Go Light Bariatrics

VITAMINS

(gastric sleeve & gastric bypass patients, pre- & post-op)

Individuals who undergo gastric sleeve or bypass surgery have reduced ability to absorb vitamins and electrolytes which places them at higher risk of developing nutritional and vitamin deficiencies (especially gastric bypass patients). These deficiencies include, but are not limited to, vitamin A, B, C, D, E, K, folate, calcium, iron, zinc, and magnesium.

BEGIN TAKING VITAMINS AS SOON AS YOU START THE PRE-OP DIET and get into the habit of taking them daily **FOR THE REST OF YOUR LIFE.**

STOP vitamins 3 days before surgery, when you start your liquid diet stage.

RESUME vitamins 1-2 weeks after surgery or as soon as you can tolerate pills (you may use liquid vitamins, chews, or a pill crusher).

You will need to purchase the following required minimum:

- Multivitamins (ideally a bariatric brand with Iron and B-Complex)
- Calcium Citrate + D3 + Magnesium Citrate (often combined 3-in-1)
- Omega 3
- Probiotics

Note! It is not required to purchase bariatric vitamins specifically (Calcium Citrate, Vitamin B Complex and Probiotics do not need to be a bariatric brand; though they are often better tasting and are higher quality products). You can choose any brand if you reach the recommended doses of each vitamin. Keep in mind that standard over the counter (OTC) vitamin brands are formulated to meet the nutritional needs of the general population. Bariatric patients require a much higher level of 13 micronutrients that regular OTC brands will not meet; this is why we recommend using bariatric formulated brands when available.

Below you will find recommendations for each vitamin, brand, and dosage.

NO GUMMIE VITAMINS OF ANY KIND AFTER SURGERY!

Multivitamins With Iron & B-Complex

Dosage:

Bariatric formulated Multivitamin with Iron & B-Complex: <u>1 serving daily</u> (each brand has different serving sizes, read the label carefully, one serving may require 1, 2, 3 or even 4 capsules or chews.) The table below suggests only bariatric-formulated options.

Non-bariatric multivitamins: 2 servings daily (200 % Recommended Daily Allowance (RDA))

We recommend capsule presentation, as chewable tablets are often reported by our patients as unpalatable. Listed below in the order or preference by the nutritionists.

Brand	Name	Dosage	Where to buy
		per day	
ProCare Health	Bariatric Multi- Vitamin with 45 mg Iron – Capsules	1 capsule	<u>https://procarenow.com/collections/bariatric-</u> <u>multivitamin/products/once-daily-bariatric-</u> <u>multivitamin-with-45mg-of-iron-capsule</u>
ProCare Health	Bariatric Multi- Vitamin with 45 mg Iron – Chewable	1 chew	<u>https://procarenow.com/collections/bariatric-</u> <u>multivitamin/products/multivitamin-45mg-iron-</u> <u>chewable-citrus-90-count</u>
Bariatric Advantage	Ultra-Multivitamin with Iron – Capsules	3 capsules 1x/day	https://www.bariatricadvantage.com/item/ultra- multivitamin
Bariatric Advantage	Advanced Multi EA – Chewable	2 chews 1x/day	https://www.bariatricadvantage.com/item/chewable- advanced-multi-ea
Celebrate	Multi-Complete 45- Bariatric Multivitamin with Iron – Capsules	3 capsules 1x/day	https://celebratevitamins.com/collections/multi- with-iron-p2/products/multi-complete-45
Celebrate	Multi-Complete 45- Bariatric Multivitamin with Iron – Chewable	3 chews 1x/day	https://celebratevitamins.com/collections/multi- with-iron-p2/products/multi-complete-45- multivitamin-with-iron-chewable
Celebrate	Multi-Complete 60- Bariatric Multivitamin with Iron – Capsules	2 capsules 1x/day	https://celebratevitamins.com/collections/multi- with-iron-p2/products/multi-complete-60
Celebrate	Multi-Complete 60 - Bariatric Multivitamin with Iron – Chewable	2 chews 1x/day	https://celebratevitamins.com/collections/multi- with-iron-p2/products/multi-complete-60-chewable- multivitamin-with-iron
Opurity	Bariatrics Multi Chewable With 45 mg Iron Bypass & Sleeve Optimized – Chewable	1 chew	https://unjury.com/products/opurity-bariatric-multi- chewable-with-45mg-iron
Barimelts	Bariatric Multivitamin with Iron – Fast melting tablets	2 tablets 1x/day	https://www.barimelts.com/products/multivitamin- with-iron

Iron:

Be sure to choose a multivitamin with 36 – 45 mg of Iron per serving (or per recommended daily dosage). Otherwise take iron separately (this is especially important for bypass patients who often develop iron deficiency).

Spacing:

Always allow at least 2 hours between Calcium Citrate and Iron (or multivitamins that include iron) for better absorption. If ferrous sulfate has unacceptable side effects (nausea or stomach pain), ferrous gluconate is a possible alternative for patients who cannot tolerate ferrous sulfate. Be aware that iron intake will cause dark stools (it is normal), and may cause constipation, bloating, and gastrointestinal pain as side-effects.

