

Bariatric Program of Excellence Provider Seminar

The First Step in your Weight-loss Journey

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Zoom Attendees Chatroom Etiquette

This is a safe and respectful forum for members to ask questions that will be answered at the end of the seminar.

Please mute yourself to eliminate background noise and use the comment box for questions.

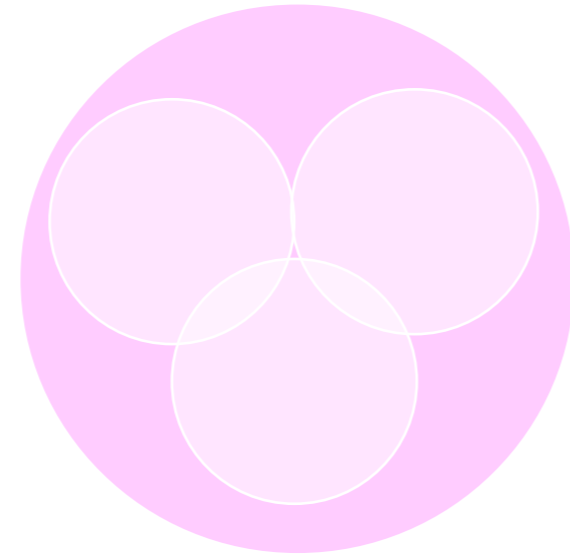
All questions should be general in nature and not specific to your individualized care.

Attendance will be taken at the beginning of the presentation. Verify your name is properly displayed (first name, last initial) for credit.

Agenda



**Overview and
Partnership**



**Evidenced
Based Tools**



Our Team



**The KPWA
Program**



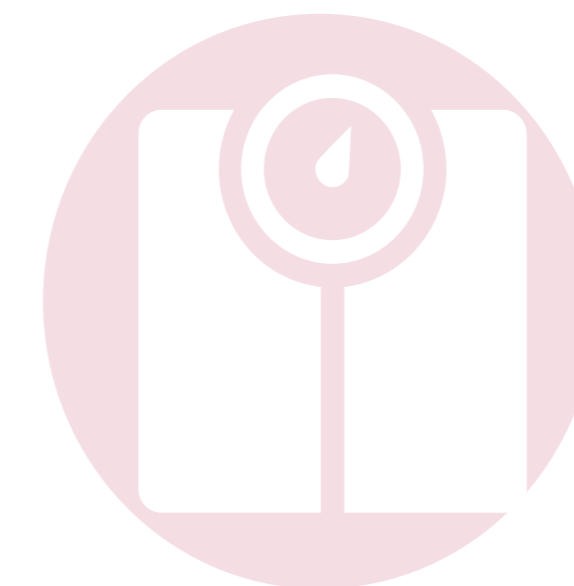
**The Scope of the
Disease**



**Treatment
Options**



**Making a
Treatment
Decision**



**Weight Loss &
Maintenance**



**Next Steps:
Your Journey to
Success**

Overview and Partnership



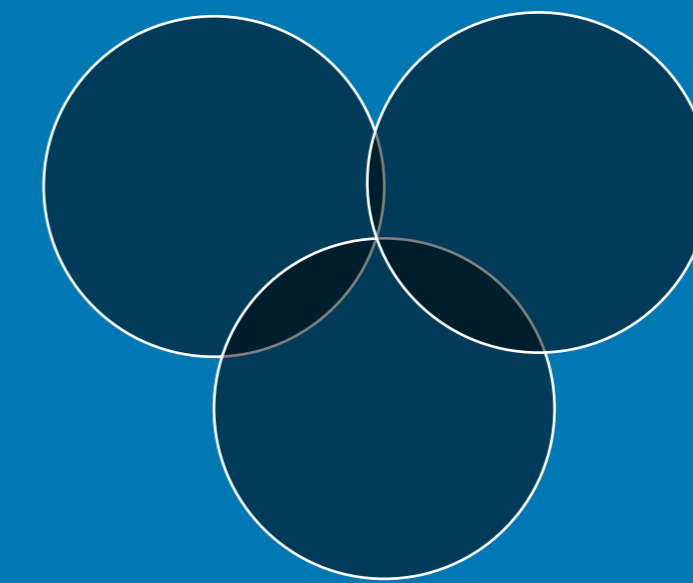
Overview and Partnership with Overlake Hospital

