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URL of this page: <https://medlineplus.gov/g6pddeficiency.html>

## G6PD Deficiency

**Also called:** Glucose-6-phosphate dehydrogenase deficiency

Glucose-6-phosphate dehydrogenase (G6PD) deficiency is a genetic disorder that is most common in males. About 1 in 10 African American males in the United States has it. G6PD deficiency mainly affects **red blood cells** [<https://medlineplus.gov/blood.html>] , which carry oxygen from the lungs to tissues throughout the body. The most common medical problem it can cause is **hemolytic anemia** [<https://medlineplus.gov/anemia.html>] . That happens when red blood cells are destroyed faster than the body can replace them.




If you have G6PD deficiency, you may not have symptoms. Symptoms happen if your red blood cells are exposed to certain chemicals in food or medicine, certain bacterial or viral infections, or stress. They may include:

- Paleness
- Jaundice [<https://medlineplus.gov/jaundice.html>]
- Dark urine
- Fatigue
- Shortness of breath [<https://medlineplus.gov/breathingproblems.html>]
- Enlarged spleen
- Rapid heart rate


A blood test can tell if you have it. Treatments include medicines to treat infection, avoiding substances that cause the problem with red blood cells, and sometimes transfusions.

*NIH: National Library of Medicine*


## Learn More

- Anemia, Nonspherocytic Hemolytic, Due to g6pd Deficiency [<https://rarediseases.info.nih.gov/diseases/6520/class-i-glucose-6-phosphate-dehydrogenase-deficiency>]  (Genetic and Rare Diseases Information Center)
- Blood Count Tests: MedlinePlus Health Topic [<https://medlineplus.gov/bloodcounttests.html>]  (National Library of Medicine)  
Also in Spanish [<https://medlineplus.gov/spanish/bloodcounttests.html>]
- G6PD Deficiency (Glucose-6-Phosphate Dehydrogenase) (For Parents) [<https://kidshealth.org/en/parents/g6pd.html>] (Nemours Foundation)
- G6PD Test [<https://medlineplus.gov/lab-tests/g6pd-test>]  (National Library of Medicine)  
Also in Spanish [<https://medlineplus.gov/spanish/pruebas-de-laboratorio/prueba-de-g6pd/>]
- Glucose-6-phosphate dehydrogenase deficiency [<https://medlineplus.gov/ency/article/000528.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/000528.htm>]

## Genetics

- Glucose-6-phosphate dehydrogenase deficiency: MedlinePlus Genetics [<https://medlineplus.gov/genetics/condition/glucose-6-phosphate-dehydrogenase-deficiency>]  (National Library of Medicine)

## Clinical Trials

- ClinicalTrials.gov: Glucosephosphate Dehydrogenase Deficiency [<https://clinicaltrials.gov/search?cond=%22Glucosephosphate+Dehydrogenase+Deficiency%22&aggFilters=status:not%20rec>]  
 (National Institutes of Health)

## Journal Articles

References and abstracts from MEDLINE/PubMed (National Library of Medicine)

- Article: High daily dose Short COurse PrimaquinE after G6PD testing for the... [<https://www.ncbi.nlm.nih.gov/pubmed/40670924>]
- Article: Evaluation of the Wondfo G6PD/Hb Test for glucose-6-phosphate dehydrogenase deficiency: preliminary... [<https://www.ncbi.nlm.nih.gov/pubmed/40597115>]
- Article: Acceptability and feasibility of glucose-6-phosphate dehydrogenase (G6PD) testing using SD Biosensor... [<https://www.ncbi.nlm.nih.gov/pubmed/40527529>]
- G6PD Deficiency -- see more articles [<https://pubmed.ncbi.nlm.nih.gov/?term=%22Glucosephosphate+Dehydrogenase+Deficiency%22%5Bmajr%3Anoexp%5D+AND+humans%5Bmh%5D+AND+english%5Bla%5D+AND+%22last+1+Year%22+%5Bedat%5D+NOT+%28letter%5Bpt%5D+OR+case+reports%5Bpt%5D+OR+editorial%5Bpt%5D+OR+comment%5Bpt%5D%29+AND+free+full+text%5Bsb%5D+>]

## Patient Handouts

- Glucose-6-phosphate dehydrogenase [<https://medlineplus.gov/ency/article/003671.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/003671.htm>]



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