

Cow's milk allergy in childhood may lead to weaker bones: study

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(HealthDay)—Children who are allergic to cow's milk may have weaker

bones than kids with other food allergies, a small study suggests.

Cow's [milk allergy](#) is the most common childhood food allergy in the United States, affecting up to 3 percent of [children](#), the researchers said. The main treatment is elimination of [cow's](#) milk and dairy products—which are major sources of the calcium kids need to build strong bones.

This new study detected [low bone density](#) in 6 percent of 52 children with a long-term milk allergy.

"Prepubertal children with persistent cow's milk allergy have a lower [bone mineral density](#) and calcium intake compared with similarly aged children with food allergies other than cow's milk," said study co-author Genevieve Mailhot. She is an associate professor at the CHU Sainte-Justine Research Center at the University of Montreal.

The study findings don't show a direct cause-and-effect link between milk allergy and low bone density.

And the difference in bone density observed in the study wasn't significant enough, on average, to worry about fractures, said one pediatric expert not involved with the research. But the findings merit attention, he added.

Most kids with cow's milk allergy—up to 87 percent—outgrow it by about 3 years of age. However, recent reports find it persists in about 15 percent of those affected until they are teens, the study authors noted.

Long-standing cow's milk allergy in adults has been linked to reduced bone density. But, children with the allergy have not been studied extensively, the authors said.

For the study, they recruited 81 pre-puberty-stage children with food allergies. Fifty-two had cow's milk allergy, while 29 had allergies to foods other than milk. The kids' average age was close to 7 years old.

The researchers measured the kids' bone mineral density using standard testing. They also took blood samples to assess levels of vitamin D, crucial for bone health. In addition, they recorded calcium and vitamin D intake and tracked compliance in those advised to take supplements.

While low bone mineral density was found in 6 percent of those with cow's milk allergies, none of those in the other group had low bone density, the researchers said.

The children with cow's milk allergies also had lower average calcium intake—930 milligrams (mg) a day compared to 1,435 in the other group. Recommended daily intake is 1,000 mg. Vitamin D intake in both groups was well below the recommended 600 International Units (IUs) a day.

Few with the cow's milk allergies took supplements—37 percent reported taking calcium and 44 percent reported taking vitamin D. However, those who did take a supplement averaged more than five days a week, which was termed good compliance, according to the study.

The study is published online April 20 in the journal *Pediatrics*.

The findings aren't surprising, said Dr. Luis Gonzalez-Mendoza, director of pediatric endocrinology at Nicklaus Children's Hospital, in Miami. He was not involved with the study.

Prior research has shown that children who don't reach peak bone mass have a higher risk of the bone-thinning disease osteoporosis in later life, the study authors noted.

But, Gonzalez-Mendoza said the difference in bone density seen in this study wasn't big enough, on average, to be concerned about fractures.

Still, the finding warrants attention and observation, he added. Parents and pediatricians have to be aware that lower bone density is a possibility and "probably have to take a look at how these kids are getting their calcium," he said.

Pediatricians who order supplements should also emphasize their importance, he said.

If your child is allergic to cow's milk, what can you do?

"Parents should encourage the intake of alternate sources of calcium in their children's diet," Mailhot said, suggesting soy, almond or rice milk and orange juice fortified with calcium.

Parents can also have a dietitian evaluate their child's diet, and find out how to increase [calcium](#) and vitamin D intake, she said. Also, a [bone density](#) scan could be considered if indicated, she said.

More information: To learn more about food allergy, visit the [American Academy of Pediatrics](#).

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