



Need to talk? Call us **0845 2412173** Monday to Friday  
9am to 5pm



Supporting those affected by  
Inherited Metabolic Disorders

# Maple Syrup Urine Disease

This rare inherited metabolic disease has been named after the unusual odour of the urine, sweat and ear wax that arises in the untreated condition. Health problems occur because the body is unable to break down three amino acids (part of the 20 different building blocks of proteins) known as leucine, isoleucine and valine. The inability to break down these amino acids leads to a build up of acid levels in the blood that becomes toxic and can lead to damage of some tissues in the body, in particular the brain. There is wide variety in the severity. The most severely affected children develop symptoms soon after birth, whereas people with milder variants may present in later childhood.

MSUD is now routinely tested for shortly after birth as part of the Newborn Bloodspot Screening Programme. If MSUD is diagnosed, treatment is started immediately. Newborn screening and early management greatly improves outcomes and prognosis. Without lifelong treatment and management, severe and life-threatening symptoms can develop, including brain damage, seizures or coma.

## Synonyms

Alternative names for this condition are:

- BCKD Deficiency
- Branched Chain Alpha-Ketoacid Dehydrogenase Deficiency
- MSUD
- MSD



Further information about this condition is available from Climb.

### Disclaimer

[Please read our disclaimer and information on data protection.](#)

Updated 28/09/17

Telephone: **0845 241 2173**  
Email: [contact@climb.org.uk](mailto:contact@climb.org.uk)

Freephone: **0800 652 3181**  
Website: [www.climb.org.uk](http://www.climb.org.uk)

Children Living with Inherited Metabolic Diseases is a charity registered in England and Wales (1089588) in Scotland (SC044634) and a Company Limited by Guarantee 4267454



ClimbHQ



ClimbHQ



TeamClimb