such lending activities should be put on ice pending a thorough assessment of the prospect that the primary beneficiary of newly generated energy export earnings would be the still-menacing ex-Soviet military and its associated industrial complex.

With regard to non-strategic trade transactions -- such as grain shipments, consumer goods, medical equipment, pollution control technologies, etc. -- the Clinton team should ensure that all federal government agencies (including, of course, Exim's professional staff) are instructed to transform U.S. loan guarantees to Russia into *genuinely* collateralized transactions. Such disciplined measures would include: taking physical possession of Russian assets of equivalent value at the *outset* of each loan disbursement; loan documentation that provides for shipment of goods under letters of credit; restricted loan drawdowns (where appropriate); on-site inspections by independent experts retained by the creditors; offshore collateralized accounts; etc.

In addition, the Clinton Administration should compile a list -- to be shared with relevant congressional committees -- of *alternative* Russian assets that could be attached by official or private bank creditors in the likely event of new Russian defaults. These might include commercial aircraft and ships, foreign deposits, overseas real estate, etc.

In the case of project financing, a *credible* Western agent bank (not the International Moscow Bank or Moscow Narodny) located outside of Russia *and Russian control* should be utilized for deposit of newly generated income streams. Indeed, the Western purchasers of Russian goods or commodities should be the parties that make the deposit into the agreed Western collateralized account. Only after the respective loan repayments are covered should cash be transferred back to the Russian enterprise in question.

It is particularly important that a mechanism be set up -- both domestically (at the Federal Reserve or Treasury) and internationally (OECD or the Paris Club) -- to ensure that the same Russian assets used as collateral are not repeatedly pledged to different Western official and private bank creditors. In the absence of such mechanisms, the Russians could make a sham of the creditors' ability to liquidate such collateral in the likely event of new instances of Russian default.[5]

[5] In this connection, it is important to note that the World Bank, which itself is close to providing $500 million to the Russian energy sector, has objected strongly to Eximbank's plan to "strip away" Russian assets needed for repayment of World Bank credits.

What is more, the Center believes that the time has come for the Western industrialized nations to develop and institute common, disciplined guidelines whereby all future lending to Russia would be properly secured. The urgency of such an initiative was underscored by Roger W. Robinson, Jr., a distinguished member of the Center's Board of Advisors and former senior economist at the National Security Council and Vice President of Chase Manhattan Bank with responsibilities for Chase's loan portfolio in the Soviet Union and Eastern Europe:

> "The issue of *genuinely* collateralized Western lending to Russia and other successor states should be made a formal agenda item for the Tokyo Economic Summit, with the preparatory work conducted during the OECD ministerial this Spring. Without a coordinated, multilateral strategy, Russia will be free to play off one creditor against another with the likely losers being taxpayers throughout the West."

Such allied discussions should institute, among others, the following preconditions to new secured Western lending:

- An immediate termination of the commitments of **Russian supplier credits** to China, Iran, Pakistan, Cuba and elsewhere for nuclear reactor and other export items currently estimated to total some $4-6 billion;
- The **raising of Russian oil prices** to world market levels as demanded by the IMF.
- Full disclosure by Moscow of **all of Russia's hard currency (or equivalent) assets** and their location.
- A comprehensive allied effort to determine the disposition of the estimated $5-15 billion which was secretly transferred out of Russia to Eastern and Western Europe by Soviet officials to serve as a kind of "war chest" for the recentralizing forces now increasingly dominating the political scene in Moscow.

The Bottom Line

The Center for Security Policy believes these recommendations need to be acted upon urgently by the executive branch and the Congress insofar as these first "secured" financial transactions will establish the precedents for others to follow. In the wake of the debilitating blows already dealt the U.S. Treasury by the S&L crisis, the BCCI fiasco, the BNL scandal and the likely write-off of almost $6 billion in CCC loan guarantees to the former Soviet Union, neither the U.S. Export-Import Bank, its professional staff or the American taxpayer should be allowed to take the fall in yet another instance of massive fiduciary malfeasance.

