
BRIGHAM HEALTH
BWH
BRIGHAM AND
WOMEN'S HOSPITAL
Bariatric Surgical Clinic Postop Follow-up
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HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL
MAGNET
RECOGNIZED
AMERICAN NURSES
CREDENTIALING CENTER

Bariatric Surgical Outpatient Clinic Postop Follow-up
减重手术门诊术后随访

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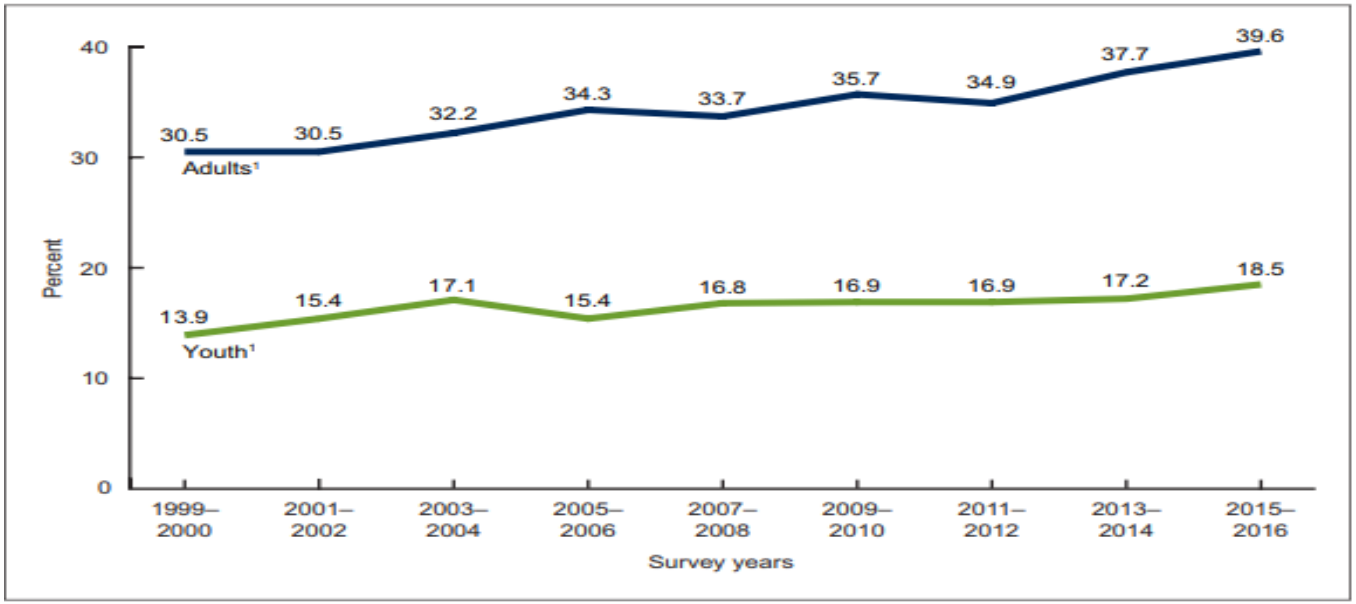
Obesity Is a Chronic Disease
肥胖症是一种慢性疾病

- Causes or accelerates many comorbid diseases such as diabetes, hypertension, hyperlipidemia, sleep apnea, even premature death
- Not just a cosmetic concern
- Not a problem of simply over-eating or a lack of self- control
- The treatment of obesity is life-long.

Trends in Adult and Childhood Obesity
成人和儿童肥胖的趋势

Figure 5. Trends in obesity prevalence among adults aged 20 and over (age adjusted) and youth aged 2–19 years: United States, 1999–2000 through 2015–2016



¹Significant increasing linear trend from 1999–2000 through 2015–2016.
NOTES: All estimates for adults are age adjusted by the direct method to the 2000 U.S. census population using the age groups 20–39, 40–59, and 60 and over.
Access data table for Figure 5 at: https://www.cdc.gov/nchs/data/databriefs/db288_table.pdf#5.
SOURCE: NCHS, National Health and Nutrition Examination Survey, 1999–2016.

NCHS Data Brief ■ No. 288 ■ October 2017

Bariatric Surgeries减重手术

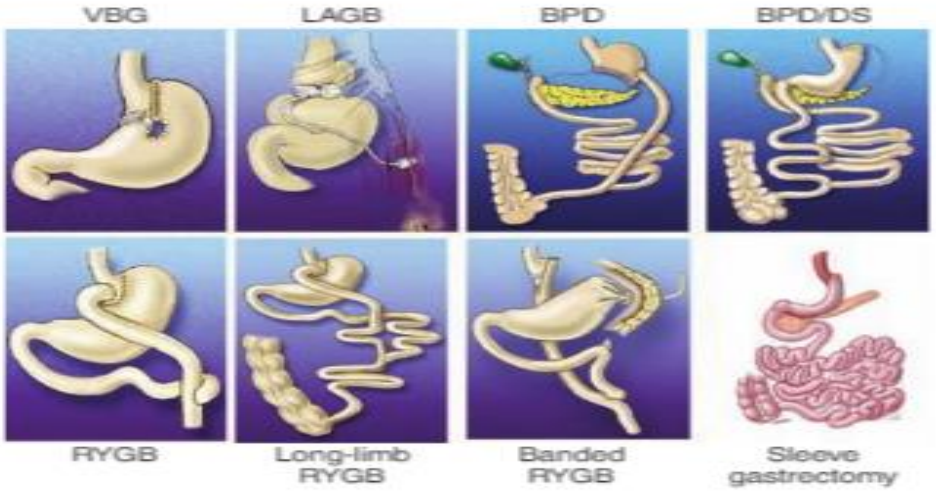
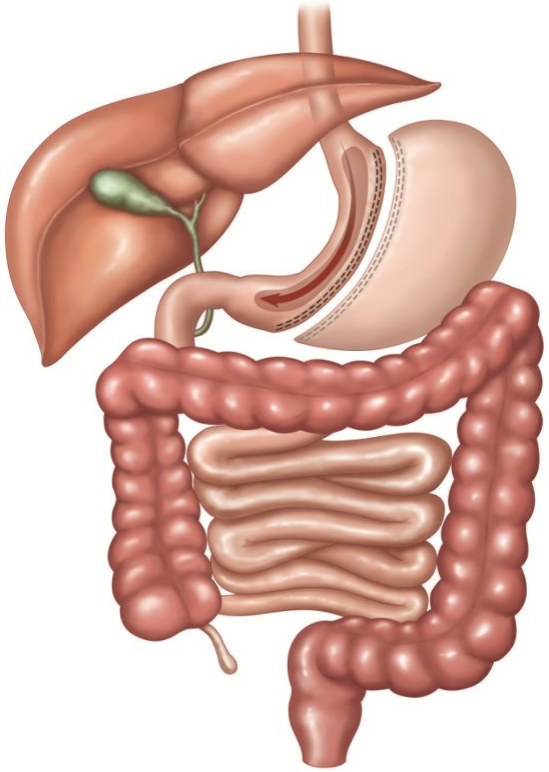


