

Welcome!

**Bariatric Surgery Medical,
Nutrition and Lifestyle
Requirements:**

Getting serious about surgery

April 5, 2023

Bariatric Education Module Overview

Week 1	Bariatric Surgery Medical and Lifestyle Requirements: <i>Getting serious about surgery</i>	<i>Wednesday April 5 at 6:45 pm</i>
Week 2	<i>Moving towards Surgery:</i> Preparing for and Post-Surgery	<i>Wednesday April 12 at 6:45 pm</i>
Week 3	Life after Bariatric Surgery: <i>Defining Success, Managing Expectation & Discussing Pitfalls</i>	<i>Wednesday April 19 at 6:45 pm</i>
Week 4	Patient Voice & Lived Experience (2-3 guest speakers)	<i>Wednesday April 26 at 6:45 pm</i>

Outline

- ❖ Overview of bariatric surgery procedures
- ❖ Qualifications & pathway to bariatric surgery
- ❖ Nutrition and eating behaviour requirements set forth by the Richmond Metabolic and Bariatric Surgery program

Medical Nutrition Therapy (MNT)

MNT is used in managing chronic diseases and focuses on nutrition assessment, diagnostics, therapy and counselling. MNT should:

- a. be personalized and meet individual values, preferences and treatment goals to promote long term adherence
- b. be administered by a registered dietitian to improve weight-related and health outcomes

Physical Activity

30-60 mins of aerobic activity on most days of the week, at moderate to vigorous intensity, can result in:

- a. small amount of weight and fat loss
- b. improvements in cardiometabolic parameters
- c. weight maintenance after weight loss

i Remember nutrition and physical activity recommendations are important for all Canadians regardless of body size or composition.

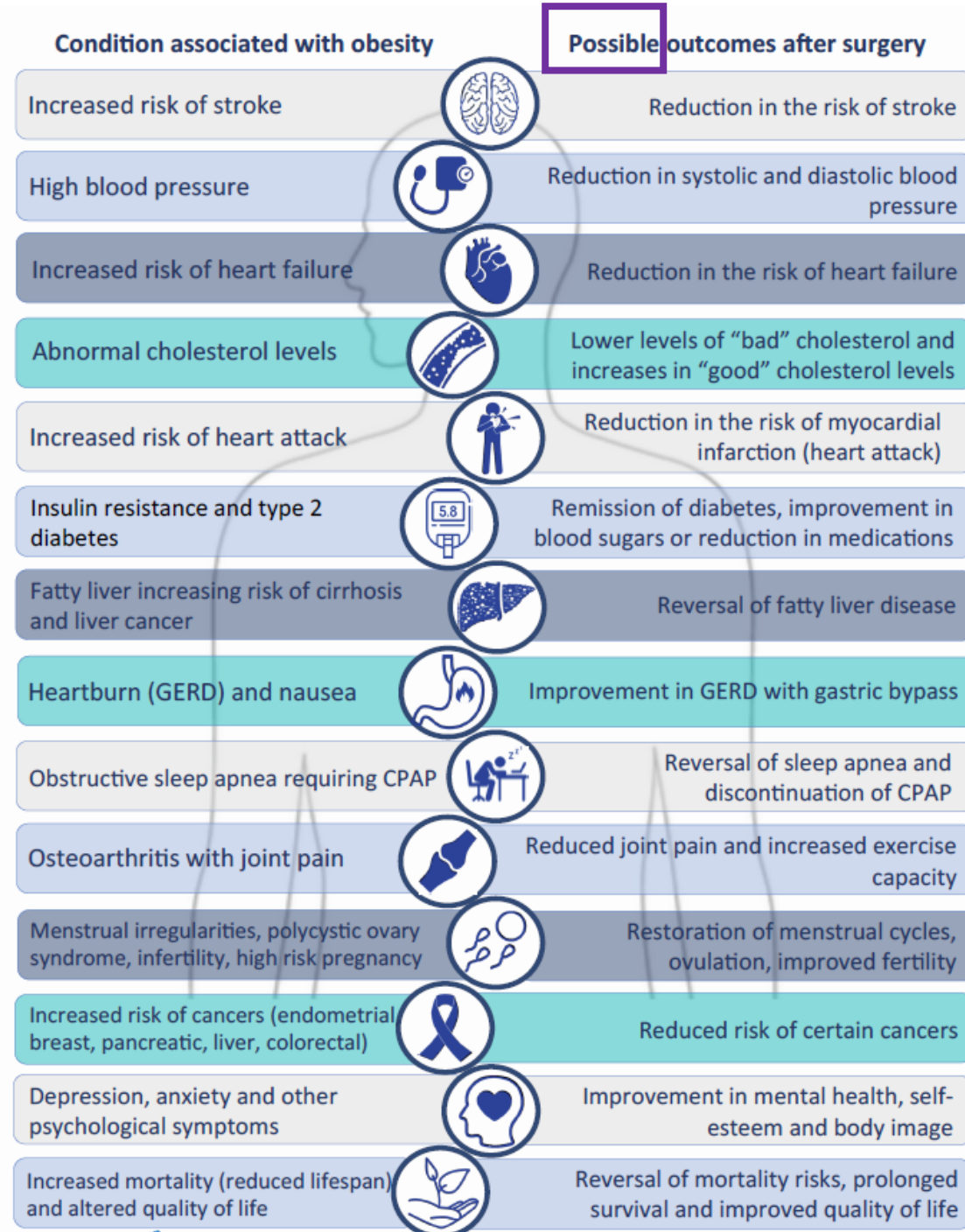
The Three Pillars of Obesity Management that Support Nutrition and Activity



Treating the root causes of obesity is the foundation of obesity management - refer to the 4M framework - mechanical, metabolic, mental and social milieu

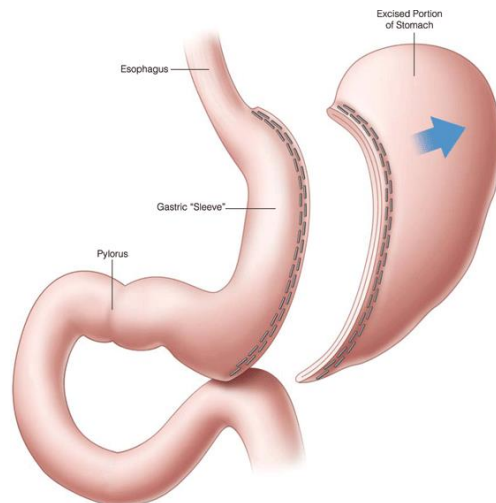
Health improvements after Bariatric Surgery

Remember, everyone is different and the goal should not be how much weight someone loses **but HOW that weight loss affects someone's health and quality of life.**

