



HEALING NEWSLETTER

NL #8, JULY AUGUST 1985

THE GERSON INSTITUTE

\$1.00

IN MEMORIAM

In shock and deepest sorrow, we have to notify you of the sudden death July 30th of our beloved Dr. Arturo Ortuno.

Dr. Art - as he was affectionately known by all - was a true healer. He not only loved his work, he enjoyed being able to help people, seeing patients return to normal active lives. He was a fine scientist with a true depth of knowledge of his craft; yet he was a gentle humanitarian, always willing to spend time with a patient, listen patiently and attentively to his reports and symptoms, and help the patient to understand the workings of "our therapy" as he called the Gerson Therapy.

We lose a man with leadership, a decision maker, one who could see all angles and arrive at the crux of a problem with clear understanding and direction; a fine, charming human being, loved by all. He will be deeply missed in every area of his activities.

PROTEIN-CALORIE RESTRICTION IN THERAPEUTIC NUTRITION

by Gar Hildenbrand

In the early part of this century medical science focused its attention on therapeutic nutrition. Dietary treatments became the subject of exhaustive investigation. Prior to World War II, Germany was the unquestioned leader of world medical research. Most research scientists over the age of sixty still have a good reading knowledge of medical German which was necessary in order to stay abreast of developments on the cutting edge of medical science. This was the "Golden Age of German Medicine", a period in which functioned a genuine scientific community of highest professional standards and during which most of the promising research work being done throughout the world had its roots in Germany. It was during this "Golden Age of German Medicine", in the late 1920s, that Max Gerson rose to prominence within the German medical community with his low sodium, high potassium, protein or protein-calorie restricted, therapeutic dietary treatment - a unique, empirically developed medical management which has shown clinical and curative value in such diverse pathologies as migraines (1), allergies (2), tuberculosis - cutaneous (3) and pulmonary (4), advanced congestive heart and kidney failure (5), and cancer (6).

Contents:

MEMORIAM
-PAGE 1

PROTEIN-CALORIE
RESTRICTION IN
THERAPEUTIC
NUTRITION
-PAGE 1-

EDITORIAL
-PAGE 6

FOOD FATS ARE
A PRIMARY
CAUSE OF
DISEASE
-PAGE 7

SPEAKING DATES
-PAGE 8

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Charlotte Gerson, President

Gerson's excellent training in the sciences (he was certified in both neurology and internal medicine) enabled him to trust his own observations even when they conflicted with conventional wisdom. It was Gerson's willingness to test accepted hypotheses and to question what authorities had written in books or scientific journals that led him into clinical experimentation which yielded information regarding the therapeutic value of simple foodstuffs. Gerson came to regard whole foods, vegetables and fruits, as medicines when used in the proper form, quantity and context. He enjoyed much attention as the curative value of his dietary treatment for cutaneous tuberculosis was demonstrated by the majority of European authors of stature (7). This was the first successful treatment for advanced cutaneous and pulmonary tuberculosis in medical history, well before the development of antibiotics.

While Gerson's therapy is perhaps best classed as a salt and water management which rests on sodium restriction and potassium supplementation for its effectiveness (Gerson himself suggested this categorization), a key aspect which must not be overlooked is strict protein restriction during the initial weeks of treatment.

Gerson can be looked to as the first physician in this century to have compiled sufficient clinical evidence to support the use of sodium restricted, protein poor nutrition in the treatment of disease, specifically of tuberculosis (7). Similar measures proved curative in advanced heart and kidney failure (5) and cancer (8).

Major emphasis was placed by Gerson on the role of cellular ion concentrations, eg: potassium (K), sodium (Na), and chloride (Cl), in the healing of disease. He found that patients under the influence of his high potassium, low sodium diet therapy lost large quantities of sodium and chloride in the urine during the first weeks of treatment in spite of dietary deprivation of those ions (9). Gerson's observations are strengthened by the experiments of Ling (10) and indirectly (in cancer therapy) by Cone (11, 12).