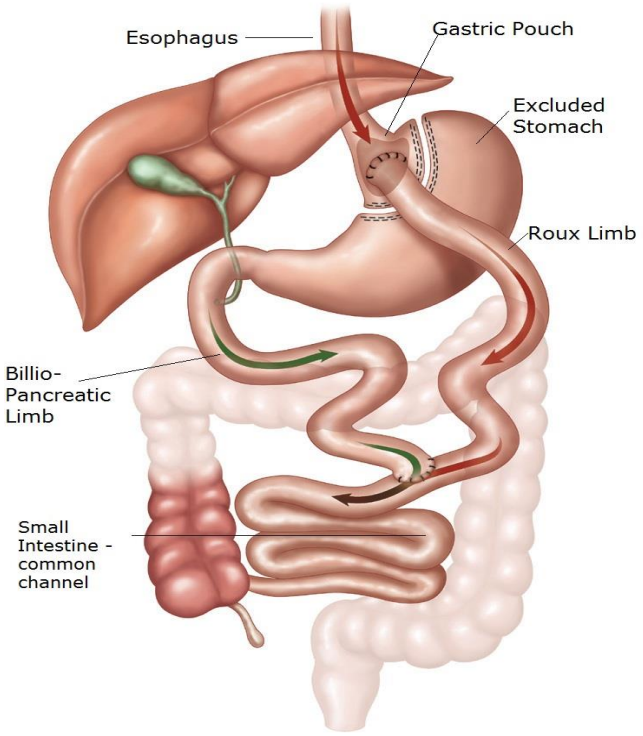
Figure 1 Currently available bariatric surgical procedures. See text for descriptions of procedures. BPD, biliopancreatic diversion; BPD/DS, BPD with duodenal switch; LAGB, laparoscopic adjustable gastric band RYGB, Roux-en-Y gastric bypass; VBG, vertical banded gastroplasty. The first seven graphics (VBG, LAGB, BPD, BPD/DS, RYGB, Long-Limb RYGB, and Banded RYGB) are reprinted with permission of the American Society for Metabolic and Bariatric Surgery, copyright 2008, all rights reserved. The last graphic (Sleeve gastrectomy) is reprinted with the permission of The Cleveland Clinic Center for Medical Art & Photography, copyright 2008. All rights reserved.

Mechanick JI et al, Obesity (Silver Spring). 2009 Apr;17 Suppl 1:S1-70

Bariatric Surgeries减重手术



袖状胃切除术



胃旁路手术

Patient Preparation for Bariatric Surgery
患者减肥手术的术前准备

- NIH criteria
  - BMI >40
  - BMI>35 with major comorbidity
  - Demonstrated repeated failure of non-surgical weight loss attempts
  - No history of significant psychiatric disorders
- Insurance policy
- Patient's readiness

Patient's Readiness
患者准备就绪了吗?

- Motivated to change?
- Demonstrating change, already?
- Aware of the post-surgical requirements *(diet/exercise/vitamins)*?
- Able to keep post-bariatric visits?
- Capable of understanding the process?
- Able to afford the required food & vitamins?

Preop psychological evaluation
术前心理评估

Condition	Studies Reporting Data	Patients Reporting Data	Patients With Condition	Prevalence Estimate, % (95% CI)[a]
Any mood disorder	10	3307	788	23 (15-31)
Depression	34	51 908	12 009	19 (14-25)
Binge eating disorder	25	13 769	2400	17 (13-21)
Anxiety	22	38 459	10 515	12 (6-20)
Suicidal ideation or suicidality	6	3518	315	9 (5-13)
Personality disorders	6	3002	184	7 (1-16)
Substance abuse disorders[b]	19	40 725	1515	3 (1-4)
Posttraumatic stress disorder	10	15 039	187	1 (1-2)
Psychosis	6	3406	31	1 (0-1)

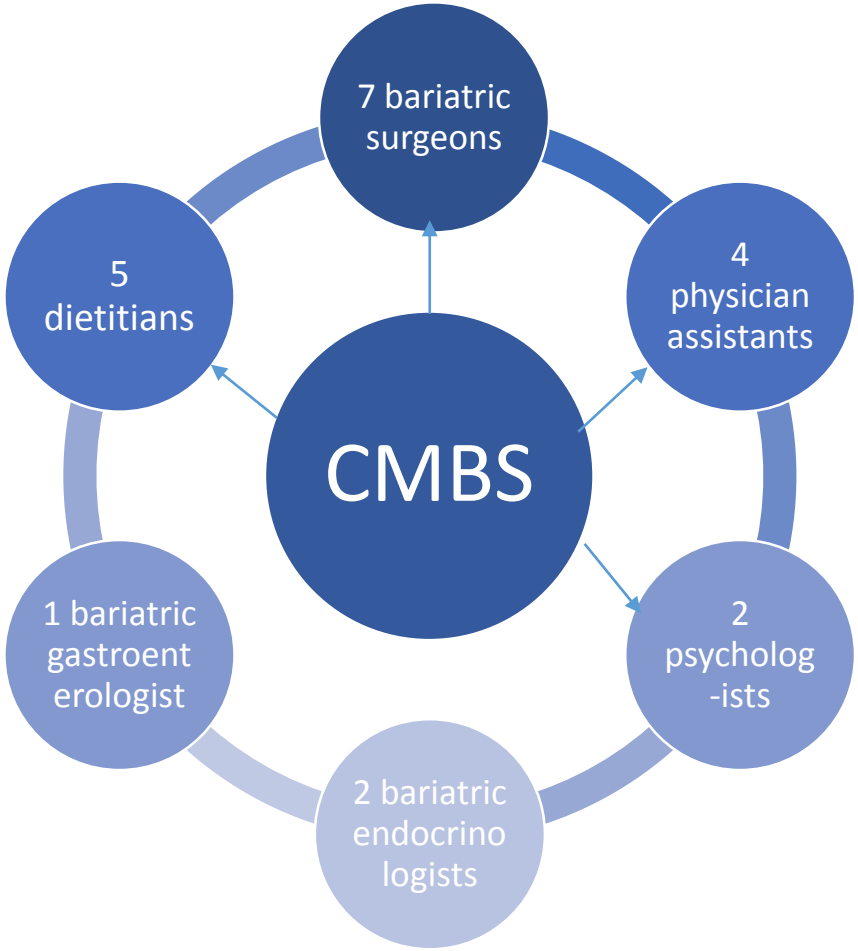
Dawes AJ, et al, JAMA 2016

Preop Nutritional Assessment
术前营养评估

- Assess preop nutritional status and correct nutritional deficiency
- Educate the patient on proper nutrition and appropriate eating habit for after surgery
- Assist the patient with preop weight loss

Preoperative Nutritional Education
术前营养评估

BWH Center for Metabolic and Bariatric Surgery (CMBS)
BWH代谢和减重手术中心



CMBS provides structured ***life-long*** follow-up for all the post-bariatric patients with our interdisciplinary teams.

