

# Gluten-free diet reduces bone problems in children with celiac disease

October 8 2009

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Celiac disease (CD) is an inherited intestinal disorder characterized by life-long intolerance to the ingestion of gluten, a protein found in wheat, rye, and barley. Although CD can be diagnosed at any age, it commonly occurs during early childhood (between 9 and 24 months). Reduced bone mineral density is often found in individuals with CD. A new article in the journal *Nutrition Reviews* examines the literature on the topic and reveals that a gluten-free diet can affect children's recovery.

Metabolic bone disease remains a significant and common complication of CD. Reduced bone mineral density can lead to the inability to develop optimal bone mass in children and the loss of bone in adults, both of which increase the risk of [osteoporosis](#). There also exists an additional risk of fracture in people with CD.

However, evidence suggests that a gluten-free diet (GFD) promotes a rapid increase in bone mineral density that leads to complete recovery of bone mineralization in children. A GFD improves, although rarely normalizes, bone mineral density in adults. Children may attain normal peak bone mass if the diagnosis is made and treatment is given before puberty, thereby preventing osteoporosis in later life.

Also, nutritional supplements consisting of calcium and [vitamin D](#) seem to increase the bone mineral density of children and adolescents with CD.

"Our findings reinforce the importance of a strict gluten-free diet, which

remains the only scientific proven treatment for celiac disease to date," the authors conclude. "Early diagnosis and therapy are critical in preventing [celiac disease](#) complications, like reduced [bone mineral density](#)."

Source: Wiley ([news](#) : [web](#))

Citation: Gluten-free diet reduces bone problems in children with celiac disease (2009, October 8) retrieved 19 April 2024 from <https://medicalxpress.com/news/2009-10-gluten-free-diet-bone-problems-children.html>

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