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Thurs. 9AM – 8PM
Fri. 8AM – 8PM
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DMG (B-15)

Such a chemical sounding name hardly seems to have any relationship to food and nutrition. NN-DIMETHYLGLYCINE or the Abbreviation DMG is neither a drug nor a food additive. However, it is a naturally occurring food substance. Not really a vitamin but DMG can be classified as a biochemical metabolite. The unofficial name for this formula is VITAMIN B15. B15 is found in rice bran, brewers yeast, and liver.

Vitamin B15 may not mean much to you but it represents a substance which may someday replace the sodium in your salt shaker and extend your lease on life. Because it is a substance which has been shown to alleviate hypoxia (lack of oxygen in the cell) it has already been effectively used in cases of coronary artery insuf-ficiency; it has been shown to relieve symptoms of angina. cyanosis and asthma. Good results have been obtained in the treatment of rheumatism, rheumatic heart disease, acute and chronic cases of alcoholism. It offers extensive opportunities for the treatment and early prevention of atherosclerosis and consequently of premature aging. It has been dramatically effective in eliminating the sentence of "amputation" in cases of gangrene.

Where have all these cures taken place? Not in our country where B15 was first discovered, but in Russia where in 1967 B15 was heralded as the "Physician's New Weapon." There is much excitement not only in Russia but in many European countries whose scientists have contributed a substantial literature in French. Ger -man, Italian, Japanese, Portuguese, Russian and Spanish about the tremendous health and therapeutic values inherent in pangamaic acid (vitamin B15).

If you think of B15 as `instant oxygen' you will understand its life-saving potential. The direct action of B15, a Russian scientific team explains. is to stimulate the hypophysis of the supra-adrenal glands. The hypophysis is a kind of bump located on the glands above the kidneys which have an important detoxifying function. By stimulating this activity, B15 retards the accumulation of toxic waste that results from an insufficien-cy of oxygen. Thus the hypoxia does less damage and a longer period of time remains for normal oxygen metabolism to be re-established without damage to the organism.

In earlier studies the Russians established (Reports of the Academy of Sciences, 144, 3, 1962) that hypoxia — insufficient supply of oxygen to living tissue, particularly the heart muscle - is significantly reduced by administration of vitamin B15. The Russian report highlighted its value in heart operations and demonstrated that it sometimes spells the difference bet-ween life and death during such surgery.

Hypoxia occurs not only during surgery — but in many run-of-the-mill circumstances. Carbon monoxide poisoning, for instance, almost a chronic condition in the polluted air of large cities, will induce hypoxia, which is insufficient oxygen in the cell. Certain types of

anemia, because there are not enough erythrocytes to carry oxygen, cause oxygen deficiency whenever there is an unusual physical effort, which may account for so many heart attacks among men shoveling snow. Ex-cessive smoking and failure or weakness of the respiratory system results in hypoxia, and according to some authorities, the distress suffered by millions of victims of angina pectoris is due to lack of oxygen.

The value of a food substance that permits the body to function well on reduced oxygen intake is tremendous. To be well stocked with this vitamin could mean the difference between life and death, between escaping a heart attack or sudden death.

The chief merit of B15 is its ability to eliminate the phenomena of hypoxia and this is a very serious key to man's health, Professor Yakow Shpirt told a scientific conference held at the Institute of Biochemistry of the U.S.S.R. in 1964 and reported in the Russian publication Culture and Life. "Atherosclerosis and premature aging precede one another or occur simultaneously." explained Dr. Shpirt, who has devoted 20 years to the study of the mechanism and prevention of atherosclerosis and premature aging. "It follows that their prevention and treatment may be effected by the same means. And these means are elimination of hypoxia which impairs the nutrition of the cells in the organism."

The tissues of the human organism have a great number of capillaries, their total length amounting to dozens of kilometers. And yet each millimeter of this long route must carry oxygen and nutrient substances to the cells. The more permeable the capillary walls, the more oxygen may be delivered to the cells, in which case hypoxia will retreat.

The capacity of vitamin B15 to counteract the phenomena of tissue hypoxia, to improve the oxidative processes by activation of respirator enzymes and to increase the lipolytic capacity of the liver served as the basis for the use of the drug in the treatment of patients suffering from atherosclerosis of various vascular regions.

B15 is effective in transmethylation, which is the transfer of a methyl group from one compound to another in metabolism. B15 is classified as a lipotrophic agent along with Choline, TMG, and Methionine. B15 has been clinically administered in the following conditions with some excellent results. Cirrhosis, fatty

liver, liver damage, diabetes mellitus, trigeminol neuralgia, conditions of the heart and circulation, stiff legs, low or high blood pressure.

B15 is the newest and most potent member of the transmethylation agents. Whereas choline has 3 labile methyl groups, B15 has 8, making B15 almost three times as potent as choline.

