Information for people who have Glucose 6 Phosphate Dehydrogenase (G6PD) Deficiency

What is G6PD?

G6PD is short for "Glucose 6 phosphate dehydrogenase".

G6PD is a substance which is found throughout the body.

Some people have G6PD deficiency.

This means they have reduced amount of G6PD in their red blood cells, which may cause problems occasionally.

How was my G6PD deficiency discovered?

It was found either by a routine screening test or because something suggested to a doctor that this condition might be present and a specific test was done to measure the G6PD level. It has only been discovered now because this test has been done.

How does someone get G6PD deficiency?

G6PD deficiency is inherited, that means it is passed from one or both parents to the child. It is found in both males and females, but it usually affects males more severely. It is found generally in people whose family originated from areas where malaria has been common such as the Mediterranean and Caribbean, Africa and South East Asia. For example, G6PD deficiency is found in 1 in 12 Cypriots 1 in 5 Africans, 1 in 10 Afro Caribbean's, 1 in 15 Indians, 1 in 30 Chinese and 1 in 5 Thais. There are many different kinds of deficiency, but the kinds found in people from the Mediterranean and South East Asia are usually more severe than the kinds found in other groups. People with G6PD deficiency may have some protection against malaria but it is still important for them to take malaria tablets when in areas of the world where malaria occurs.

What does G6PD have to do with blood?

It is found in red blood cells which carry oxygen to all parts of the body. It helps the red blood cells to function normally. It also helps protect red blood cells against substances that can accumulate when you have a fever or take certain medicines. If there is not enough G6PD to protect the red cells some of them may be destroyed, if this happens the person may not have enough red blood cells, and may become anaemic.

When can G6PD deficiency cause problems?

Problems for children and adults

Th e vast majority of people with G6PD deficiency have completely normal health. However, problems can occur occasionally, these problems are more common in boys and men with G6PD deficiency than girls and women. Children and adults with G6PD deficiency ***occasionally*** have a problem if they eat broad beans (this is called favism), if they develop a fever , or if they take one of the medicines listed below. An affected person feels unwell, becomes pale and jaundiced (yellow) and may have a backache and pass dark urine, if you develop any of these symptoms, call your GP or go to Casualty Department and ***take this leaflet with you.***

How can I avoid having problems?

The following medicines can sometimes cause problems for people with G6PD deficiency and should be avoided if possible:-

For Malaria avoid

Maloprim (contains Dapsone)
Primaquine
Pentaquine
Pamaquine

For other infection avoid

Nalidixic acid
Nitrofurantoin
Sulphonamides (some including Co-trimoxazole= Septrin, Bactrim)
Dapsone

Avoid close contact with

Moth Balls (Naphthalene)

Avoid eating

Fava (Broad) Beans
Chinese Herbal Medicine

Note(1) There are many different kinds of G6PD deficiency and many medicines have been thought to cause haemolysis. Although this is not a comprehensive list of drugs, those listed above are most likely to do so in people who have G6PD deficiency. Very occasionally other medicines can cause problems and if a medicine which is not on the list is found to cause haemolysis in a particular person it should be avoided. In some medical situations it may be necessary for a person with G6PD deficiency to have one of the medicines listed above and if that happens your doctor will probably arrange to check your blood count while you are taking the medicine.

(2) Some additional drugs can cause problems are not available in the UK but maybe elsewhere and should also be avoided: Acetanilid, Niridazole, Phenazopyridine, Phenylhydrazine.

(3) In people with sever G6PD deficiency haemolysis may occur in other situations. In particular, in association with infections.

Problems for new born babies

If a mother carries G6PD deficiency, she may pass it on to some of her children, and some may get jaundiced (yellow) in the new born period. This is particularly likely for baby boys. Jaundice can be bad for new born babies if it is not treated It is usually treated by putting the baby under a special light for several hours at a time for a few days. Jaundice may be worse if the baby is premature and also of the baby's clothes or nappies have been kept in mothballs. Many boys with G6PD deficiency are diagnosed because they have jaundice soon after birth. Once the jaundice has passed they should not

get other problems from g6DP deficiency provide that they avoid broad beans and the drugs listed above.

Problems in the unborn child

G6PD deficiency does not cause any problems in the unborn child.

For further information: please contact:

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Please keep this leaflet handy with your medical card and show it to your doctor whenever you are given a prescription or medicine to take