

Nutrition for Nurses

Nutrition and Human Welfare

by

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Vitamin D.

Vitamin D is known as 'The anti-rachitic'. It is concerned in the deposition of calcium and phosphorus in the bones. It is specially important for infants and children whose bones are in the processes of growth and development. The expectant mother, in whom the bones of the foetus are developing also needs this vitamin in large amounts. Night workers, invalids, women in purdah, the aged and the fractured cases, all depend on this vitamin for their special needs.

Rickets is a deficiency disease occurring in growing children, when they do not either get enough calcium, phosphorus or vitamin D or get them in inadequate proportions. It is the result of derangement of deposition of calcium and phosphorus in the bones. When these conditions are present in adults, osteo malacia is the resulting disease in women.

Vitamin D is very important for growth of children. It promotes the absorption of calcium from the intestines. It aids in regulating the blood calcium level. Besides the role it plays in the deposition of calcium and phosphorus in the bones, it contributes much towards the formation of healthy enamel and dentine in the teeth.

Food sources of Vitamin D

Cod-liver oil, shark liver oil (the latter has more vitamin D), egg, butter and milk.

Sunlight and Vitamin D

Vitamin D is formed when some sterols are exposed to the ultra violet rays. Sun-

light has some ultra violet rays. Therefore, when it falls on our skins the sterols on the skin get converted into vitamin D. When foods containing ergosterols are irradiated with ultra violet rays by exposure, vitamin D is developed in them. This vitamin is also known as calciferol or vitamin D2.

Requirement of Vitamin D

400-800 International units of this vitamin per day will satisfy the needs of all types of people. One international unit of this vitamin is equivalent to 0.025 micrograms of crystalline vitamin D2.

Vitamin K

Vitamin K is so called, because its discoverer, a Dane, named it the "Koagulation" vitamin. It is necessary for the formation of prothrembin without which blood cannot clot or coagulate. This vitamin helps in the prevention of hæmorrhagic diseases of the new born. Daily requirements : 1-2 mg.

Food sources

Spinach and other green leafy vegetables, cabbage, tomatoes and cauliflower. Certain bacteria in the intestinal tract also contribute this vitamin to human beings.

Vitamin E—Tocopherol

Vitamin E has been found necessary for proper reproduction in some animals. It has never been satisfactorily demonstrated by experiments that this vitamin is important for reproduction in human beings. Deficiency of this vitamin in rabbits and guinea pigs, interferes with

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