Bariatric postop Follow-up
减重术后随访

- Weight Management
- Complication management
- Nutrition and vitamin management
- Behavioral management

Postop Follow-up with Surgeons
减重术后与外科医生的随访

1st year	2nd year	After 2nd year
• 2 weeks • 6 weeks • 3 months • 6 months • 9 months • 12 months	• 18 months • 24 months	• Yearly • Life-long

Postop Weight Management
术后体重管理

Category	Body Mass Index (Kg/m2)	Over Ideal Body Weight (%)
Underweight	<18.5	
Normal	18.5-24.9	
Overweight	25-29.9	
Obesity (Class 1)	30-34.9	>20%
Severe Obesity (Class 2)	35-39.9	>100%
Severe Obesity (Class 3)	40-49.9	
Superobesity	>50	>250%

Postop Weight Management
术后体重管理

- Different metrics to discuss weight loss

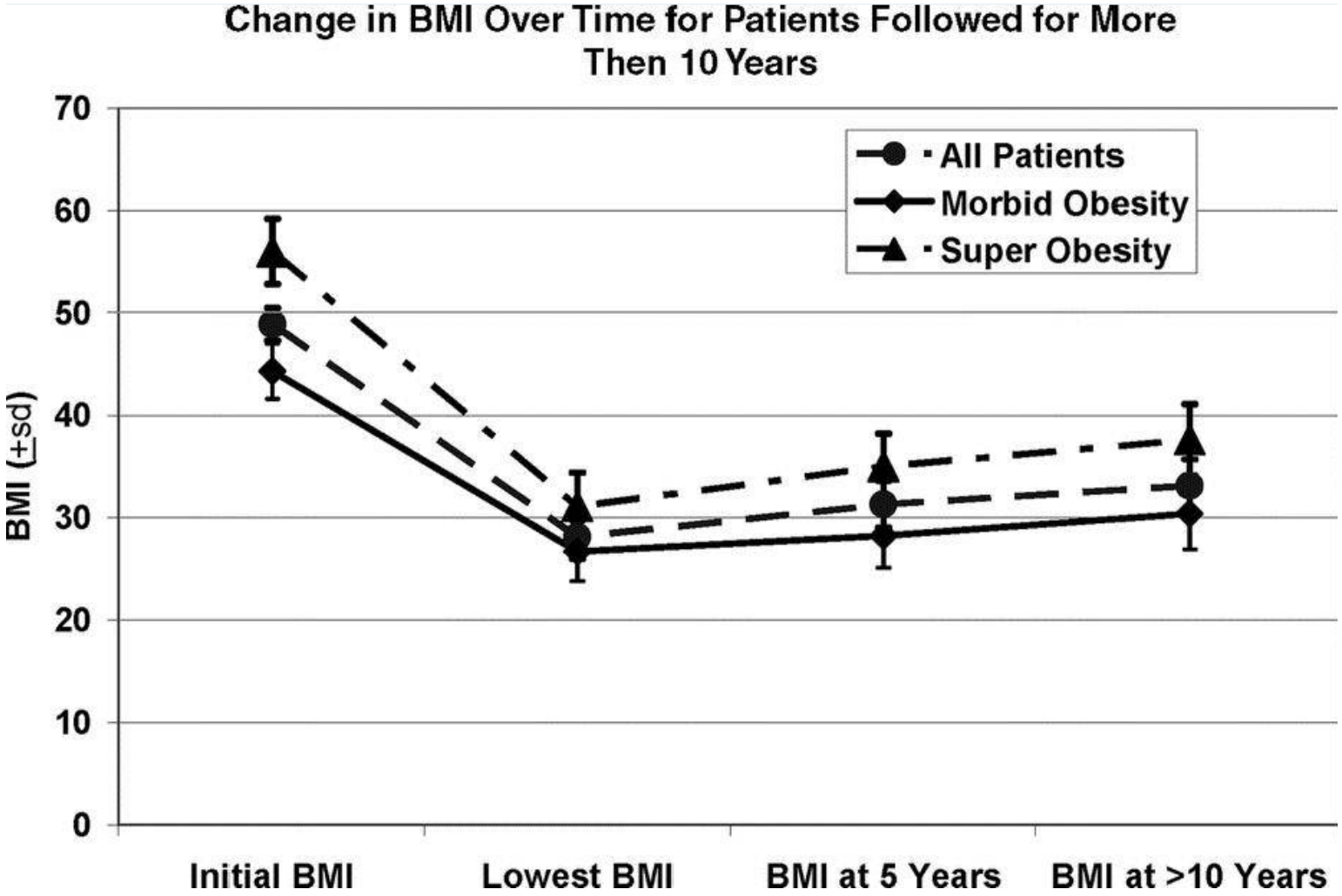
The absolute # of pounds or BMI units lost

Weight or BMI achieved after weight loss

The % excess body weight loss (EWL)

Postop Weight Management
术后体重管理

- Is weight loss rate too fast, too slow or appropriate?
- What is the patient's self-assessment of weight progress?
- Any concerns on diet, exercise, or medical condition?



Christou, N, MD, et al, Ann Surg, 2006 Nov

Postop Weight Management
术后体重管理

- Dietary red flags
  - Unhealthy snacks: crackers, nuts, sweetened beverages
  - Skip meals
  - Resumption of old eating habit: grazing, nighttime snacking, emotional eating
  - Lack of vegetable and fruit
  - Nightshift workers

Postop Weight Management
术后体重管理

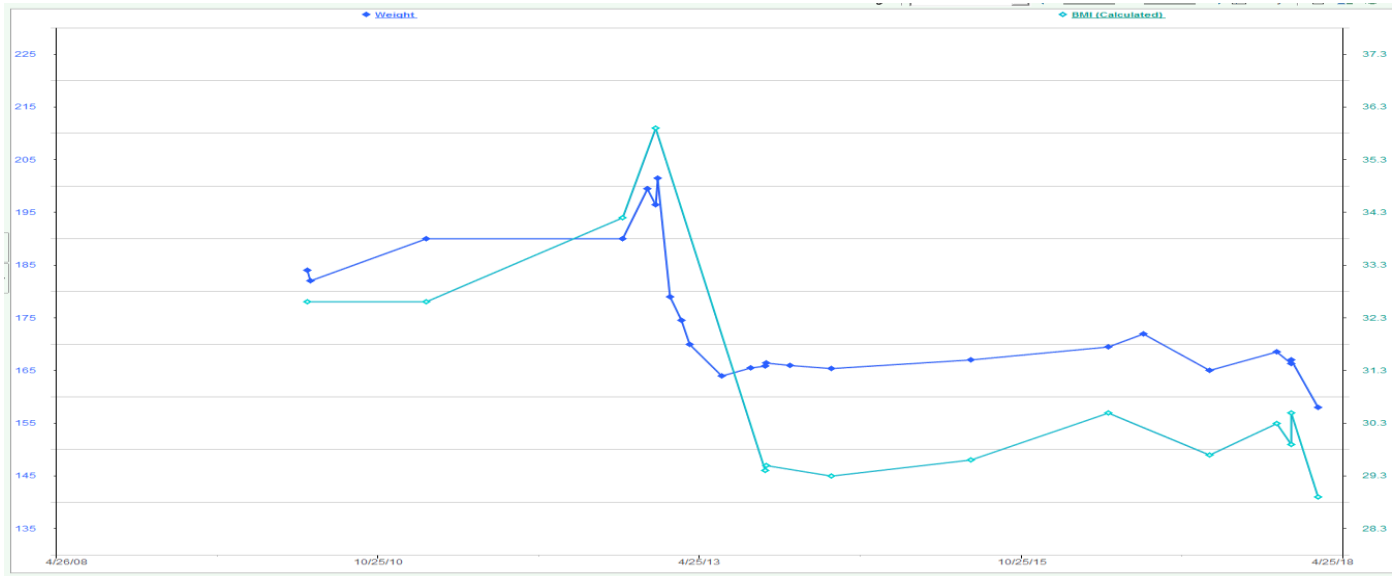
- Behavior predictors for weight gain
  - Increased food urges
  - Concerns regarding addictive behaviors
  - Decreased well-being
  - No show to follow-up visits
  - Lack of self monitoring

