

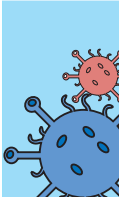


Sickle Cell Disease (SCD) is a genetically inherited red blood cell disorder affecting nearly 17 500 people in the UK. SCD has both medical and nutritional features with the nutritional features directly linked to the main clinical features of the disorder. However, nutrition is only recently emerging as a management option in SCD. This leaflet aims to provide an overview of how to manage some of the nutritional implications in SCD.

NUTRITIONAL IMPLICATIONS IN SICKLE CELL DISEASE:

CLINICAL FEATURES	HOW IT AFFECTS THE BODY	CONSEQUENCES	IMPACT
CHRONIC HAEMOLYSIS 	The rapid breakdown of red blood cells under low oxygen conditions in the blood ➤	Chronic anaemia and fatigue, increased red blood cell turnover, low oxygen levels in the blood, increased oxidative stress leading to chronic inflammation	High Resting Energy Expenditure (REE) High protein turnover High red blood cell turnover
VASO OCCLUSION 	The blockage of small and large blood vessels with sickle shaped red blood cells ➤	Reduced or obstruction of blood flow in blood vessels, leading to tissue or organ damage and chronic inflammation	Increased cardiac demand/expenditure Chronic anaemia and fatigue
IMPAIRED IMMUNITY 	Impaired functioning of the spleen ➤	An increased risk of infection, increased nutritional requirements and chronic inflammation	Increased oxidative stress Chronic inflammation Impaired immunity

KNOW THE SIGNS AND SYMPTOMS IMPACTING YOUR NUTRITIONAL RISKS

MAINTAINING GOOD NUTRITIONAL PRACTICES FOR GOOD HEALTH

Share your nutritional concerns with your healthcare professional or GP if you;

Consider the following to prioritise good nutrition and help you maintain good health;

- Have a poor appetite
- Have lost weight unintentionally
- Not able to regain your weight after illness
- Worsening anaemia or fatigue
- Multiple or long lasting infections
- Frequent hospital admissions
- Worsening complications
- Not able to engage in activities of daily living

- Aim to eat at regular intervals
- Use the Sickle Cell Nutrition: Eat Well Guide to help choose healthy options
- Eat little and often when your appetite is small
- Have energy dense snacks (high in protein and carbohydrates) in between your meals - see SCD Eatwell Guide
- Enrich/Fortify your meals and snacks to increase your protein and calorie intake
- You may need a nutritional supplement if there is no change in your appetite or you are losing weight

Reference: