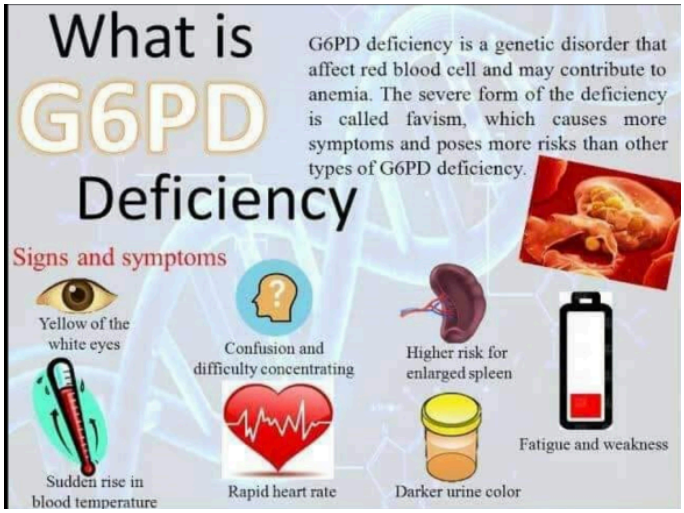
G6PD Rainbow Factsheet

The G6PD deficiency is more common in Israel than in many European or North American countries. This is because generically the Jews in Israel who have ethic origins in North Africa are much more likely to be carriers of the gene that causes G6PD deficiency. This is why you may have worked for example in the UK for many years in the UK and never had a child in a setting with the deficiency, and now working in Israel you find multiple children in each class have this diagnosis. Therefore, it is important that we learn a little more about it!



What is it?

G6PD deficiency is an inherited condition. It is when the body doesn't have enough of an enzyme called G6PD (glucose-6-phosphate dehydrogenase). This enzyme helps red blood cells work properly. A lack of this enzyme can cause hemolytic anemia. This is when the red blood cells break down faster than they are made.

What Causes G6PD Deficiency?

G6PD deficiency is inherited. Children who have it are born with it because it was passed down in genes from one or both parents. The gene responsible for this condition is on the X chromosome.

Living with G6PD deficiency

People with this condition need to avoid things that can trigger hemolytic anemia. These include:

- Aspirin, and products that have aspirin
- Certain antibiotics
- Fava beans
- Moth balls

Background and Detail

G6PD helps red blood cells work. It also protects them from substances in the blood that could harm them.

In people with G6PD deficiency, either the red blood cells do not make enough G6PD or what they do make doesn't work as it should. Without enough G6PD to protect them, the red blood cells break apart. This is called hemolysis (hih-MOL-ih-sis). When many red blood cells are destroyed, a person can develop hemolytic anemia. This can cause tiredness, dizziness, and other symptoms.

Red blood cells that don't have enough G6PD are sensitive to some medicines, foods, and infections. When these things trigger a quick loss of red blood cells over a short time, it's called a hemolytic crisis. In these cases, the symptoms stop when the cause is gone. In rare cases, G6PD deficiency leads to chronic anemia regardless of exposure to triggers.

Triggers of hemolysis in kids with G6PD deficiency include:

- illness, such as bacterial and viral infections
- some painkillers and fever-lowering drugs
- some antibiotics (most often those with "sulf" in their names)
- some antimalarial drugs (most often those with "quine" in their names)
- fava beans (also called broad beans)
- naphthalene (a chemical found in mothballs and moth crystals). Mothballs can be very harmful if a child swallows one

How Is G6PD Deficiency Treated?

Treating G6PD deficiency symptoms is usually as simple as removing the trigger. Often, this means treating the infection or stopping the use of a drug. A child with severe anemia may need treatment in the hospital to get oxygen and fluids. Sometimes, a child also needs a transfusion of healthy blood cells.

What Can Parents and Early years staff do?

The best way to care for a child with G6PD deficiency is to limit exposure to anything that triggers symptoms. Check with your doctor for instructions, and a list of medicines and other things that could be a problem for a child with G6PD deficiency.
With the right care, G6PD deficiency should not keep a child from living a healthy, active life.

Flava Bean Ban (פול)

Because we have children at Rainbow with G6PD – we have a **complete ban on Flava beans** (broad beans). This includes for food or play.