What if one (1) parent has hemoglobin C trait and the other parent has sickle cell trait?

If one (1) parent has hemoglobin C trait and the other parent has sickle cell trait, there is a 25 percent (1 in 4) chance with each pregnancy of having a child with hemoglobin SC disease, also called sickle hemoglobin C disease. Normal red blood cells are round. A person with sickle hemoglobin C disease has red blood cells that can sickle or become banana shaped. Under certain conditions, these cells can keep blood from circulating normally. This condition, called sickle cell hemoglobin C disease, also having a child with hemoglobin SC disease, also have sickle cell disease. Also, if one (1) parent has hemoglobin C trait and the other parent has sickle cell trait, there is a 25 percent chance with each pregnancy of having a child with hemoglobin SC disease.

What is hemoglobin C trait?

- Hemoglobin C trait is a condition that affects the red blood cells.
- Your red blood cells contain hemoglobin, which carries oxygen from the lungs to all parts of your body. People with normal hemoglobin have only one (1) type, hemoglobin A.
- People with hemoglobin C trait have hemoglobin A and hemoglobin C in their red blood cells. Hemoglobin C is not normal.

Who can have hemoglobin C trait?

- About one (1) out of every 40 African-Americans has hemoglobin C trait. This trait affects mostly African-Americans and people who have African ancestors. It is possible for a person of any nationality to have hemoglobin C trait.
Will people with hemoglobin C trait get sick?
- No, people with hemoglobin C trait will not get sick from the trait. If you have hemoglobin C trait, you will not get hemoglobin C disease or sickle cell disease later in life.

Why should I know if I have hemoglobin C trait?
- You can pass on hemoglobin C trait to your children, like you would hair color or eye color.
- If one (1) parent has hemoglobin C trait and the other parent has normal hemoglobin A, there is a 50 percent (1 in 2) chance with each pregnancy of having a child with hemoglobin C trait.
- Normally, people with hemoglobin C trait do not have any health problems caused by the trait.

What if both parents have hemoglobin C trait?
- If both parents have hemoglobin C trait, there is a 25 percent (1 in 4) chance with each pregnancy of having a child with hemoglobin C disease.
- Most people with hemoglobin C disease do not have any health problems caused by the disease.
- In some cases, hemoglobin C disease can cause mild anemia. This means the body does not make a normal amount of red blood cells. Hemoglobin C disease can also cause gallstones and a large spleen in some cases.