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Health Options
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Rickets makes a comeback

The word rickets may trigger vague memories of diseases out of the dark ages, but the dark ages may be back.

Rickets is a condition that develops in infants and young children who do not get adequate vitamin D. This deficiency prevents calcium from accumulating in bones, resulting in soft bones that are easily deformed. Classic signs of rickets include bowed legs, multiple protrusions from the ribs, abnormal curvature of the spine and more fractures.

In the early 20th century, rickets was a major health problem in the United States. But in the 1920s milk producers were required to fortify milk with vitamin D, and since then rickets has been rare. However, research reported in the Journal of Pediatrics indicates a possible resurgence of the disease in the United States.

Nutritional deficiencies in the United States are not usually related to poverty, as they are in developing countries. They are more commonly related to nutritional ignorance.

A mother's breast milk, for example, does not provide enough vitamin D to meet the needs of an infant. Exposure to the sun is one way to make up the difference -- for white infants, five to 10 minutes of sun exposure daily is adequate. But indoor lifestyles and concerns about skin cancer make a dietary source of vitamin D more acceptable to many parents.

You may think that vitamin D deficiency couldn't happen in sunny Hawaii. However, Georgia also has considerable sunshine, yet two medical reports document at least five hospital cases of classic textbook vitamin D deficiency within an 18-month period.

All of these cases of rickets were in infants with darker skin pigmentation. People with darker skin require greater sun exposure to produce vitamin D. Knowing how much sun exposure is enough is complicated by differences in skin color. The American Academy of Pediatrics recommends that breast-fed infants with low sunlight exposure, or who have mothers that may be vitamin D deficient, be given a supplemental source of the vitamin.

Modern cases of rickets have occurred when well-intentioned parents fed their infants macrobiotic diets, which typically lack a dietary source of vitamin D. Rice milk and soy milk -- commonly used milk alternatives that often are not fortified with Vitamin D or calcium -- should not be considered equivalent to infant formulas or cows' milk as a source of nutrients. Particularly for infants and toddlers, milk alternatives should be chosen carefully by parents, especially since they may be the sole source of nutrients for the child.

Generally, rickets is overlooked in early stages because the condition has become so rare. In the Georgia cases, infants had normal language and social interaction skills, but showed decreased growth rate and decreased ability to crawl, roll over and sit up.

Children are not the only ones prone to this deficiency. Older adults who seldom go outside also are vulnerable, at a time when vitamin D is important to preventing osteoporosis. Vitamin D is always important, but especially in the dawn and dusk of life.

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