In heart disease, cancer, and other disorders which affect either the general metabolism or that of specific tissues there exists a tissue damage syndrome as defined by Cope (13). Characteristics of the tissue damage syndrome are A) loss of cell potassium, B) cell retention of sodium and chloride, and C) swelling of the cell with excess water (cellular edema). As cells are damaged by toxins, trauma, oxygen or nutrient starvation, or other challenges, the normal configuration state of cytoplasmic lipid-protein macromolecules is altered, adversely affecting ion association, water structuring, and the cell's ability to limit fluid content. The disruption of a cell's normal internal en-

vironment damages mitochondria, which in turn results in lower energy production in the form of ATP, which results in the cell being unable to generate enough energy to repair itself. The Gerson diet therapy probably exerts some of its beneficial effect through correction of this syndrome (10).

For many years, in spite of the clinical evidence for efficacy of low sodium, high potassium diets, no substantial body of medical literature existed to explain why such empirically derived treatments are successful. Laboratory science is now able to predict that reduced dietary sodium coupled with added potassium should result in reversal of the tissue damage syndrome (13, 14).

During the course of development of his diet therapy, Gerson noted repeatedly that protein restriction accelerated the excretion in urine of Na and Cl by patients receiving low sodium, high potassium nutrition. In "High Fluid Content Potassium Diet as Therapy for Cardiorenal Insufficiency" (5) Gerson explained, "Both the surplus potassium and surplus fluid of the 'fluid-rich potassium diet' are being used therapeutically to accelerate the elimination of retained sodium and thereby indirectly also of retained chloride....The effect of potassium is definitely enhanced through the extremely low protein content of the vegetarian diet; this enhanced effect is certainly demonstrated with the increased, unspecific stimulation of the potassium diet...Clinical observations indicate in the first place that with intentional protein deprivation, protein compounds which have become useless protein deposits will be broken down anywhere they are stored in the body. Because Na as well as Cl in part enter poorly soluble protein compounds in edema, protein-poor nutrition appears to provide a favorable prerequisite for the accelerated elimination of these compounds."

"It appears to us that herein lies a theoretical rationale for the empirically long recognized beneficial effect of protein-poor nutrition in edema patients. Salomon attributes it to the reduced workload of the diseased heart in the combustion of protein-poor nutrition. As Urbeanu, we prefer to concentrate on underlying connections between the retention of Na and Cl in compounds with 'protein-group-connections', which the research of Rudolph Keller also corroborates, in which most amino acids in the biological environment stand out in the same sense with Na and Cl and therefore as antagonists of the potassium group. Urbeanu had previously required a minimum ratio of potassium to protein: for each 16 grams of nutritional protein, there must be allotted 'at least 1 gram of potassium'. With our fluid-rich potassium diet we by far exceed this minimum. With the strictest form of the "liquid raw food" the patients receive practically no notable amounts

of vegetable protein.

"In this form the protein-poor, fluid-rich potassium diet exerts a 'potassium thrust' which occurs after 3-4 days in healthy persons as well and increases more and more with each successive day of the strict diet, as we shall discuss in another place.

"The blood picture of healthy subjects during apple-potato days also shows an increasing leukocytosis with a shift to the left which quickly diminishes after protein is increased with an otherwise unchanged diet. It appears to be clear that this 'potassium thrust' owes its stimulating effect largely to simultaneous protein underfeeding."

In his monograph, "Diet Therapy for Lung Tuberculosis" (9), Gerson devoted much space to this issue, addressing it from every angle. Tables in that book indicate that Gerson limited his pulmonary tuberculosis patients' protein intake during initial treatment to 6% of their total calories. Calories were limited as well to approximately 1,250/day. Gerson alternated this "raw food" initial diet with "apple/potato days" which offered more calories (2,661/day) but even more strictly limited protein to 4% of the total calories. With time, as he saw evidence of healing, Gerson increased the caloric load dramatically to as much as 3,700/day. It is perhaps appropriate to note here that during periods of tissue regeneration and repair, caloric requirements may rise sharply, e.g.: severe burn patients may utilize up to 9,000 calories per day during recovery.

Gerson wrote (9), "The digestion of protein does not take place in the intestine alone, after all - in the human body every healing process is a digestive process - and resorption processes in infiltrations, already described, show us how through the growth of young connective tissue and new capillary vessels, viz. through the opening up of capillary reserves, digestion of protein masses takes place in the disease foci (Krankheitsherd). Now it seems, just as with the healing of scars on the skin, that even the input of a small amount of certain nutritional protein factors would be capable of inhibiting parenteral protein digestion, ie: the resorption of disease foci. It also seems to me that, especially in the first weeks of the diet, foods as low as possible in protein can quickly initiate healing processes and keep them rapidly moving, which would be impossible to achieve on a more protein-rich initial nutrition."

