

Western Zone Obesity Network

Bariatric Surgery Dietitian Quick Reference Guide

Sleeve Gastrectomy & Roux-en-Y Gastric Bypass

Dietitian-facing reference for pre- and post-operative nutrition follow-up and micronutrient management.

SECTION 1: PRE-OPERATIVE NUTRITION

A. Assessment Upon Referral to Bariatric Surgery

3+ months prior to surgery, 60-90 minutes

- Weight and dieting history
- Estimated protein intake
- Fluid intake & beverage choices
- Alcohol, caffeine, carbonated fluids
- Disordered eating behaviors
- Comorbidities
- Medications impacting nutrient absorption
- Food insecurity
- Baseline bowel patterns
- Initial bloodwork completed
- Food allergies (wheat, eggs, soy, peanuts, tree nuts are allergens in total meal replacements)

B. Intervention

- Review WZON Nutrition Guide for Bariatric Surgery
- Review vitamin (see Section 3) and total meal replacement (TMR) requirements
- Provide lab-guided micronutrient repletion in collaboration with PCP. Consider starting an OTC MV and others as needed to develop routine of taking vitamins
- Provide RD contact information if possible for ongoing support

C. Pre-Operative Follow-Up Upon Scheduling Surgery Date

1-2 months prior to surgery, 30-60 minutes

- Provide guidance on ordering and using TMR
 - 4 boxes required for each week on TMR (cost of \$86/week plus approx. \$25 shipping)
 - Ensure patients with diabetes follow-up with Diabetes Centre to adjust medications if needed
- Review and adjust micronutrient supplementation during TMR period to account for nutrients provided by the formula. Typically stop multivitamin and any additional vitamin C, continue others
- Remind to bring Nutrition Guide for Bariatric Surgery to hospital to review with inpatient dietitian
- Coordinate post-surgery RD follow-up (1 week, 1 month, 2 months, 6 months, 1 year)
- Notify inpatient RD of upcoming surgery

SECTION 2: POST-OPERATIVE NUTRITION

A. Assessment

Check-In Post-Op (week 1)

Diet Advanced to full fluids with protein

Fluids ≥1.5-2 L/day

GI Screen for red flags

MV Started

Extras Avoiding carbonated and caffeinated beverages

Early Post-Op (1-2 months)

Protein Minimum 60 g/day

Fluids ≥1.5-2 L/day Separated from meals by 30 minutes

Meals 3-5/day Slow/chew well

GI N/V Reflux Dumping

MV Daily Tolerated

Diet Advancing appropriately

Late Post-Op (6+ months)

Protein 1.2-1.5 g/kg/day goal body weight

Fluids ≥1.5-2 L/day Separated from meals by 30 minutes

Meals 3-5/day Planned snacks as needed

Extras Caloric beverages Alcohol

MV Adherence

B. Intervention

- Reinforce protein goal
- Reinforce fluid goal and timing
- Supplement adjustment and education
- Support behavioural goals
- Regular assessment of dietary intake to identify suboptimal intake and micronutrient risk

C. Lab Monitoring Schedule

Post-op labs at 3, 6, and 12 months, then annual:

- CBC, electrolytes, Cr, random glucose, HbA1c, lipid panel, liver panel, ferritin, iron studies, B12, folate, 25-OH Vit D, Ca, PTH, albumin
- If RYGB, may be added: Vit A, E, Zinc, Cu, thiamine (B1)

D. Red Flags

Further investigation by RD:

- Infrequent bowel movements (>3 days) without pain or vomiting
- Intermittent nausea or early satiety
- Occasional vomiting linked to eating behaviours (portion, speed, texture)

Refer to surgical/medical team if present:

- No bowel movement \geq 5 days or sooner with abdominal pain, vomiting, or distention
- Persistent vomiting (daily or severe early post-op, \geq 1-2x/week beyond early post-op)
- Diarrhea \geq 3 loose stools/day for > 3 days; steatorrhea
- Dysphagia
- Recurrent abdominal pain
- Severe or worsening bloating/distension
- Neurologic or visual changes

SECTION 3: VITAMIN & MINERAL SUPPLEMENTATION

A. Recommendations for Vitamin & Mineral Supplementation

- All-in-one bariatric supplements can help compliance by reducing the number of vitamins that need to be taken daily
 - Common brands available: Bariatric Advantage, Celebrate
 - Some bariatric MVs may still need additional calcium, iron, Mg, B12 or vitamin D supplementation
 - Many OTC MVs may still need additional thiamine, vitamin B12, vitamin A, vitamin D, iron, Mg
 - Read labels carefully to ensure they meet the requirements of the chart below
- Chewable or liquid vitamins for 4-8 weeks post-op; can switch to capsules thereafter (sometimes cheaper)
- **RYGB**: Higher risk of malabsorption; deficiencies are common
- **SG**: Less malabsorption; can use regular MV if desired and additional supplements based on labs

B. Daily Prevention Micronutrient Supplementation after RYGB & SG

Micronutrient	Daily Supplementation	Notes/Special Populations
Vitamin B1 (Thiamine)	12 mg (50-100mg if high risk)	If insufficient in MV, add 50 mg B complex supplement
Vitamin B9 (Folate)	400-800 mcg	Increase to 1000 mcg for preconception/pregnancy
Vitamin B12	350 mcg	May require alternative routes if malabsorptive issues persist
Vitamin C	120 mg	
Vitamin A	5000-10 000 IU	Caution not to exceed upper limit if pregnancy is in future
Vitamin D	3000 IU (75 mcg)	Adjust based on 25-OH vitamin D levels
Vitamin E	15 mg	Monitor if deficiency risk
Vitamin K	90 mcg	Some individuals may need higher doses
Calcium (Citrate)	1200-1500 mg	Prefer citrate form; divided doses separated by 2 hours of no more than 500-600 mg/dose; separate from iron by 2 hours
Magnesium	400 mg	
Iron	18 mg (low risk) 45-60 mg (high risk)	Consider 45-60 mg/day if high risk (menstruating, previous low ferritin). Adjust based on iron studies
Zinc	8 mg	Ratio of zinc:copper should be 8-15mg:1mg
Copper	1 mg	Important for zinc balance

For a full list, see *Obesity Canada Clinical Practice Guidelines: Bariatric Surgery: Postoperative Management: Table 3.*