

Nutrient requirements in pregnancy post bariatric surgery

Surgery Type	Recommendation
Lap band	Pregnancy specific supplement usually suffices
Bypass or Gastric sleeve	In addition to pregnancy specific supplements: <ul style="list-style-type: none"> • 1-2 adult multivitamin plus mineral (each containing iron, folic acid and thiamine) supplements in chewable form • Calcium 600–1000 mg (citrate form) • B₁₂ 1000 microgram oral/day • Vitamin D 1500 IU (or more, dependent on pathology and amount in Multivitamin) • Iron (dependent on pathology and amount in Multivitamin)

Underlined and bolded text in the table below indicates the appropriate amount to recommend/prescribe for each nutrient per day to pregnant women post bariatric surgery. May be derived from diet and/or supplements as indicated.

	Post-surgery requirements* (per day)	Recommended dietary intake in pregnancy [#] (per day)	Upper limit in pregnancy [#] (per day)	Comment
Iron	<u>45-60 mg</u>	27 mg	45-70 mg	Increased requirement due to decreased absorption (less gastric acid and bypass of sites). Deficiency risk is high due to decreased gastric acid and less intrinsic factor (for Bypass and Gastric sleeve). Estimate that patients only absorb 1% from oral form.
B ₁₂	<u>1000 microgram</u>	2.6 microgram	Not determined	
Folate	400 microgram	<u>600-800 microgram</u>	1000 microgram (as Folic Acid)	Aim for 600 microgram/day from dietary sources. Additional 400-500 mg from supplemental form.
Vitamin D	<u>3000 IU</u>	2000 IU	Not determined	Titrate according to biochemistry.
Calcium	<u>1200-1500 mg</u>	1000–1300 mg	2500 mg	Decreased efficiency of absorption as less gastric acid and bypass of absorption sites (not in Lap Band). Derive from diet and as citrated supplement in divided doses not greater than 600 mg/dose. Avoid taking with iron sources.
Thiamine	<u>1-3 mg</u>	1.4 mg	Not determined	High risk of deficiency with frequent vomiting. Needs prompt treatment if suspected.
Iodine	N/A	<u>220 microgram</u>	1100 microgram	Supplement 150 microgram/day.
Vitamin A	Increased requirement in pregnancy, though high levels increase risk of teratogenicity. Unlikely increased risk of deficiency unless malabsorption occurs. Unless a good reason to suspect deficiency, prudent to avoid supplements with Retinol or Retinyl esters. Betacarotene or mixed carotenoids are safe.			
Vitamin E, K	May be compromised especially in Bypass surgery. More likely if fat malabsorption present. Monitor biochemistry			
Zinc, Copper	Increased requirement, important to ensure patients are meeting recommended daily intake.			