A UNIFIED CONCPT OF DISEASE

Vitamins

Eminent scientists, such as Albert Einstein, have attempted to relate the energies of magnetism, gravity and elect--ricity by a unified field theory based on time, mass and velocity. Part of the reson for this is to provide the world with an inexhaustible supply of electrical energy derived from one or both of these other energies

Similarily, by defining two well known and another far less well defined factor concerning nutrition, I have attempted to show that much disease has a common basis. Once this basis is verified the treatment and prevention of much disease will be greatly facil--itated. These three factors are chronic vitamin D and calcium deficiency and the body's potential to adapt to the stress of bic--chemical alteration imposed by such deficiency.

It has been stated that the primitive living and vegetable cells were evolved independantly but no opinion has been expressed as to which cell was the first to be evolved and what interval of time did lapse between this first and second evolution. Clinical observations made during years of practice, that have focussed my attention on the utilization of energy by the cell and otherphysio--logical processes, have resulted in the opinion that the primitive living cell was the first to evolve during the primordial night and that it predated the evolution of the primitive vegetable cell, that occurred during the primordial dawn and day, by many millions of years.

The physical thermal and inorganic chemical energy which the primitive living cell extracted from its environment was utilized for a single function of growth. The cell grew in size until it burst at which time portions of its wall invaginated to form daughter cells and so the cycle continued. Several billions of years ago, as the earth cooled, to permit the condensation and precipitation of the water vapor and volcanic dust of the earth's dense atmosphere, the first rays of sunshine reached the earth and the primordial dawn was born. Sometime after this date this solar energy provided reason for the evolution of the primitive vegetable cell the chlorophyl

of which could utilize this energy to bind together atoms of carbon, oxygen and hydrogen derived from carbon dioxide and water to form the long carbon chained molecules of glucose sucrose and cellulose, liberating oxygen. These compouds and oxygen, which was liberated into the atmosphere, became solid and gaseous stores of this energy.

As this cell became more complex it gave rise to a vitamin D substance that eventually ended up as ergosterol a compound pres--ently found in ergot or wheat rust. This compound not only absorb--ed the vibrant energy of the ultra violet radiation of sunlight in the range of 3,800 Angstroms, but likewise acted as a storage and transport agent for this energy much as glucose served to store and transport the vibrant solar energy of the visible spectrum. Once this vitamin D compound met or was attracted to an atom of calcium or to a molecule containing calcium this energy stripped of or extracted one or two electrons from the atom of calcium to leave it with a single or double charge, that is to leave it chemically and so biologically active.

No other radiant energy of sunlight from the very long radio waves to the very short X rays, including the separate colours of the visible spectrum have this potential of altering the chemical structure of a compound, that is to produce chemical change that will have such pronounced effect on the human or other mammalian body. For example while the production of melanin to produce tanning is such a chemical and photosynthetic effect, this reaction does not have a profound effect on the total chemical state of the body. In other example infa-red or X radiation of sunlight do not cause similar chemical alteration of an element such as zinc or iron or of a protein or phospholipid molecule. I thus trust that I have amply emph--asized that the chemical change of calcium produced by sunlight is not only unique to this element but that this change is very closely related to the chemical change that resulted in the prod--uction of glucose.

As the primordial dawn gave way to the early primordial day several billions of years ago the living cell not only absorbed the solar bonded energy products of the vegetable cell, namely glucose and vegetable vitamin D but also oxygen of the increasing oxygen content of its environment. Eventually also the living cell synthesized its own vitamin D substance, a fat seven-dehydrocholest--erol. For these reasons with each Summer season the living cell absorbed or synthesized a high concentration of bonded energy and vitamin D substances ionizing calcium. and with each Winter season the cell experienced a deficiency of these substances. Survival of the cell, predicating the direction of evolution, resulted in the following effects of ionic calcium on these solar bonded energy compounds. To enhance the survival of the cell during periods when their synthesis was limited, ionic calcium served tp prevent the break down of these compounds immediately after they were formed, that is to preserve them for periods of deprivation. Also during these periods of deprivation, when survival of the cell and/or develpping mammalian organism was dependant on extraction of the last vestige of stored solar energy from glucose etc. a decreased concentration of ionized calcium became related to a facilitation of the release of this energy and of its intra-cellular transport.

. As calcium ionized by vitamin D became related to the preserv--ation and release of solar bonded energy it became related to the factor most basic to the progress of each separate function of each different variety of cell, namely energy. This relationship, produced by or which was the result of two physiochemical reactions and the evolutionary process placed ionic calcium in a most superior pos--ition in the hieracy of minerals concerned with the physiology of the cell . Because of this great importance, the same evolutionary process directed change in the direction that would best ensure survival .As the complex mammalian and human structures evolved it developed adaptive mechanisms that would protect the organism against severe deprivation of this ionized element.

