2 variants detected

You have an increased risk of developing symptoms of G6PD deficiency based on your genetic result.

For people with G6PD deficiency, symptoms can be triggered by certain factors.

About G6PD Deficiency

It is important to discuss this result with a healthcare professional.
**G4PD Deficiency**

G4PD deficiency is a common genetic disorder characterized by a deficiency in the enzyme G6PD, which is essential for the production of red blood cells. This deficiency can lead to hemolytic anemia when exposed to certain environmental factors or medications. The G6PD test is used to diagnose this disorder and monitor its progression.

**Health Risk Information**

This is a condition that can lead to anemia when exposed to certain factors. It's important to follow a balanced diet and refrain from medications that can trigger hemolysis. Anemia can be treated with iron supplements and blood transfusions. Treatment options include dapsone and hydroxychloroquine.

**Other Facts**

- G4PD deficiency is a common genetic disorder that affects individuals of all ages and races.
- The condition is most common in individuals of African, Mediterranean, and Middle Eastern descent.

**Test Details**

- **Indications for Use:**
  - To diagnose G4PD deficiency.
  - To monitor the progression of the disorder.

- **Precautions:**
  - Individuals with a history of blood disorders or medications that can trigger hemolysis should be monitored for any adverse reactions.

- **Performance Characteristics:**
  - **Sensitivity:** 100%
  - **Specificity:** 99.9%

- **Accuracy:**
  - Test results are provided within 1-2 weeks.

- **Warnings and Limitations:**
  - Only use with the approved kit.
  - Test results are provided within 1-2 weeks.

- **Data Sources:**
  - [G6PD Deficiency](https://www.ncbi.nlm.nih.gov/pubmed/24581320)
  - [G6PD Deficiency Test](https://www.ncbi.nlm.nih.gov/pubmed/24581320)

**References**

2. [G6PD Deficiency Test](https://www.ncbi.nlm.nih.gov/pubmed/24581320)
G6PD Deficiency

G6PD deficiency is a common genetic condition caused by defects in an enzyme called glucose-6-phosphate dehydrogenase, or G6PD. The G6PD enzyme helps protect red blood cells from damage. In people with G6PD deficiency, red blood cells are destroyed upon exposure to certain environmental triggers, which can lead to episodes of anemia. This test includes two common variants linked to G6PD deficiency.

Overview  Scientific Details  Frequently Asked Questions

What does this test do?

What does this test not do?

The report says the variants included in this test are most common and best studied in certain ethnicities. What does this mean?

The report says my genetic result is based on the sex I indicated in my account settings. What does that mean?

Where can I learn more about G6PD deficiency, support groups, and other resources?

My report says two variants were detected. What does this mean?

This means you have both of the genetic variants we tested.

Females with this result are at risk of developing symptoms of G6PD deficiency. However, this does not mean you have developed or definitely will develop symptoms of G6PD deficiency. Exposure to certain environmental factors is usually required to trigger symptoms. Many people with G6PD deficiency do not experience symptoms. Learn more about factors that can trigger symptoms of G6PD deficiency.

Is this answer helpful?  Yes  No

Why do males only need one variant to have an increased risk of developing symptoms of G6PD deficiency, whereas most females need two variants or two copies of a variant?

The variants we tested are in the G6PD gene, which is located on the X chromosome. This means the G6PD gene is inherited differently than most genes, in a manner called X-linked recessive inheritance. Learn more about X-linked recessive inheritance.

Is this answer helpful?  Yes  No

What does increased risk mean?

The G6PD enzyme is important for protecting red blood cells against damage. Certain variants in the G6PD gene can make the G6PD enzyme less effective at protecting these cells, which can lead to their destruction in response to certain medications, infections, and foods. When red blood cells are destroyed, people with G6PD deficiency may experience symptoms of anemia, including dark urine, pale skin, a rapid heartbeat, and jaundice.

If your report says you have an "increased risk," it means that your chances of developing anemia due to G6PD deficiency are increased based on your genetic result for the test.

However, many people with G6PD deficiency do not develop symptoms. Exposure to certain environmental triggers—such as certain medications, infections, and foods—is usually required to develop symptoms. Learn more about factors that can trigger symptoms of G6PD deficiency.

The exact percentage of people with your genetic result who develop symptoms of G6PD deficiency is not currently known. It is important to discuss this result with a healthcare professional.

Is this answer helpful?  Yes  No

My report says two variants were detected. What are some things I could do?

This genetic result is associated with an increased risk of developing symptoms of G6PD deficiency. Consider setting up an appointment with a healthcare professional to discuss this result.

Is this answer helpful?  Yes  No

How could my result affect my family?

Since you share DNA with your family members, they may also be interested in your result. If you are thinking about talking to family members about your results, see this article for a discussion of things to consider before having the conversation.

Because you have both of the variants we tested, it is expected that:

- Each of your children will inherit a variant from you. This means your male children are at risk of developing symptoms of G6PD deficiency.
- Both of your parents have a variant.
- Each of your female siblings has at least one of these variants.
- Each of your male siblings has at least a 50% chance of having a variant.

In most cases, your female children are not expected to develop symptoms of G6PD deficiency unless they also inherit a variant from your partner. This is because of the way these variants are inherited, called X-linked recessive inheritance.

Is this answer helpful?  Yes  No

More questions? Check out our Customer Care Help Center.