

Carrying haemoglobin O Arab

(also known as being A/O Arab, or having haemoglobin O Arab trait)

- A carrier of haemoglobin O Arab is a healthy person.
- Carrying haemoglobin O Arab does not weaken them physically or mentally.
- They do not need any medical treatment because they carry haemoglobin O Arab.

What does it mean to carry haemoglobin O Arab?

Haemoglobin O Arab is one of many possible variations in the blood called *haemoglobin gene variants*, or *haemoglobin variants*.

Haemoglobin is what makes blood red. It is packed into red blood cells. Carriers of haemoglobin O Arab have both the usual haemoglobin (haemoglobin A) and an unusual haemoglobin called haemoglobin O Arab. Most also have slightly smaller red blood cells, but more of them, than other people.

A carrier will always be a carrier, and no-one can catch it from them. They inherited haemoglobin O Arab from one of their parents, and could pass it on to their children.

Haemoglobin O Arab is uncommon. It has been found only among people who originate from North Africa, Northern Greece, Romania, Bulgaria, Turkey or Cyprus.

Can carrying haemoglobin O Arab cause any health problems?

Carrying haemoglobin O Arab is not an illness, and will never turn into an illness. Carriers can eat what they want, and do any kind of work they choose.

Occasionally a doctor thinks a carrier must be short of iron because they have small red blood cells. If the doctor prescribes iron medicine, in the long run this could do more harm than good. A carrier should take iron medicine only if a special blood test (serum iron or serum ferritin) shows that they are short of iron.

Carriers can give blood provided that they are not anaemic (do not have a lower haemoglobin level than usual).

Could a carrier of haemoglobin O Arab have children with a serious haemoglobin disorder?

Only if their partner carries haemoglobin S (sickle cell).

With medical help, such a couple can have healthy children.

What should a carrier do if they are thinking of having children?

They should tell their partner that they carry haemoglobin O Arab, and ask him or her to have a blood test “for haemoglobin disorders”. This test should be done before they start a pregnancy, or as soon as possible once a pregnancy has started. Their GP can arrange it.

If their partner is not a carrier, there is nothing to worry about.

What should they do if their partner is also a carrier?

They should ask their GP for an immediate appointment with a specialist counsellor. This is particularly important if they have already started a pregnancy. They can also contact the counselling service directly.

Is there anything else that a carrier should do?

If a carrier has brothers or sisters, or already has children, they need to know that they may also carry haemoglobin O Arab. They should ask their GP or practice nurse for a blood test “for haemoglobin disorders”.

Counselling services for haemoglobin gene variants are provided in this area by: