Man evolved under a canopy of solar radiation which contained both visible light radiation synthesizing glucose and oxygen and invisible ultra violet radiation synthesizing vitamin D. The first of those energies stored in glucose and oxygen served to fuel the cells while the latter stored in vitamin D served to ionize calcium thereby providing it with biological activity in the Fiving cell.

In the evolutionary development of that cell that form of calcium became involved in a mechanism controlling the oxidative intracellular liberation of the stored energy of glucose and oxygen and its transfer throughout the cell. On the basis of such control, chronic deficiency of either vitamin D and calcium, or more seriously combined deficiency of both those factors, gave rise to "cell energy starvation".

As complex mammalian organisms evolved they developed adaptive mechanisms in physiologically active organs such as those concerned with respiration and digestion, and in the skeleton which served as a massive store of calcium, that would effect biochemical compensation for any deficiency of that most vital calcium ion. The breakdown of those functions occasioned by persisting deficiency would give rise to the "mal-adaptive" diseases, such as chronic asthma, ileitis, and arthritis. Moreover, the individual cell also acquired the means of adapting itself, and the total organism, to that deficiency through genetic change that would beneficially alter cellular and organ function.

For reason of those changes any number of cells with such functional genetic alterations may be found present in the different mal-adaptive disease. As all of those organ related diseases had a common feature of energy starvation created by chronic ionic calcium deficiency, that change would be related to a calcium-vitamin D gene.

Consequently, the genes currently being searched for in various disease states, and which are considered to be of etiological importance, instead may represent functional alteration of the calcium-vitamin D gene that would play a part in adapting the body to the disease creating deficiency.

True malignant adaption occurs when one of these already genetically altered or normal cells undergoes further genetic alteration to produce a primitive type of cell which can bypass the oxidative for the fermentation release of the energy in glucose. Such a cell which therefore had no need for either calcium, vitamin D, or oxygen would be "tailor made" to thrive in the climate of ionic calcium deficiency, energy starvation, and of organ adaption to that state. That cell is both functionally, not absolutely, anoxic and is acalcic.

Since the "adaptive device" of some organs involves the super-acidification of all body cells which will facilitate the ionization of residual cellular molecular calcium, patients with evidence of either such functional or malignant mutation will show an acidic pH state of their saliva.