

[www.reutershealth.com](http://www.reutershealth.com)

## **Vitamin D improves bone loss due to epilepsy drugs**

*Last Updated: 2006-12-18 16:16:22 -0400 (Reuters Health)*

By Will Boggs

NEW YORK (Reuters Health) - It's well known that, taken for long periods, anti-[epilepsy](#) drugs can lead to brittle bones. Now, researchers have shown that high-dose [vitamin D](#) therapy significantly improves bone mineral density in this situation.

Dr. Ghada El-Hajj Fuleihan from American University of Beirut Medical Center, and colleagues compared the effects of low-dose and high-dose vitamin D on bone mineral density in 72 adults and 78 children and adolescents taking antiepilepsy medications. The low dose consisted of 400 IU (international units) per day, and the high dose was 2000 IU per day for children and 4000 IU daily for adults.

At the start of the study, 34 percent of the adults were in the deficient range of vitamin D levels and 46 percent were in the insufficient range, the investigators report in the medical journal *Neurology*. Among children, the corresponding figures were 18 percent and 44 percent.

Bone mineral density was below normal in the adults, but in the children and adolescents it was still in the normal range.

After treatment, none of the adults and only a few of the children in the high-dose group still had vitamin D deficiency, and relatively few had vitamin D insufficiency, the researchers report.

Bone density in adults assigned to high-dose vitamin D increased significantly, but it didn't change much in the low-dose vitamin D group, the report indicates.

For children, bone density increased with both low and high doses of vitamin D, the researchers say, with no differences between the dose groups.

Despite the improvements in adults, however, bone density remained below normal even after a year of vitamin D therapy.

SOURCE: Neurology, December 2006.

Copyright © 2006 Reuters Limited. All rights reserved. Republication or redistribution of Reuters content, including by framing or similar means, is expressly prohibited without the prior written consent of Reuters. Reuters shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon. Reuters and the Reuters sphere logo are registered trademarks and trademarks of the Reuters group of companies around the world.

Featured article in Applied Neurology, [www.appneurology.com/](http://www.appneurology.com/).