Odom, J et al, OBES SURG (2010) 20:349–356

Postop Weight Management
术后体重管理

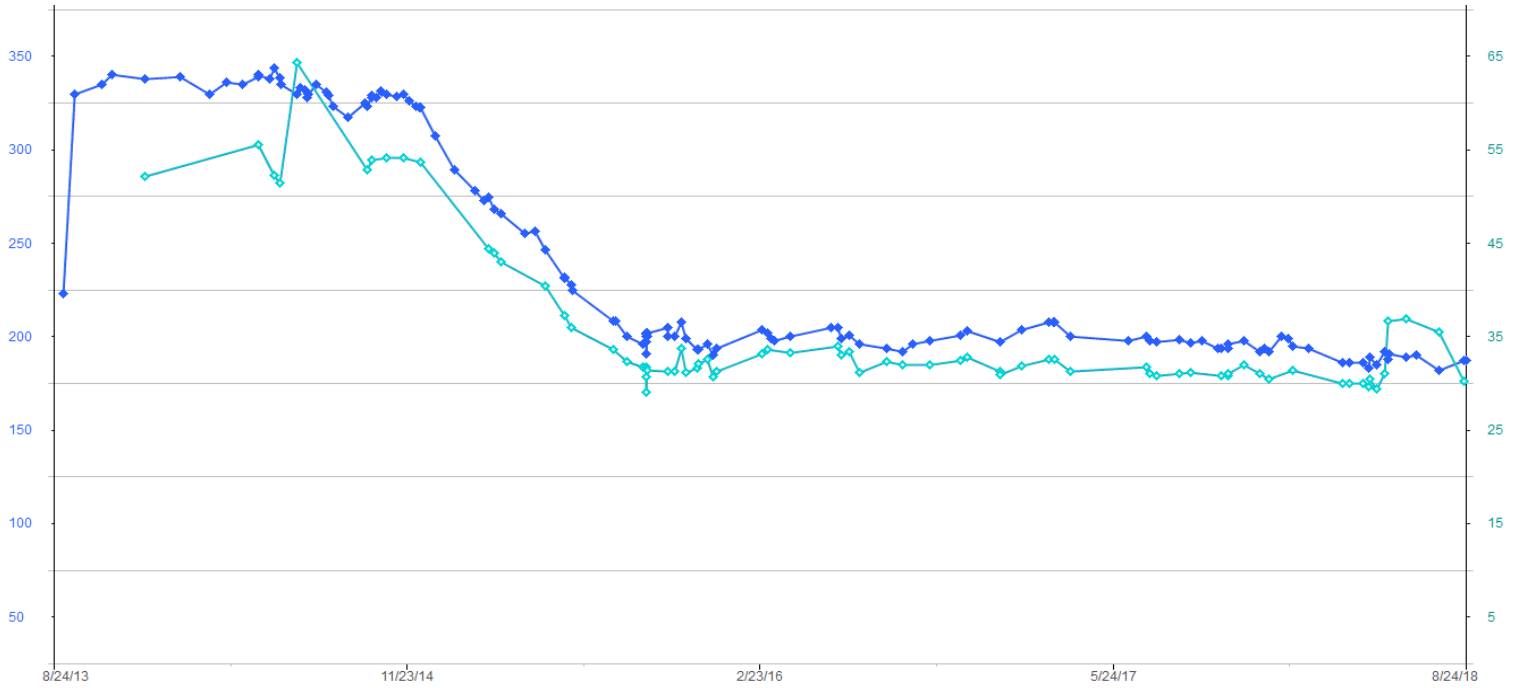
A year following sleeve gastrectomy 100% EWL

Postop Weight Management
术后体重管理



5 years following conversion of band to sleeve - 195 lbs in 2007, 71% EWL

Postop Weight Management
术后体重管理



71yo M w/ DM, HTN, CAD, CKD, OSA, GERD Lap RYGB 12/2014, BMI 54 down to 30

Postop complication management
术后并发症管理

Early complications

- Anastomotic leak
  Bleeding
- DVT/PE
- Bowel obstruction
- Anastomotic narrowing
- Wound infection
- Heart attack/Death

Late complications

- Internal hernia/bowel obstruction
- Nutritional deficiencies
- Incisional ventral hernia
- GJ anastomotic ulcers
- Chronic abdominal pain
- Gastrogastric fistula/Weight regain

Postop complication management
术后并发症管理

- Screens for
  - Dehydration
  - Constipation
  - GERD symptoms
  - Gallstones
  - Dumping/reactive hypoglycemia
  - Abdominal pain
    - Marginal ulcer
    - Internal hernia
  - Weight regain
    - Gastrogastric fistula