- 30 -

N120

U.S. — INDOCHINA RECONCILIATION PROJECT

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Phone (212) 764-3925 ■ Fax (212) 764-3896 ■ Telex 6503102691 MCI UW

JOHN McAULIFF
Executive Director

Mr. James A. Baker, III
Senior Counselor to the President
The White House
Washington, D.C.

Fax 202-456-2833

Dear Mr. Baker;

The conventional wisdom has become that the Bush Administration will go no further with Vietnam. Having watched on C-SPAN over the weekend Secretary Eagleburger's speech and answers to questions at the Council on Foreign Relations, such a conclusion is hard to escape. (That is also the interpretation given to it by Vietnamese diplomats at the U.N.)

If this is the case, I fear that we face one more lost opportunity, another misstep in a 48 year history of misunderstandings and miscalculations that have cost dearly our two peoples. It is particularly tragic if the "dead hand of the past" in the literal form of the controversy over MIA remains is what frustrates present national interests and future opportunities.

I know personally several of the key proponents of the thesis that not enough has been done regarding remains and that only keeping the pressure on will bring the desired results. Although I respect their goals and their commitment, I believe they are serving neither their own purposes nor larger national interests.

If it is correct that the Vietnamese have or can easily obtain additional remains but won't, that could be because their ability to move is frustrated by suspicious hard liners who have their own reasons for preferring to postpone normalization and its attendant door-opening to the forces of "peaceful evolution". Moderates may simply believe longer lasting benefit will derive from settling things with the incoming Administration.

From conversations in Hanoi and Saigon in November and December, I conclude that most Vietnamese ("liberals", "moderates" and "conservatives") believe they have already gone relatively further than we have. Another major step was taken in their minds the second time I was in Hanoi when the article appeared in Nhan Dan and many other newspapers encouraging popular cooperation in obtaining remains. The absence of significantly "equivalent" U.S. steps to lift the embargo or allow IFI loans only strengthened the arguments of the hard-liners.

Let's imagine for the moment that the Vietnamese are actually doing everything they can within reasonable parameters. How much does it poison the well that so little, from their perspective, has been done in return?

In the short time remaining on your watch, I am not sure that anything further could or would be done by Vietnam even in response to a dramatic move by the U.S., but certainly nothing will happen without such a move. Even if Vietnam doesn't respond, at least you will have left a positive rather than a negative legacy for your successors. In addition, if there really is a hard core group in Hanoi seeking to use non-cooperation on the remains issue as a way of delaying normalization, the startling move of lifting the embargo and moving towards normal relations would undermine their credibility and influence.

I also think it would give the President a deserved "triple crown" to be remembered for: Somalia, START, and ending the state of hostilities with Vietnam.

Finally, as you prepare to leave office, may I once more express gratitude for what I have perceived from outside to be your personal role in bringing about new American policies towards Laos, Cambodia and Vietnam. Good luck in your future endeavors in the private sector. If I can be of any assistance to you in the future regarding Indochina, please do not hesitate to ask.

Sincerely,

John McAuliff
Executive Director

P.S. In case you haven't seen it, I attach an editorial from the rather conservative editor of the Far Eastern Economic Review.

EDITORIAL

Ending America's Vietnam syndrome

The best solution for Vietnam is a government that is involved as little as possible in the economy," Dang Xuan Ky, a member of the Communist Party central committee told REVIEW *editor L. Gordon Crovitz recently in Hanoi. Dang, who is also director of the Marxist-Leninist Institute and thus keeper of the ideological flame, was reminded that Ronald Reagan used to say that the best government is the government that governs least. Dang leaned forward and said, "I agree with Reagan. This is correct thinking."*

Back when the American public was losing patience with the progress of the war in Indochina, a US senator, George Aiken, had an inspired suggestion. Declare victory in Vietnam, he urged, and get out. Turn the clock forward: now that Vietnam's chief ideologue rushes to agree with Reagan, Washington should declare victory and get back in. The stability of Asia that US forces once helped to assure by confronting communism in Indochina can now be best guaranteed by an America that normalises trade and diplomacy to help the Vietnamese further liberate themselves from their tragic past.

