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Recommended Follow-Up After Bariatric Surgery for Patients

The following advice is intended for patients who have previously undergone bariatric surgery. It is intended for use with patients who have undergone either laparoscopic Roux-en-Y gastric bypass (LRYGB), laparoscopic One Anastomosis Gastric bypass (LOAGB), or laparoscopic sleeve gastrectomy (LSG) surgery, who are at least one year out from their surgery, and who have completed the standard follow-up of their bariatric surgery program. This advice may not be suitable for patients who have undergone different bariatric operations, or in every circumstance. Additionally while every effort is made to keep current follow-up recommendations available at https://aspiringbariatrics.co.nz/fags/#resources, guidelines do change.

Vitamins

All patients who have undergone bariatric surgery require life long vitamin supplementation with a multivitamin. There are a wide range of multivitamins available in New Zealand and unfortunately most are not sufficient for patients post bariatric surgery. Our current recommended options are:

- BN bariatric multivitamin available as capsules or chews through bnmulti.co.nz.
- My New Tum bariatric multivitamins at a dose of two tablets per day mynewtum.co.nz
- Barilife Just One multivitamin at a dose of one tablet per day https://nz.barilife.com.au/
- Centrum Women's multivitamin at a dose of one to two tablets daily after sleeve gastrectomy or two tablets daily after LYRGB or LOAGB (available from most supermarkets and pharmácies)

Please note that the multivitamins available on prescription are not suitable for patients after bariatric surgery and that Centrum multivitamins may not be suitable for long term use due to high vitamin B6 levels.

All LRYGB and LOAGB patients also require calcium at a dose of 500mg of elemental calcium twice daily. Calcium is only needed for sleeve patients with insufficient dietary calcium intake. Although this can be given on prescription as calcium carbonate, this form of calcium is poorly absorbed after gastric bypass surgery. We recommend **calcium citrate chews** at a dose of 500mg elemental calcium two to three times daily. These can be purchased on line from bariatric vitamin suppliers such as Barilife (https://nz.barilife.com.au/) or Tric nutrition (tric.co.nz). Please take these at least 2 hours apart from any iron supplements, and if taking prescription calcium carbonate, these must also be taken with meals. Calcium citrate is already contained in My New Tum multivitamins, so additional calcium is not needed with these multivitamins.

Vitamin B12 may required for patients with low levels on testing. It can be given as an intramuscular injection by your GP or practice nurse every 3 months.

Iron will be required by most menstruating women. Iron will also be required by any patient with low or falling iron stores on testing. We recommend Maltofer oral iron polymaltose which can be obtained over the counter from pharmacies. An alternative is Ferro-grad which can be obtained on prescription, but has more frequent gastro-intestinal side effects including constipation. For each of these one to two tablets daily taken three days per week (Monday, Wednesday, Friday) may be better tolerated than daily dosing. Iron should be taken separately from calcium and tea for best absorption.

Vitamin D may be required if testing reveals a deficiency. This will need to be given on prescription by your GP as over the counter vitamin D tablets are too low a dose. Vitamin D deficiency is common in the south and taking vitamin D monthly over winter is recommended.

Blood Testing

Patients who are a year or more out from bariatric surgery should only need laboratory blood testing once per year if they are nutritionally stable. Blood tests may be required more frequently for those with symptoms suggestive of a vitamin deficiency, pregnancy, or following supplementation of a deficiency. Please see your GP or practice nurse to arrange for these tests. Blood test recommendations are available on https://aspiringbariatrics.co.nz/faqs/#resources.









Pregnancy

Risks of most pregnancy complications are reduced following bariatric surgery. However it can be difficult for bariatric patients who are pregnant to meet their increased nutritional needs and appropriate weight gain throughout pregnancy needs to be addressed. For this reason all women should be referred to a bariatric surgeon AND bariatric dietitian prior to conception, and should have their pregnancy managed in conjunction with a high risk obstetrician.

If this is not possible, recommended daily vitamin intake should be:

- BN bariatric multivitamin throughout pre-conception and pregnancy
- Folic acid 800 mcg/day (5mg/day if BMI > 30 kg/m²) pre-conception to week 12
- · lodine 150 mcg/day from pregnancy to the end of breastfeeding

Blood tests should be checked for vitamin A, copper and zinc pre-conception and vitamin A, zinc, vitamin B12, and folate each trimester.

Other Issues

Rapid weight loss is a risk factor for the development of **gallstones**. Unexplained abdominal pains should be investigated by your GP, and referral to a surgeon is indicated if diagnosed. Gallbladder removal should ideally be performed by a bariatric surgeon who can check the anatomy of the bariatric procedure at the same time.

Bowel obstruction or anastomotic ulcer can occur after LRYGB or LOAGB and can be difficult to diagnose. It is important that any unexplained abdominal pain is investigated by a bariatric surgeon.

Lifelong **smoking cessation**, and **avoidance of non-steroidal anti-inflammatory drugs** (e.g. voltaren, naprosyn, ibuprofen) is important to prevent anastomotic ulcers, which can occur at any point after surgery.

Gastro-oesophageal reflux symptoms are common after LSG. These can usually be managed with over the counter reflux medications or a prescription from your GP. Persistent or severe symptoms should be investigated by a bariatric surgeon.

Excessive weight loss or significant weight regain can have surgical causes. Please contact a bariatric surgeon for further investigation.

Vomiting after meals is often the result of overeating or eating too fast, however can have a surgical cause. Please contact a bariatric surgeon or dietitian.

Excess skin is common after significant weight loss. Patients should delay any body contouring surgery until their weight is stable, preferably two years after their bariatric surgery. After this time, referral to a plastic and reconstructive surgeon should be requested.

When to see a Specialist

Please consider requesting referral to a specialist bariatric surgeon in the following circumstances:

- Unexplained abdominal pain
- Excessive weight loss or significant weight regain
- Significant or difficult to treat vitamin deficiencies
- Intractable reflux symptoms
- Pregnancy or pre-pregnancy planning
- Symptomatic gallstones
- Anv other concerns

We also recommend a referral to a bariatric Dietitian in the following circumstances:

- Significant weight regain
- Pregnancy or pre-pregnancy planning
- Fatigue
- Increased energy requirements eq nutrition for increased activity or specific sports

If you have any other questions about these guidelines please contact us.

Yours sincerely,

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