Gerson's observations with thousands of advanced cutaneous and pulmonary tuberculosis patients led him to understand the importance of the quality as well as the quantity of dietary protein. Different types of protein could have dissimilar effects on the healing process. He wrote, "Even animal protein factors cannot be

simply compared in (calorie) tables. Liver acts differently from kidney, yoghurt acts differently from milk...The former are useful, the latter harmful to the healing process. The deeper connections are not known to us. But let it be said that it would be highly unsuitable to pinpoint the varying amounts of purine substances as the cause of the different effects on TB patients. To my surprise, tests have shown that animal substances highest in purine (sweet-breads) and others lowest in purine (brain) were tolerated equally well, while other types which are halfway between, such as muscle flesh, kidney, etc., were not easily fitted into the TB diet. We must therefore consider other factors as causative ones than just the nitrogen and purine contents of the food. The influence of hormones probably plays a role, too, which is much larger than we know at present" (9).

Consistent clinical observations persuaded Gerson to make bold assumptions. He was convinced of the role of allergy in the healing of TB as a type of immune activity and was certain that protein deprivation enhanced that activity. "It becomes clear now that limiting the protein in the dietary therapy has many multifaceted possible effects in the sense of an unspecific sensitization, by creating a desired hyper-sensitivity to protein.

"Contrary to other allergy therapies, we do not wish to de-sensitize the TB patients; on the contrary: thus we understand that on the one hand von Noorden is right when he warns against an exaggerated protein phobia, but on the other hand we also understand that for those patients whose bodies are crammed full of protein waste products, it is precisely the creation of such a sensitivity that is needed to evoke hyperergic reactions to those waste products which have until then lain stored in the tissues for want of a sufficient body reaction.

"This train of thought allows us to understand why feverish illnesses, above all TB, lead to heightened protein collapse; why at the onset of the disease the body must have a 'negative protein balance'. It is a self-healing tendency that tries here to eliminate protein that has become unusable. The dietary therapy deliberately supports this self-healing tendency by giving protein-poor nutrition precisely at times of high fever.

"Thus the diet helps to dissolve the unusable protein in the body, and to destroy and eliminate it fast. We can see in this, just as in the formation of caverns and edemas, something logical and above all, at the start of the healing process, something vitally important.

"Contrary to the view which has gradually become popular since Graves, and which claims that 'a fever should be fed', we don't want to disturb the tubercular organism through protein input at

the very moment when it is already burdened with masses of protein waste products, which came into being through the mutually destructive battle of leukocytes against bacilli, of the tissues against the toxins. Only when these masses have been at least partially parenterally digested and eliminated, i.e. when the re-sorption processes have been set into motion, do we attempt first to produce a good protein balance through the cautious and systematic addition of protein, and later to re-acustom the healed patient to protein nourishment" (9).

However, Gerson did not adopt an immutable position based on the success of protein deprivation in early treatment. "It would be mistaken to reach conclusions from this concerning the nutrition of healthy people or, indeed, of the nation. Together with von Noorden I, too, doubt the wisdom of 'promoting low-protein nutrition as the hygienic ideal of the future.' We can see the harmful consequences of such low-protein diets among some nations, e.g. the Hindus, who have not only ceased being a dominant race ("Herrenvolk"), but who haven't even acquired greater resistance to degenerative diseases, which is even more important for our thesis.

"However important the creation of protein hypersensitivity is in the first months of the cure, let me say that in my experience severe pulmonary TB will not be cured if the patient is not given animal protein in the form of egg yolks and (not quite so important, but serving the purpose, liver, brain and sweetbreads) in certain amounts.

"It would equally be a mistake not to accustom cured TB patients to other protein factors, above all to milk; but here we must carefully draw a boundary line: the cured TB patient should be able to tolerate milk, soured cream, etc., and occasionally even a piece of beef steak or a portion of fish, precisely in order to get used thereby to insensitivity to protein which he needs in order to be able to resist the commonplace stimuli of daily life. But he should not overdo it in this respect, he should not forget that an overload of these substances might diminish in him the ability to react which he will need to protect him from re-infection for the rest of his life" 9).

Although Gerson's clinical observations led to a successful, empirically developed, periodic, temporary protein and calorie restriction, until recently there has little of value in the literature to support his views.