About Our Center of Excellence

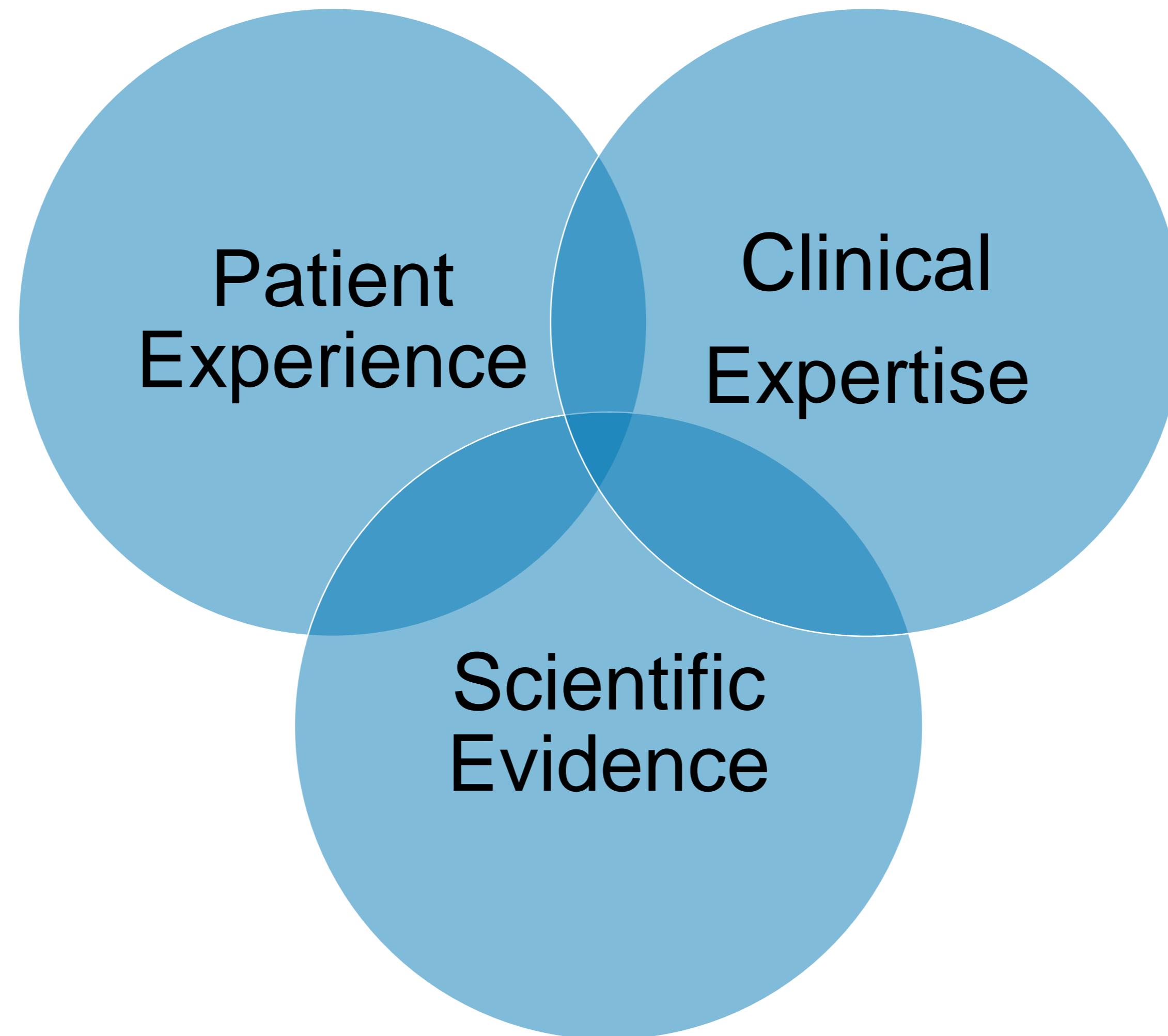
As one of the highest volume bariatric centers in Washington state, Overlake's program has been the recipient of the [Healthgrades Bariatric Surgery Excellence Award](#) for three consecutive years (2017-2019). This award recognizes the program as among the top 5% of hospitals evaluated in the nation. Our program is the only hospital in Washington to achieve a five-star rating for five consecutive years (2015-2019).



Evidenced Based Tools



Evidence based practice strategies and tools "the integration of clinical expertise, patient values and the best research evidence into the decision-making process for patient care."



Bariatric Surgical Risk/Benefit Calculator

Published August 2019

The Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP) has launched a new surgical risk/benefit calculator that will provide metabolic and bariatric surgeons and their patients with accurate, patient-specific information to guide surgical decision making and informed consent. [Click here](#) for direct access to the calculator.



Welcome to the MBSAQIP Bariatric Surgical Risk/Benefit Calculator

With this tool you can enter preoperative information about your patient to provide estimates regarding your patient's risk of postoperative complications, remission of weight-related comorbidities, and weight loss for each of four primary bariatric surgical procedures.

