

of the organs with which it is to be incorporated; and their purpose being to assimilate the food as much as possible to the nature of the organic body it is to nourish, all these functions have been included under the term *Assimilation*.

The second series of vital functions comprises those which are designed to convey the nutritive fluids, thus elaborated, to all the organs that are to be nourished by them. In the more developed systems of organization this purpose is accomplished by means of canals, called *vessels*, through which the nutritive fluids move in a kind of circuit; in this case the function is denominated the *Circulation*.

It is not enough that the nutritive juices are assimilated; another chemical process is still required to perfect their animalization, and to retain them in their proper chemical condition for the purposes of the system. This third object is accomplished by the function of *Respiration*.

Fourthly, several chemical products, which are wanted in different parts of the economy, are required to be formed by a peculiar set of organs, of which the intimate structure eludes observation; although we may perceive that in many instances among the higher orders of beings, a special apparatus of vessels, sometimes spread over the surface of a membrane, at other times collected into distinct masses, is provided for that purpose. These specific organs are termed *glands*, and the office performed by them, as well as by the simpler forms of structure above mentioned, is termed *Secretion*.

Fifthly, similar processes of secretion are also employed to carry off from the blood such animal products as may have been formed or introduced into it, and may possess or have acquired noxious properties. The elimination of these materials, which is the office of the *excretories*, constitutes the function of *Excretion*.

Sixthly, changes may take place in various parts of the body, both solid and fluid, rendering them unfit to remain in their present situation, and measures are taken for