However, since the early 1970s Dr. Robert A. Good and colleagues have generated a considerable volume of experimental data and literature regarding diet, nutrition, and immunity. In Africa during the late 1960s and early 1970s, Good observed the drastic effects of early malnutrition on immunity in refugee children and

African native children. He noted that each component of immunity tested was defective. In his own words (15) "I was struck by how little immunologists knew about the relationship between nutrition and immunity and, along with my colleagues, embarked upon studies in an attempt to elucidate this link. It was clear that experimentation with animals would be essential. Nutritional deficiencies in humans were extremely complex, with deficiencies of vitamins, minerals, and macronutrients all occurring together. In addition, infection and protozoal infestation were regular concomitants that could influence the immune functions adversely.

"The first experiments with mice, rats, guinea pigs, and monkeys showed that antibody production is decreased quantitatively by protein or protein-calorie restriction. On the other hand, T cell-mediated immunities actually increased with protein-calorie or even amino acid restriction. Common bacterial infections, eg, streptococcal or pneumococcal infection, were enhanced in underfed animals, but heightened resistance to certain viral or fungal infections was present. We thus faced a dilemma — malnourished humans showed all kinds of immunity depression, but under laboratory conditions T cell-dependent immunities, even tumor immunities, were regularly increased by dietary deficiency."

Specific experiments by Good with guinea pigs suggest a rationale for the observed success of protein-calorie deprivation in Gerson's treatment of advanced, refractory tuberculosis patients. Good and Kramer (16) found that cell-mediated (T-cell) immunity in guinea pigs could be enhanced by dietary protein deprivation: "Chronic (4 weeks or more) moderate (4-12%) protein malnutrition frequently produces...vigorous phagocytic and T lymphocytic immunity and well maintained cell-mediated immunity responses." In order to strengthen his analysis of T-cell activity, Good studied responses of lymph node cells to sensitizing T-dependent antigen BCG (Bacillus Calmette-Guerin, an attenuated bovine mycobacterium) and the plant lectin PHA. He wrote that evidence suggested lymphocyte proliferation induced *in vitro* by a T-dependent antigen is, in fact, T-cell dependent and is probably expressed by T-cells, and reported that his findings suggested that T cells can be readily sensitized in protein-malnourished guinea pigs.

Good found these results paradoxical in comparison with observations in protein deprived humans in whom cellular immunities are usually decreased. However, as Good pointed out, protein or protein-calorie malnutrition in man is never a pure dietary influence and other deficiencies (trace metals, vitamins, even parasitosis or infection) could explain the difference.

Gerson's work with tubercular patients, however, seems to clarify this last point. Gerson's

calorie and protein restriction were administered with a carefully constructed, high vitamin and mineral diet.

In a presentation for the International Conference on Nutrition of Tokyo, 1981, held by the Foundation for Nutritional Advancement, Good observed, "There is considerable evidence which strongly supports the view that in protein or protein-calorie malnutrition syndrome under field conditions, it is the regularly concomitant zinc deficiency which accounts for the T-cell immunodeficiency which occurs in the protein-calorie malnutrition syndrome and this is the experimental work which, where supplemented vitamins and minerals including zinc are given, yielded different results."

It has long been known that tubercle bacilli phagocytized by macrophages in chronic Tb patients actually continue to live and grow within these immune cells and are disseminated throughout the lymph and other tissues by these macrophages. Sensitization transforms mononuclear phagocytes into competent destroyers of the tubercle bacilli. As Stanley Robbins remarked in his "Pathology" (17), "While it is clear that allergy materially modifies the basic character of the inflammatory response to the infection and is responsible for the development of the characteristic caseous necrosis and the tubercle, one of the most perplexing problems in the entire study of tuberculosis is the question of the relationship of the allergy to immunity. Is allergy an immunity? Are the two processes identical or closely related? Or is immunity distinct from allergy? One fact stands out as established: A first infection with tuberculosis confers increased resistance to reinfection....To the normal individual whose tissues have not previously been in contact with the tubercle bacillus, this organism is virtually innocuous. The bacteria act almost as foreign bodies and excite a minimal inflammatory response in the same fashion as would inert particulate matter of similar size. To the previously exposed individual, the tubercle bacillus acts as a violent poison. This altered reactivity is related to the development of tuberculosensitivity or allergy....Overwhelming tuberculosis or intercurrent infections may, however, produce anergy."

