

of a Tangerine orange, of a bright yellow colour. The pulp is white in colour, very bitter in taste. It contains strychnine and brucine, consequently is poisonous. The seeds are found embedded in the pulp. These are frequently called Quaker's buttons or poison nuts. They are about an inch in diameter and a quarter of an inch thick, of a greenish-grey colour; sometimes they are quite flat, but often have one side concave and the other convex.

The edges are thickened; there is a small prominence from which a raised line passes to the central hilum. They are covered with numerous silky hairs. They have an extremely bitter taste, but no odour. The seed contains the alkaloids strychnine and brucine; strychnine acid; a glucoside, loganin; also a little tannin.

Strychnine, the active principle of the drug, and its methods of extraction, have been previously dealt with. The highest yield of alkaloids in the seeds has been found to be from 5 to 5½ per cent. In an assay of nux vomica to find the amount of alkaloids present, a weighed quantity of the seeds (which have been previously finely powdered) are exhausted with chloroform and alcohol, the mixture agitated with weak hydrochloric acid; ammonia is added, and the chloroform is then separated off (it will contain the alkaloids). It is evaporated over a water-bath to dryness, when all the chloroform will go off, leaving only the alkaloids, which can be weighed and the percentage calculated out.

The standard test for strychnine is to place a few crystals on a white slab; by the side of them place a little potassium chromate. To each add a drop of sulphuric acid; draw them together with a glass rod, when a beautiful purple colour is formed of various shades, passing to brown and green. To test for brucine, a drop of nitric acid placed on the alkaloid gives a deep red colour. The advantage of using a white slab is that the colour is so well shown up. Brucine is not official.

There is a liquid extract of nux vomica containing 1½ grains of strychnine in 110 minims; the dose is 1 to 3 minims. There is an ordinary extract prepared from the liquid one, which contains 5 per cent. of strychnine; the dose is ¼ to 1 grain. There is a tincture, strength ¼ grain of strychnine in 110 minims; the dose is 5 to 15 minims. It is the preparation in general use—often given in iron mixtures.

Of strychnine itself there are several preparations, which were given in Table No. 1.

Nux vomica is a general tonic and a stimulating expectorant. It also acts as a laxative, so is often given in mixtures to counteract the effect of other drugs, such as iron. It increases the appetite.

In cases of poisoning, emetics must be given and the stomach pump used; a small dose of chloral may be injected hypodermically until convulsions cease. Bromide of potassium may be given; and inhalation of chloroform and artificial respiration.

Practical Notes on Invalid Feeding.

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III.—EGGS.

Holding an intermediate position between liquid and solid foods are eggs, which can be served in either a liquid or a solid form.

Eggs are storehouses of nourishment for the young, which they serve to reproduce, and therefore contain all that is necessary for the support of life. The young birds find in them the materials for building up their tissues until they emerge as fully-developed creatures. On this account, eggs are particularly useful in the feeding of the young, and, because they are easily digested, they are suited to those whose bodily infirmities reduce them to the weakness of the young.

An egg contains within its shell two distinct parts—the white and the yolk—which differ in composition and in nutritive value. The white of the egg contains little besides water, a proteid called egg-albumin, and sulphur. The proteid matter is contained in millions of tiny cells, which are ruptured by beating, and for this reason raw eggs are more easy of digestion if they are well beaten. The yolk contains a smaller proportion of water, and is of higher nutritive value than the white, especially as nearly one-third of its volume consists of fat in the form of an easily-digested emulsion. Another reason for the superiority of the yolk over the white is its larger proportion of mineral matters. It is specially rich in phosphoric acid, lime, and iron in such a form as to be readily taken up by the blood. The presence of lime and phosphoric acid makes yolk of egg a useful food for rickety children, and the presence of iron specially adapts eggs to cases of anæmia.

There are a few people with whom, owing to idiosyncrasy, eggs act as an irritant, and give rise to diarrhoea, but the usual tendency is to produce constipation, partly because of the large amount of lime they contain. The character of eggs is so bland that they can be borne in delicate conditions of the stomach and the intestine, and it is partly because they cause so little irritation that the intestine is not stimulated to action and constipation results.

The digestibility of eggs depends very largely upon the way in which they are served. Both yolk and white are rich in albumen, which coagulates at a temperature of 180° Fahr., and becomes harder and more horny as the temperature is raised. Fried eggs, as served with bacon, are particularly indigestible, as the fat in which they are cooked is raised to a higher temperature than that of boiling water, and the albumen becomes very hard. Raw eggs, lightly-cooked eggs, and hard-boiled eggs represent

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