Kids and Vitamin D Deficiency

Rosemont, IL, October 19, 2012 – A startling increase in the frequency of severe vitamin D deficiency is being reported in the U.S. and other countries. This severe deficiency can have a devastating impact on a child’s bone strength, the United States Bone and Joint Initiative (USBJI) says. “Vitamin D is essential to our body’s ability to absorb calcium from our diet to build strong bones which are the building blocks of a healthy body, and to make muscles move,” says Dr. Ellen Raney of Shriners Hospitals for Children in Portland, Oregon. Several groups have joined USBJI to raise awareness of the importance of strong bones and muscles during World Pediatric Bone and Joint (PB&J) Day, celebrated on October 19, which is part of Bone and Joint Health National Awareness Week (Oct. 12-20).

Dr. Raney explains, “Vitamin D deficiency or nutritional rickets can show up in several ways. If the problem starts early, kids’ growth may be severely stunted. The arms or legs may not grow straight, or bones may be weak and easily broken.”

Jesus* is a 14-year-old boy with a dark complexion who began to complain of knee pain when he ran. Always a bit “knock-kneed,” this became more pronounced, and he stopped playing basketball because of knee pain. His examination and X-rays showed severely abnormal bending at both knees. A blood test showed severe vitamin D deficiency.

Jack* is a 15-year-old boy with very pale skin who has always preferred video games to sports and doesn’t get outside much. He was able to participate in physical education in school until recently, when he began having pain in both knees. His examination and x-rays showed he had fractures in both shin bones. His vitamin D level also was severely deficient.

Neither of these teenagers was born with this problem. Jesus’ vitamin D deficiency prevented his bones from growing straight. Jack’s severe vitamin deficiency led to his bones being too weak to support his weight.

During sunny times, the body can make sufficient vitamin D with just a few minutes a day of midday sun exposure without sun screen. However, dermatologists caution against direct sun exposure to avoid risks of skin damage and skin cancer. A useful alternative to sun exposure is supplemental vitamin D. There is some controversy about the amount of vitamin D that children and adults should take in, ranging from 400 IU to 2,000 IU daily. The American Academy of Pediatrics and the Institute of Medicine recommend a daily intake of 400 IU per day of vitamin D during the first year of life beginning in the first few days, and 600 IU for everyone over age 1. Everyone— and in the case of children, their parents—should consult their primary care professional to determine the correct amount of vitamin D they should be taking to ensure optimal vitamin D levels.

Both of these youngsters are doing well now thanks to a team approach including orthopaedic and pediatric specialists, and each has been placed on a vitamin D replacement program specific to his needs.
For more information about Vitamin D levels recommended for children, visit the website for the American Academy of Pediatrics, the Institute of Medicine, or Your Orthopaedic Connection. This story is brought to you as part of World Pediatric Bone and Joint (PB&J) Day, celebrated on October 19, which is part of Bone and Joint Health National Awareness Week (Oct. 12-20).

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*Names changed to protect privacy*

**Contact:** Toby King, United States Bone and Joint Initiative (USBJI), 847-430-5053, [tobyking@usbji.org](mailto:tobyking@usbji.org)