It is true that despite economic reforms, Vietnam remains one of the last outposts of communist rule. But it is also true that Vietnam has already met most of the conditions set out in the Bush administration's "road map" to recognition, including withdrawal from Cambodia, letting former US personnel emigrate and resolving American soldiers still listed as missing in action.

To American sceptics of a change in policy, we would argue that the greatest threat to communist one-party rule in Vietnam now is the highly subversive effect of trade and opening to the West. This is why leaders of many countries in the region, including Indonesia, Malaysia and Singapore, have strongly urged the US to normalise relations with Vietnam as a way to help moderate Hanoi and play a constructive role in the region.

American businesses have complained that they are losing opportunities, but the most compelling reason to lift the US embargo is the Asian lesson of development. This is that open markets lead to democracy; free markets have created middle classes that demand an end to authoritarian rule — witness Taiwan, South Korea, Thailand. Our guess is that the same will happen to totalitarian Vietnam. Since the US remains the single largest export market for each of the newly industrialising developing countries, only letting Vietnamese trade with Americans can fully empower markets to endanger closed politics.

The trade embargo served a noble function so long as communist ideology retained even a sliver of credence. But when it became clear that the market was the far superior mechanism for assuring guns and butter, Star Wars and microchips, the Soviet empire simply shattered. The pace of Vietnamese economic reforms — *doi moi* — quickened when Soviet aid disappeared. American dollars, not Vietnamese dong, have become the currency of choice from government trading offices down to the street stalls. And we note that the communist countries that use US trade embargoes to block themselves off from the pressures of the market have proved the most resilient: North Korea and Cuba.

Asia would interpret American re-engagement with Vietnam as a sign of its broader commitment to this region despite the inevitable scale-down of US defences. Asia recognises its own interests in an involved America — including an America involved in Vietnam. As Singapore's minister of defence, Yeo Ning Hong, noted in a recent speech, any reduction of the American presence could "create a vacuum with potentially destabilising results, prompting countries like China and Japan to build up their armed forces."

Preserving the new prosperity of Asia means preserving the stability that makes it possible. The alternatives to a strong America simply do not exist. Japanese forces merely as part of a UN peacekeeping team in Cambodia has been controversial. The likely beneficiary of a diminished American role would be China, whose military ambitions in the South China Sea already worry neighbours. Indeed, the debate in the upper reaches of Hanoi's policymakers is whether to side with China or with the West, which should welcome Vietnam as a wedge against Chinese expansionism.

Vietnam wants American recognition for its own reasons, despite its rulers knowing full well trade's threat to totalitarianism: Hanoi could make normalisation with America easier for the president by moving to normalise relations with its own people. Jubilee Campaign, a London-based rights group, has documented 49 Vietnamese religious prisoners by name, and America's Puebla Institute points to this year's sentencing of Dr Nguyen Dan Que to 20 years in prison for the "crime" of calling for better adherence to human rights. Their release would certainly give the president a better case to present to his public.

As with the war itself, the final peace depends on domestic American considerations. Recall that what lost the war and precipitated the fall of Saigon was a lack of public support for an ill-defined foreign policy that became even weaker once the Nixon administration found itself enmeshed in Watergate. Twenty years after a third-rate burglary in the posh Washington hotel helped to precipitate the fall of Saigon, domestic concerns again threaten to jeopardise the clear foreign-policy interests of what is now the world's undisputed superpower.

By this we mean the bitter debate that will almost certainly divide the American people and paralyse US policy if it is left to Bill Clinton to move towards recognition of Hanoi. The recent decision by the Bush administration to allow American firms to enter into contracts with Vietnam implies that recognition is a matter of time. Still, old wounds will open if the final resolution is left to a president who demonstrated against his government abroad while fellow Americans who did not escape the draft were dying in Vietnam; if only Nixon could go to China, perhaps only a war hero such as Mr Bush can extend a hand to Vietnam.

