

Idiopathic Ketotic Hypoglycaemia (KH)

Idiopathic Ketotic hypoglycaemia is a common reason for low blood glucose (low blood sugar) in young children who have no metabolic or endocrine problem. It generally occurs following a long period of time without food. It usually first appears when a child is between 18 months and five years old. Children tend to outgrow this after 6 years of age, but this can vary.

Ketotic means high level of ketones in the blood.
Hypoglycaemia means low blood glucose levels.

Usually the body uses glucose for energy from the foods that we eat. Our bodies also has stores of glucose, called glycogen that can be used if we have not eaten recently. If these stores run out, our bodies can then make energy from stored fats. Our stored fats cannot be used directly by the brain for energy and so they need to be converted into ketones before they can be used. Ketones are mainly made and used by the body during times of illness or prolonged fasting, or when not eating or drinking as much as usual.

During illness, after fasting or after strenuous exercise, young children with KH are at increased risk of having low blood glucose episodes. Children with KH will make ketones normally, but they can build up and make children unwell when produced in excess when they are sick/fasting.



How is KH treated?

Children must maintain a healthy, balanced diet, including complex carbohydrates at each meal and before bed.

Complex carbohydrates include:

- Bread and bread rolls
- Pasta, rice and noodles
- Popcorn
- Breakfast cereals such as Weetabix, Porridge and Ready Brek
- Scones
- Pancakes
- Crackers and crispbread



During times of illness or prolonged fasting if your child is not eating complex carbohydrate, the emergency regime (ER) will be needed.

Your Health Care Professional will give you an ER pack. The ER is a specific-to-age concentrated glucose drink that gives the body enough energy.

If the ER is not tolerated **you will need to bring your child to your local hospital** to possibly start intravenous (IV) fluids containing dextrose (a form of sugar).

If you have any questions or concerns, please contact the metabolic team.

Email: metabolic.dietitians@cuh.ie

Metabolic Unit Monday – Friday, 9am-5pm on 01 878 4317.

Outside of these hours Monday to Sunday contact switchboard on 01 878 4200 and ask for the Metabolic Registrar on call or ask for the Metabolic Nurse on call.

For St. Brigid's Ward call 01 878 4374

For Metabolic Nurse Specialist 01 878 4409

References

<https://flipbooks.leedsth.nhs.uk/LN005153.pdf>

<https://www.evelinalondon.nhs.uk/resources/patient-information/ketotic-hypoglycaemia.pdf>