Postop complication management
术后并发症管理

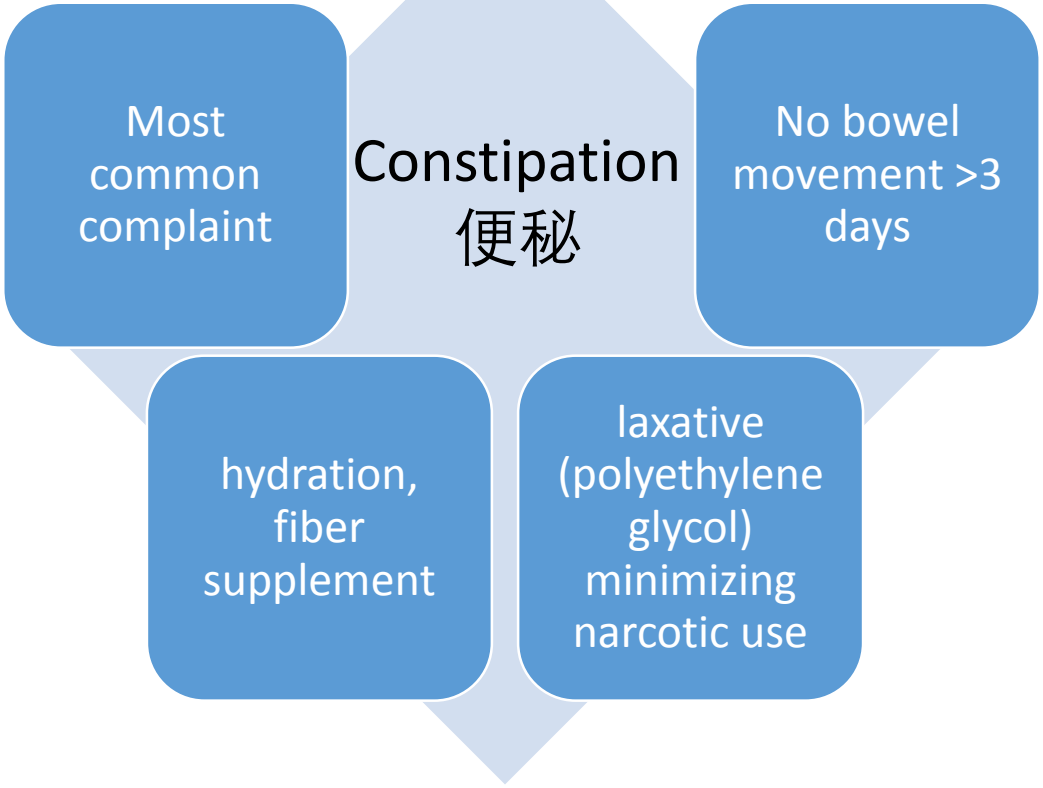
Dehydration 脱水

Most common in 2 weeks postop

Fatigue, light headedness, dry mouth, stomach cramps, muscle cramps, decreased or dark urine, rapid weight loss, diarrhea

Increase oral intake, IVF, nausea control, PPI

Postop complication management
术后并发症管理



Postop complication management 术后并发症管理

Anastomotic leak 吻合口漏

- Within the first few days of surgery and rarely after 2 weeks (<1%)
- Tachycardia, worsening abdominal pain, leukocytosis, fever
- UGI, CT abd/pelvis
- TPN, antibiotic, drainage, lap evaluation and repair leak

Postop complication management
术后并发症管理

GERD 胃食管反流性疾病

- 2.1-24.9% patient after sleeve surgery
- Heartburn, acid reflux, dysphagia, cough
- Esophageal manometry, 24-hr PH monitoring, EGD
- PPI, conversion sleeve to gastric bypass

Soricelli E et al. Obes Surg 2010; 20: 1149-53

Postop complication management 术后并发症管理

Gallstone formation胆结石形成

- Up to 35% of patients within 6 months postop
- Epigastric pain, indigestion, right upper abdominal pain
- Bile stasis leads to increased sludge and gallstones
- Ursodiol
- Elective surgery for symptomatic gallstones

Postop complication management 术后并发症管理

Marginal ulcers 吻合口溃疡

- Epigastric or retrosternal pain, dyspepsia, vomiting
- GJ anastomosis, proximal jejunal limb, gastric pouch
- EGD
- Treatment:
  - PPI, carafate, antibiotics if H. Pylori, avoiding NSAIDS, alcohol, smoking, diabetic management
  - Endoscopic removal of suture
  - Surgical revision if refractory

Postop complication management 术后并发症管理

Weight regain 体重反弹

- Failure to follow dietary guidelines
- Lack of exercise
- Psychiatric issues (e.g., depression, anxiety, binge eating)
- Postsurgical issues (dilated gastric pouch, dilated gastrojejeunal anastomosis, gastrogastric fistula)

Postop Complication Management 术后并发症管理

Medications 药物治疗

- Medication reduction for DM, HTN
- Pain medication: Tylenol, Tramadol, opioid, Lidocaine patch, avoid NSAIDs,
- Crushed, opened, or in elixir
- XR, SR, XL, DR, ER, XT, CR, CD medications must be switched to immediate release formulations.
- Capsules are to be opened (Nexium, Prilosec, Prevacid, Depakote, Effexor, Gabapentin, Flomax, Adderall, Cymbalta)

Postop Nutrition Management
术后营养管理

Getting Ready for Surgery

What to Buy Before Surgery

- ☐ Measuring Cups & Spoons
- ☐ Food Scale
- ☐ Sugar-free Fluids
- ☐ Protein Shakes*
- ☐ Vitamin & Mineral Supplements*

**Choose protein shakes and vitamin & mineral supplements from the shopping guides.*

Diet Progression Timeline

Surgery Date: _____

Start Pre- Op diet: _____

Once your surgery date is known, start the recommended pre-op diet 2 weeks before surgery.

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Fluids	*Protein Shakes*	*Smooth Foods*	*Soft Foods*	*Regular Textures*
Starts on ...				
Day 0-1 → *while in hospital*				
	Day 1-2 → *while in hospital*			
		Day 10 → *Start your vitamins now too! (Chewable until stage 4)*		
			Day 20 →	
				Starts on day 40 after surgery → *Lifelong diet!*

*May start pill form of vitamins if desired
*No alcohol for at least 6-12 months

Postop Nutrition Management
术后营养管理

Diet and texture progression

- Stage 2: fluid and protein shakes
- Stage 3A: smooth texture (Greek yogurt, cottage cheese, tofu, refined bean, unsweetened applesauce)
- Stage 3B: soft texture (chicken, turkey, fish, egg, well-cooked vegetable)
- Stage 4: regular texture

Postop Nutrition Management

BRIGHAM HEALTH
BRIGHAM AND WOMEN'S
Center for Metabolic and Bariatric Surgery

CHEWABLE MULTIVITAMINS

- Any vitamin not on this list should be brought into your nutrition appointment for approval.
- Remain on chewables for at least 6 weeks after surgery.
- Avoid gummy multivitamins – these don't have all the right nutrients.
- Having blood work done regularly is just as important as taking your supplements.
- Separate multivitamin(s) with iron or any iron supplement from calcium by at least 2 hours.
- It is okay to take your vitamins in the morning or evening. Refer to page 11 in your Nutrition Guidelines book for timing suggestions.

GOLD LEVEL ★ ★ ★

These contain all essential vitamins and minerals

NAME		DOSE	WHERE TO BUY	PRICES
Celebrate Multi – Complete "36" or "45" Chewable "36" = preferred for men "45" = preferred for women		2 tablets/day	www.celebrate vitamins.com or By Phone 877-424-1953	$19.95 (60 ct – 36 mg iron) $24.95 (60 ct – 45 mg iron)
Bariatric Advantage Advanced Multi EA Chewable		2 tablets/day	www.bariatric advantage.com or By Phone 1-800-898-6888	$37.45 (60 ct) *Use code "BWHC" on main page for 15% off*

*Do not need to take additional B12.

SILVER LEVEL ★ ★ ☆

Opurity Bypass & Sleeve Optimized Multivitamin		1 tablet/day	www.opurity.com or By Phone 1-800-517-5111	$29.95 (90 ct) *Use code "MABWHC02" for 10% off your 1st order*

*This option is low in iron. Additional 18mg iron or more needed for men. 30mg additional iron for women.
*Do not need to take additional B12.