Mr Bush has it within his power to do the one thing Mr Clinton cannot do: put the Vietnam issue behind America. We hear that the president is contemplating a series of key foreign policy speeches before he leaves office, one of which would be on Vietnam. He recently pardoned those involved in the Iran-Contra affair so that America will enter the Clinton presidency unencumbered by tired old debates that prevent the US from assuming a leadership role that many in Asia would welcome. Mr Bush entered the presidency promising to end the Vietnam syndrome of national pessimism and self-doubt. It would be entirely fitting for one of President Bush's final acts to be declaring an end to the American war with Vietnam by recognising that even its one-time enemy must be part of the new post-Cold War order.

NRN

The Conservative Network

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"Conservatives Helping Conservatives Worldwide"

OFFICE OF THE EXECUTIVE DIRECTOR
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Conservatives Helping Conservatives
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TEL 703-971-0692
FAX 703-971-6980

DATE: 01/10/93

TIME: 10:12

TO: Baker, The Honorable James, Chief of Staff

COMPANY: The White House

From: OFFICE OF THE EXECUTIVE DIRECTOR

COMPANY: THE CONSERVATIVE NETWORK, INC.

Please note the following information concerning Cal Thomas, our guest speaker for Monday, Jan 11th, at The Capitol Hill Club, 300 First Street, S.E. [Capitol South Metro stop], 6-8pm. Also be advised we are sending you, under seperate cover, your new TCN VIP Travel Membership Card. If you choose to use it, you are guarantee the lowest air fairs available. Included in your mailing is the opportunity to renew your dues at the OLD rate of $25 per year as long as you like before dues increases take effect 01-March-93. I look forward to seeing you Monday evening. We have much to work for these next few years if America is to move forward.

NRN

FAX MESSAGE

DATE: 11/1/93 FAX NO: 0101 202 456 7705

TO: MR. JAMES BAKER

COMPANY: CHIEF OF STAFF - WHITE HOUSE

FROM: FREE IRAQI COUNCIL PAGES:

PRESS RELEASE

1. A large group of prominent Iraqis opposing Saddam Hussein attended a meeting in London on 3 January to discuss his removal. They represented all shades of Iraqi political opinion.

2. The following subjects were discussed:

   a. Measures being taken to effect Saddam's removal.
   b. An evaluation of Iraq's present internal situation.
   c. The setting up of a force to plan an integrated democratic Iraq based on respect for human rights and the rejection of sectarianism.
   d. Proposal for a suitable constitution for a truly democratic Iraq.
   e. Future meetings of the group.

3. A wide variety of issues were covered during the meeting. These included the need to re-establish friendly relations with other Arab States, the need to create confidence in the new movement and the elimination of the hardships imposed on the Iraqi people by the United Nations.

4. A consensus was obtained on all the points discussed and the meeting agreed to appeal to all countries to boycott the existing Iraqi regime and finally to reject any suggestions for normalizing relations with it. It was also agreed to appeal to all humanitarian agencies to help the ordinary people who are suffering an acute shortages of food and medicines.

5. Those present agreed that the agenda for the next meeting should include three appeals:-

   a. An appeal to the UN for the implementation of Resolution 688 (Human Rights of Iraqis).
   b. A second appeal to the UN for the whole of Iraq to be declared a safe haven.
   c. A third appeal to the world community to isolate further the present regime without harming the people.

LONDON
11 JANUARY 1993

MRN

ASIAN AMERICANS FOR ~~REAGAN~~ Bush

DR. JOHN H. CHEN
National Coordinator

4525 LINCOLN AVENUE • P.O. BOX 1086
BELTSVILLE, MARYLAND 20705

(301) 937-1221
(24-hour Services)

January 5, 1993

The Honorable James Baker, III
Chief of Staff to the President
The White House
1600 Pennsylvania Avenue, N.W.
Washington, D.C. 20500

Dear Jim:

I wrote you a letter dated October 16, 1992, and attached a hand written letter by Donald E. Graham, the Washington Post Publisher. Please return Mr. Graham's original letter at your earliest convenience. ?