It seems appropriate to point out here that the prototype of cell-mediated hypersensitivity, which is closely related to cell-mediated immunity, is seen in tuberculin hypersensitivity. When a tuberculous guinea pig is injected subcutaneously with a suspension of tubercle bacilli, there is a massive inflammatory reaction at the injection site that tends to wall off the injected material and often leads to necrosis. This is known as Koch's phenomenon.

As noted above, Gerson observed in his protein-restricted patients an increasing leukocytosis with a shift to the left. Gerson's clinical results, shrinkage of cavities and lesions and frank cures of far advanced, refractory pulmonary and cutaneous tuberculosis patients, seem to justify the conclusion that the relatively pure influence of chronic protein-calorie restriction in the context of his high vitamin and mineral tuberculosis diet promoted the sensitization of T cells which in turn resulted in T cell-mediated hypersensitivity producing a systemic variant of Koch's phenomenon for clinical validity in a surprisingly large percentage of his patient population.

The actual mechanisms whereby such a sensitization might occur are not known. The early observations of Gerson and recent experiments of Good and others should provide impetus to research in the physiology of nutrition as a key modulator of immunity. Indeed, additional experiments conducted by Good and colleagues bolster clinical observations of Gerson, et al, regarding the beneficial effects of strict dietary manipulation in such diverse pathologies as cardiovascular disease (18), nephritis and nephroses (19-22), and cancer (23-25).

Much fundamental research in appropriate nutrition and therapeutic nutrition antedated World War II and was generated by European authors belittled by the German scientific community. The wealth of this information lies unattended. Rediscovery of this exhaustive clinical experimentation by contemporary nutrition researchers can possibly streamline new efforts by providing a context, a ground level from which to build. Certainly the discerning scientist will find in those earlier researches much viable grist for the mill.

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EDITORIAL

It is impossible to express the deep sorrow we feel at the unnecessary death of our friend and colleague, Dr. Arturo Ortuno. Art collapsed suddenly at his favorite racquetball court with a massive coronary. An autopsy revealed severely advanced atherosclerosis; his arteries were blocked by the by-products of a battle between his body's immune system and the dietary fat in his bloodstream. After strenuous exercise his heart had literally starved to death due to lack of blood supply.

Dr. Art was just forty years old, with a wife and children of seven and ten. To all outward appearances, the doctor was a healthy man, athletic, continually active, intelligent and capable.

How could this tragedy have occurred, especially to a man who could treat and cure others of heart and coronary artery disease?

The answer is painfully simple and it falls into the category of truths realized in hindsight.

Just as for many years smoking was accepted, and the connections between cigarettes and heart or lung disease were obscured by assurances from the tobacco companies that cigarettes were safe and fashionable, dietary fats and sodium are very commonly accepted. In spite of the known dangers these materials represent, there are many reports which falsely reassure us that only a relative few persons are susceptible, leaving the impression that most of us are safe to use them. In fact, the mythology exists that organized medicine can somehow identify those persons at risk and let them know to "lay off the salt and fat".

Dr. Art, a sensitive, discriminating young physician with a pioneering spirit which led him

into experimental medicine and therapeutic nutrition was the victim of a pervasive social mind set which holds that those who are young and healthy can tolerate more dietary challenges. Undoubtedly, Art was storing his medical knowledge of healing through diet for a time when he felt he might really need it. Dr. Art was fortunate in his youth to have no apparent medical problems (unlike Dr. Max Gerson who suffered migraines and allergies) and therefore made the assumption that he was perfectly healthy. Art did not know how seriously ill he was. Atherosclerosis, coronary artery disease, a silent killer, crept in while the young physician remained unaware.

In spite of the fact that he practiced some dietary moderation, his diet continued to be high fat and salted. He preferred the foods of his youth.

We at the Gerson Institute who have lived the lives we encourage others to live, who eat the foods we praise and avoid those we condemn, those of us who practice what we preach feel the pain of loss for this brave medical pioneer, but even more we feel the sting of awareness that it need not have been.

Dietary fat and sodium are addictive. Persons who eat large amounts of salt and fat often cannot help themselves. They feel empty unless they eat salty, fatty foods. They go through withdrawal symptoms, toxic changes, when they try to stop (diet to lose weight). This addiction is a disease and it is serious - as serious as tobacco, alcohol, or drug addiction. And those of us who are clear, who are aware, although we are not perfect, and although we may not be diplomats, must try to make an impression on the addict and on the family of the addict.

