Fact Sheet
G6PD deficiency (Favism)

You may be reading this fact sheet because you have been told that your baby has G6PD deficiency. Learning that your baby has a medical condition is upsetting, however, be reassured that this condition is common and that people with G6PD deficiency can live normal lives as long as they avoid certain foods and chemicals.

What is G6PD deficiency?
It is a condition which affects the red blood cells. These cells carry oxygen to all parts of the body. G6PD is an enzyme (a chemical) in the red blood cells that is essential to keep the cells working properly.

When people with G6PD deficiency come into contact with certain foods, chemicals and medicines (see next page for list) their red blood cells break down, this is called haemolysis. Haemolysis can be serious because there may not be enough oxygen reaching all parts of the body.

So what are the symptoms of haemolysis (red cell breakdown) in G6PD deficiency?
Things that parents need to look out for are:

- **Pale skin**: this is caused by anaemia (having a low number of red blood cells)
- **Yellow skin, eyes and tongue**: this is called jaundice and is caused by the red blood cells breaking down
- **Dark yellow/brown urine (wee)**:
- **Tiredness**:
- **Fast heartbeat and difficulty breathing**: this happens because the body is not getting enough oxygen
- **Fever**: raised temperature

How did my baby get G6PD deficiency?
People are born with this condition. We say it is genetic which means that you inherit the defective gene from your parents. It is important to understand that not every person is affected by G6PD deficiency in the same way. There are many variations (types) of the gene problem resulting in some people being affected mildly and others severely. When the condition is very severe we call it Favism.

Some racial groups have a higher incidence (number of affected people) than others:

- Certain African people: up to 20% of the population are affected
- People from a Mediterranean background: 4% to 30% of people affected
- People from South East Asia and Papua New Guinea: 5% to 25% may be affected

If your child has G6PD deficiency and develops pale skin, unusual tiredness, yellow skin and eyes and/or dark urine, you should consult your doctor immediately.
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What about newborns who have G6PD deficiency?
It is important to diagnose G6PD deficiency in newborns and therefore at Westmead Hospital screening is offered to all babies.

Babies with G6PD deficiency may develop prolonged and severe neonatal (newborn) jaundice. Neonatal jaundice is common and can be due to a number of causes, most of which are not serious. Usually neonatal jaundice is mild and should disappear a few days after your baby is born. If the jaundice persists seek medical advice early.

What should people with G6PD avoid to stay healthy?
The list includes:

Foods
- Fava beans (also called broad beans)
- Tonic water
- Sometimes blueberries
- Plus others (see full list in link provided)

Chemicals
- Naphthalene (the main ingredient of moth balls / moth flakes and some toilet deodorant cakes)
- Methylene blue

Certain Antibiotics
- Sulphonomides
- Co-trimoxasole
- Chloramphenicol
- Plus many others

Certain anti-malarials
- Chloroquine
- Primaquine
- Quinine
- And many others

Other drugs
- Sometimes aspirin
- Large doses of vitamin C
- Methyldopa
- And many others

The list of drugs and chemicals that need to be avoided is long, so:
✓ ALWAYS talk with your doctor before giving your child any medication.
✓ ALWAYS read the label of any medication you have bought without a prescription.
✓ ALWAYS be very careful about using any herbal, naturopathic, or alternative forms of medicine.

Additionally, it is important to remember that any viral or bacterial infection can stress the body and lead to haemolysis (red cell breakdown) in people with G6PD deficiency.

The G6PD Deficiency Association has a very detailed list of things to avoid but these will depend on how severely your child is affected, so you still need to discuss the details with your doctor.

Click here to find the list.
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Naphthalene is the chemical found in moth balls and moth flakes and toilet deodorant cakes. It can cause haemolytic anaemia in any baby, not just those with G6PD deficiency, although the effect is more severe in babies with the condition.

Haemolysis can occur in G6PD affected babies and adults even by wearing clothes that have been stored in moth balls. Moth balls should never be used in homes where there are children younger than 3 years old.

Click here for NSW Health Department information on mothballs and children

Translations in many languages of the NSW health factsheet on naphthalene can be found here

What treatment will my baby receive if she/he has G6PD deficiency and develops neonatal jaundice?

- Your baby will be monitored very closely with blood tests to check for anaemia and bilirubin levels.
- Your baby may need to be treated with phototherapy – treatment under special lights.
- In severe cases your baby may need a blood transfusion.

The staff looking after your baby will discuss the treatments with you. Don’t hesitate to ask questions if you feel concerned.

How are children and adults with G6PD deficiency with a haemolytic crisis treated?

- Sometimes no treatment is necessary as the red cells repair themselves over time.
- In severe cases a blood transfusion may be required

Reading this information may leave you feeling overwhelmed, but remember that G6PD deficiency is common, and nearly all people with the condition lead normal lives just by taking extra care what they eat, the medicines they take and avoiding the chemicals that cause haemolysis.

A website that we recommend for further reading:
G6PD Deficiency Association

We welcome further feedback on this brochure as a way of continually improving our service.
Send your feedback to:
WSLHD-Get_Involved@health.nsw.gov.au

This written information is for guidance only and does not replace consultation and advice by your health care provider.