



# Checking for Low Bone Density in Children with Autism Spectrum Disorder

**Children and adults with autism spectrum disorders can sometimes have low bone density caused by associated health problems. This handout will help you figure out if your child is at risk of having low bone density and how to schedule a doctor's appointment if your child needs to be checked for low bone density.**

## WHAT IS LOW BONE DENSITY?

**Low bone density** is a condition in which bones are less dense and therefore weaker than they should be at that age. Low bone density with a **significant fracture history** is called **osteoporosis**. The care team will let you know if your child has a significant fracture history.

## WHAT CAUSES LOW BONE DENSITY?

There are many causes of low bone density. The most common causes in children with autism spectrum disorders (ASD) include:

- Family history of low bone density
- Not enough physical activity
- Poor muscle tone
- Low vitamin D levels
- Low calcium intake through diet and supplements
- Special diets
- Taking certain medications
- Certain health conditions

## IS MY CHILD AT RISK OF LOW BONE DENSITY?

Your child is at risk of having low bone density if they have one or more of these risk factors:

- Low muscle mass or tone
- Less active lifestyle
- Poor nutrition
- Low vitamin D levels
- Dairy-free and/or gluten-free diet
- Taking certain anti-seizure medications for a year or more

- Other medications, such as antipsychotics and proton pump inhibitors
- Use of oral corticosteroids for more than 3 months
- Other diseases that can happen with ASD, including celiac disease, inflammatory bowel disease, kidney disease or conditions needing a wheelchair.

## WHEN SHOULD I HAVE MY CHILD CHECKED FOR LOW BONE DENSITY?

Your doctor will tell you when your child should be checked for low bone density. In general, your child should be checked for low bone density if they have:

- Low levels of vitamin D
- Limited mobility or poor muscle tone
- Had 2 or more broken bones (fractures) before age 10
- Had 3 or more broken bones before age 19
- Had a vertebral or spine fracture
- Rett syndrome or other conditions that increase the risk of low bone density

## HOW DO I SCHEDULE AN APPOINTMENT TO HAVE MY CHILD CHECKED FOR LOW BONE DENSITY?

If your child needs to be checked for low bone density, call the **Pediatric Bone and Mineral Metabolism (BAMM) Disorders Clinic** at MassGeneral Hospital for Children at 617-726-2909.

The BAMM Disorders Clinic cares for children who have low bone density and other disorders that affect bone health and how the body processes minerals, like vitamin D and calcium.