

# THE WORSENING OF IONIC CALCIUM DEFICIENCY THROUGH

## THE PROCESS OF "BIOCHEMICAL INHERITANCE".

The attached diagrams are designed to illustrate the maintenance of a normal ionic calcium concentration in four successive generations of mothers experiencing an optimum lifestyle. They also illustrate the occurrence and worsening of ionic calcium deficiency in four generations of women all of whom experience similar defects of lifestyle. The most serious of these defects concerns diet.

Ionic calcium deficiency, attained by a woman for reason of her defective lifestyle, and may be donated as a biochemical defect to her embryonic child and augmented in this child as it matures within her womb. This is "biochemical inheritance". This deficiency may be further enhanced in the new born child as it is fed a deficient diet to hazard the occurrence, in it, of severe symptoms and disease.

Ionic calcium deficiency of all body tissues may be heightened by this process in successive generations until certain symptoms and physical changes are created and autonomic adaptive function compensating for this deficiency is excited. Ultimately this function may be broken down to give rise to "mal-adaptive" disease. This disease may overshadow but will not eliminate the symptoms of deficiency.

Despite severe defects of lifestyle the critical level of ionic calcium deficiency required for the excitation of symptoms and disease is rarely attained by an adult who began life as a perfectly nourished and healthy child. If these do occur in such a first generation deficient adult they usually only occur late in life. These symptoms and disease however will invariably occur with increasing frequency in later generations if they experience the same deficiencies.

The critical level of deficiency, and so the occurrence of symptoms and disease, is reached more frequently in the later children of a deficient mother than in her first children. The attainment of this level in a particular child is naturally dependant on the severity of the deficiency experienced by the mother during this pregnancy but is also dependant on the aggravation of the deficiency state by other factors such as illness, overwork, and mental stress.

The presence of defects of lifestyle and symptoms and physical changes of the deficiency syndrome, in the absence of disease, represents the disease prone state to the ionic calcium deficiency diseases. These diseases need not necessarily occur and may not occur in such an individual though they may experience these symptoms for their lifetime. If this person is a deficient mother it is very likely that her children will bear the brunt of her chronic deficiency by suffering an increased incidence of symptoms and disease.

## LEGEND

(I), (II), (III) and (IV)- Represents four generations of women.

"a", "b", and "c":- Represent three children of each generation of women. The third is a female who becomes a mother.

"X" and "...":- represents natural death or continuing life.

"A":- represents normal ionic calcium balance maintained in successive generations of women by their pursuit of optimal optimum lifestyle habits. Their salivary pH is 7.5 to 7.0.

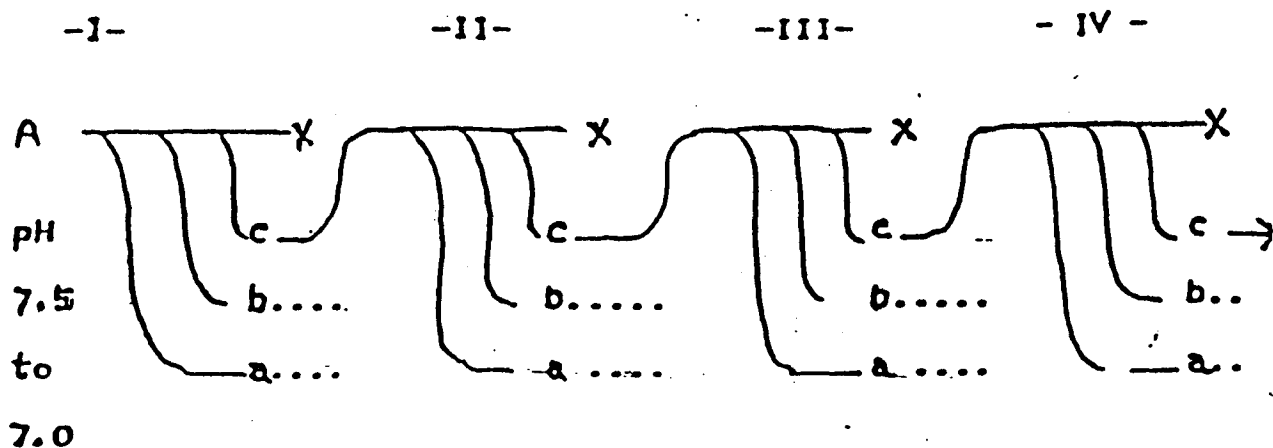
"B":- Represents increasing ionic calcium deficiency incurred in another four successive generations of women by their pursuit of defects of lifestyle. Their salivary pH is in the acid range of 6.5 to 4.5.