Your Bariatric Team



Bariatric Surgeons



Anirban Gupta, MD
Bariatric Surgeon
Medical Director



Imad Haque, MD
Bariatric Surgeon



Shireesh Saurabh, MD
Bariatric Surgeon

Bariatric Physician Assistants and Psychologist



Lynda Crescenzi, PA-C



Travis Sears, PA-C



William Young, PA-C



Sierra Widmer-Rodriguez, PA-C



Dr. Janet Ng
Psychologist

Bariatric Support Team



Sarah Chan
Bariatric RN



Fionna Marave
Registered Dietician



Sara Hernandez
Medical Assistant



Liz Puckett
Bariatric RN



Lisa Stariha
Registered Dietician

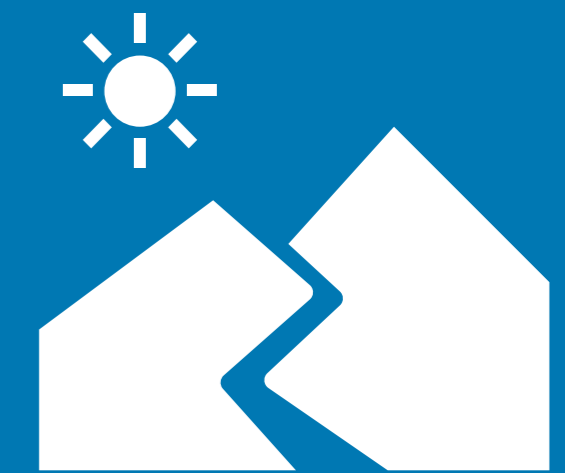


Nicole Hutchinson
Medical Assistant

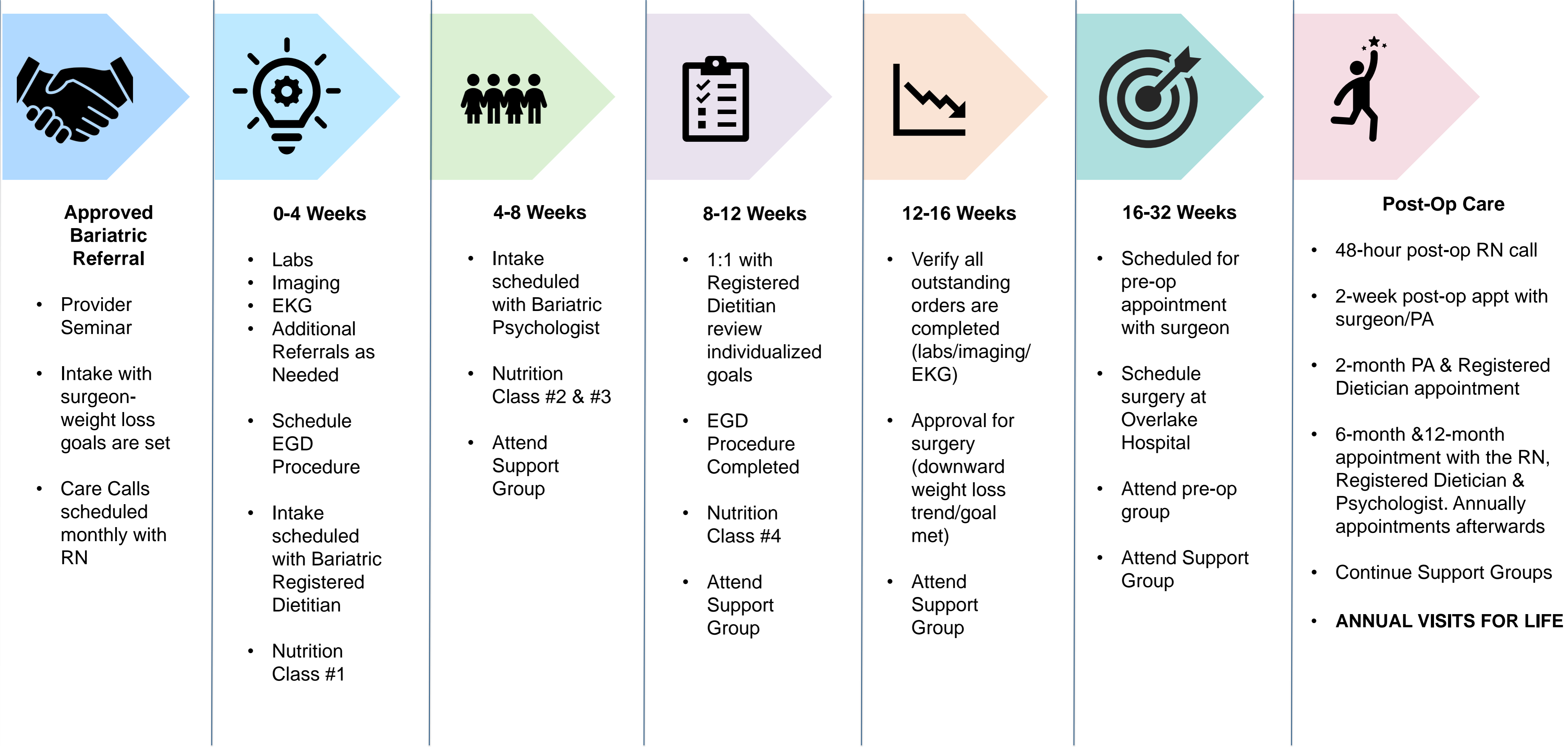


Sara Pham
Medical Assistant

KPWA Bariatric Program Overview



Bariatric Program Overview



Patient led journey contingent on patient progression through the program.

What is the key to our success?