Some fat and salt addicts will live to old age. But fifty percent of the population of the U.S. is at increased risk for coronary disease. And fifty percent of all deaths occurring daily, even in young people, are due to cardiovascular disease. There is almost no one in the U.S. who has not been touched by the death of a heart patient.

Dietary fats invade the sponge-like inner walls (intimae) of arteries. The immune system sends out phagocytes (large debris-eating white blood cells) to clear away this irritant. But fat is too much for phagocytes, cholesterol crystals rupture their "stomachs" spilling digestive enzymes into the intimae of arteries and scarring them. More phagocytes are called out to clear the battle field, and many of them face the same fate, causing even more damage to arteries. This war between the immune system and dietary fat results in the formation of plaque which eventually completely blocks arteries in advanced atherosclerosis.

How many of our readers have seen the microscopic effect of a high fat meal on the bloodstream itself? Ross Horne, Australian author of "The Health Revolution" a strong proponent of Nathan Pritikin and the work of Dr. Max Gerson, published the following dark field microscopic

photos to illustrate one profoundly negative effect of dietary fats. As red blood cells (fig.1) are clumped into rouleaux (fig. 2) formation they lose their ability to fold and squeeze one at a time through capillaries. Even worse, as these rouleaux formations form log jams they cannot pass the narrow openings of athero-sclerotic arteries. Therefore, they cannot carry oxygen to the muscle of the heart.

It is our obligation, not our privilege, to say to our family and our friends who persist in dangerous dietary habits, "You must know that you may be killing yourself".

Would we do any less for a loved one who suffered from alcoholism? from heroin addiction? from cocaine addiction? There was a time when advocates of appropriate nutrition were regarded as fanatics, but that is no longer the case. When we see someone potentially committing suicide, we must not look the other way and mutter under our breath. We must communicate. Suicide is not an individual right. And besides, most people are truly not aware that the food they eat could be killing them. The point to recall is that we do not seek to cause others to conform to our lifestyle, but rather we seek to give them information and awareness of a very real danger.

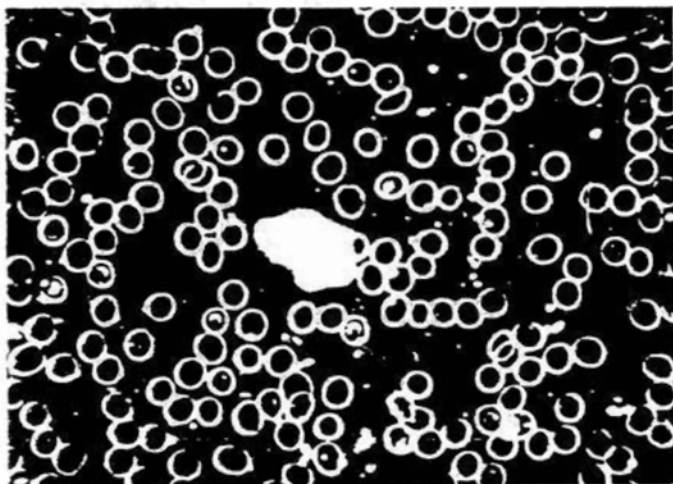


Figure 1

Dark field high power view of normal non-aggregation red blood cells six hours after a low-fat meal.

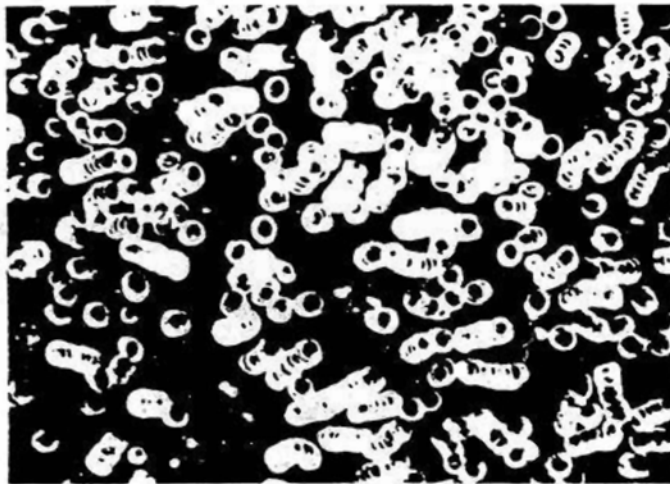


Figure 2

Example of red blood cell aggregation and rouleaux formation 6 hours after a high-fat meal."