Thank you for your cooperation.

Cordially yours,

John H. Chen

John H. Chen

布希漸入佳境表現越來越好

Dr. John H. Chen
4525 Lincoln Ave.
Beltsville, MD 20705

SOUTHERN MD 206
PM
07 JAN
1993

Hon. James Baker, III
Chief of Staff to the President
The White House
1600 Pennsylvania Avenue, NW
Washington, DC 20500

Persnal Attention

NRN

Dear Secretary of State Baker

My name is Jeffry Thomas, I would like to present to you my proposal to accompany a entertainment entenage into Russia after the winter weather clears the path for travel abroad.

If you feel that there are any problems concerning the trip abroad you can reach me at either my Houston office or Los Angeles location.

Thank You
Jeffry Thomas

Jeffry Thomas
1214 East 33rd
Houston Tx 77022

HOUSTON, TX 770
PM
6 JAN
1993

Secretary of State James A. Baker III
White House
1 Pennsylvania Ave
Washington D.C. 20500

1/13 - spoke w/ Beverly in Amb's offc to regret invite

EMBASSY OF THE
UNITED STATES OF AMERICA
MEXICO

1/13 - regretted w/ Tom Rose - Chairman's Office

OFFICE OF THE AMBASSADOR

January 11, 1993

The Honorable
James A. Baker III
Chief of Staff
The White House
Washington, D.C. 20500

Dear Jim,

Last Friday Fausto Miranda invited me to lunch to meet with the leaders of a Mexican organization called Gente Nueva (literally "new people"), an organization dedicated to the promotion of family and community values here in Mexico and a number of other countries. In Mexico Gente Nueva is comprised of about 15,000 university-age youth involved in a variety of social and cultural projects throughout the country. I can vouch for the seriousness and integrity of this organization.

One of the participants at the luncheon was Jose Ignacio Avalos, Chairman of the Board of Gente Nueva who happens also to be Fausto's son-in-law. Avalos explained to me that this year Gente Nueva will hold its annual congress in Monterrey from February 25 to 28. As you can see from the attached letter, Avalos is extending an invitation to you to be a guest speaker at the congress.

While I did not give either Fausto or Avalos any encouragement I did promise to convey the invitation to you, both because the group is worthwhile and because of your long-standing ties with the Mirandas. Fausto senior, by the way, was also there and sends you his warmest regards.

I would, of course, be pleased to convey your response to Gente Nueva. If you prefer you could fax them directly at (011-525)-202-6835.

With best wishes.

Sincerely,

John D. Negroponte
Ambassador

Enclosure as stated

DE SER GENTE NUEVA

Mexico, January 7th, 1993

Mr. James A. Baker III
Chief of Staff
The White House
Washigton, D.C.

Dear Mr. Baker,

We wish to extend to you a cordial invitation to speak on the topic " Liberty and Democracy, the elements of the World's Globalization" at Gente Nueva's International Youth Congress; entitled " Creating a New World". The themes we have chosen for this Congress are "Characteristics Of Today's World", "Man and His Essential Values", "The Environment", and " The Challenges We Face".

As in past years, the message of our International Youth Congress should be strengthened by speakers who, due to their profound achievements and moral standings, can contribute inspiring ideas, principles, and testimonials to today's youth.

This year's Congress will be held in Monterrey, Nuevo Leon, Mexico, February 25th - 28th, 1993. We expect an attendance of approximately 10,000 young adults, who will come to listen to outstanding testimonials on the four themes of this year's Congress. Among whom, some will come from Texas, Chile, Venezuela, Spain, and Italy.

Our objective is that these young adults listen to testimonials of outstanding persons on the subjects referred to above.