We are a truly integrated program with a multi-disciplinary team that leverages best practice and evidence-based care to deliver a comprehensive experience designed to meet our members' individual needs and promote long-term success.

Understanding the Scope of Obesity & Related Illnesses



What is obesity?

Who is considered overweight?

- Rather than using “body” types to determine who is overweight, we use a simple calculation called **Body Mass Index** or BMI.
- BMI relates a person’s weight to their height.
- BMI is not the only measure of health. Other important measures include:
 - Waist circumference
 - Body composition

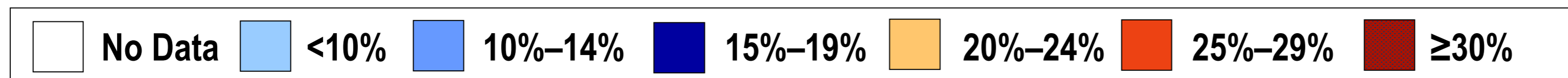
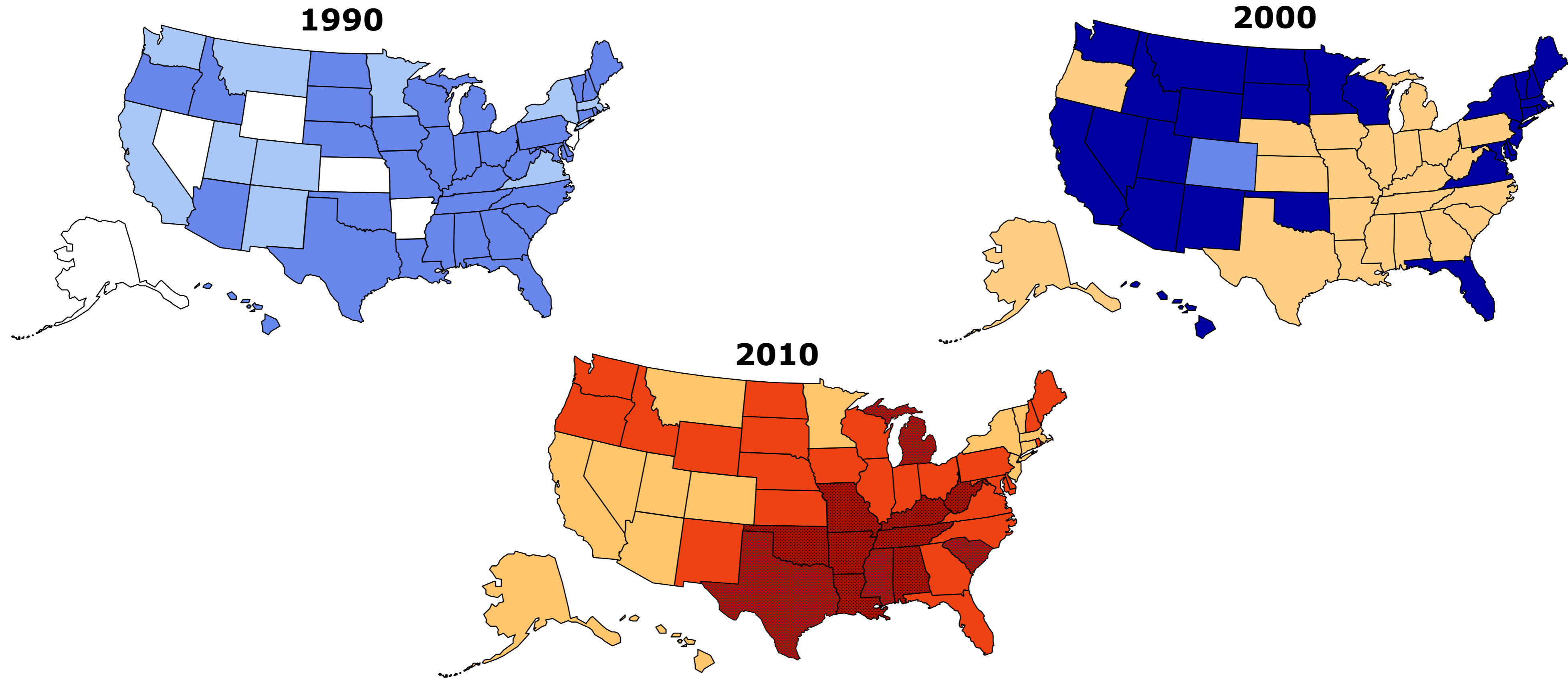
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lbs		41	45	50	54	59	64	68	73	77	82	86	91	95	100	104	109	113	118	122	127	131				
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HEIGHT		Underweight					Healthy					Overweight					Obese					Extremely Obese				
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Obesity Trends* Among U.S. Adults

