

## **Fatigue and Anemia**

Rapid fatigue and exhaustion is a common symptom for individuals with sickle cell disease. An individual's energy supply relies heavily on its circulatory system. With activities such as running or lifting heavy weights, the body's heart pumps harder to distribute red blood cells that supply the energy needed for the activity. However, sickle cell disease can cause chronic low blood count levels that offer a low energy supply. Therefore, when individuals with sickle cell disease exert themselves in activities such as running or lifting heavy weights, they rapidly use their low energy supply and find themselves quickly fatigued.

Sickle red blood cells have a shorter life span of about four to six weeks compared to three to four months for normal red blood cells. The bone marrow works overtime to produce red blood cells that replace those that are destroyed. This results in a higher than normal reticulocyte count in blood laboratory values. However, if more blood cells are destroyed than produced (hemolysis), or the bone marrow occasionally stops producing blood cells (aplastic crisis), then a more severe anemia can develop. Aplastic crisis can develop as a result of infections and viruses, or the flu.

Anemia caused by sickle cell disease tends to find a stable level without specific treatments. The blood hemoglobin level measures the degree of the anemia. Normal hemoglobin levels in individuals with sickle cell disease are generally between 6 to 8 gms/dl (normal levels are above 11 gms/dl). Monitoring blood hemoglobin levels over several blood tests will give a good indication of that individual's normal hemoglobin level. There is concern when individuals with sickle cell anemia develop normal hemoglobin counts without transfusions.

### **DISCLAIMER:**

This information is for educational purpose only and is not intended to substitute for informed medical advice from your health care provider. You should not use this information to diagnose or treat a health problem or disease without consulting a qualified health care provider with any questions or concerns you may have regarding your condition or conditions of others.