

Bone Health and Epilepsy

Children who take medicine for seizures due to epilepsy may be at higher risk for weak or breaking bones. This happens because these medicines change the way the body uses calcium and vitamin D, which are very important to keep bones strong. Exercise is also very important to keep bones strong. When children do not get enough calcium or vitamin D in their diet or do not get enough exercise, bones get weak and can break.

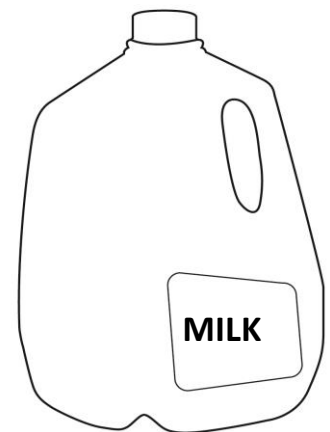
Who is at high risk

Children who are at high risk for weak or broken bones are those who:

- Take seizure medicines
- Have epilepsy
- Have trouble walking or do not get enough exercise

How to protect bones

- The best way to protect your child's bones is to make sure he or she gets enough calcium and vitamin D from food.
- Dairy foods, like yogurt, cheese, and milk (Picture 1), have the highest amounts of calcium and vitamin D.
- All children should eat 3 to 4 servings of dairy a day. This may be different depending on your child's age.
- Leafy green vegetables and canned fish can be good sources of calcium and egg yolks and fish can be good sources of vitamin D.
- Fortified foods are foods that have calcium or vitamin D added to them. Some cereals, breads, or orange juice are fortified.



Picture 1 Milk is a great source of calcium.

Sources of calcium

A child with epilepsy needs to get at least 1300mg of calcium per day. This is how much a teenager would get. Here is the amount of calcium in servings of food your child may like.

<u>Food Serving</u>	<u>Amount of Calcium</u>
1 glass of milk	300 mg
1 8-ounce container of yogurt	450 mg
1 ounce of cheese	70-200 mg
½ cup of ice cream	100 mg
1 package of instant oatmeal	100-150 mg
1 cup of broccoli	180 mg
½ cup of white beans	70 mg

Sources of vitamin D

A child with epilepsy needs to get at least 600 IU of calcium per day. Here is the amount of vitamin D in servings of food your child may like.

<u>Food Serving</u>	<u>Amount of Vitamin D</u>
1 glass of milk	115-124 IU
3 ounces of cooked salmon	447 IU
1 glass of fortified orange juice	137 IU
1 can of tuna	154 IU
1 egg	41 IU
1 8-ounce container of fortified yogurt	80 IU
1 cup of fortified cereal	40 IU

Sources of exercise

- If your child is able to walk, weight-bearing exercises help to build strong bones. These kinds of exercises include walking, running, and jumping.
- Children with epilepsy should stay away from heights when playing.
- All children, especially those with epilepsy, should wear a bike helmet when riding a bike.

Important to know

- The easiest way to get more calcium and vitamin D is by regularly eating foods that have these nutrients. If your child is not able to get enough vitamin D or calcium in his or her diet, you may need to take vitamins in the form of tablets or pills. Please talk to the doctor about this.
- Your child may need blood tests to check the levels of calcium or vitamin D in the body.
- If your child drinks mainly formula, talk to the doctor or care provider about how much calcium or vitamin D your child is getting.