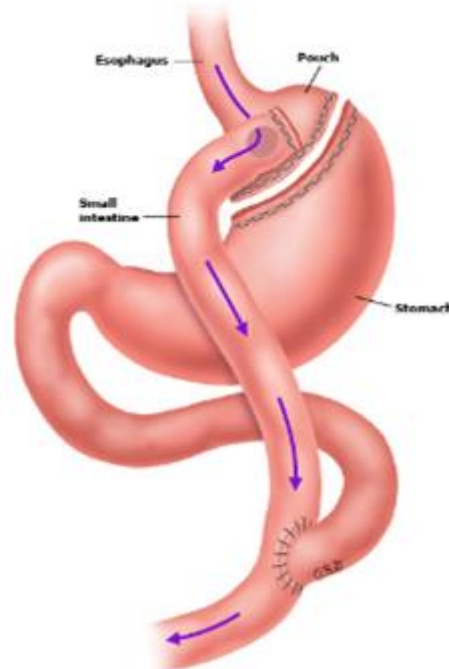


Bariatric Surgery

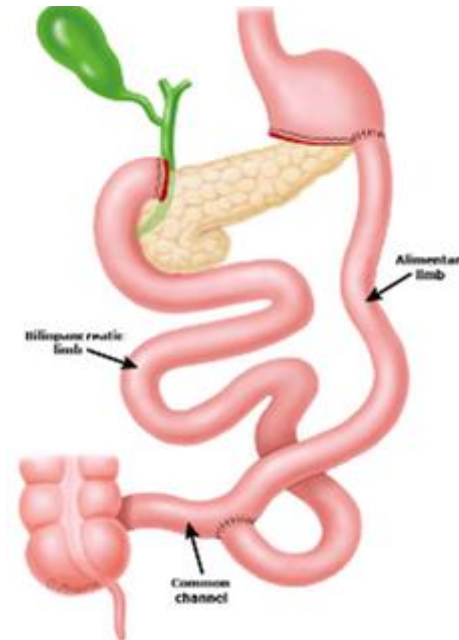
Sleeve Gastrectomy (SG)



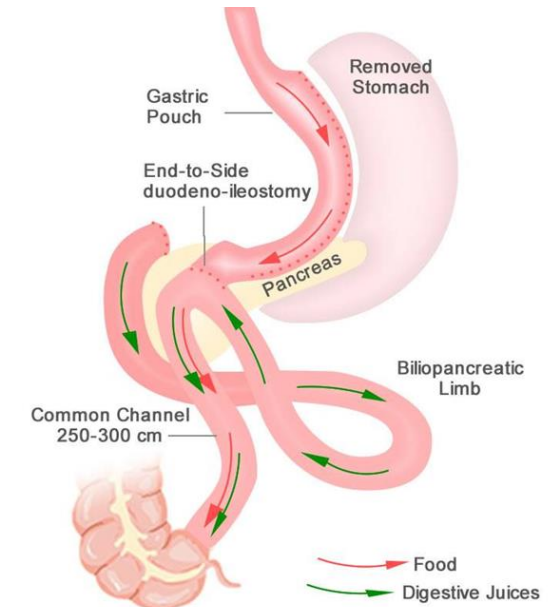
Roux-en-Y Gastric Bypass (RYGB)



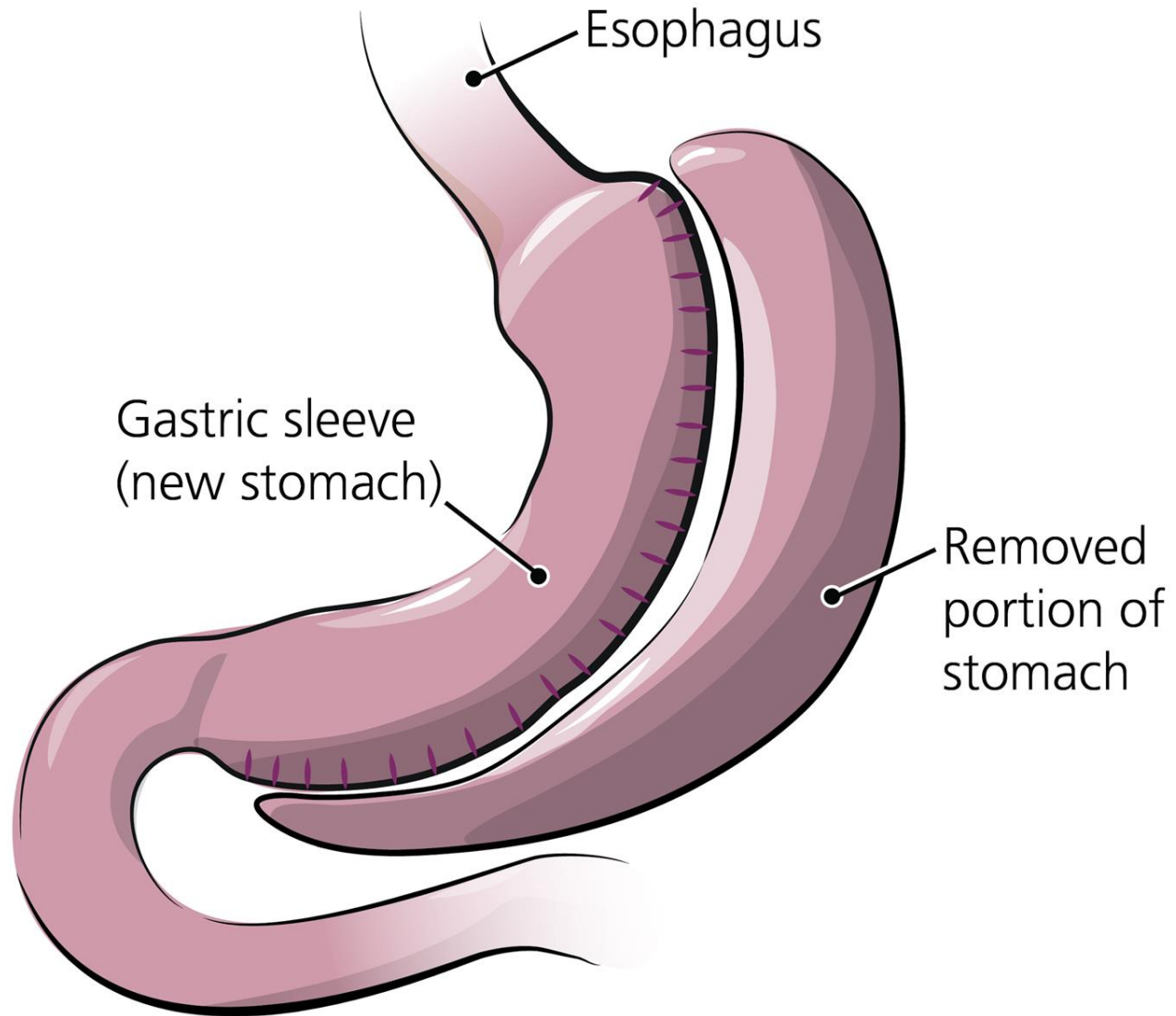
Biliopancreatic Diversion w/ Duodenal Switch (BPD/DS)



