

Osteoporosis

Osteoporosis is a common morbidity in thalassaemia patients and according to the World Health Organisation, is characterised by low bone density, bone tissue deterioration which in turn increases bone fragility and fracture risk.

Calcium is an important nutrient for building and maintaining bone and teeth strength. A diet high in calcium will increase storage of calcium in bones which can prevent bones becoming weak, fracturing, and leading to osteopenia (reduced bone mass) and osteoporosis. It strengthens bones by aiding its structure and rigidity and enables bones to store minerals for the body to use which is particularly important for children and their development. **Calcium also reduces haem iron absorption and it can be useful to try to have a glass of milk with meals or incorporate milk into cooking.**

The peak time for storage is during the teenage years. It is during this time that the bones reach their adult length and strength. However, it is still not too late for adults to strengthen their bones! Both your diet and exercise play a vital role in strengthening your bones; weight bearing exercise is most beneficial such as walking, running, dancing etc. If your bones are weaker or you have osteoporosis, you may need more calcium than average which can be achieved through a varied diet. Calcium supplements are also an option but ask your GP or consultant for advice before taking any supplements.

Remember that if you are on a low-iron diet, it is important to bear in mind that some foods that are high in calcium are high in iron too e.g. broccoli or kale. Dairy products are a much better source of calcium such as milk, cheese and yogurt.

Vitamin D is also important for your bones as it helps the body to absorb calcium. The main source of vitamin D is from the sun and is found in small amounts in food sources. In the winter months, vitamin D levels are likely to decrease, and this can result in the development of different symptoms e.g. fatigue and muscle weakness. Therefore, it is suggested that a vitamin D supplement is taken in the winter months but ideally all year round. It is of increased importance for individuals with darker skin complexions, as the increased melanin in the skin reduces the skin's ability produce vitamin D from the sun. You can check with your consultant as they typically prescribe vitamin D3 supplements based on your test results if required.

Please note that this is generic nutritional advice, and everyone has their own nutritional needs that is specific to them. For nutritional advice that is tailored to you, I would suggest seeing a registered dietician.