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CHAPTER VI.

PREPARATION OF FOOD.

§ 1. Prehension of Liquid Food.

In studying the series of processes which constitute assimilation, our attention is first to be directed to the mode in which the food is introduced into the body, and to the mechanical changes it is made to undergo before it is subjected to the chemical action of the digestive organs. The nature of these preliminary processes will of course, vary according to the texture and mechanical condition of the food. Where it is already in a fluid state, mastication is unnecessary, and the receiving organs consist simply of an apparatus for suction. This is the case very generally with the Entozoa, which subsist upon the juices of other animals, and which are all provided with one or more sucking orifices, often extended in the form of a tube or proboscis.* The Hydatid, for instance, has four sucking apertures disposed round the head of the animal: the Tania has orifices of this kind in each of its jointed segments: the Ascaris and the Earth-worm have each a simple mouth. The margin of the mouth is often divided, so as to compose lips; of these there are generally two, and in the leech there are three. In some rare cases, as in the *Planaria*, there is, besides the

* Some species of *Fasciola*, or flukes, are furnished with two, three, six, or more sucking disks, by which they adhere to surfaces: to these animals the names *Distoma*, *Tristoma*, *Hexastoma*, and *Polystoma* have been given; but these denominations, implying a plurality of mouths, are evidently incorrect, since the sucking disks are not perforated, and do not perform the office of mouths; and the true mouth for the reception of food is single. Cuvier discovered an animal of this class furnished with above a hundred of these cup-shaped sucking organs. See Edinburgh Philos. Journal, xx. 101.