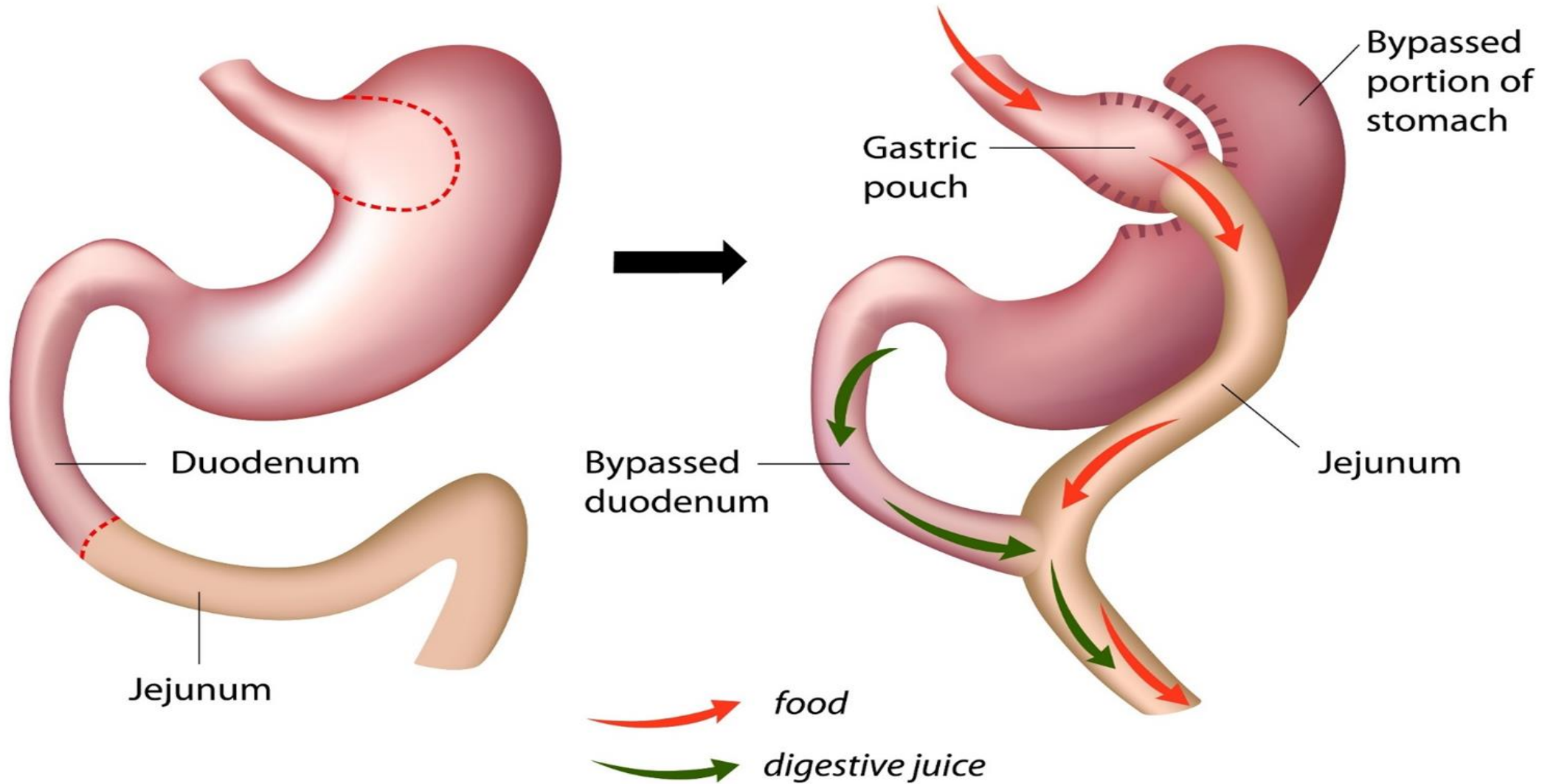
Single Anastomosis Duodeno-Ileal Bypass with Sleeve Gastrectomy (SADI-S)