Among the confirmed speakers we have Messrs: Rigoberta Menchu, 1992 Nobel Peace Prize; Luis Donaldo Colosio, Mexican Secretary for Social Development; Manuel Camacho Solis, Mayor of Mexico City; Dr. Alfonso Lopez Quintas, the famous Spanish philosopher; Dr. Massimo Introvigne, Italy's director of CENSUR; and Orestes Lorenzo, the Cuban exiled pilot.

Paseo de la Reforma 1110 Lomas de Chapultepec C. P. 11000 Tels 202 16 33 Fax 202 68 35

DE SER GENTE NUEVA

Internationally, we have organized twenty congresses thanks to the outstanding participation of the renowned speakers, such as Mother Teresa of Cacutta, Dr. Victor Frankl, Dr. Bernard Nathanson, Ambassador Armando Valladares, including Mr. Lech Walesa - Poland's Prime Minister who kindly allowed us to video tape in Poland his participation in the 1989 Congress when he was still the head of Solidarity and hence unable to come to Mexico because of what was transpiring at the time - we have achieved great success in encouraging thousands of young people towards the creation of a better world.

The enthusiasm that we have instilled in the many young organizers has made Gente Nueva what we consider to be a unique organization not only in Mexico, but also in Europe and South America.

Since Mexico City's earthquake in 1985, Gente Nueva as a non-profit organization established a relationship with Sam Taylor of USAID in providing humanitarian assistance. Gente Nueva has continued to participate in AID programs under the direction of Jerry Bowers. Enclosed is additional information about Gente Nueva, our 1993 Congress, and our relief programs.

We hope you can accept to express your thoughts in our forthcoming 1993 Congress on the role that freedom and democracy must play in creating a new world globally united and civilized. Further, we hope you will challenge the young adults to actively participate in furthering freedom and democracy at a global scale.

Your proven world leadership and guidance will undoubtly impact the young ladies and gentlemen who within a few years will have the responsibility to lead our future, and we will be honored if you accept our invitation to speak; should you accept, as we warmly wish, please let us know which of the above dates is most convinlent for you.

Sincerely,

Jose Ignacio Avalos
Chairman of the Board.

Paseo de la Reforma 1110 Lomas de Chapultepec C. P. 11000 Tels 202 16 33 Fax 202 68 35

525

WEW

MAYNARD E. WHITE
2309 THORNDALE COURT
ELKHART, IN 46517
(219)294-7177

December 30, 1992

James A. Baker III
Chief of Staff
White House
Washington, DC

Dear Mr. Baker:

Today there is an emerging geological threat that trenscends international differences and has serious ramifications for the future of civilization.

In researching the enclosed book World in Peril, we updated the recently declassified records of "Project Nanook" (1946-48) with contemporary knowledge of geophysics and found the results literally earthshaking.

According to the resultant findings, the earth has been periodically reshaped over the millennia through phenomena known as "crustal shifts", which may be triggered by the geomagnetic forces accompanying radical magnetic polar displacements following axial convergence of the magnetic and geographic poles.

Based on current data from the National Geomagnetic Information Center, it is clear that the poles are once again converging and that another "polar flip" could occur at any time, threatening the survival of many lifeforms, including our own. Presumably the most recent such phenomenon brought about the extinction of the prehistoric Pleistocene fauna in a cataclysmic upheaval that caused the last ice age ten to twelve thousand years ago.

Needless to say, civilization as we now know it would be profoundly imperiled with the advent of another flip, the circumstances of which are explained in World in Peril Chapters 27 through 30. (Part I of the book offers the background of the discoveries as well as the scientific findings.)

In an attempt to share our observations with appropriate agencies and personnel, I would be very grateful for your help in identifying those in our government and scientific communities who you think should be contacted in order to bring the necessary attention and resources to bear on this time-critical problem. Specifically, we wish to make contact with those capable of providing further research into the phenomenon, analyses of other matters pertinent to the survivability of our society and its institutions throughout the geological event, and studies regarding reconstruction in the aftermath.

Your opinions and kind assistance are greatly appreciated. My son, the author, and I would be glad to meet with you if you so desire.

Sincerely,

Maynard E. White
Colonel, USAF (Ret.)