Guidelines for the prescribing of nutritional supplements post bariatric surgery

Prescribing recommendations:

Post adjustable gastric band or sleeve gastrectomy – Nutritional supplements RAG status 'Do not prescribe'. NHS patients should be directed to purchase nutritional supplements that are available over the counter

Post gastric bypass, one anastomosis bypass or duodenal switch – Nutritional supplements RAG status 'Amber 0'

Introduction

The main bariatric surgeries are gastric band, sleeve gastrectomy, gastric bypass (Roux-en-Y), one anastomosis bypass (treat as gastric bypass) and duodenal switch.

All people should have a comprehensive nutritional assessment prior to bariatric surgery.[i] Recommendations for postoperative supplementation vary in accordance with the type of procedure.

Generally, in the initial stages after surgery, patients are advised to start on a liquid diet, before progressing onto pureed food, soft food and then more normal textured food. At two years, the patient should be able to manage a wide range of textures of foods but may still report difficulties with some. It can be assumed that all are not receiving the benefits of eating a "well-balanced" diet to a greater or lesser extent depending on the type of surgery they have had. Therefore, life-long supplementation is indicated in all patients.

People who have bariatric surgery should have a postoperative follow-up care package within the bariatric surgery service for a minimum of 2 years. This should include monitoring nutritional intake, dietary and nutritional assessment, advice and support.[1]

Blood monitoring should be performed at intervals that are dependent on the type of bariatric surgery performed (see Table 2) or as directed by the specialist bariatric service.

Table 1: Recommended nutritional supplements after bariatric procedures[1]

Nutritional Supplement	Procedure			Product Example	Dosage	Course Length
	Laparoscopic Adjustable Gastric Band Patient must be advised to purchase Forceval® OTC	**Laparoscopic Sleeve Gastrectomy** All supplements available OTC should be purchased: Forceval®, Iron and Calcichew® D3 Forte. Vitamin B12 will need to be prescribed and administered in primary care	**Roux-en-Y Gastric Bypass and duodenal switch** Prescribe all preparations			
Multivitamin and Mineral	Yes	Yes	Yes	Forceval®*	One daily	Lifelong
Iron	Yes	Yes	Yes	Ferrous Sulphate	200mg once daily	Lifelong
				Ferrous Fumarate	210mg once daily	
				Ferrous Gluconate	300mg once daily	
Folate	Included in Forceval®*	Included in Forceval®*	Included in Forceval®*	Forceval®*	One daily	
Vitamin B12	No	Yes	Yes	Hydroxocobalamin	1mg every 3-months	Lifelong
Vitamin B	Yes	Yes	Yes	Vit B Co strong	One or two three times a day	for 3 – 4 months post-surgery
Calcium and Vitamin D	No	Yes	Yes	Calcichew® D3 Forte	Three times daily	Lifelong
Zinc	Included in Forceval®*	Included in Forceval®* May require additional supplementation up to 15mg o.d.	Included in Forceval®* May require additional supplementation up to 15mg o.d.	Forceval®*	One daily	
Copper	Included in Forceval®*	Included in Forceval®*	Included in Forceval®*	Forceval®*	One daily	
Selenium	Included in Forceval®*	Included in Forceval®*	Included in Forceval®*	Forceval®*	One daily	
Vitamin A (only if deficiency is found)	Included in Forceval®*	Included in Forceval®*	Yes – separate preparation is required	-	-	
Vitamin E	Included in Forceval®*	Included in Forceval®*	Yes – separate preparation is required	-	-	
Vitamin K (only if deficiency is found)	Included in Forceval®*	Included in Forceval®*	Yes – separate preparation is required	-	-	

* Forceval® is the only complete multivitamin and mineral supplement available both on and off prescription. Forceval® is available in both soluble and capsule form. Other A to Z multivitamins and minerals are also available to buy perhaps at a lower price. However, it cannot be guaranteed that these contain everything that is required.

Table 2: Recommended schedules of blood monitoring after bariatric procedures[1]

Blood Test	Procedure		
	Laparoscopic Adjustable Gastric Band	**Laparoscopic Sleeve Gastrectomy**	**Roux-en-Y Gastric Bypass and duodenal switch**
*Calcium	3, 6, 12 months after surgery, then annually	3, 6, 12 months after surgery, then annually	3, 6, 12 months after surgery, then annually
*Ferritin	3, 6, 12 months after surgery, then annually	3, 6, 12 months after surgery, then annually	3, 6, 12 months after surgery, then annually
*Folate	3, 6, 12 months after surgery, then annually	3, 6, 12 months after surgery, then annually	3, 6, 12 months after surgery, then annually
*Full Blood Count	3, 6, 12 months after surgery, then annually	3, 6, 12 months after surgery, then annually	3, 6, 12 months after surgery, then annually
HbA1c or Fasting Blood Glucose (patients with preoperative diabetes)	Monitor as appropriate	Monitor as appropriate	Monitor as appropriate
Lipid Profile	Monitor in those with dyslipidaemia	Monitor in those with dyslipidaemia	Monitor in those with dyslipidaemia
*Liver Function Tests	3, 6, 12 months after surgery, then annually	3, 6, 12 months after surgery, then annually	3, 6, 12 months after surgery, then annually
*Parathyroid Hormone	Check if not done so prior to surgery	Check if not done so prior to surgery	Check if not done so prior to surgery
*Selenium	N/A	If clinically indicated*	Annually
*Thiamine	3, 6, 12 months after surgery, then annually	Routine blood monitoring is not required – only in patients with prolonged vomiting	Routine blood monitoring is not required – only in patients with prolonged vomiting
*Urea and Electrolytes	3, 6, 12 months after surgery, then annually	3, 6, 12 months after surgery, then annually	3, 6, 12 months after surgery, then annually
*Vitamin A	Measure if concerns regarding steatorrhea or symptoms of vitamin A deficiency e.g., night blindness	Measure if concerns regarding steatorrhea or symptoms of vitamin A deficiency e.g., night blindness	Monitor every three months for the first year then annually
*Vitamin B12	N/A	6, 12 months after surgery, then annually – not required if the patient is receiving B12 injections	6, 12 months after surgery, then annually – not required if the patient is receiving B12 injections
*Vitamin D	3, 6, 12 months after surgery, then annually	3, 6, 12 months after surgery, then annually	3, 6, 12 months after surgery, then annually
*Vitamin E and K	Check serum vitamin E levels if unexplained anaemia or neuropathy	Annually	Annually
*Zinc, Copper	Check serum/plasma zinc levels if unexplained anaemia, hair loss or changes in taste acuity. Check serum copper levels if unexplained anaemia or poor wound healing	Annually	Annually