B12:

All bariatric formulated multivitamins already include the recommended dosage of vitamin B12. If you are using Bariatric multivitamins, you may skip the rest of this section and proceed to Calcium Citrate section.

If your non-bariatric multivitamin brand does not include B12 or the dosage is low, be sure to take it separately as B12 or part of B-Complex. See the recommended daily dosage below:

Vitamin B12 (Cobalamin) use one of the options:

- 500 1000 mcg per day (ideally sublingual dissolvable pills or liquid form)
- 1000 mcg twice a month by injection (only if necessary, to be determined after the 1st postop lab work at 3 months post-op)

Your lab values will be high when taking this amount of B vitamins. We expect this high lab value; taking the B complex helps prevent a deficiency. Your nutritionist will adjust your intake based on your post-op lab work that is recommended at 3-, 6-, 12-, and 24-months post-op.

B-vitamins can be taken on an empty stomach, all others should be taken with a meal.

Calcium Citrate + D3 + Magnesium Citrate

Dosage:

Calcium Citrate 1500-2000 mg/day

Vitamin D3 800-2000 IU /day

Magnesium Citrate or Magnesium Glycinate 400 – 500 mg per day (do not use Magnesium Oxide)

Divide this into 2-3 servings per day to reach the daily recommended dosage and for better absorption. Choose a brand that contains Calcium Citrate with vitamin D3 and Magnesium (otherwise take Magnesium separately). Avoid Calcium Carbonate or Calcium Caltrate.

Remember to separate the multivitamin with iron from calcium citrate by 2+ hours for maximum absorption.

Brand	Name	Dosage per day &	Where to buy
		spacing	
Pro Care	Calcium Citrate	4-6 tablets: take	https://procarenow.com/collections/c
Health	(with D3 &	2 tablets 2-3x/day	<u>alcium-</u>
	Magnesium) –		supplements/products/calcium-
	Capsules		citrate-500mg-caplet-120-count
Pro Care	UpCal D Powdered	2-3 packets: take	https://procarenow.com/collections/c
Health	Calcium Citrate	1 scoop or packet	alcium-supplements/products/upcal-
	(with D3 only) –	2-3x/day	d-powdered-calcium-citrate-canisters
	Powder		
Blue	Liquid Calcium	2-3 tablespoons:	https://bluebonnetnutrition.com/prod
Bonnet	Magnesium Citrate	take	ucts/liquid-calcium-magnesium-
	+ Vitamin D3 –	1 Tbsp. 2-3x/day	<u>citrate-and-vitamin-d3-blueberry-</u>
	Liquid		flavor? pos=1& psq=calcium+citrate&
			<u>ss=e&_v=1.0</u>
Celebrate	Calcium Plus 500	2-3 chews: take	https://celebratevitamins.com/collecti
	(with D3 &	1 chew	ons/calcium-only/products/calcium-
	Magnesium) –	2-3x/day	<u>citrate-chewable</u>
	Chewable		
Bariatric	Calcium Citrate	2-3 chews: take	https://www.bariatricadvantage.com/i
Advantage	Chewable 500mg	1 chew 2-3x/day	tem/calcium citrate chewable 500m
	(with D3 &		g/
	Magnesium) –		
Citra col	Chewable	1 Conneulou taka	
Citracal	Maximum Plus	4-6 capsules: take	https://www.citracal.com/products/m
	Calcium Citrate (with D3 only) –	2 capsules 2- 3x/day	<u>aximum-plus</u>
	Capsules	SX/udy	
Barimelts	Calcium Citrate	4-6 tablets: take	https://www.barimelts.com/products/
Darments	(with D3 &	2 tablets 2-3x/day	calcium-citrate
	Magnesium) – Fast		
	melting tablets		
Opurity	Calcium-Citrate	4 chews: take	https://unjury.com/products/opurity-
	Plus-Chewable	2 chews 2x/day	r-calcium-citrate-plus-chewable
	(with Magnesium)		
	– Chewable		
Kirkland	Calcium Citrate	4-6 tablets: take	https://www.costco.com/kirkland-
	Magnesium and	2 tablets 2-3x/day	signature-calcium-citrate%2C-
	Zinc with D3 –		magnesium-and-zinc%2C-500-
	Large tablets		tablets.product.11672433.html

Dosage:

Omega-3 2000 mg per day (with meal).

It is recommended that you start taking Omega 3 (fish oil) during your pre-op diet and resume it as soon as you can tolerate it after surgery, preferably 2- or 3-months post-op. Give preference to brands that source fish oil from non-farmed wild species. If you are allergic to fish, use capsules with flaxseed oil, also a great source of Omega-3.