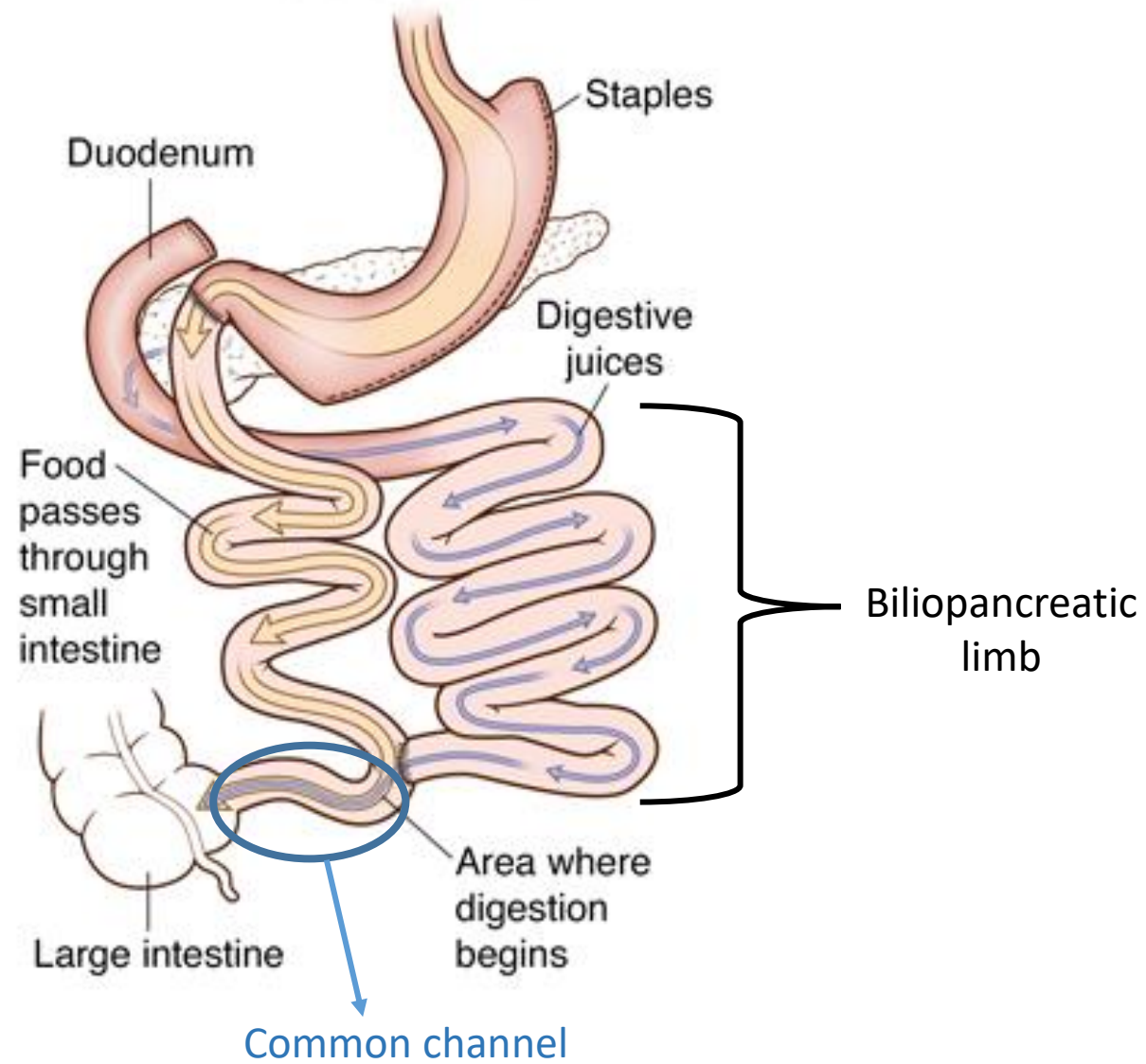
Gastric Sleeve



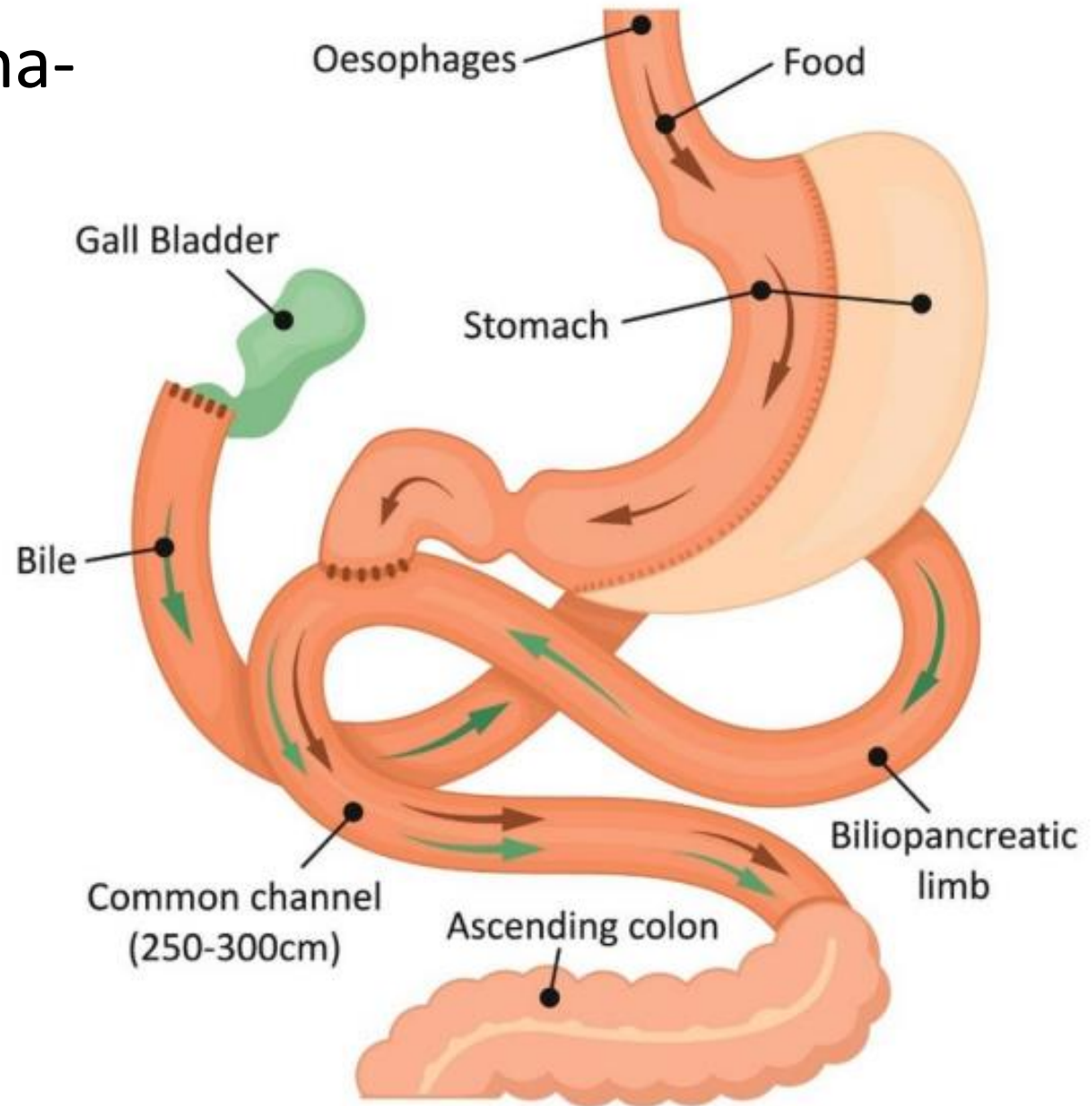
Roux-en-Y Gastric Bypass (RNY)



Biliopancreatic Diversion with Duodenal Switch



Single Anastomosis Duodeno-Ileal Bypass with Sleeve Gastrectomy (SADI-S)



Updates from RMBS Program

- Please keep an open mind to the different surgical options so the surgeons can discuss the best option for you specifically in terms of associated health conditions and expected weight loss.
- Patient interested in the SADI-S or BPD-Duodenal Switch will follow a different pathway as they would be screened and optimized by Dr. Jordanna Kapeluto (Endocrinologist) and they are very selective with patient pursuing this route (higher BMI (over 50), so people with higher weights and larger bodies, were more significant impact on their health and medical conditions).
- SADI-S and BPD-DS are revisional surgeries for those who have experienced significant weight regain following a sleeve gastrectomy.
- The pre-bariatric nutrition and lifestyle requirements for nutrition clearance for the SADI-S and BPD-DS, they are the same as with the sleeve or RYGB, so the check list and what is discussed in the Session 1 module.

Revisional Surgery:

- For patients who have had previous bariatric surgery (lap band, plication, sleeve gastrectomy, stapling, etc), we will do our best to work with you and we may refer you to the Richmond Metabolic and Bariatric Surgery Program for revisional surgery. **This is not an expedited referral as each case must be assessed by the surgeons if a revisional surgery is safe and even feasible.** These patients must also be medically assessed by our physicians and cleared for the nutrition, eating and lifestyle behaviours requirements for bariatric surgery in order to be referred.
- Again being referred to the Richmond Metabolic and Bariatric Surgery Program does not automatically guarantee that you will undergo revisional bariatric surgery. The RMBS healthcare team and bariatric surgeon will review your file and further assess if revisional bariatric surgery is safe and effective treatment for the management of your obesity, and they will make the final decision regarding this. Please read, review and be aware of the RMBS Bariatric Program Patient Contract once you receive the RMBS Program Manual.

