

This is an epitome of the more necessary proximate principles of which the bodies of animals are composed, and as these same animals are machines in a state of activity, so they are liable to wear, and consequent waste in these essential constituents, and hence the necessity for a continuous supply, which is affected by our daily consumption of

LIQUID MATTER. SOLID MATTER.
Drink. *Victuals.*

Constituting Food.

In order, therefore, to meet the supply of these requirements, we have in food the following substances, which have been thus classified:—

Classification of Food.

CLASS I.—ALIMENTARY, OR NECESSARY.

GROUP 1.—Mineral.

- a. Water.
- b. Salt.
- c. Ashes of plants and animals.

GROUP 2.—Carbonaceous—Respiratory—Heat-giving.

- a. Starch.
- b. Sugar.
- c. Fat.

GROUP 3.—Nitrogenous—Flesh-forming.

- a. Albumen.
- b. Fibrin.
- c. Casein.

CLASS II.—MEDICINAL, OR AUXILIARY.

GROUP 1.—Stimulants.

- a. Alcohol.
- b. Volatile oils.

GROUP 2.—Alteratives.

- a. Acids.
- b. Alkaloids.

GROUP 3.—Narcotics.

- a. Tobacco.
- b. Indian Hemp.
- c. Opium.

GROUP 4.—Accessories.

- a. Cellulose.
- b. Gum.
- c. Gelatine.

From this classification we see that food, on analysis, yields two sets of principles, one which is absolutely necessary to meet the wear and tear of the animal machine when in healthy action; the other, to aid in producing effects on different organisms, according to the defect or aberration of their functions. Now, if we enquire into the nature of these different groups of substances, more especially those of the first class, we shall find, as one essential characteristic, that these are not all required in uniform proportions, and that though all may be developed in every kind of vegetable, it may not be the most economical plan to derive all of them from the vegetable kingdom. This may be illustrated by reference to the first substance in the list.

Water—This fluid can be readily obtained from a spring. There is, therefore, no reason why we should desire its presence in large proportions in vegetable food, so that instead of a plant being more valuable as food in proportion to its amount of water, it is rather the reverse, for every alimentary substance of much value contains relatively but little water. This will be evident from the following table:—

Quantities of water in 100 parts of different kinds of vegetable food.

Turnins, - - - - -	87	Beans, - - - - -	14
Carrots, - - - - -	86	Wheat-flour, - - - - -	14
Parsnips, - - - - -	79	Barley-meal, - - - - -	14
Potatoes, - - - - -	75	Oat-meal, - - - - -	13
Peas, - - - - -	14		