Multiple Carboxylase Deficiency (MCD) General Overview

Q. What is MCD?
A. MCD is a treatable disorder that affects the way the body uses biotin (a vitamin) to help break down proteins and process fats and carbohydrates. If left untreated, MCD can cause life-threatening illness.

Q. What happens to biotin in a child with MCD?
A. In a child with MCD, the enzyme needed to use biotin is either missing or not working properly.

Q. What is the treatment for MCD?
A. MCD is easily treated with daily supplements of the biotin vitamin. To prevent problems, treatment must begin shortly after birth, and is life-long. People with MCD require treatment through a specialty clinic with experience in treating this disorder.

Q. What are the effects of having MCD if it is not treated?
A. Untreated MCD can lead to breathing problems, low blood sugar levels, developmental delay, coma and possible death. It can also result in hair or skin problems.

Q. Why would a child have MCD?
A. MCD is an inherited disorder. It results when a baby receives a double-dose of a specific non-working gene (one from each parent). For more information about this, contact your health care provider or a genetic counselor.

Q. What are the chances that a child will be born with MCD?
A. The prevalence of MCD is unknown, but very rare. However, parents who have a child with MCD each carry one copy of the non-working gene. That means, with each pregnancy, each one will have a one in four chance of having MCD.

For more information about MCD, please see the Disorders section or our website: www.doh.wa.gov/nbs.