

physiological phenomena prove that a temporary cessation of hunger may be produced though the substances that are submitted to the organs of digestion may not be, properly speaking, nutritive. The earth of the Ottomacs, composed of alumine and silex, furnishes probably nothing, or almost nothing, to the composition of the organs of man. These organs contain lime and magnesia in the bones, in the lymph of the thoracic duct, in the colouring matter of the blood, and in white hairs; they afford very small quantities of silex in black hair; and, according to Vauquelin, but a few atoms of alumine in the bones, though this is contained abundantly in the greater part of those vegetable substances which form part of our nourishment. It is not the same with man as with animated beings placed lower in the scale of organization. In the former, assimilation is exerted only on those substances that enter essentially into the composition of the bones, the muscles, and the medullary matter of the nerves and the brain. Plants, on the contrary, draw from the soil the salts that are found accidentally mixed in it; and their fibrous texture varies according to the nature of the earths that predominate in the spots which they inhabit. An object well worthy of research, and which has long fixed my attention, is the small number of simple substances (earthy and metallic) that enter into the composition of animated beings, and which alone appear fitted to maintain what we may call the chemical movement of vitality.

We must not confound the sensations of hunger with that vague feeling of debility which is produced by want of nutrition, and by other pathologic causes. The sensation of hunger ceases long before digestion takes place, or the chyme is converted into chyle. It ceases either by a nervous and tonic impression exerted by the aliments on the coats of the stomach; or, because the digestive apparatus is filled with substances that excite the mucous membranes to an abundant secretion of the gastric juice. To this tonic impression on the nerves of the stomach the prompt and salutary effects of what are called nutritive medicaments may be attributed, such as chocolate, and every substance that gently stimulates and nourishes at the same time. It is the absence of a nervous stimulant