"s" and "p":- Represent symptoms and physical changes of the ionic calcium deficiency syndrome such as chronic fatigue, muscle pains and cramps, headaches, anxiety, indigestion, constipation, etc.

"D" :- Represents the occurrence of ionic calcium deficiency disease such as arthritis, hypertension, asthma, cancer, and obesity etc. ( obesity instead may not represent mal-adaptive disease, "D", but an accentuated symptom "s").

### FOUR SUCCESSIVE NON DEFICIENT GENERATIONS

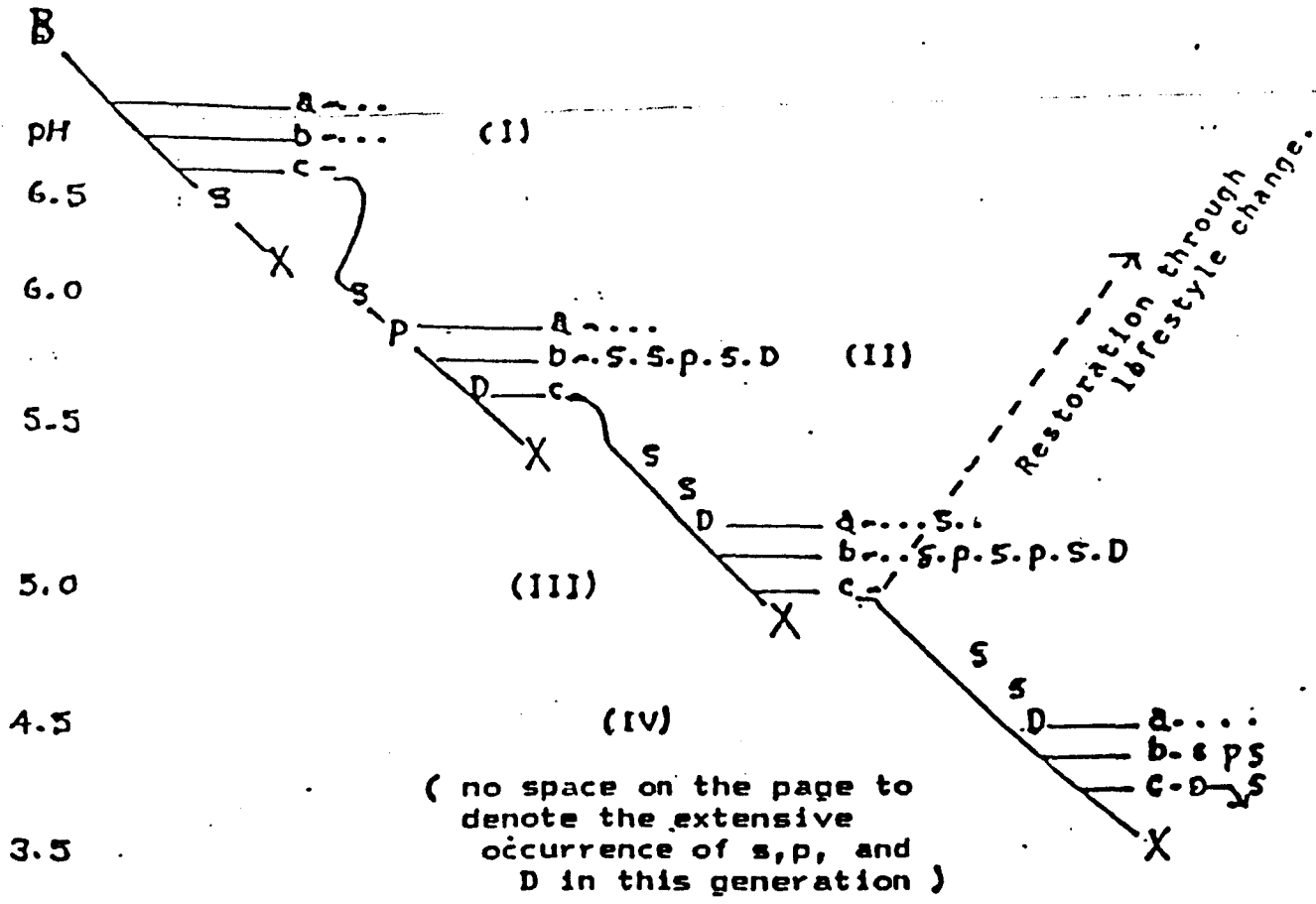
( The maintenance of physical biochemical mechanisms)



