CHAPTER VII.

Digestion.

All the substances received as food into the stomach, whatever be their nature, must necessarily undergo many changes of chemical composition before they can gain admission into the general mass of circulating fluids; but the extent of the change required for that purpose will, of course, be in proportion to the difference between the qualities of the nutritive materials in their original, and in their assimilated state. The conversion of vegetable into animal matter necessarily implies a considerable modification of properties; but even animal substances, however similar may be their composition to the body which they are to nourish, must still pass through certain processes of decomposition, and subsequent recombination, before they can be brought into the exact chemical state in which they are adapted to the purposes of the living system.

The preparatory changes we have lately been occupied in considering, consist chiefly in the reduction of the food to a soft consistence, which is accomplished by destroying the cohesion of its parts, and mixing them uniformly with the fluid secretions of the mouth; effects which may be considered as wholly of a mechanical nature. The first real changes in its chemical state are produced in the stomach, where it is converted into a substance termed *Chyme;* and the process by which this first step in the assimilation of the food is produced, constitutes what is properly termed *Digestion.*

Nothing has been discovered in the anatomical structure of the stomach, tending to throw any light on the means by