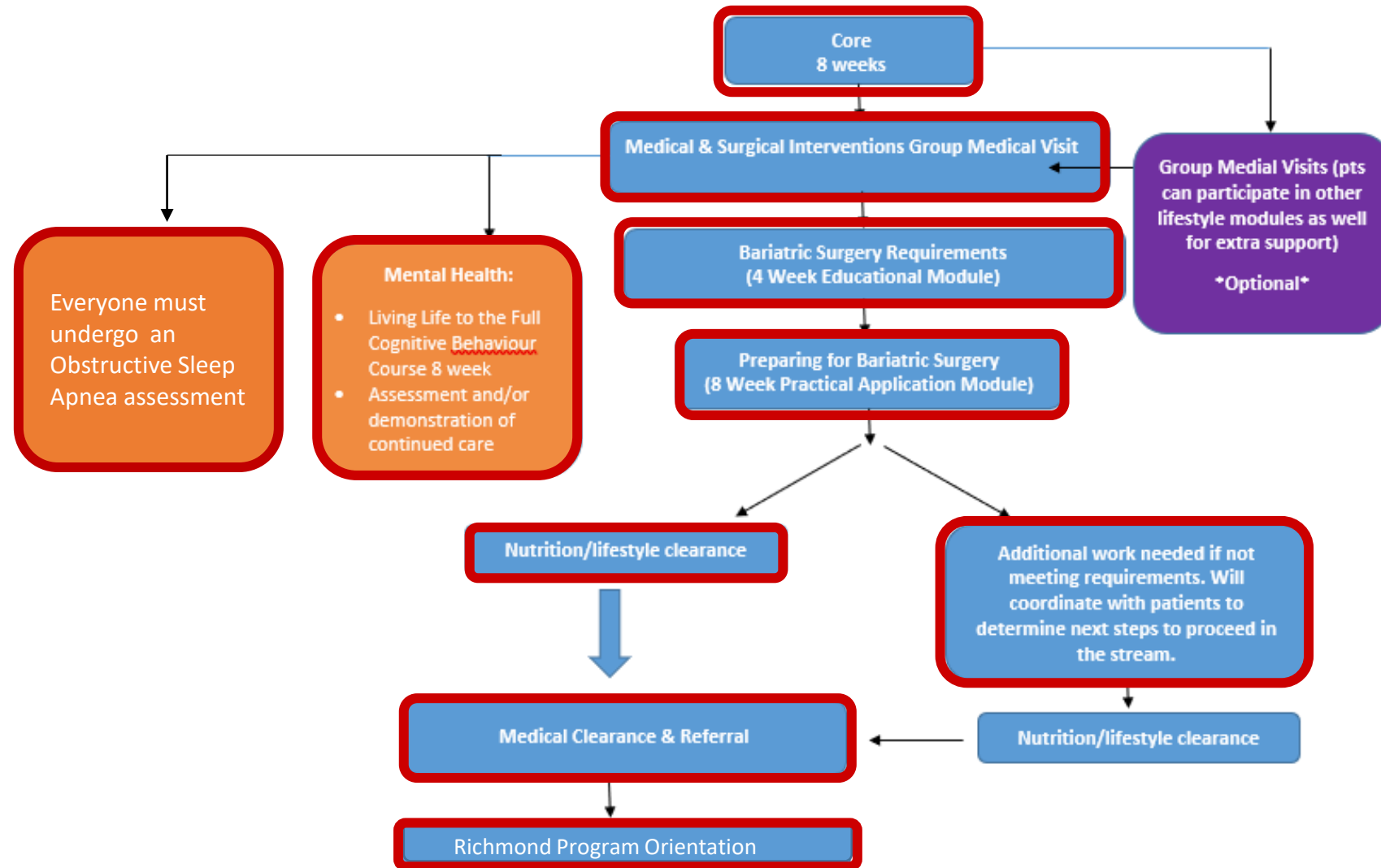
Surgical Program



Delivered in partnership with the Richmond Metabolic and Bariatric Surgery Program:

- OMDI Medical Weight Management Program:
 - Assesses readiness for surgery
 - Prepare patients for surgery
 - Provides long-term bariatric care to help patient maintain weight loss and improved health benefits associated with the surgery
- Richmond Metabolic and Bariatric Surgery Program
 - Further assess appropriateness for surgery
 - Provides immediate pre & post surgical care
 - Performs the surgical procedure

BARIATRIC PROGRAM



Timeline

Pre-Surgery

- ✓ Assess your readiness to change
- ✓ Complete the OMDI course requirements
- ✓ Provide teaching and support to develop skills needed post surgery
- ✓ Ensure you are comfortable and prepared for surgery

Post-Surgery (ongoing)

- ✓ Support you in recovery
- ✓ Assist you in maintaining your new lifestyle

Program Considerations

1. Material Costs

- Bariatric Preparedness Course: \$300 for 8 weeks
- Post-surgery vitamins/mineral supplements (for life) = ~\$35-75/month

2. Time Off

- Pre-surgery: classes and appointments at OMDI & RMBS Program
- Post-surgery recovery: ~4 weeks off work
- Post-surgery: medical appointment

3. Transportation (reduced due to COVID19)

Expected Weight Loss Outcomes

Surgery Type	Excess Body Weight Loss	Total Weight Loss
Vertical Sleeve Gastrectomy**	~46-65%	18-30%
Roux-en-Y Gastric Bypass*	~60-75%	20-40%
Biliopancreatic Diversion With Duodenal Switch	~70-80%	

Excess Body Weight (EBW) = Weight above BMI 24.9

*Buchwald et al., *JAMA* 2004;292(14):1724-1728

**Shi et al., *Obes Surg* 2010;20(8):1171-1177

***Colquitt JL, et al. (2009) Surgery for Obesity. *Cochrane Database of Systematic Reviews* (2).

Example of Excess Body Weight Loss 60%

Age: 25 - Weight: 350lbs (159kg) - Height: 172cm (5'7) - BMI: 53.7 kg/m²

Body weight at BMI 24.9 = 162.8 lbs

Current weight at BMI 53.7 (350 lbs) – weight at BMI 24.9 (163lbs) = ~187 lbs
x 0.60 = **112 lbs potentially will be lost.**

Current wt. 350lb – potential loss 112 lbs = 238 lbs
238 lbs is possible weight achieve post surgery
BMI 36.5 kg/m²

