

File under: UV -vitamin D

Already in 1919, Huldschinsky exposed children to a mercury arc lamp and demonstrated radiologic healing of rickets.

He promoted the use of ultraviolet irradiation as an infallible cure for rickets.

In 1921, Hess and Unger exposed several children who had rickets to sunlight on the roof of a New York City hospital and demonstrated dramatic improvement in their rickets.

The Vitamin D Deficiency Pandemic: a Forgotten Hormone Important for Health

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Early in the twentieth century more than 80 percent of children in industrialized Europe and North America were ravaged by the devastating skeletal consequences of rickets.

Finding that exposure to ultraviolet radiation or sunlight treated and prevented rickets led to the ultraviolet irradiation of foods including milk.

These practices along with the fortification of a variety of foods including dairy products with vitamin D and widespread use of cod liver oil eradicated rickets as a significant health problem by the late 1930s.

Many countries mandated the fortification of milk with vitamin D to prevent rickets during wartime shortages.

In the 1950s, in Europe, many countries forbid fortification of dairy and food products except breakfast cereals and margarine because of an outbreak of vitamin D intoxication in neonates.

Vitamin D deficiency has again become a major public health interest with its association with osteoporosis, osteomalacia, fractures, and more recently with prevention of cancer, diabetes, heart disease and other chronic illnesses.

Regular sun exposure has decreased due to changing lifestyles.

Vitamin D deficiency is especially prevalent in dark skinned children and adults living in Northern latitudes, and obese children and adults. Improving the vitamin D status worldwide would have dramatic effects on public health, and reduce healthcare costs for many chronic diseases.

The most cost-effective way to remedy this deficiency is to increase food fortification with higher levels of vitamin D along with sensible sun exposure, and adequate vitamin D supplementation.