FOOD FATS ARE A PRIMARY CAUSE OF SEVERE OXYGEN DEFICIENCY AND THEREFORE OF HEART ATTACKS, CANCER, AND OTHER DEGENERATIVE DISEASES.

— Norman Fritz

The two microscope photos in the preceding editorial show healthy red blood cells (fig. 1), and diseased red blood cells (fig. 2) such as those that commonly occur in most patients who die of the major diseases.

Normal, healthy red blood cells are thin disks which carry oxygen from the lungs into the blood capillaries for delivery to body cells. Diameters of red blood cells are larger than diameters of fine capillaries. Therefore, red

blood cells must change form (literally fold) in order to pass through the capillaries.

The average consumption of fat by Americans accounts for 42% of their daily calorie intake. Some consume upwards of 60% of their total daily calories in fat!

Within six hours after eating a high fat meal many of these "average" people will have their red blood cells coated with a thin layer of fat particles. This fat layer reduces oxygen absorption by red cells. "Sticky", fat-coated red cells clump together like stacks of coins (fig. 2). Clumping further blocks oxygen absorption. Clumped red cells make blood "thick" which leads to the use of blood "thinners" which further damage the body.

More serious oxygen blockage occurs because clumped red cells cannot deform to pass through fine capillaries. Therefore, most cells in the bodies of persons consuming high fat diets are continuously starved for oxygen. Even more serious oxygen deficiency occurs when arteriosclerosis is present. Arteriosclerosis is likely in persons who consume high fat diets with sodium chloride and without exercise. Then heart attacks and strokes (oxygen starvation of the heart and brain) can occur. Cancer cannot occur unless there is oxygen deficiency in body tissues (per Otto Warburg, winner of two Nobel prizes). Arthritis, diabetes, and most other diseases are also oxygen deficiency diseases.

Within 4 days after beginning a strict low fat diet, a patient's red cells will be unclumped,

free of their fat coating, and able to receive much more oxygen. Patients then have more energy and feel better.

The Nathan Pritikin Program uses this increased energy to begin exercising heart patients. Some triple bypass candidates have later been able to run 26 mile marathons by persisting in Pritikin's low fat and exercise program.

The Gerson Therapy uses a very low fat, low protein diet from 20 pounds of organic food daily along with comprehensive detoxification and numerous supplements to create a very intensive metabolic program.

About 4 days after patients begin the Gerson Therapy, the increased oxygen and energy levels, decreased toxin levels, better nutrition and improved metabolism usually allow a healing reaction to begin. This healing reaction is a strong indication of a reactivated immune system becoming able to eliminate foreign substances and waste materials. Thus cancer patients often experience spectacular tumor reductions during healing reactions. In a few cases tumors have even completely disappeared in 4 days. Most high and low blood pressure patients can have normal blood pressures in 4 days.

(The above photographs and much of the information in this article are from "The Health Revolution" by Ross Horne. It is one of the most understandable and informative health books. Available from the Gerson Institute, \$11.45 postpaid. California residents add \$0.60 tax.)

GERSON INSTITUTE SPEAKING ENGAGEMENTS UPDATE

NORMAN PRITZ Executive Vice President of the Gerson Institute will speak at the GRAND CANYON REGIONAL NEP CONVENTION at the PHOENIX HOTEL (Central and Adams) PHOENIX, AZ, OCTOBER 26-27, 1985.

CHARLOTTE GERSON, President of the Gerson Institute will speak at the WORLD HEALTH EXPO at the ANAHEIM HILTON HOTEL, ROOM #2 (777 Convention Way) ANAHEIM, CALIFORNIA, SEPTEMBER 7, 1985 AT 4:45PM.

*****CANCELLATION***** The NEP CONVENTION scheduled for SEPTEMBER 21-22, 1985 in WORCESTER, MASSACHUSETTS has been CANCELLED.

*****ERRATUM***** The SOUTHEAST REGIONAL NEP CONVENTION will take place at the DIPLOMAT (3515 S. Ocean Dr.) in HOLLYWOOD, FLORIDA, NOVEMBER 23-34, 1985. We had erroneously reported that this convention was in California.

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