Total weight loss: 32%

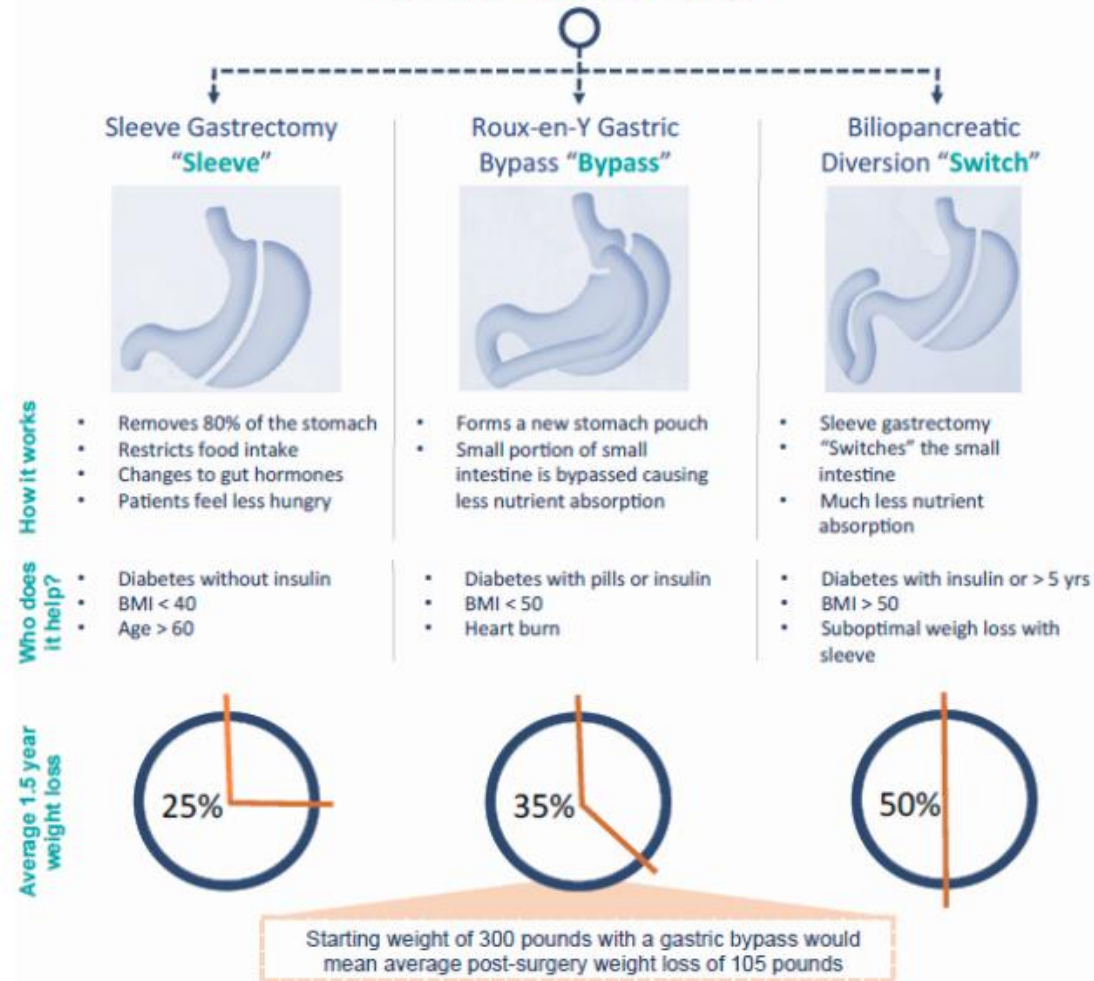
Managing Expectations - estimated

Start weight (lbs)	Medications & Lifestyle Modification			Bariatric Surgery & Lifestyle Modification
	5%	10%	15%	20-35% (pounds lost)
350	333	315	298	280-227 (70-123 lbs)
325	309	293	276	260-211 (65-114 lbs)
300	285	270	255	240-195 (60-105 lbs)
275	261	248	234	220-179 (55-96 lbs)
250	238	225	213	200-162 (50-88 lbs)
225	214	203	191	180-146 (45-79 lbs)

*Percentages are actual weight loss; numbers approximations and also depends on other factors such as weight loss prior to surgery, lifestyle behavior modification, etc

WEIGHT LOSS SURGERY

Which Procedure is Right for Me?



How is the type of surgery chosen?



Requirements for Surgery

- ✓ Age 18-65 years
- ✓ BMI ≥ 35 + weight-related disease
- ✓ BMI ≥ 40

Medical requirements:

- ☐ No significant cardiopulmonary or medical comorbidity that requires additional assessment
- ☐ No history of significant gastrointestinal disease - e.g Peptic ulcer, Crohn's, Colitis, delayed gastric emptying.
- ☐ No previous gastric surgery
- ☐ Not using or dependent on non-steroidal anti-inflammatory drugs (NSAIDs)
- ☐ BMI must be below <60



Requirements for Surgery

Metabolic

- ☐ If living with diabetes - A1C should be <8.5%
- ☐ If has sleep apnea then has a CPAP machine and functioning daily.
- ☐ Smoke free for 6 months
- ☐ Other chronic metabolic issues well treated & stable
 - e.g. hypertension, dyslipidemia, hypothyroidism.



Medical Cannabis

- Smoking or vaping must be stopped 6 month before referral.
- Edibles an alternatives for medical use.
- The Richmond Metabolic and Bariatric Surgery Program only proceed with surgery for patients using medicinal cannabis in edible form and they encourage patients to wean off it possible at least a few weeks preop.
- It isn't advised after surgery and for patient who do have to resume it after surgery, it is under their own GP's direction.

Requirements for Surgery



Mental Health

- ☐ No history of self harm/suicide - as risk increases post surgery
- ☐ If you have a mental illness, a substantial period of mental health stability (at least 2 years) documented by mental health professional or GP treating the mental illness (a letter to be provided).
- ☐ Stop using non-prescription or illicit drugs 18 months before surgery.
- ☐ No cognitive, personality disorder, or substance abuse disorder that could affect compliance with treatment (assessed by Dr. Lyon).
- ☐ No active binge eating disorder
- ☐ Completed a cognitive behavior therapy program such as Living Life To The Full or a Stress Management course.
- ☐ A history of good compliance/adherence with medical appointments and treatment recommendations.