As one may suspect, if increased acidity of body fluids can serve as a substitute for vitamin D by enhancing the ionization of calcium compounds , then it is likely that such mechanisms would be developed within systems such as the respiratory and digest--ive systems whose prime or most obvious function did concern the concentration of acidic or basic chemicals within air or body fluids. Similarily such adaption by increased acidity may be develpped within metabolic processes, such as the metabolism of carbohydrates which may be directed to the production of organic acids. Equally obviously such adaption versus ionic calcium deficiency may arise or be devel--oped within the skeleton which constitutes a major store of this mineral. Less obvious sites of such adaptive function may be the arterial vascular system involving hydrostatic pressure and flow within this system, and the central nervous system exerting auto--nomic control on all of these previously mentioned adaptive mech--anisms.

The design of these mechanisms was to provide protection against deficiency of ionic calcium that was seasonal and did not last longer than a six month period. The extension of this period into years by the forced or voluntary non exposure to sunshine plus an adoid--ance or restriction of mineral and vitamin D containing foods may lead to the exhaustion plus deterioration of these mechanisms. The net result of such influences on these mechanisms is that they may be disrupted to give rise to the pyssical changes and functional complaints whic constitute what I define as a "mal-adaptive disease".

This disruption of these adaptive mechanisms may not only result from their exhaustion that arises for reason of continual autonomic nervous stimulation which is the consequence of persisting deficiency but also, or more particularily, for reason of the direct effect which the same chronic deficiency does have on the secretory, nerve and smooth muscle tissue that constitee integral parts of the adapting organ.

The existance of such direct effects of chronic deficiency , that have the capability of disrupting the adaptive function of an organ is evidenced in the symptoms and physical changes of a syndrome that is found associated with a lifestyle,including diet, that that can give rise to a cellular deficiency of ionic calcium. The symptoms and physical changes of this syndrome,which largely encompass the excessive fonction or spasm of smooth muscle of int--ernal organs and of the skeletal muscle of the body, and which in--clude alterations in secretory function of mucous membrane and an alteration of the acid-base balance of body fluids in the direction of acidityindicate that this direct effect indeed may play a vital part in the breaking down of the over pressured adaptive mechanism of an organ.

Not only may this direct effect be responsible for the prod--uction of a specific deficiency syndrome and the "bringing to the surface" of mal-adaptive disease but particularily in the instance of excessive activity or spasm of muscle it may give rise to what are defined as the direct and non adapting calcium deficiency diseases. These diseases,examples of which are severe skeletal muscle myositis, migraine, dysmennorhea and eneuresis , therefore represent exaggerates e expression of one of the symptoms of the deficiency syndrome.

Just as the deficiency syndrome may be found in relation with various of the indirect and adaptive calcium deficiency diseases, so it may be found to co-exist with these examples of direct and non adapting calcium deficiency diseases.

Possibly the most important aspect of the above deficiency syndrome is that when it is found in existance with the responsible deficiency state but in the absence of disease it constitutes or denotes the disease prone state in reference to these two types of direct and indirect calcium deficiency disease.

The main clinical features of this syndrome are listed in the following table

"THE CLINICAL STIGMA OF THE A & D VITAMIN AND MINERAL DEFICIENCY MALADAPTIVE SYNDROME"

The individual who complains of or shows a representative number of the physical findings of this syndrome is deficient. This deficiency is present either singly, for reason of dietary deficiency, deficiency of sun on skin or for reason of malabsorption of the nutrient factors. Alternatively the deficiency state may be a combination of these factors. Even if the patient is not demonstrating overt disease he or she must be benefitting from the asymptomatic defence mechanisms of an adapting tissue or organ, adapting to a chronic deficient state.

Naturally there is danger that the adapting device of either tissue or organ may be "pushed too far" by relentless chronic deficiency or by the added insult of an allergic reaction. At this point the tissue or organ becomes functionally and then physically deranged in a functional and reversible, or later a physical and irreversible disease.

It is emphasized that the occurrence of only two or three of the most important clinical findings of the syndrome such as tendon hyper reflexia, a coated tongue and constipation constitutes presence of this syndrome.

This syndrome therefore denotes the disease prone state to disease arising for reason of chronic deficiency of these particular nutritional factors. Other such syndromes must exist for other nutritional factors, and await elucidation.

SMOOTH MUSCLE

G.U.	Eneuresis and/or dysmennorhea	
G.I.T.	Spastic abdominal pains*, Gas and bloating*. Constipation* Alternating const. and diarrhoea	
C.V.S.	Palpitation	
OCULAR	Blurring of vision	

CENTRAL NERVOUS SYSTEM	Paraesthesiae of extremeties Temporal headaches* Postural dizziness* Chronic anxiety Insomnia	Increased tendon reflexes* Anxious and apprehensive

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COVERINGS AND LININGS

SKIN AND NAILS	Dry @ pruritic	Dry
	Break easily Layer*	Broken Chewed
NOSE	Conjested	Conjested
BRONCHIAL	Cough, Expectoration	Cough, Expectoration
TONGUE		Coated*

ARTICULAR	Peri articular pain* Migratory joint pain	Limitation due to fixation or pain.