What does B15 do exactly? Principally, it increases the supply of oxygen in the blood and its uptake into the body's tissues. From this simple transaction. many medical marvels follow. The cells need oxygen to func-tion normally; hypoxia, or lack of cellular oxygen, is the beginning of bad health and perhaps death. How B15 performs is not clear, but it does have the added ability to detoxify oxygen-consuming pollutants in the blood.

The Russians expecialiy praise B15's miraculous effects on heart patients. By pumping more oxygen into heart tissue starved by narrow arteries, B15 seems to relieve the symptoms of cardiovascular conditions. Heavy breathing and pain tend to disappear; the discom-fort of angina is also remedied.

Further Russian research indicates that B15 nor-malizes cholesterol levels in the blood and keeps the vessels free of other fatty deposits leading to hardening of the arteries.

Although B15 is regarded seriously abroad (in France, Germany, Yugoslavia, Japan, Spain, as well as in the USSR), it is mainly a feel-good pill in the land of its' origin.

Dr. Robert Atkins recommends B15 to the weary in Dr. Atkins' Superenergy Diet. "I use it primarily as a fatigue fighter," he says. "When none of the other vitamins I prescribe works, B15 can turn a patient's energy picture around rather surprisingly. I rate it with the upper echelon of nutritional agents — on a par with B6, folic acid, and para-aminobenzoic." He depends on a daily pick-me-up himself. "If I forget to take it, I feel it. If I'm getting tired during the day and I have a meeting at night, I take three B15s and I'm no longer tired."

Soviet athletes eat B15 like candy, and Russian ex-periments on swimming rats and human rowers showed a decrease in the buildup of lactic acid, the cause of muscle fatigue. Thus the appeal to long-distance run-ners like Dick Gregory. "We all take B15." says Gary Null, WMCA's nutritionist in residence and off-mike marathoner.

The aging pro can grow young on B15, according to Virginia biochemist Dr. Richard Passwater. The in-creased oxygen not only provides a second wind but another property of the vitamin serves to retain muscle glycogen, or reserve fuel. Not for nothing does Dr. Passwater coach members of the Washington Redskins' "over-the-hill gang" in B15 formations.

For Richard Burns (a pseudonym for a roving media consultant), B15 is a tonic stronger than Lourdes water. A few years ago, he was a physical wreck. After surviv-ing several terminal diagnoses, he checked into Princeton's Brain Bio Center, a high-powered diagnostic clinic specializing in the treatment of biochemical disorders. Center director Dr. Carl C. Pfeiffer, a pioneer in megavitamin therapy, put Burns onto B15. Life sud-denly became worth living again. "As soon as I took B15," Burns insists, "I could do eight hours of yoga while still on chemotherapy for a skin condition. Prior to that I spent most of my day in bed. On B15, I can now run farther, swim longer, and do more push-ups than I could before."

An improved formula of B15 is highly recommended and is the product of choice. The following formula meets the strict requirement.

NN Dimethyl Glycine…….100 mg.

Calcium Gluconate……30.7 mg.

Glycine ……..25 mg.

Potassium Aspartate……125 mg.

Magnesium Aspartate…….125 mg.

Trimethylglycine (TMG)……100 mg.

The Potassium and Magnesium Aspartate support the function of B15 because of its effect on the heart muscle. Depletion of potassium and magnesium in the heart muscle cells are responsible of arrhythmias. heart failure, and death of the heart muscle cell according to Wilhelm Raab, Emeritus Professor of Experimental Medicine at the University of Vermont.

TMG improves the body's ability to absorb oxygen and increases physical stamina and energy. TMG is rapidly converted to DMG (Dimethylglycine) in the liver. TMG metabolism also helps detoxify homocysteine. a by-product of Methionine metabolism that is a powerful oxidant and free radical generator which is thought to be a factor in developing atherosclerosis.

Nutritionally, TMG is closely related to Choline and the Amino Acid Methionine. All three of these com-pounds are a source of labile methyl groups which participate in a number of transmethylation reactions.

One of the more important transmethylation reactions in which TMG participates is the regeneration of methionine from homocysteine. The role of TMG as a methyl donor is an important aspect in the regulation of methionine metabolism.

Other important transmethylation reactions involves the synthesis of epinephrine (adrenalin), melatonin, creatine, phosphatidyl choline and N-methylnicotinamide to mention a few.

Physiologically, TMG, Choline and Methionine are each capable of preventing or alleviating the accumula-tion of fat in liver tissue. This lipotropic action of TMG and Methionine is apparently attributed to the ability of each to donate methyl groups for the synthesis of Choline. Choline can then participate in the formation of phospholipids which have greater solubility and mobility in body fluids than does neutral fat.