Requirements for Surgery

LIFESTYLE

NUTRITION



Nutrition Foundation

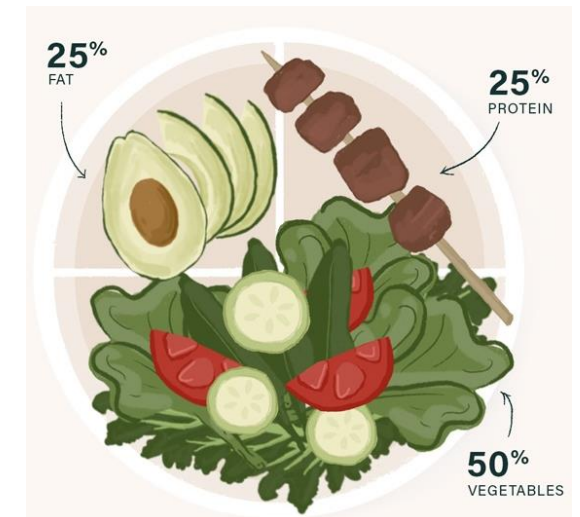
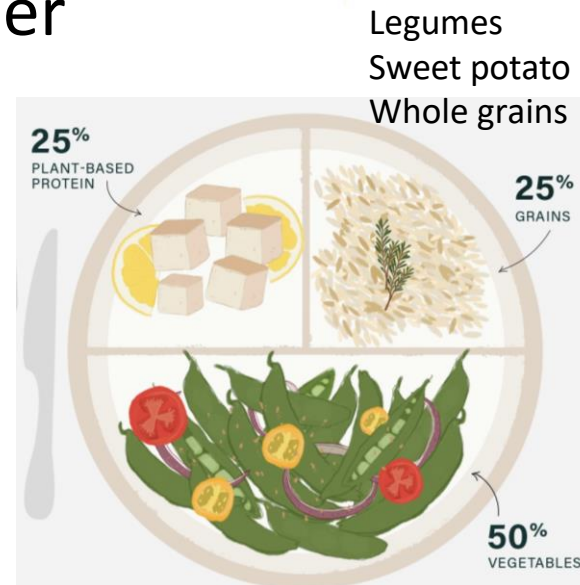
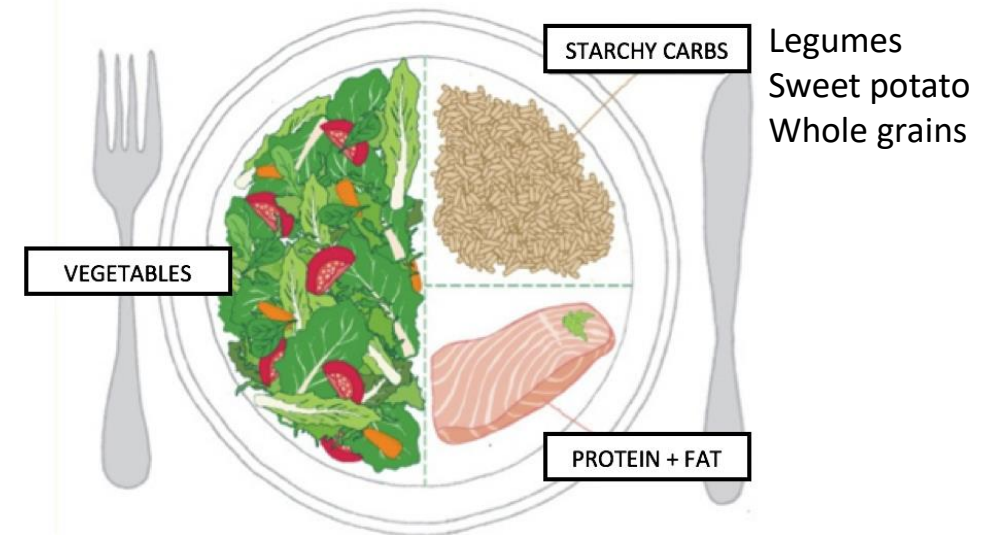
- Track dietary intake – e.g. pen & paper, Word doc, Myfitnesspal, Baritastic
- Balanced meals (“half your plate”)
- Mindful eating (slowly, chewing food well)
- Time to eat meals: over 20-30 minutes
- Structured mealtimes:
 - Breakfast within 60-90 minutes
 - Meal & snack within range of every 2 to 4 hours

Nutrition Foundation

- Consume 1.5-2 liters of calorie-free fluids per day
- Reduce to eliminate sugar-sweetened, carbonated beverages, alcohol, and caffeinated beverages
- De-caffeinated beverages allowed
- Separating solids & liquids by 30 minutes
- Eats out (restaurant, take out, fast food) less than 2 times per week

Balance - Half Your Plate

- Protein spread throughout the day (meals & snacks)
- Vegetables eaten at 2 separate meals or more, per day
- Fruit consumed at least once per day
- High dietary fibre
- Healthy fats



How much Protein?

Men:

*70 – 100 grams
protein per day.



Women:

*60-90 grams
protein per day.



*based on individual needs.

Height (feet & inches)	Height (~cm)	Protein requirement (grams per day)
4'11"	149.9	56 – 84
5'0"	154.2	59 - 88.5
5'1"	155	59.5 – 89
5'2"	157.5	61.5 – 92
5'3"	160	63.5 – 95
5'4"	162.5	65.5 – 98
5'5"	165	67.5 – 101
5'6"	167.7	70 – 105
5'7"	170	72 – 108
5'8"	172.7	74 - 111
5'9"	175	76 - 114
5'10"	177.8	78.5 - 118
5'11"	180.3	80.5 - 121
6'0"	182.8	83 - 124
6'1"	186	86 - 129
6'2"	189	89 - 133.5
6'3"	192	92 - 138

Protein requirement:

Meals = 18-30g

Snacks = 5-15g

<div> <div></div> <div> <div>Patient name:</div> <div>Patient Name</div> </div> </div>	
<div>NUTRITION AND EATING BEHAVIOUR CHECKLIST</div>	
X	Tracking all food & beverage intake (e.g. pen & paper, online, app) <u>most days</u>
X	Has a sense of food portion amounts having a food scale and household measuring cups and spoons
<input type="checkbox"/>	Eliminated caffeine, carbonation, alcohol, and all sugar-containing beverages
X	Drink 6-8 cups (1.5-2 L) of water per day, practicing sipping on water all day long in between meals
X	Meet minimum protein target for each day as determined by dietitian. Target: 79-118.5 g per day (height 177.8; based on IBW BMI 24.9 / 25.0 kg/m ² , 1.0 - 1.5 g/kg)
<input type="checkbox"/>	Supplements: Labs: Dec 2020 Vit D 28, Vit B12 181
X	Eat within 60-90 minutes of waking
X	Eat every 2-4 hours throughout the day
<input type="checkbox"/>	Eat slowly, mindfully (without distraction) and chew food thoroughly (20 bites, thinking applesauce consistency), taking 20-30 minutes to finish main meals
<input type="checkbox"/>	Separating liquids and solid food by 30 minutes
X	Eats out (restaurant, take out, fast food, cafe) less than twice per <u>week</u> (≤ 2)
X	Plans food & meals in advance, avoids skipping meals
X	More home-prepared meals and from wholesome, minimally processed foods
X	Eat everyday fruit 1-3 servings per day (serving $\frac{1}{2}$ cup) and vegetables at two separate meals every day (at least 1-2 cups; serving $\frac{1}{2}$ cup or 1 cup leafy greens)
X	Good basic nutrition knowledge
<div> <div>NOTES:</div> <div> <p>XXXX has been working hard and food planning more and now meeting the nutrition and eating behaviours. Has completed <u>4 week</u> Bariatric Education Module and 8 week Bariatric Preparedness Course.</p> <p>Continue to work on separating solids and liquids by 30 minutes and working on eating slowly mindful extending <u>meal times</u> to 15-20 minutes.</p> </div> </div>	

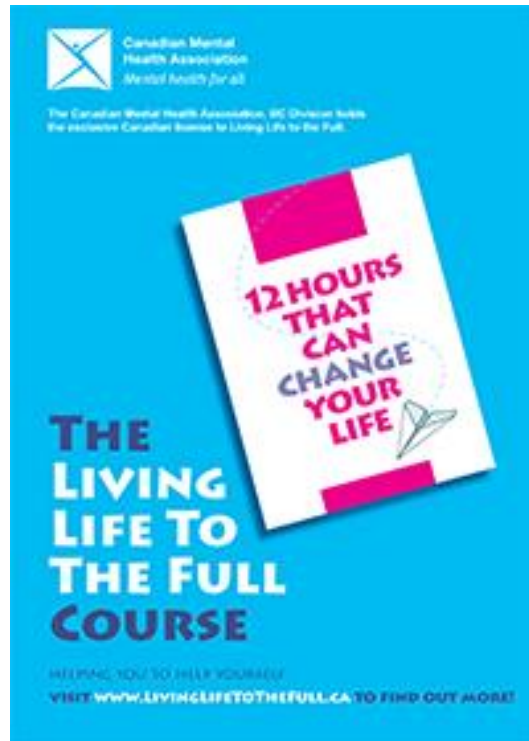
Movement



The screenshot shows the HealthLink BC website. The header includes the British Columbia logo and the text 'HealthLinkBC'. Navigation links include 'Call 8-1-1', 'Contact Us', 'About Us', and 'Other L'. A menu bar contains 'Home', 'Healthy Eating', 'Physical Activity', 'Mental Health & Substance Use', 'Medical Tests', 'Medications', and 'Health Topics'. The breadcrumb trail reads: 'Home / Physical Activity / For Everyone / Physical Activity Services at HealthLink BC'. The main heading is 'Physical Activity Services at HealthLink BC'. A sidebar menu shows 'For Everyone' (expanded) with sub-items 'Older Adults' and 'Physical Activity Services', and 'For Your Condition'. A download PDF link is available in multiple languages: English, Chinese, Farsi, French, Korean, Punjabi, and Spanish.

