

moisture, etc. If one of these conditions or indeed the organized substance itself should vary, nutrition would be restrained.

Without delaying here on these slow and continual modifications, which the organized substance always undergoes, and which are the testimonies even of life, I wish to draw your attention to the more abrupt modifications which are the work of an alterant, or of a cause of nutritive disturbance. The principal influence is then exercised by the intervention of the changes brought about by assimilation. All the vital powers are, indeed, subordinate to that metabolism of which I spoke a short time ago, which ought to be considered as an elementary quality, the most general, the most simple and the most characteristic of life, constituted by the material replacement, molecule for molecule, of the anatomical elements, from which results the apparent support of the organism in its primitive state.

Some of the troubles in the physico-chemic actions characterizing the life of the cells may be provoked either by modifications brought about in the phenomena of assimilation, or by modifications brought about in the phenomena of disassimilation. These two kinds of disturbances are then characterized by troubles of absorption and by troubles of secretion, these latter being provoked, above all, by the retention of decayed materials. It results from this that these are the grand functions of nutrition: digestion, circulation, respiration, and urination, which are the most directly modified. It would be to make use of an insufficient and blind treatment, consequently dangerous, to seek to set up a remedy for the troubles of these functions directly, without being occupied with their origin.

The animal organism is an energetic agent of the production of synthesis by oxidations and successive reductions, divisions, hydrations, dehydrations; and we know by experimenting that the influence of the agents, in the function of their physico-chemic constitution, is of primordial importance in the determination and regulation of these various phenomena.

The nutrition of the anatomical elements is effected by the intervention of the sanguine plasma. So the modifiers of nutrition will come to be essentially the modifiers of sanguine plasma, either as these modifications are slowly realized, under the influence of an alimentary regime, etc., or as they may be abruptly brought about, under the influence of some medicinal substances. In all cases the proofs will be the same, and they will be hindered through an obstacle from manifesting the phenomena consecutive to the acts of nutrition or indeed by troubles in the acts peculiar to the anatomical elements.