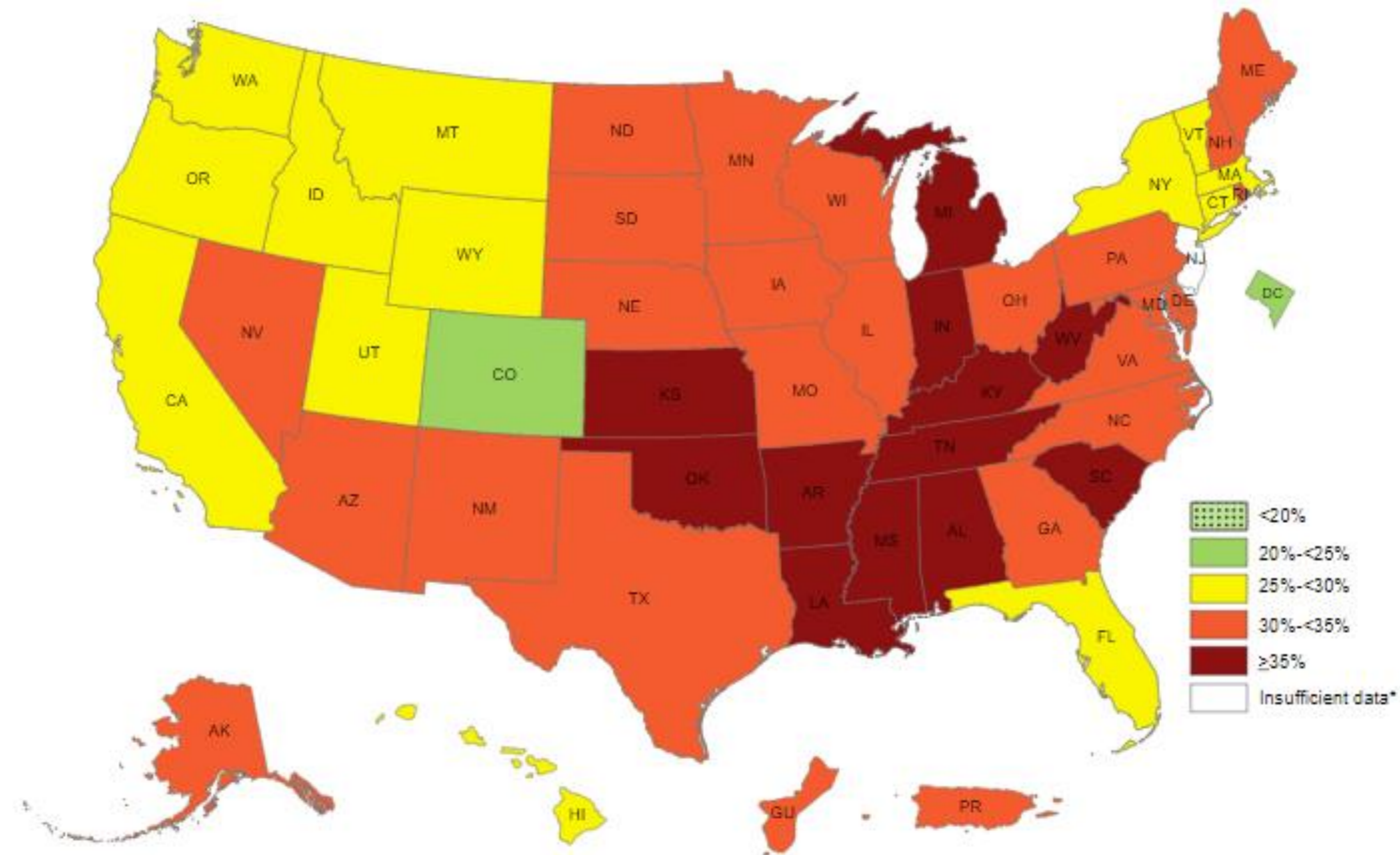
BRFSS, 1990, 2000, 2010

(*BMI ≥ 30 , or about 30 lbs. overweight for 5'4" person)



Prevalence* of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2019

* Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.