ProCare Health Bariatric Complete Chewable		1 tablet/day	www.procarenow.com or By Phone 877-822-5808	$11.99 (30 ct)

*This option does not contain Vitamin K. This is not recommended for pregnant women.
*Do not need to take additional B12.

Postop Nutrition Management
术后营养管理

- Assess the degree of adherence of taking vitamin supplements
  - Patient self-report
  - Detailed assessment by the clinicians and dietitians
  - Bio-chemical monitoring

Postop Nutrition Management
术后营养管理

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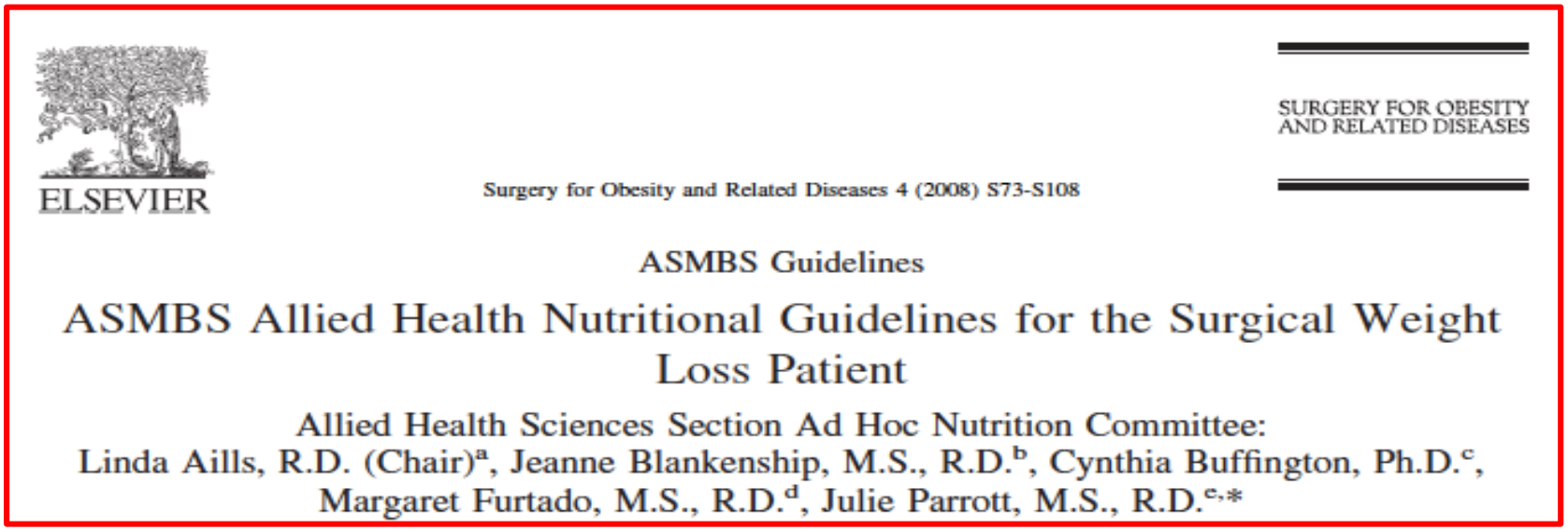
Center for Metabolic and Bariatric Surgery

Bariatric Laboratory Schedule
Gastric Bypass & Sleeve Gastrectomy

	Initial Pre-op Visit		Month 3	Month 6	Month 9	Month 12	Month 18	Year 2	Year 3	Year 4	Year ...
Comprehensive Metabolic Panel	✓					✓		✓	✓	✓	✓
Basic Metabolic Panel			✓	✓	✓		✓				
CBC	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Hemoglobin A1C	✓		Only in patients with diabetes								
Folate*	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Ferritin	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Iron Panel (Serum Iron, Iron Binding Capacity, UIBC)	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
TIBC	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
TSH	✓		If indicated (fatigue, weight re-gain, etc...)								
Vitamin B12	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
25-OH Vitamin D	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
PTH	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Vitamin A	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Vitamin B1 (Thiamin)*	✓		✓			✓		✓	✓	✓	✓
H. Pylori IgG	If indicated		If indicated								
Zinc	If indicated		If indicated (in limb patients and when clinically indicated)								
Copper	If indicated		If indicated (in limb patients and when clinically indicated)								

Postop Nutrition Management
术后营养管理



ELSEVIER

Surgery for Obesity and Related Diseases 4 (2008) S73-S108

SURGERY FOR OBESITY AND RELATED DISEASES

ASMBS Guidelines

ASMBS Allied Health Nutritional Guidelines for the Surgical Weight Loss Patient

Allied Health Sciences Section Ad Hoc Nutrition Committee:
Linda Aills, R.D. (Chair)[a], Jeanne Blankenship, M.S., R.D.[b], Cynthia Buffington, Ph.D.[c], Margaret Furtado, M.S., R.D.[d], Julie Parrott, M.S., R.D.[e,*]

Aills L, et al. SOARD 2008

Postop Nutrition Management
术后营养管理

BRIGHAM AND WOMEN'S
Center for Metabolic and Bariatric Surgery

Bariatric Surgery at Brigham & Women's Hospital and Brigham and Women's Faulkner Hospital

Lab and Vitamin Guidelines for Practitioners Working with Bariatric Patients

Postop Nutrition Management
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Lab Measure	BWH Goal	ASMBS Goal	Treatment
Vitamin D, 25-OH	30-80 ng/mL	>30 ng/mL	If levels are: 1. 25-30ng/mL: advise 2000IU daily 2. 20-25ng/mL: advise 50,000IU once weekly for 8 weeks* 3. 12-19ng/mL: advise 50,000IU once weekly for 12 weeks* 4. <12ng/mL: advise 50,000IU three times weekly for 12 weeks* *Once high dose treatment plans are completed, advise 2000IU/daily
Intact PTH	< 65 pg/mL	< 65 pg/mL	1200-1500 calcium mg/day • Give in divided doses not to exceed 600mg at one time • Calcium carbonate should be taken with meals • Calcium citrate may be taken with or without meals • Calcium dosage includes both diet and supplements
*Folate	serum > 5.2 ng/mL RBC folate ≥366 ng/mL	RBC folate 340-1020 ng/mL	1. Initiate daily MVI and confirm MVI contains at least 400 mcg folic acid 2. If already taking adequate MVI, provide 1000mcg oral folic acid daily to achieve normal levels 3. Women of childbearing age should aim to take oral dose of 800-1000 mcg daily
Vitamin B12 (Cobalamin)	250-900 pg/mL	200-1000 pg/mL (<400 pg/mL suboptimal)	1. If suboptimal (200-400 pg/mL), confirm taking multivitamin containing vitamin B12 2. Initiate daily MVI (200% DV) containing 350-500 mcg vitamin B12 or in a separate vitamin B12 of oral (350-500mcg) or nasal form (1000mcg) 3. If patient already on a daily MVI or separate vitamin B12, provide 1000 mcg oral vitamin B12 daily 4. Parenteral (IM or subcutaneous) 1000 mcg/month to 1000-3000 mcg every 6-12 months is recommended if unable to maintain target levels with oral or intranasal routes
Iron	37-158 µg/dL	60-170 µg/dL	1. If low ferritin, assess Hgb/HCT. Clinical judgment required for interpretation. If normal, start MVI containing iron or if already on MVI containing iron, start an oral iron supplement. Intravenous (IV) iron should be initiated if pt is intolerant or does not have a response to oral dose by 3 months from start of treatment 2. If low ferritin and low Hgb/HCT, initiate MVI with iron and start oral iron supplement. Begin IV iron if pt is intolerant or does not have a response 3. If low ferritin and low Hgb/HCT and pt is on MVI and PO iron, begin IV transfusions Treatment regimens include oral ferrous sulfate, fumarate, or gluconate to provide up to 150-200 mg of elemental iron daily, taken in divided doses, no more than 65mg at a time, separate from calcium supplements, acid reducing meds and foods high in phytates and polyphenols. Vitamin C supplementation may be added simultaneously to increase iron absorption
Ferritin	20 – 170 µg/dL	12-300 ng/mL (male) 12-150 ng/mL (female)	
TIBC	250-450 µg /dL		
TSH	0.5 – 5.0 ml U/L		If abnormal, refer to PCP for further evaluation and treatment. Will need confirmation that level has normalized prior to surgery

