

The activity of the digestive functions, and the structure of the organs, will also be regulated by a great variety of other circumstances in the condition of the animal, independent of the mechanical or chemical nature of the food. The greater the energy with which the more peculiarly animal functions of sensation and muscular action are exercised, the greater must be the demand for nourishment, in order to supply the expenditure of vital force created by these exertions. Compared with the torpid and sluggish reptile, the active and vivacious bird or quadruped requires and consumes a much larger quantity of nutriment. The tortoise, the turtle, the toad, the frog, and the chameleon, will, indeed, live for months without taking any food. Fishes, which, like reptiles, are cold-blooded animals, although at all times exceedingly voracious when supplied with food, can yet endure long fasts with impunity.

The rapidity of development has also great influence on the quantity of food which an animal requires. Thus, the caterpillar, which grows very quickly, and must repeatedly throw off its integuments, during its continuance in the larva state, consumes a vast quantity of food compared with the size of its body; and hence we find it provided with a digestive apparatus of considerable size.