* GP to be informed by the specialist service if indicated.

Nutritional Deficiencies – What to Look For

Clinicians should also be aware of the signs and symptoms of potential nutritional deficiencies especially anaemia, vitamin D deficiency, protein malnutrition, as well as other vitamin and micronutrient deficiencies (see Table 3).

Table 3: Potential nutritional deficiencies post-bariatric surgery [2]

Nutritional Deficiency	Notes
Protein malnutrition	May present as oedema several years post-surgery. Requires urgent referral back to the bariatric team
Anaemia	Iron deficiency (rule out and investigate other potential causes, such as blood loss). Folate deficiency. Vitamin B12 deficiency. Less common deficiencies such as zinc, copper, and selenium are a potential cause of unexplained anaemia. Some patients may need parenteral iron or blood transfusions if oral iron does not correct the deficiency
Calcium and vitamin D deficiency	Deficiency may result in secondary hyperparathyroidism. It is recommended that vitamin D should be replaced if deficiency is severe – aim for levels of 75 - 250nmol/L post weight-loss surgery.
Vitamin A deficiency	Suspect in patients with changes in night vision. Patients with steatorrhea or those who have had a duodenal switch are at high risk
Zinc, copper and selenium deficiency	Unexplained anaemia, poor wound healing, hair loss, neutropenia, peripheral neuropathy and cardiomyopathy are potential symptoms. Ask about over-the-counter supplements and liaise with bariatric unit, as zinc supplements can induce copper deficiency and vice versa
Thiamine deficiency	Suspect in patients with poor intake, persistent regurgitation or vomiting. This may be caused by anastomotic stricture in the early postoperative phase, food intolerances or an over tight band. Start thiamine supplementation immediately and refer urgently to the local bariatric unit due to risk of Wernicke's encephalopathy. Do not give sugary drinks as they may precipitate Wernicke's encephalopathy.

When to Request Specialist Biochemical / Nutritional Advice or Refer

Diagnosis and management of micronutrient deficiency syndrome can be complex and so when in doubt, it is recommended that specialist advice is sought, especially in the following cases:

- Newly identified biochemical deficiency, where there is differential diagnosis, or its appropriate investigation and treatment are uncertain
- Unexplained symptoms that may be indicative of underlying micronutrient / trace element deficiencies
- Women who have undergone previous gastric bypass, sleeve gastrectomy or duodenal switch surgery and who are planning to become pregnant or who are pregnant
- The patient is regaining weight

Version Control

Version Number	Date	Amendments Made	Author
Version 1.0	March 2017	Approved	AG
Version 1.1	June 2019	Reference to commissioning responsibilities removed. Logo updated.	AG
Version 1.2	December 2019	Prescribing for private patients' recommendation changed.	AG
Version 1.3	July 2020	References checked and prices updated.	AG
Version 1.4	January 2022	Revised as due update. BOMSS updates incorporated.	AG
Version 1.5	November 2022	Reference to private patients removed.	AG
Version 1.6	July 2023	Improved clarity of table indicating which items should be prescribed or purchased.	AG
Version 1.7.1 (not published)	Oct 2025	Review and update of references	SA
Version 1.7.2	May 2026	Reformatted, text streamlined	DP
Version 1.7.3	May 2026	Table 1 header text updated to re-state guidance that all supplements available OTC should be purchased for patients with laparoscopic sleeve gastrectomy.	DP

References

[i] British Obesity and Metabolic Surgery Society Guidelines on perioperative and postoperative biochemical monitoring and micronutrient replacement for patients undergoing bariatric surgery—2020 update. Obes Rev. 2020 Aug 2;21(11) British Obesity and Metabolic Surgery Society Guidelines on perioperative and postoperative biochemical monitoring and micronutrient replacement for patients undergoing bariatric surgery—2020 update - PMC

[2] Royal College of General Practitioners Nutrition Group. Ten top tips for the management of patients post bariatric surgery in primary care 2014 RCGP-Top-Ten-Tips-Bariatric-Surgery-Leaflet-Nov-2014.pdf