Fish Oil, Multivitamin Gave Same Vitamin D Boost

BY JEFF EVANS
Senior Writer

ARLINGTON, VA. — Fish oil capsules and multivitamin tablets that contain 10 mcg of vitamin D_3 provide the same increase in stored levels of the vitamin when taken daily during a 4-week period, Kristin Holvik reported at a conference sponsored by the American Society for Bone and Mineral Research.

Even though many types of vitamin supplements are available to patients, little is known about whether the bioavailability of vitamin D_3 (cholecalciferol) differs when it is sequestered in fat-containing capsules as opposed to solid tablets, noted Ms. Holvik, a Ph.D. student at the Institute of General Practice and Community Medicine at the University of Oslo.

In a randomized trial, 55 healthy young adults (34 females and 21 males) received 28 days of supplementation with either fish oil capsules or multivitamin tablets, each of which was taken once daily and contained 10 mcg vitamin D_3 (an amount equivalent to 400 IU).

The participants completed a self-administered questionnaire about diet and sun exposure and had a nonfasting venous blood sample drawn at the beginning and end of the study, which took place in Oslo in late winter 2005, according to Ms. Holvik. She won an ASBMR Young Investigator Award for her research, which she presented during a poster session at the conference.

Serum 25-hydroxyvitamin D levels in individuals who took fish oil capsules increased from an average of 48.5 nmol/L to 80.4 nmol/L at the end of the study. Multivitamin users had a similar rise in serum 25-hydroxyvitamin D levels from a mean of 40.3 nmol/L to 76.5 nmol/L. On average, the participants were aged about 28 years and had a body mass index of about 24 kg/m^2. ■