Probiotics

After weight loss surgery (WLS), the balance between "good" and "bad" bacteria may become altered. This is due to disruption of your GI tract, and use of antibiotics after surgery to help prevent infection. While antibiotics can help keep harmful bacteria under control, they can also wipe out the good bacteria in your body. The number and type of intestinal bacteria is regulated by both intestinal motility and gastric acid secretion, which are both altered with the WLS. Probiotics will also help vitamin B12 absorption and will help decrease intestinal inflammation, bloating, food intolerances, and other types of discomfort that often follow WLS.

Brand	Name	Dosage per day	Where to buy	
Garden of Life	Primal Defense	1 capsule	https://www.gardenoflife.com/primal-	
	ULTRA Ultimate		defense-ultra-probiotic-formula	
	Probiotic			
	Formula			
Align Probiotic	B. Infantis 35624	1 capsule	https://www.alignprobiotics.com/en-	
(Bifidobacterium)			us/products/probiotics-digestive-	
			support/extra-strength-probiotic-	
			<u>supplement</u>	
Align Probiotic	B. Infantis 35624	1 chew	https://www.alignprobiotics.com/en-	
(Bifidobacterium)	Chewables for		us/products/probiotics-digestive-	
	Adults		support/probiotic-chewables	
Culturelle	Digestive Daily	1 capsule	https://culturelle.com/products/digestiv	
(Lactobacillus)	Probiotic		<u>e-daily-</u>	
			probiotic?selling plan=1127022670&var	
			iant=39930481082446	
Bariatric	Chewable	2 chews	https://www.bariatricadvantage.com/it	
Advantage	FloraVantage		em/probiotic-chewable	
	Probiotic			

Celebrate	Balance	1 capsule	https://celebratevitamins.com/collectio	
	Probiotic Plus		ns/gut-health/products/balance-	
	Prebiotic		probiotic?variant=8978510381103	
Klaire Labs	Ther-Biotic	1 capsule <u>https://us.sfihealth.com/v775-12-ther-</u>		
	Complete		biotic-complete	
Mega Foods	MegaFlora	1 capsule	https://megafood.com/products/megafl	
	Probiotic Plus		<u>ora-plus</u>	
Nutrition Now	Immune support	1 capsule	https://www.target.com/p/nutrition-	
PB8	probiotic		now-probiotics-pb-8-probiotic-780mg/-	
			<u>/A-86768589</u>	

There are many over the counter probiotics available, most of them contain only one strain of bacteria. Probiotics with at least 5 billion colony forming units (CFUs) per dose that contain at least seven strains of probiotics appear to be the most effective. Probiotics come in many forms, including pills, powders, liquids, capsules, and chewable tablets.

Probiotics are most effective when taken in the morning on an empty stomach.

Note!

After surgery you will be provided with instructions for your post-operative blood work. It is important to follow them to monitor your vitamin and mineral levels and adjust your vitamin intake as needed. Your bariatric nutritionist will always review your lab work results and guide you accordingly.

To learn more, visit:

- After Weight Loss Surgery at <u>https://golightbariatrics.com/after-weight-loss-surgery/</u>
- Post-Op Diet at <u>https://golightbariatrics.com/post-op-diet/</u>

Time	Example 1	Example 2	Example 3
	Pre-op & 1 – 2 months		If extra iron is needed
	post-op	2+ months post op	3+ months post op
7:00 am	Probiotic (1 daily dose)	Probiotic (1 daily dose)	Probiotic (1 daily dose)
(breakfast)			
	Calcium Citr. w/Vit D3 &	Bariatric Multivitamin	Calcium Citr. w/Vit D3 &
	Magnesium Citr.	w/Iron (1 daily dose)	Magnesium Citr.
	(1 chew/tablet)		(1 chew/tablet)
10:00 am	Bariatric Multivitamin		Bariatric Multivitamin
(snack)	w/Iron (1 daily dose)		w/Iron (1 daily dose)
12:00 pm	Calcium Citr. w/Vit D3 &	Calcium Citr. w/Vit D3	Calcium Citr. w/Vit D3 &
(lunch)	Magnesium Citr.	& Magnesium Citr.	Magnesium Citr.
	(1 chew/tablet)	(1 chew/tablet)	(1 chew/tablet)
		Omega 3 (1 capsule)	Omega 3 (1 capsule)
3:00 pm			Iron with Vitamin C
(snack)			(1 capsule) *
6:00 pm	Calcium Citr/ w/Vit D3 &	Calcium Citr. w/Vit D3	Calcium Citr. w/Vit D3 &
(dinner)	Magnesium Citr.*	& Magnesium Citr. *	Magnesium Citr. * (1
	(1 chew/tablet)	(1 chew/tablet)	chew/tablet)
		Omega 3 (1 capsule)	Omega 3 (1 capsule)

*3rd Calcium intake is recommended for bypass patients only or women after menopause after either gastric sleeve or bypass.

*Extra iron (additionally to multivitamins with iron) only if needed after having post-op lab work done that confirms iron deficiency.

Note! You may take vitamins throughout the day at your convenience (make your own schedule), as long as you do not take Calcium and iron (or Calcium and multivitamins that contain iron) at the same time.