

mental activity contains no more phosphorus than that of other parts of the body—not so much as the bones and teeth. Fish does not furnish this element more abundantly than other animal foods. Good head work like good hand work requires a good digestion, and as fish is easily assimilated it may, for this very reason, be found of great value to brain workers, especially if such do not take sufficient muscular exercise to induce a vigorous digestion.

Before bringing these lectures to a close I wish to give you an outline of the process of digestion, the changes that take place in cooking food, and a few practical remarks drawn from a consideration of the whole subject.

DIGESTION.

Mastication or trituration of the food in the mouth serves by a thorough division of the material to present a greater surface to the solvent action of the digestive fluids. An increased digestion is the result. Saliva, secreted by certain glands of the mouth, softens and moistens the food and converts the insoluble starch into soluble sugar. In this reaction the active principle is Ptyaline.

The gastric juice, the secretion of the true peptic glands of the stomach, has a physical and chemical action. It dissolves and disintegrates the food, reducing it to a liquid condition, and converts the albuminoids into peptones, which are assimilated by the blood. Its composition is:—

Water.....	97.5
Pepsin	1.5
Hydrochloric acid.....	.5
Salts	.5
	100.0

It has an acid reaction.

The intestinal digestion is promoted by the pancreatic juice, which has an alkaline reaction. It has a fourfold function:—

- (1) Converting starch into sugar.
- (2) Converting albuminoids into peptones.
- (3) The emulsification of fats.
- (4) Conversion of cane sugar into grape sugar.