Please note: The total absence of ionic calcium symptoms and disease as the pH of saliva is maintained at slightly alkaline or neutral levels.

### FOUR SUCCESSIVE DEFICIENT GENERATIONS

( The decline of physical biochemical mechanisms 0



Please note:

For emphasis of the influence of deficiency the first children "a" are shown to not experience symptoms or disease.

Increasing incidence of ionic calcium deficiency symptoms and disease in 2nd, 3rd, and later generations as the pH of saliva becomes more acidic. This indicates increasing acidic adaptive potential attempting biochemical compensation for the enforced ionic calcium deficiency.

This type of "biochemical inheritance" is labile, that is it may be eliminated from the society at any time by correction of the defects of lifestyle which gave rise to it.

biochemical mechanism inherited from a perfectly healthy mother appear veritably indestructible. However if the female second generation child grows to adult life experiencing severe deficiency, becomes pregnant, continues in a defective lifestyle during pregnancy, and moreover provides her child ( a grand child of the non deficient woman) with the same deficient diet it is very likely that as a babe or in childhood or adolescence this third generation child or some of its siblings will develop symptoms and disease ~~attributable to chronic ionic calcium deficiency.~~ This is particularly true of the later children of the deficient mother at whose time of birth the mother was more severely deficient and may have begun to evidence the first signs of deficiency. As a rule, however, despite the appearance of a plethora of symptoms and disease among the grand children the mother, who was the daughter of the non deficient woman and who by that time had experienced chronic deficiency for her lifetime including the life span of her diseased children, will experience only minor expression of these symptoms or disease.

If the female children of this third generation duplicates the same errors of lifestyle, including that of her pregnancy and infant feeding, then it is almost inevitable that her children ( the great grand children of the non deficient woman), particularly the second or third sibling will develop serious nervous and physical symptom and disease expression of ionic calcium deficiency early in life.

This pattern of the "symptoms of civilization", known also as the symptoms of the "Vitamin A and D deficiency Syndrome", and of the "diseases of civilization", known also as "The Direct and Indirect Ionic Calcium Deficiency Diseases", is well evidenced in alcoholic families. In these families the predominant symptom of deficiency is chronic anxiety-tension which I have defined as the "biochemical anxiety of chronic deficiency". This physical-chemical factor, and the attendant psychological factor of having been raised in an environment of anxiety-tension, are likely responsible for the reliance of a large percentage of the members of such families on alcohol and other drugs.

That the responsible biochemical factor is labile and so may be eradicated by correction of the defects in lifestyle, is frequently evidenced in the contrast of mental and physical good health provided by the occasional member of such alcoholic families who, on "leaving the fold" chose to pursue a different and improved lifestyle.

Labile "biochemical inheritance" may be as important a factor in the creation of disease as indelible dominant or recessive inheritance. Indeed biochemical inheritance may represent what is currently defined as "loose genetic inheritance".

SUMMARY OR RECAPITULATION OF:

" THE INFLUENCE OF INHERITANCE ON THE DEVELOPMENT OF DISEASE"

OR

"BIOCHEMICAL INHERITANCE"

PLEASE NOTE: The understanding of the concept of "biochemical inheritance" is as vital to the understanding of the development of ionic calcium deficiency symptoms and disease as is the understanding of the concept of "mal-adaption".