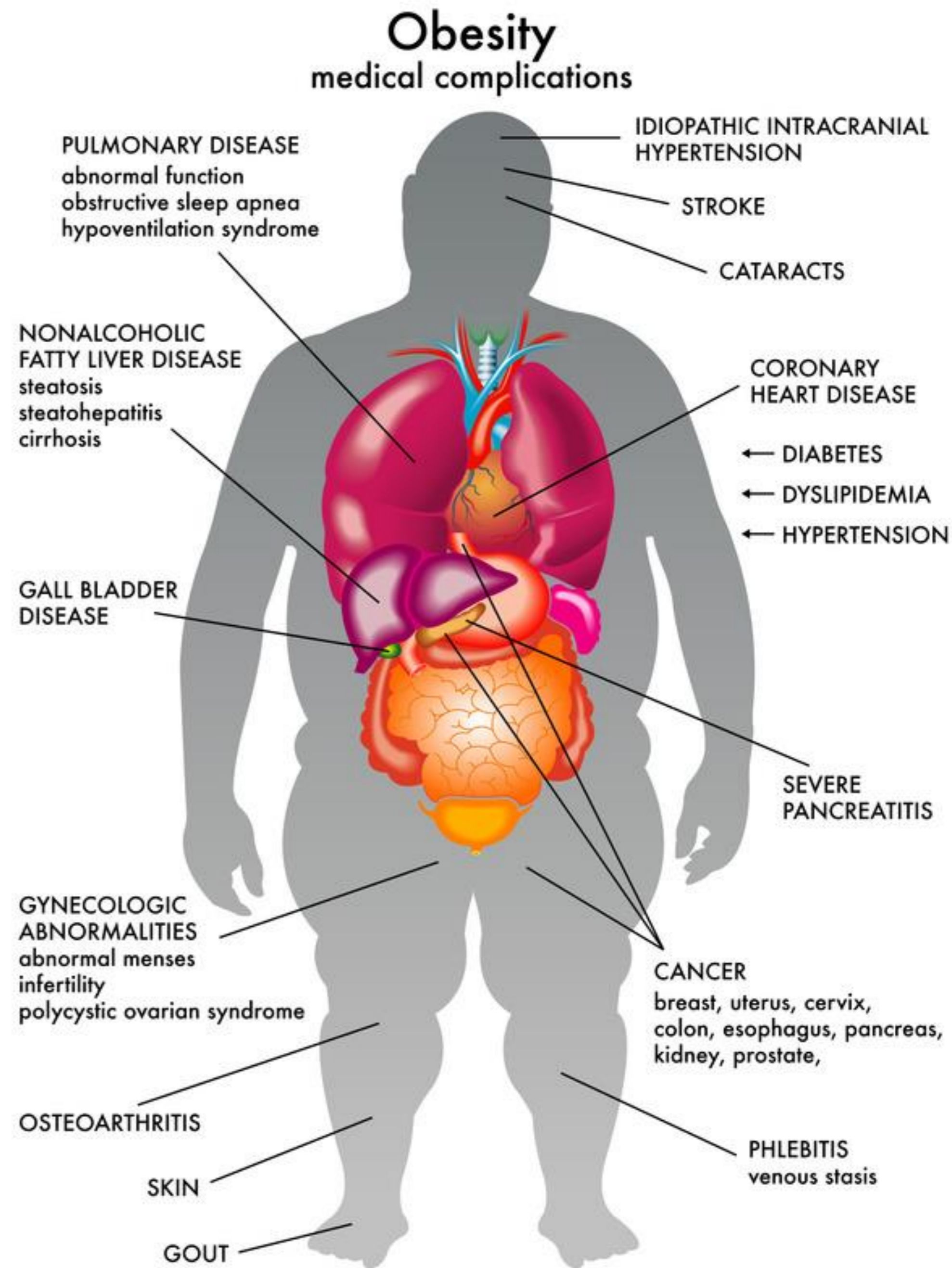
*Sample size <50 or the relative standard error (dividing the standard error by the prevalence) $\geq 30\%$.



