

The general composition of fresh fruit, as given by Dr. Hutchison, is :

Water	...	...	85 to 90 per cent.
Proteid	...	...	0.5 "
Fat	...	...	0.5 "
Carbo hydrates	...	5½ to 10½	"
Cellulose	...	...	2½ "
Mineral matters	...	...	0.5 "

The greatest variation is found in the carbo-hydrates, which are always in the form of sugar, but even those which contain the largest proportion can scarcely be regarded as important sources of heat-giving substance on account of the large proportion of water. In most cases the sugar is in the form of grape-sugar, which is more easily assimilated than cane sugar, but cane sugar is also present in apples, apricots, and pineapples.

The chief minerals consist of potash in combination with a vegetable acid, such as tartaric acid in grapes, citric acid in lemons, and malic acid in apples. During digestion the acids are converted by the body into carbonates, which render the blood more alkaline and the urine less acid.

In addition to the acids, most fruits contain pectose, a mucilaginous substance of doubtful nutritive value. To this substance the setting of jam and the formation of fruit jelly is due.

Stone fruits are the most difficult of digestion, and of all fruits the skin is a very indigestible portion and should be rejected. On account of its indigestible character fruit should be eaten early in the day, and never in large quantities. All fruit should be fresh and just ripe, as unripe or over-ripe fruit is liable to give rise to intestinal disturbance.

Apples are most wholesome when cooked, and baked apples are often recommended for dyspepsia. The juice of the apple, when fermented, produces cider. When pure, cider is of service in gouty affections; but unfortunately the beverage is one which is easily manufactured without the product of the orchard.

Grapes are of service in the sick-room because they are cooling and contain a large proportion of sugar. When taken in large quantities they are diuretic and gently laxative. The seeds as well as the skins should be rejected.

With small-seeded fruit, the best way of giving it to an invalid is in the form of a purée. The fruit may be stewed or left raw, and passed through a sieve to keep back all indigestible portions. It should then be sweetened with sugar and served as an accompaniment to blanc-mange, or it may be set in a shape with the addition of gelatine.

A few years ago bananas were almost unknown in this country, but now they are rapidly becoming one of our most valuable fruits. The nutritive value of the banana is high because it contains a fair amount of proteid in addition to carbo-hydrate,

but there is a popular tendency to exaggerate its nutritive value. The proportion of cellulose is high, and, on account of the texture of the fruit, it is rather difficult of digestion. The unripe banana is sometimes dried and ground, and produces a flour which contains half the amount of proteid contained in wheat flour, with rather more carbo-hydrate, and five times as much mineral matter. Several preparations of dried bananas are used, but the one which is specially recommended is Bananina, from which the fibrous matter is extracted, and which is specially suited for invalids and dyspeptics.

The chief use of vegetables is as a source of mineral matter. Compounds of potash are abundant, and tend to keep the blood alkaline. The action on the skin is very marked, and eczema has often been known to give way to an increased supply of green vegetables. As antiscorbutics they are invaluable, cabbage being the most valuable. The difficulty which exists with regard to the digestion of vegetables may be partly overcome by choosing young varieties, and seeing that they are well boiled. Over-boiling must be avoided, as during boiling there is a great loss of mineral matters, and an almost total loss of the small amount of nutrient contained. Vegetables should also be perfectly fresh, or fermentation will result in the intestine, giving rise to flatulence and diarrhoea.

Green vegetables and cauliflowers should be boiled with the lid of the saucepan off, and, if hard water is used, a little carbonate of soda should be added. For invalids, such vegetables should be boiled in two waters to remove the strong odour which may prove offensive to a weak stomach. As antiscorbutics, cauliflowers are equal in value to cabbages, and are the most easily digested of all vegetables.

Potatoes form a valuable antiscorbutic food. They are very rich in starch, but almost without proteid substance. Under the skin of the potato is a poisonous substance called solanine, which is destroyed by cooking. The outer layer of the potato is of a fibro-vascular nature, and is very much richer than the inner portion in proteid and salts of potash. As this part is removed when potatoes are pared, it will be seen that cooking the potatoes in the skin is the more economical method. Potatoes absorb a large amount of butter, so that they are useful carriers of fat in phthisis and in mild cases of diabetes. Provided that potatoes are well cooked, they are easily digested and well absorbed.

The tubers of Jerusalem artichokes contain more sugar and less starch than potatoes. They contain inulin, which is a carbo-hydrate of unknown nutritive value.

Globe artichokes furnish an agreeable vegetable, which is less productive of flatulence than any

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