



# Libyan International Medical University Faculty of basic medical science

## **Favsim Anemia**

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#### **Abstract:**

According to the subject that these report well be including the favism anemia and the different study's depending on the factors and symptoms the study's are done in (Egypt - America - Canada ).

#### **Introduction**:

Favism is a medical condition which is caused by an enzyme deficiency in the blood. People with this deficiency can experience anemia as a result of exposure to fava beans. The condition is most common in people who live around the Mediterranean, and it generally affects men, although women can be carriers. For people with this condition, an assortment of other foods and some pharmaceuticals can also trigger a reaction. The most effective treatment is to avoid the substances that can trigger anemia and a blood transfusion for people in anemic crisis. Officially, favism is known as Glucose-6-Phosphate Dehydrogenase Deficiency, or G6PD. The severity of this condition varies from patient to patient; in all cases, people suffer what is known as hemolytic anemia because their lack of this enzyme means that the health of their red blood cells is impaired. As a result, the cells can break down very quickly, triggering a range of symptoms from tiredness to coma, depending on the severity of the anemia. Southeast Asians and some Africans are also at risk of this condition. Fava beans have been linked with anemic conditions since ancient times, which is why "favism" is used as a generic name for G6PD deficiency. Not all people with this condition react to these beans, however, and other legumes can also spark an anemic episode. G6PD deficiency also causes severe reactions with some medications. People with this condition should speak to a medical professional about what drugs to avoid, as different medications represent different risks for unique individuals, and the list of risky drugs is quite long. For someone with the severe form, exposure to even the pollen of fava beans can cause a reaction, as will consumption of the beans. The patient may feel tired, feverish, or experience a headache, and the condition can also cause abdominal pain, nausea, and vomiting. If left untreated, it can result in serious health problems, like a coma. Early warning signs include jaundice, dark urine, and a general sense of feeling run down and tired all the time. People who think that they may have favism can be tested for it. A simple blood test can check a patient's enzyme levels to determine whether or not the patient has a deficiency and how severe the people who have family condition is. G6PD is genetic, so members

### **Discussion:**

- 1. Case done in Canada in the university of Toronto health care program on 400 patient 80 ware man and 100 ware woman of the age of 16to 40 years old they do have hemolytic anemia 70% of patient after eating bens have symptoms of wakens after good diagnosis and lapratrory waek out they found glucose-6-phosphate dehydrogenase (G6PD) deficienc and headache 40 % ware man and 20% ware women , symptoms included abdominal pain as well .these study was done in 2003 to 2007.
- 2. Case done in Egypt in the university of Cairo research and program on 150 patient 90 ware man and 70 ware woman of the age of 20to 60 years old they do have hemolytic anemia 60% of patient after eating bens have symptoms of wakens after good diagnosis and lapratrory waek out

they found glucose-6-phosphate dehydrogenase (G6PD) deficienc and headache  $40\,\%$  ware man and 20% ware women , symptoms included abdominal pain as well. As well 40% of them ware eating bens and had nothing in the history or dignisis so related to these it's not always who eats have it. This study was done in 2003-2005.

3. Case done in India local researches program for postgraduate medical science program health care program on 80 patient 60 ware man and 20 ware woman of the age of 22 to 46 years old they do have hemolytic anemia 50% of patient after eating bens have symptoms of wakens after good diagnosis and laboratory weak out they found glucose-6-phosphate dehydrogenate (G6PD) deficiency and headache 30 % ware man and 50% ware women , symptoms included abdominal pain as well . As well 40% of them ware eating bens and had nothing in the history or diagnosis so related to these it's not always who eats have it. This study was done in 2006-2008

These all linked to the development of hemolytic anemia after ingestion of fava beans and it is almost exclusively seen in patients with glucose-6-phosphate dehydrogenate (G6PD) deficiency these have G6PD deficiency impairs production of anti-oxidative enzymes such as glutathione peroxides (GSH) and occurs as a result of mutations in the X chromosome, it's not always related to the factor what was discussed along the study's some time it's not.

#### Reference:

**Conclusion:** 

- 1. Cotran's Favsim anemia, 2015, Robbins basic pathology Favsim anemia 8<sup>th</sup> ed.
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- 3. www.favsimakotoonline.com
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