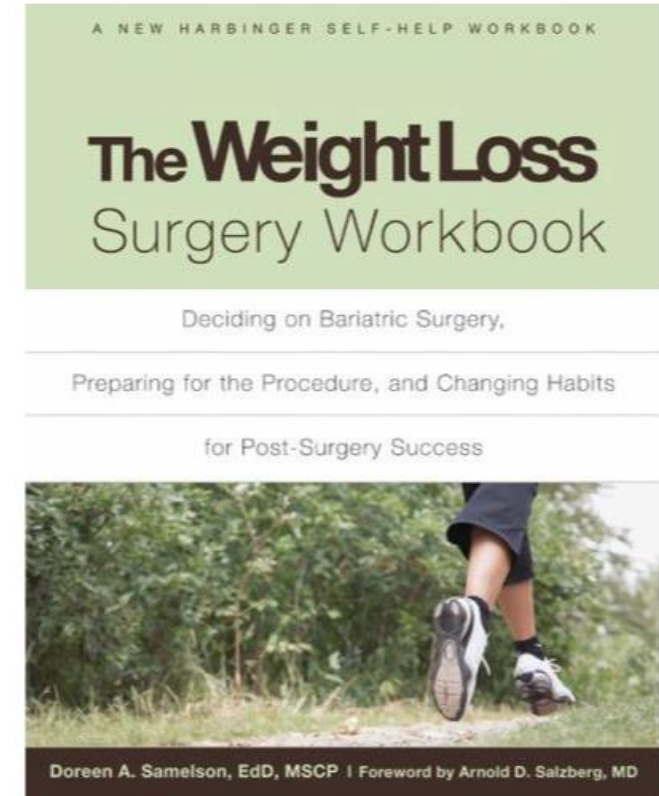
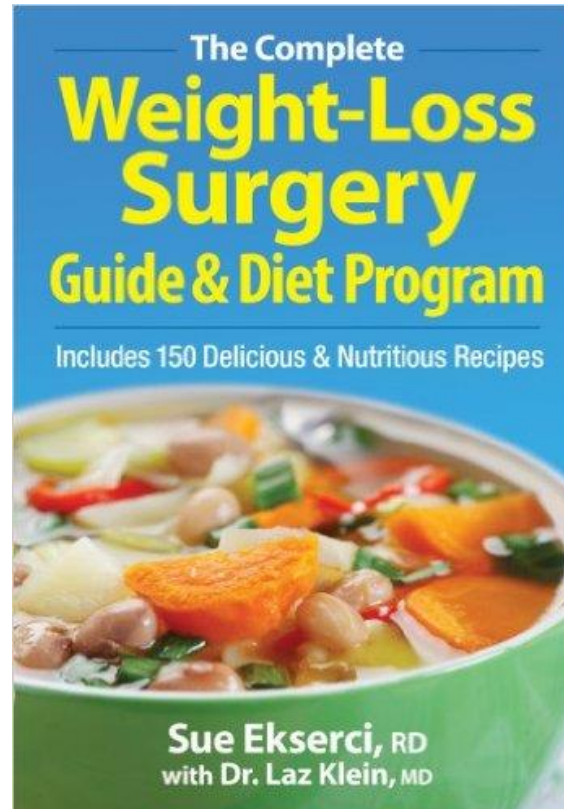
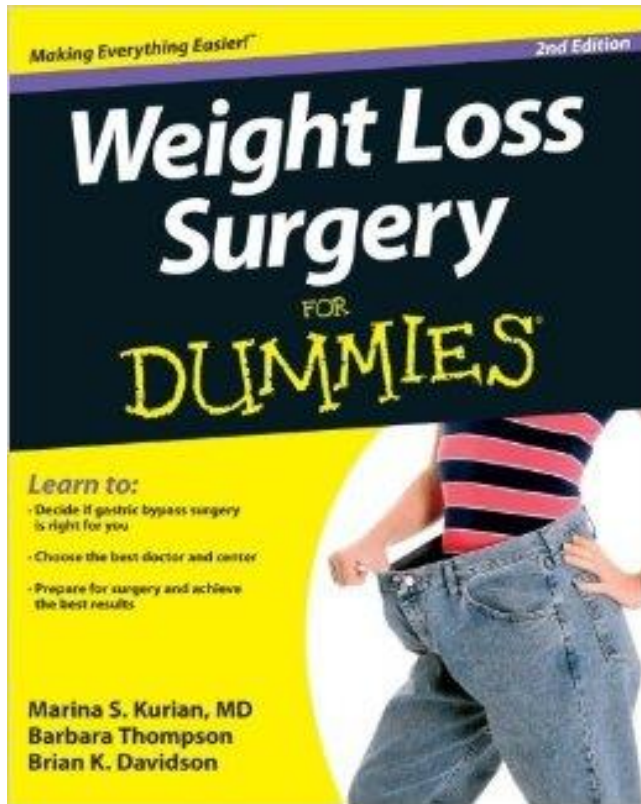
FREE 8-1-1

Mental Health



If required,
letter from your
counselor,
psychologist,
psychiatrist or
family doctor

Additional Readings



Important Reminders

- The time that you're spending on the waitlist to orientation should not be "wasted time"
- Improving your lifestyle habits starting TODAY will improve your health immediately, as well as shorten the length of time you spend during pre-op conditioning after you do join the program



Source: Pre-orientation conditioning information session
<http://www.vch.ca/your-care/hospital-care/surgery/metabolic-bariatric-surgery>



Help Petition Government to Fund More Bariatric Surgery

Help advocate for people waiting for bariatric surgery. [Sign the Petition](#) to request the Government of BC to fund more bariatric procedures.

BC'S COMPREHENSIVE BARIATRIC SURGERY PROGRAM

Richmond Metabolic and Bariatric Surgery offers the full-spectrum of Bariatric Surgery services to our patients via our comprehensive, multidisciplinary team and outstanding long-term patient support.

Check out our website to learn more about the disease of obesity and the surgical treatments that are available to help. See if bariatric surgery is the right choice for you!

Website:
<http://www.rmbsurgery.com/>