

plant by the surrounding organisms, friends and neighbours, enemies and robbers, parasites, etc. All these and many other very important influences, all of which more or less modify the organism in its material composition, must be taken into consideration in studying the change of substance which goes on in living things. Adaptation, accordingly, is the consequence of all those material variations the external conditions of existence produce in the *nourishment of the elementary parts*, and the influence of the surrounding outer world produce in the *change of substance* and in the *growth* of the organism.

How very much every organism is dependent upon the whole of its external surroundings, and changed by their alteration, is, in a general way, well known to every one. Only think how much the human power of action is dependent upon the temperature of the air, or how much the disposition of our minds depends upon the colour of the sky. Accordingly as the sky is cloudless and sunny, or covered with large heavy clouds, our state of mind is cheerful or dull. How differently do we feel and think in a forest during a stormy winter night and during a bright summer day! All these different modes of our soul depend upon purely material changes of our brain, upon movements of molecular plasma, which are started through the medium of the senses by the different influences of light, warmth, moisture, etc. "We are a plaything to every pressure of the air."

No less important and deeply influential are the effects produced upon our mind and body by the different quality and quantity of food. Our mental activity, the activity of our understanding and of our imagination, is quite different