

## **Vitamin and Mineral Supplements and Blood Tests**

Following bariatric surgery your food intake will be greatly reduced and food choices restricted.

This will limit the ability to take in enough vitamins and minerals from food and the absorption of vitamins and minerals from food can also be affected by bariatric surgery. This makes it essential that you follow the recommended vitamin and mineral regimen after your bariatric surgery.

Low vitamin and mineral levels may make you feel low in energy and may result in problems such as hair loss or brittle nails in the short-term and more serious side effects such as bone thinning in the longer-term.

### **What vitamin and mineral supplements are needed following bariatric surgery?**

Routine vitamin and mineral supplements:

- Multivitamin and mineral supplement x 1-2 per day
- Calcium and vitamin D supplement x2 per day
- Vitamin B12 injections\* (every 3 months from 3 months post-surgery)

Additional vitamin and mineral supplements may be required for some patients. These include additional vitamin D, if your pre surgery level is low or iron if your iron level is low prior to surgery or at any point following surgery.

\*Vitamin B12 injections should be commenced at 3 months following your surgery if you have had a gastric bypass or mini gastric bypass. Following a sleeve gastrectomy, your levels may remain normal for several months and vitamin B12 injections may not need to start straight away. Your Dietitian will advise you based on your blood tests.

### **When should I take my vitamin and mineral supplements?**

In order to help the absorption of your vitamin and mineral tablets it is often necessary to take them at set times of the day or with or without certain food or drinks.

Below is a list of some of the most common vitamin and mineral supplements and how you can ensure you get the most from them. You may also find that taking certain tablets at set times of the day will help you to establish a good routine and remember to take them.

#### **Calcium and Vitamin D tablets e.g. Calceos or Adcal D3**

- Take with a meal to help increase absorption. An increase in stomach acid

can help absorption.

- If you need to take 2 or 3 times per day, aim to take 1 with each meal of the day, e.g. 1 with breakfast, 1 with lunch, and 1 with the evening meal.

However, certain foods can interfere with the absorption of calcium supplements such as phytates (in cereals and bran) and oxalates (in spinach and rhubarb) so try to avoid taking calcium supplements if at all possible with these foods.

### **Iron tablets e.g. Ferrous Fumarate or Ferrous Sulphate:**

- The absorption of iron will be **reduced** if taken together with calcium in milk or dairy foods or calcium supplements.
- The absorption of iron will be **reduced** if taken with tannins found in tea and coffee so avoid taking with a cup of tea or coffee.
- The absorption of iron will be **reduced** if taken with foods containing phytates. Phytates are naturally occurring compounds found in grains such as wheat, rye, oats, bran and rice and also nuts, seeds and beans or legumes.
- Try to take your iron tablets **before a meal**.
- If you experience side effects with iron tablets such as diarrhoea or constipation, an upset stomach or nausea and vomiting, taking your iron along with food can help to decrease the side effects. It is better to take your iron tablets with food, than not at all.
- If you are taking antacid medication, e.g. omeprazole or lansoprazole, try to avoid taking your iron tablets at the same time as your antacid. Ideally, the iron tablets require some stomach acid to help absorption.
- The absorption of iron can be **improved** by swallowing the tablets with fluids containing vitamin C. Try taking with:
  - a small glass of fruit juice
  - a glass of water with a mid-morning vegetable or fruit snack
  - a glass of water with a piece of fruit mid afternoon

### **Multivitamin and Mineral Tablets:**

Your multivitamin and Mineral supplement should be taken once to twice per day. This can be taken alongside a meal but ideally separate to your iron tablets and your calcium tablets.

- **Multivitamin and mineral for use during the fluid and diet stages:**

- Centrum Fruity Chewable is an A-Z multivitamin and mineral chewable supplement. Some of the vitamin levels are lower than a tablet version, so you will need to take x2 per day and move onto a solid multivitamin and mineral tablet as soon as you can tolerate one.
- Forceval Soluble is a complete multivitamin and mineral in soluble form.
  - **Suitable multivitamin and mineral supplements for long-term use:**
- Forceval multivitamin and mineral available via your GP x1 per day
- Superdrug A-Z, Tesco A-Z, Sanatogen A-Z Complete, ASDA A-Z, Lloyds Pharmacy A-Z, Sainsbury's A-Z or Centrum Performance x2 per day.

### **How often do my bloods need to be checked for vitamin and mineral levels?**

- Your bloods will initially be checked at your pre-operative assessment appointment and the results of these discussed with you at your first Dietetic appointment following your surgery.
- Within the first 2 years, your bloods will be checked every 6 months (unless some of the levels are not within the normal range, then they may be checked more frequently).
- After 2 years, it is essential that you have your blood levels checked at your GP surgery annually. It is usually helpful to arrange this on the anniversary of your surgery month, to help you remember.

**If you require more information regarding this or any other nutrition or diet related topic, please speak with your Dietitian.**