Postop Nutrition Management
术后营养管理

Vitamin B1, Thiamin	TPP activity 70-180nmol/L	TPP activity 70-180 nmol/L Serum or plasma Thiamin 8-30 nmol/L	1. Supplementation of 50-100mg dose daily should be included as part of routine multivitamin with mineral preparation 2. Treatment should begin before or in the absence of laboratory confirmation and deficiency. Monitor resolution of signs and symptoms 3. Oral Therapy: 100mg orally 2-3 per day until symptoms resolve 4. IV Therapy: 200mg TID to 500 mg once per day or BID for 3-5 days followed by 250mg/day for 3-5 days or until symptoms resolve. Afterwards, consider 100mg/day orally, usually indefinitely or until risk factors have been resolved 5. IM: 250mg once daily for 3-5 days or 100-250mg monthly 6. Simultaneous administration of magnesium, potassium and phosphorus should occur in patients at risk for refeeding syndrome
Vitamin A	32.5-78.0 mcg/dL		1. Without corneal changes: 10,000-25,000 IU/d orally until clinical improvements (1-2 weeks) 2. With corneal changes: 50,000-100,000 IU IM for 3 days followed by 50,000 IU/d IM for 2 weeks 3. Evaluate for concurrent iron and/or copper deficiency, which can impair resolution of Vitamin A deficiency 4. Special attention should be paid to prenatal supplementation of vitamin A in pregnant women
Zinc	0.66-1.10 mcg/mL	Plasma zinc 60-130 ug/dL	1. Initiate a complete multivitamin containing 100% of RDA for sleeve gastrectomy and 200% for gastric bypass: RDA = Males (11mg) Females (8mg) ** 2. Supplementation with 1 mg copper is recommended for every 8-15mg elemental zinc to prevent copper deficiency
Magnesium	1.7-2.6mg/dL	n/a	Initiate a complete multivitamin (containing magnesium)
Copper	Ceruloplasmin 26-60 mg/dL Copper 0.75-1.45 mcg/mL	Ceruloplasmin: 75-145 µg/dL Serum or plasma copper 11.8-22.8mmol/L	1. Initiate a complete multivitamin (containing at least 2mg copper as copper gluconate or sulfate) 2. Supplementation with 1 mg copper is recommended for every 8-15mg elemental zinc to prevent copper deficiency 3. Mild to moderate deficiency: 3-8mg/day oral copper gluconate or sulfate until levels normalize 4. Severe deficiency: 2-4 mg/day of IV copper can be initiated for up to 6 days or until serum levels return to normal and neurological symptoms resolve
Calcium (serum, ordered as part of CMP, no separately)	8.8-10.7 mg/dL	9-10.5mg/dL	1. 1200-1500mg/day (LAGB, SG, RYGB) • As stated above: give in divided doses • Calcium carbonate should be taken with meals • Calcium citrate may be taken with or without meals • Calcium dosage includes both diet and supplements

Postop Nutrition Management
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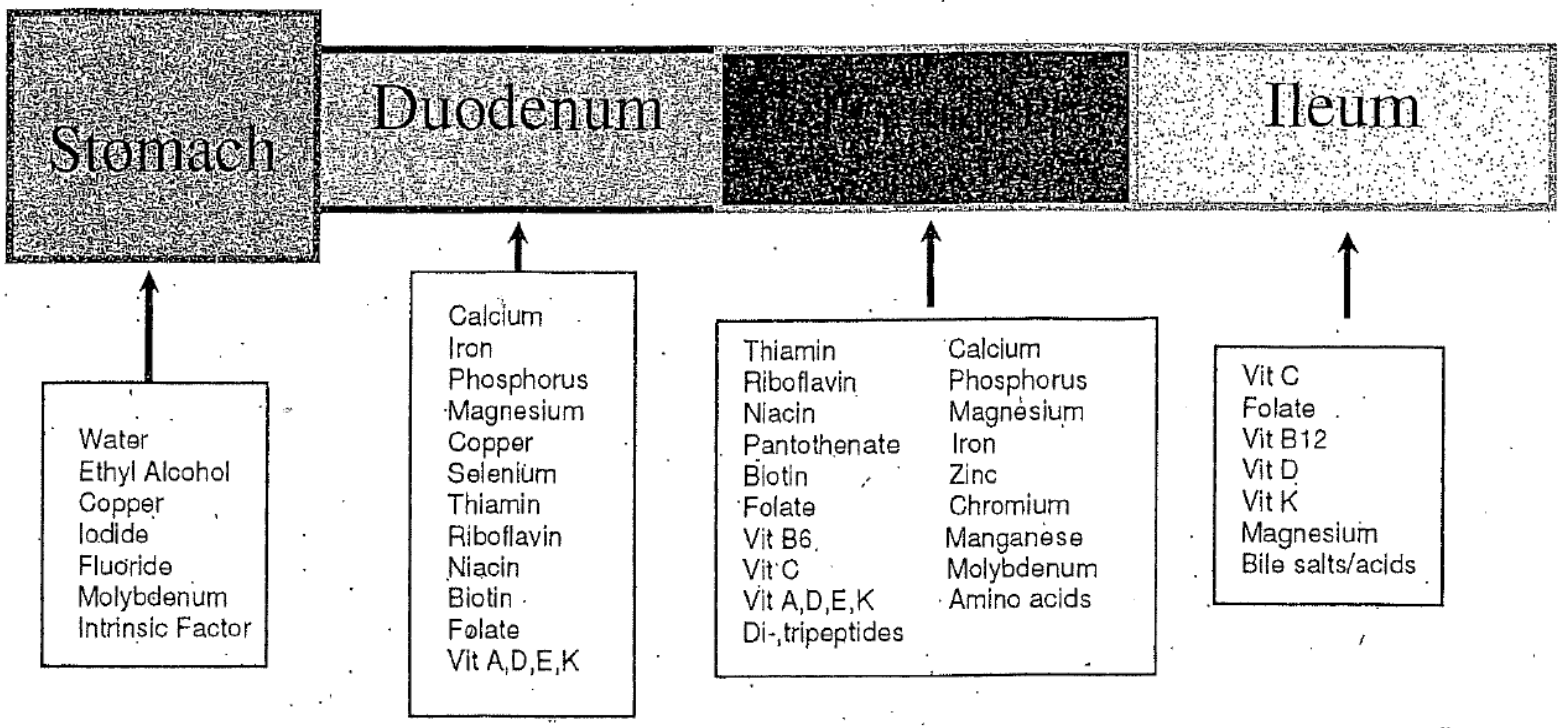


Figure 4. Sites of nutrient absorption in the gastrointestinal tract.