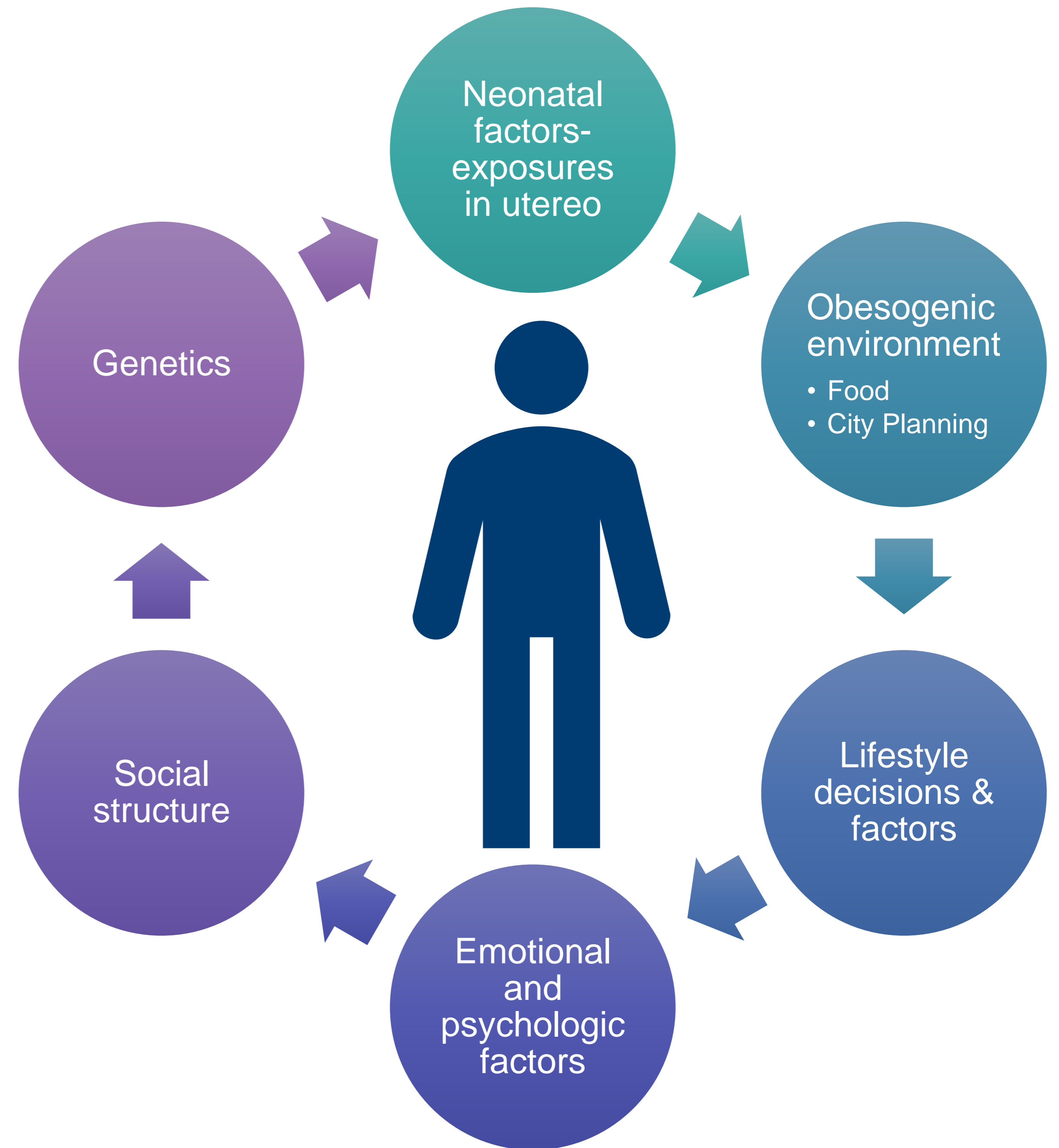
How does the growing rate of obesity impact us?

Each year, **400,000 Americans die prematurely** due to obesity-related diseases. This number is increasing rapidly and soon obesity will replace tobacco and smoking as the number one preventable health problem in the United States.

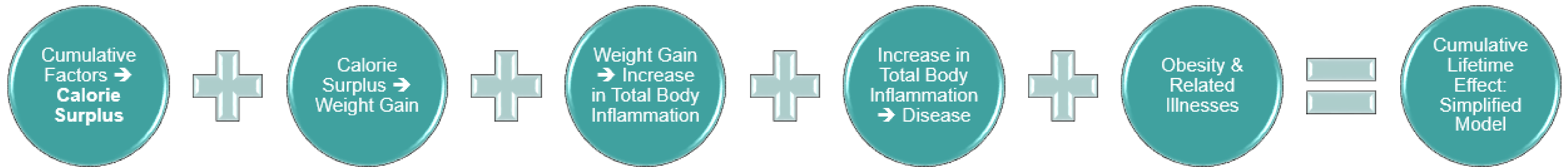
What medical complications are related to obesity?



