

However, in the majority of cases, though less manifest or immediately obvious to our senses, the influence exercised by the environments on the animal organism is quite as important as that exercised by the same agents on the vegetable organism. The differences, so glaring in appearance, which exist between the animal and vegetable when one considers some representatives raised high enough in each group, disappear when we consider the anatomical elements. Then we see no more constantly the products of vegetable assimilation serving for animal nutrition than that the products of animal disassimilation are used by the vegetal. What we desire to point out is that the vegetable is an agent of organization, of synthesis, of reduction, while the animal is an agent of destruction, of analysis, and of oxidation. In the presence of some anatomical elements, the oxidations and reductions are effected in both cases and after the same manner.

Now it is necessary to wait and see the physical agents play a very important role under the title of modifiers of nutrition, and we can even discover a trace of this physico-mechanic influence in the manner some medicinal substances will intervene as a means of modification. There exists, indeed, a very accentuated difference in the influence exercised by various medicinal substances. Certain bodies act chemically on the protoplasmic elements or on their elaborated products, while others act physically and their influence depends more on the number of molecules contained in the medium than on the nature of these molecules. I cite, as an example, the influence exercised by sea salt. A weak solution stimulates the fermentation of glucose in the presence of the beer leaven and promotes the absorption of an albuminous solution injected into the rectum of an animal, a solution which would not be normally absorbed, while concentrated solutions of sea salt absolutely arrest these phenomena.

The influence exercised by these physico-mechanic conditions is still very obscure and scarcely commences to appear in the interpretation of medicinal actions, but we will certainly draw from here a few of the precepts which will allow the elucidation of a great number of questions. The theory of ions, of cryoscopy, of osmotic tensions are the proofs of the part, at times preponderant, which these questions of molecular physique may claim in the unravelling of the phenomena.

By way of resumé, the modifiers of nutrition represent par excellence the type of those remedies named by Fonssagrives, biocraties, that is to say, permitting of the creation, in some way, of a special form of health, a particular physiology, only temporary, and profitting by the favorable solution of maladies when it is stirred up in an opportune manner. These are the remedies of which Hertz has defined the effect in the following way, "To dominate the physiology of a malady by that of the remedy."