Written by W.J.Pais

Foods may be broadly classified into 11 groups based on their nutritive value:

1. Cereals and millet :

Cereals and millets constitute by far the most important group of foodstuffs as they form the staple food of a large majority of the population throughout the world. They form about 70 to 80 percent of the diets of the low income groups in India and other developing countries. They contain about 60 to 72 percent proteins and are good sources of some vitamin and minerals. Hence, they provide about 70 to 80 percent of the calories, proteins and other nutrients in the diets of the low income groups.

2. Pulses :

Dried pulses are rich in proteins containing about 19 to 24 percent. They are good source of many B vitamins and minerals. Puffed pulses are commonly used by the low income groups as snacks

3. Nuts and Oilseeds :

Nuts and oilseeds are rich sources of proteins containing about 18 to 40 percent. Soya bean is the richest containing about 40 percent. They are also rich sources of fat, vitamins and minerals.

4. Vegetables :

Vegetables may be broadly divided into three groups from the nutritional point of view:

- (1) Green leafy vegetables; (2) Roots and tubes and
- (3) other vegetables.

Green leafy vegetables: Green leafy vegetables are very rich in carotene. They are good source of calcium, riboflavin, folic acid and vitamin C. Daily consumption of 100 g of leafy vegetables by adult and 50 g by children will provide the daily requirement of carotene, folic acid, and vitamin C and a part of the calcium and riboflavin requirements. They are the cheapest among the protective foods.

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<u>Roots and Tubers:</u> The important foods in this group are potato, sweet potato, tapioca, carrot, elephant yam and colocasia. They are, in general good sources of carbohydrates. They are however, poor sources of protein, except potato which is a fair source. Carrot and yellow flesh variety of sweet potato are good sources of carotene.

<u>Other Vegetables:</u> This group includes a large number of vegetables. Some of them are good sources of vitamin C. Yellow pumpkin is a fair source of carotene other vegetables in this category include tomatoes, brinjal, cauliflower etc.

5. Fruits:

Fruits, in general, are good sources of vitamin C. Some of them e.g., mango and papaya, are in additional fair sources of carotene, Indian gooseberry (Amla) and guava are very rich in vitamin C. They are also the cheapest among the fruits. Apple, banana and grapes are poor sources of vitamin C.

6. Milk and Milk products:

Milk has been used from time immemorial as the sole food for infants and as a supplement to the diets of children and adults. Milk is almost a complete food except for deficiencies of iron and vitamin C and D. Milk proteins are of high biological value. One litre of cow's milk provides about 35 g protein, 35 g fat, 1 g calcium, 1.5 mg riboflavin, 1500 I.U. of vitamin A and substantial amounts of other B-vitamins and minerals. Buffalo's milk is used extensively in India, Pakistan and Egypt. Its fat content is about twice that of cow's milk.

7. Eggs:

Hen's egg contains about 13 percent proteins of very high biological value and 13 percent fat. It is a rich source of vitamin A and some B-vitamins. It is a fair source of vitamin D but does not contain any vitamin C. The chemical composition of duck's egg is similar to that of hen's egg. Egg white contains about 12 percent protein and some B- vitamin and devoid of fat and vitamin A. Egg yolk contains about 15 percent proteins and 3 percent fat (cholesterol). It is rich sources of vitamin A and fair source of iron, B-vitamin and vitamin D and therefore it is used as a supplement to the diets of the infants.

8. Meat, Fish and Other Animal Foods:

<u>Meat:</u> Meat is rich in protein (18 - 22) percent of high biological value. It is fair source of Bvitamins. It does not contain vitamin A, C or D. Written by W.J.Pais

<u>Fish:</u> Fish is rich in proteins (18-22) percent of high biological value. It is fair source of B-vitamins. Fatty fish contain some vitamin A and D. Large fish are rich in Phosphorus, but are deficient in calcium. Small fish eaten with bones are good sources of calcium.

<u>Liver:</u> Liver is rich in protein (18-20) percent, vitamin A and B-complex. It is the richest natural source of vitamin B12.

9. Fats and Oils:

Fats and Oils serve mainly as sources of energy and provide the essential fatty acids. Butter and ghee and vanaspaty are good sources of vitamin A. The common vegetable oils and fats do not contain carotene or vitamin A. Many of them are good sources of vitamin E.

10. Sugar foods:

The carbohydrate foods commonly used are cane sugar, jaggery, glucose, honey, syrup, custard powder, arrowroot flour and sago. They serve mainly as a source of energy. Honey and jaggery contain small qualities of minerals and vitamins.

11. Condiments and Spices:

Condiments and spices are not important sources of nutrients in average diets, but are used mainly enhancing the palatability of the diet. The flavor principles present in them help to improve the flavor and acceptability of food preparations.

Source of this information