Shikora SA, et al. Nutr Clin Pract. 2007; 22(1): 29-40.

Vitamin B12

- 4-12% patient developed it after sleeve surgery, higher rate after RYGB
- Pernicious (megaloblastic) anemia, numbness or tingling, muscle weakness, depression, memory loss, or behavioral changes
- Oral, sublingual, nasal spray, intramuscular injection

Postop Nutrition Management
术后营养管理

Vitamin D and calcium

- Obesity is associated with vitamin D deficiency and secondary hyperparathyroidism.
- Up to 50-80% patients after gastric bypass.
- Osteomalacia with aching pain
- Calcium citrate (1200-1500 mg/day associated with 400 IU vitamin D), demonstrated a greater increase in calcium serum levels and greater reduction in PTH

Postop Nutrition Management
术后营养管理

Iron

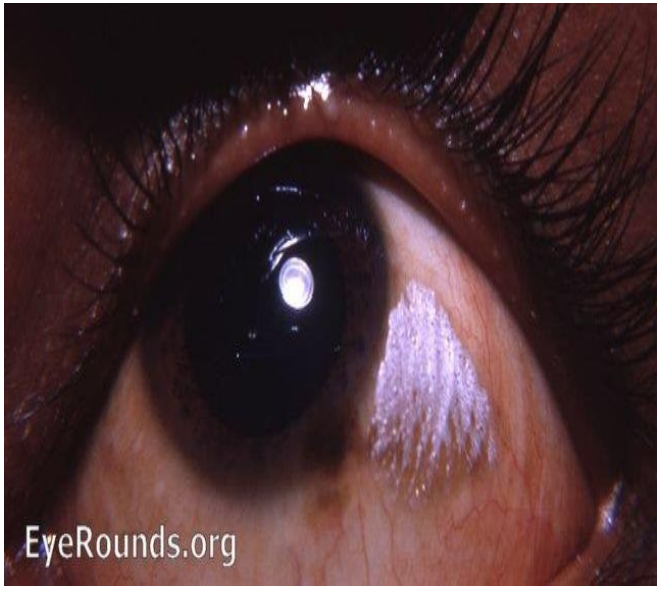
- 0 – 58% patients with obesity preop, and 8-50% postop
- Iron panel, ferritin, and CBC
- MVI with iron, add oral iron supplement (ferrous fumarate or ferronyl. Iron infusion if patient is intolerant or does not have a response.
- Pay attention to the patients with heavy period and pregnant patients.

Postop Nutrition Management
术后营养管理

- Vitamin A
  - 14% patients with obesity before surgery
  - 8-11% patients developed it after RYGB
  - Symptoms: night blindness, Bitot's spots, poor healing, hyperkeratinization of the skin, and loss of taste
  - 10,000-25,000 IU/d orally if no corneal changes, add 10,000 IU/d for 2 weeks
  - Evaluate for concurrent iron and/or copper deficiency
  - Special attention to prenatal supplement in pregnant women.

Postop Nutrition Management
术后营养管理

Postop Nutrition Management
术后营养管理



Bitot's spot

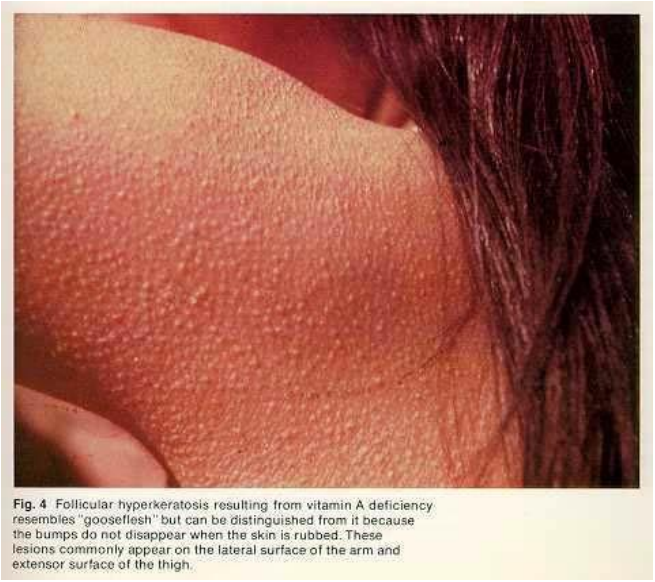


Fig. 4 Follicular hyperkeratosis resulting from vitamin A deficiency resembles "gooseflesh" but can be distinguished from it because the bumps do not disappear when the skin is rubbed. These lesions commonly appear on the lateral surface of the arm and extensor surface of the thigh.

Follicular hyperkeratosis

Postop Behavioral Management
术后行为管理

- Postop mental illness lead to lower weight loss and an increased risk for weight gain.
- Addiction transfer: the prevalence of "addictive" behaviors, such as alcohol abuse, gambling, addiction to medications, compulsive shopping and driven sexual behaviors, may be a problem for bariatric surgery patients

Muller M et al. Journal of Gastrointestinal Surgery, published online August 8, 2018

Postop Behavioral Management 术后行为管理

Alcohol consumption

- faster absorption of alcohol, lower metabolic clearance, and higher blood alcohol content
- Empty calories
- Marginal ulcers

Pregnancy after Bariatric Surgery 减肥手术后怀孕

- Infertility is one of the many comorbidities associated with obesity
- Improved fertility and/or unanticipated pregnancies after bariatric surgery
- Defer pregnancy for the first 12-18 months after surgery.
- Birth defects and perinatal mortality are not increased.
- Frequent follow-up with bariatric program and Ob-gyn

Miscellaneous
其他杂类

- Phone triage (PAs, dietitians)
- Patient Gateway
- Support group/monthly forum
- Facebook
- Virtual Visit
- Annual Walk from Obesity

- Weight loss surgery is not a quick fix. It requires lots of hard work and a lifelong commitment.

- 减重手术并不能一下子解决问题，它需要病人不断的努力和终身的承诺.

Our Interdisciplinary Team
我们的多学科团队