Medium Chain Acyl-CoA Dehydrogenase (MCAD) Deficiency

(Sounds like MEDIUM CHAIN A-SIL-CO-A DE-HIGH-DRAW-GEN-ASE DE-FISH-IN-SEA)



What is newborn blood spot screening?

This is a blood test, from a heel poke, that is done a day or 2 after babies are born to test for treatable conditions including medium chain acyl-CoA dehydrogenase (MCAD) deficiency that you, your doctor, or midwife can't see by just looking at your baby. This screening test is different from those done during pregnancy.



What does it mean if my baby needs more tests for MCAD deficiency?

A baby needs to have more testing for MCAD deficiency when their screening test result is abnormal or positive. This doesn't mean your baby has MCAD deficiency. It means your baby has a higher chance of having the condition and will need more tests to find out if they have MCAD deficiency or not.

It's normal to feel worried if your baby needs more testing. Your specialists and other healthcare providers are there to support you. They'll explain what will happen and answer your questions.

What is MCAD deficiency?

MCAD deficiency is a metabolic condition that affects how your body uses fat from the food you eat to make energy. This can include breastmilk and regular formula. Your body breaks down fat into smaller parts called fatty acids. With a deficiency, or not enough MCAD, your body can't use medium-sized fatty acids to make energy and control sugar. These fatty acids build up in your body and can cause health problems.

What are some early signs of MCAD deficiency?

Your baby may:

- be very sleepy (hard to wake for feedings)
- find it hard to feed well and gain weight

What causes MCAD deficiency?

MCAD deficiency is genetic. This means babies with MCAD deficiency are born with a gene from both parents, which has a change in it. This change stops the gene from working properly. MCAD deficiency isn't caused by anything that happened during pregnancy.

There may be no signs of MCAD deficiency at birth. It's important to remember that this condition can't be seen by looking at your baby.



What can I expect with more testing?

Everything that will happen with more testing will be explained to you. Your baby may need to have their blood and urine tested to check for MCAD deficiency.

This testing may be done at a clinic in Edmonton or Calgary that specializes in MCAD deficiency.

What if more testing shows my baby has MCAD deficiency?

If testing shows that your baby has MCAD deficiency a specialized healthcare team will work with you to make a care plan for your baby. You and your baby will get the best care and support possible.



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How is MCAD deficiency treated?

Babies with MCAD deficiency need to be fed often. They don't need a low-fat diet. The specialized healthcare team will give you detailed instructions about how to manage your baby's health.



Be careful when you search for information on the Internet. Get information from trusted sources and learn where to find reliable information.

If you're ever concerned about your baby's health or need support for you or your family, speak with your family doctor, the specialized healthcare team, or call Health Link at 811.

To learn more about MCAD deficiency visit <u>babysfirsttest.org</u> and enter MCAD into Find a Condition, or scan this QR code.





Newborn blood spot screening is provided through the Alberta Newborn Screening Program (ANSP) within Alberta Health Services (AHS). The program helps your baby have the best start in life. Early screening for certain conditions makes sure your baby gets treatment when it can help the most.

To learn more about newborn screening visit <u>ahs.ca/newbornscreening</u> or scan this QR code.



Notes

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