

GASTRIC BYPASS FOLLOW-UP CARE

Dear Doctor,

Patients who have had the surgical weight loss procedure, Roux-en-Y Gastric Bypass (RYGB), require close monitoring of their nutrition status, physical and mental well being for the rest of their life. We would like to coordinate care with your office for routine visits. Our offices will see surgical weight loss patients for follow up visits regularly for the first year after surgery and then yearly after that. Any treatment specifically related to the surgery will be addressed. We ask that the primary care office write scripts for, and monitor the blood work listed below and make appropriate medication changes. If there are any labs, that you would like our office to address, please fax the blood results to 717-948-0488. The following are topics that should be reinforced regularly to assure success after Roux-en-Y gastric bypass.

Lifestyle and eating habits:

- Healthy food selections (diet should be low in fat and no added sugar)
- Portion control: patients are instructed to start off with ¼ cup, and progress gradually to 1-1½ Cups daily by one-year post op. They should remain eating 1- 1 ½ cups of food for the rest of their lives.
- Fluids: Consume 48-64 oz. of total fluid daily, with the majority being no calorie, no caffeine.
- Exercise: Patients should increase their daily activity/exercise as tolerated. We recommend a cumulative amount of varied exercise to equal 20-30 minutes 3-5 times per week.
- Weight re-gain: Weight regain is possible after RYGB. Dilated gastric pouch, maladaptive eating patterns or poor food choices are common reasons for this. Please refer your patient back to our team for assessment as soon as weight re-gain begins.

Assessment of general well-being:

- Skin rashes or infection related to excess skin
- Nausea/vomiting:
- Bowel habits:
 - Constipation: May use stool softeners, enemas or Benefiber powder 1 Tbsp up to 6 times daily (gradual inclusion into diet is recommended). Make sure patient is getting adequate liquid with increased fiber in diet. We do not recommend stimulant laxatives.
 - Regularity: Addition of fruits, veggies and whole grains into diet is recommended.
- Fatigue: Can develop due to vitamin/mineral deficiencies or inadequate caloric intake – please refer to the program dietitian.
- Depression and relationship changes are common. Please refer your patient back to our program for psychological assessment.

Preventative supplementation recommendations:

Multivitamin: Vitamin with minerals including iron: Chewable adult Centrum 2 daily OR chewable Flintstone's 2 daily. By 6 months post op, adult MVI in **pill form** may be chosen.

Calcium plus D:

- Recommended dose: 1500-2000 mg daily from all sources (food and supplement).
- Calcium citrate plus D: such as *Citracal*, is the best absorbed and does **not** need to be taken with food.

Vitamin B₁₂:

- **Injection dose:** B₁₂ 1000 mcg/month
- **Oral Sublingual dose:** 350-500 mcg daily unless labs indicate a change
- **Intranasal dose:** 500mcg/week

***NOTE: Some of our patients are taking protein supplements that may contain extra vitamins and minerals. Please monitor for drug/nutrient interactions.**

Please direct questions to: **877-609-6848**

Recommended Laboratory tests: (Q 3-4 months for 1st year after surgery then twice a year when stable)

Ferritin, iron profile	<p>Ferritin is the first indicator of iron deficiency and we often recommend FeSo4 when we see low-normal ferritin levels. Due to the malabsorptive nature of RYGB, all patients should take a daily MVI with Fe.</p> <p>Replenishment: Ferrous fumarate, sulfate or gluconate up to 150-300mg elemental Fe daily. Add Vitamin C or take with orange or cranberry juice to help with absorption. Do not take with Ca++ supplements.</p>
<p>Serum B12</p> <p>Optional: Serum Methylmalonic Acid (MMA)</p>	<p>RYGB patients poorly absorb Vitamin B12. There is up to 1 year of stored B12 in the liver, however, it is common for patients to become deficient sometime in the future, especially in the absence of supplementation. Levels should be monitored regularly to determine appropriate repletion schedule. Patients should start B12 supplementation within the first 3 months following surgery. Recommend blood levels around 500 pg/mL.</p> <p>Serum B12 levels can be falsely high. B12 deficiency can also be masked by excessive folate supplementation. MMA will be elevated in the presence of B12 deficiency.</p> <p>IM Replenishment: 1000mcg/day for 1-2 weeks Oral Replenishment: 2000mcg/day for 1-4 weeks.</p> <p>Re-check labs and if levels normal, continue ongoing oral supplementation of 1000mcg/day.</p>
Optional: RBC Folate or Homocysteine (Hcy)	<p>B12 and folate are closely tied metabolically. To differentiate between B12 and folate deficiencies, we recommend checking Hcy along with serum B12 and serum MMA. An elevated Hcy level and/or a low RBC folate indicate folate deficiency.</p> <p>Replenishment: Begin with 1000mcg oral folic acid/day. It can take more than 2 months of supplementation for folate deficiency to resolve.</p>
CBC	
Electrolytes	
Pre-albumin	Low level indicative of protein deficiency. Please refer patient back to their program dietitian for dietary assessment.
Fasting Lipid Profile to include triglycerides	
Vitamin D, 25 level	<p>Every 6-12 months. Low Vitamin D suggests poor calcium absorption and Vitamin D deficiency that can lead to osteomalacia. Values below 30ng/mL should be treated with prescription Vitamin D and labs re-checked after 8 week treatment.</p> <p>Replenishment: Prescription Vitamin D, 50,000IU x 8 weeks.</p>
iPTH (intact parathyroid hormone level)	Monitor along with Vitamin D. Check q 6-12 months.
Serum Thiamine	<p>Thiamine deficiency, Bariatric Beriberi or Wernicke-Korsakoff encephalopathy are rare after RYGB, but have been reported. Can happen in the presence of chronic vomiting or very poor po intake. Symptoms include ataxia, visual changes, mental confusion.</p> <p>Replenishment: 100mg/day oral or IM until symptoms resolve.</p>
Optional: Bone Health Bone-specific alk phos Serum N-telopeptide DEXA	RYGB patients poorly absorb calcium. Additionally, weight loss has been linked to weakening of the bones.