



2-METHYLBUTYRYL-CoA DEHYDROGENASE DEFICIENCY (2-MBG)

FAMILY FACT SHEET

What is a positive newborn screen?

Newborn screening is done on tiny samples of blood taken from your baby's heel 24 to 36 hours after birth. The blood is tested for rare, hidden disorders that may affect your baby's health and development. The newborn screen suggests your baby might have a disorder called 2-MBG.

A positive newborn screen does not mean your baby has 2-MBG, but it does mean your baby needs more testing to know for sure.

You will be notified by your primary care provider or the newborn screening program to arrange for additional testing.

What is 2-MBG?

2-MBG affects an enzyme needed to break down fats in the food we eat. In 2-MBG, the enzyme used to break down proteins is missing or not working properly.

A person who has 2-MBG doesn't have enough enzyme to break down protein containing isoleucine, so harmful toxins can build up in the body.

2-MBG is a genetic disorder that is passed on (inherited) from parents to a child. The mother and father of an affected child carry a gene change that can cause 2-MBG. Parents usually do not have signs or symptoms, or even know they carry the gene change.

What problems can 2-MBG cause?

2-MBG is different for each child. Some children with 2-MBG have few health problems, while others may have serious complications.

2-MBG is most prevalent in newborns of Hmong ancestry.

If 2-MBG is not treated, a child might develop:

- Sleepiness
- Low blood sugar
- Developmental delay

It is very important to follow the doctor's instructions for testing and treatment.

What is the treatment for 2-MBG?

2-MBG can be treated. Treatment is life-long and can include:

- Diet low in isoleucine- a dietitian will help you with the best diet for your child.
- Medications to help the body get rid of harmful toxins.

Children with 2-MBG should see their regular doctor, a doctor who specializes in 2-MBG, and a dietitian.

Prompt and careful treatment helps children with 2-MBG live the healthiest lives possible.

Michigan Resources and Support

Michigan Newborn Screening

Nurse Consultant

Toll-free: 1-866-673-9939

newbornscreening@michigan.gov

Children's Special Health Care Services

Toll-free: 1-800-359-3722

Michigan Metabolic Coordinating Centers

Children's Hospital of Michigan: 1-313-832-9343

Michigan Medicine: 1-734-764-0579



Phone 1-866-673-9939

www.michigan.gov/newbornscreening

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