Defects of lifestyle, including the eating of a diet which is deficient of alkaline minerals and of vitamin D, and the pursuit of totally indoor habits, will induce chronic deficiency of calcium and of the D vitamins required for the ionization of this calcium within the cells.

Symptoms and disease may arise due to one or the combined "direct" and "indirect" effects which ionic calcium deficiency has on tissues and organs of the body. These symptoms and diseases, however, will not arise for reason of the influence of these defects of lifestyle during the lifetime of a single individual who was born of a perfectly healthy and non deficient mother. The biochemical mechanisms acquired from such a mother are practically indestructible during a single lifetime, no matter what defects of lifestyle the individual may pursue. Instead the deficient state, and associated biochemical changes principally of adaptive hyperacidity that are responsible for disease, will only acquire an intensity sufficient to excite symptoms and disease when they have been accentuated or compounded, over two or more generations, through a process which I define as "biochemical inheritance".

The existence of such a process was predicated on my clinical observations that chronic asthmatic children, whose disease was readily relieved by therapy with vitamin D and calcium containing supplements, were born of mothers who lived a life style that was responsible for deficiency of these two nutritional and living habit factors. Though these mothers usually revealed none or little of the ionic calcium deficient symptoms or diseases they invariably showed some of the physical stigma of this deficiency state.

Therefore second generation children, born of a perfectly nourished and healthy mother, will not experience either symptoms or disease even if they pursue serious lifestyle defects responsible for ionic calcium deficiency for their lifetime. As previously stated, cellular

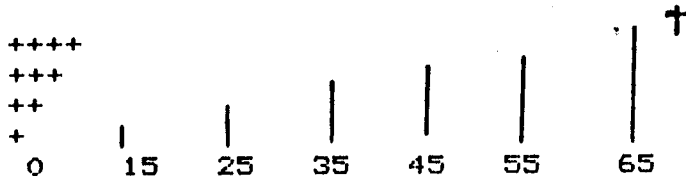
DIAGRAMS INDICATING THE OVERALL EFFECTS ON THE  
GENERAL POPULATION OF CHRONIC DEFICIENCY OF THE  
D VITAMINS AND CALCIUM.

i) OF ADDED QUALITY OF LIFE, AS EXPRESSED IN A MINIMUM OF COMPLAINTS, AND

ii) OF ADDED YEARS OF LIFE WHICH IS THE CONSEQUENCE OF NOT EXPERIENCING THE "MAL-ADAPTIVE" DISEASES, INCLUDING CANCER.

DIAGRAM #1: REGARDING COMPLAINTS

a) The incidence of complaints in the up to 65 year of age deficient population which arise because of the "energy starvation" effect which the deficiencies have on muscle, nerve, support, secretory, and other tissues



QUALITY OF LIFE

b) The incidence of those complaints in the non deficient population

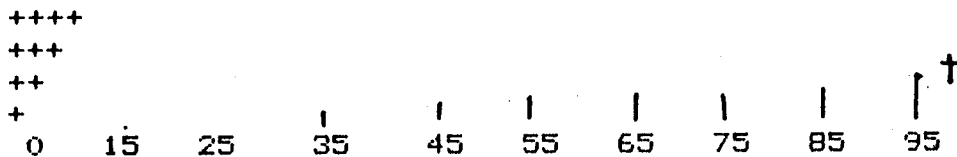
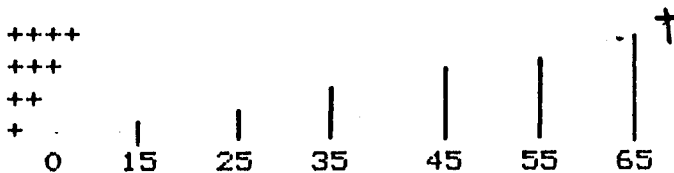


DIAGRAM #2: REGARDING DISEASES

a) The incidence of the "maladaptive" diseases in the approximately 75% of the population who experienced the deficiencies to a moderate to severe degree, and consequently a diminution of their average life-span.



LIFESPAN

b) The incidence of those diseases in the approximate 25% of the population who did not experience the deficiencies, to not experience disease, and thus to also live an "extra" 20 to 30 years.