How did we get here?



Cumulative Lifetime Effect: Simplified Model

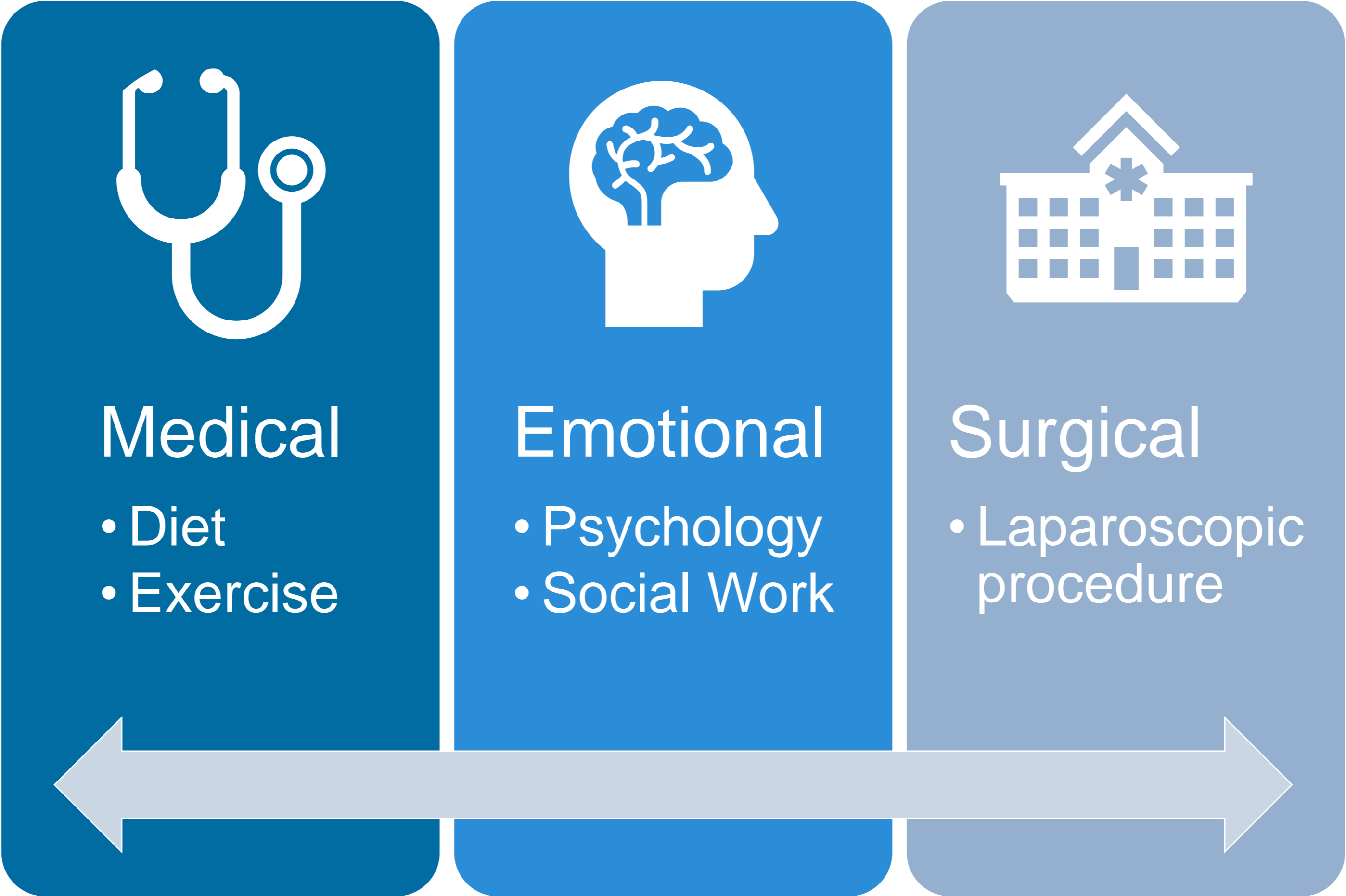


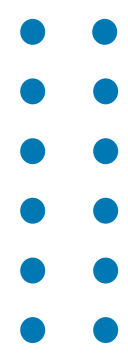
Understanding Your Treatment Options



Weight Loss Options

An Integrated Continuum for a Chronic Illness





Indication for weight loss surgery

- BMI \geq 40 with or without medical problems
- BMI \geq 35 – 40 with medical problems like diabetes/hypertension/obstructive sleep apnea
- Age: 20 – 65 years
- > 65 years: case by case evaluation



Bariatric Surgery Options

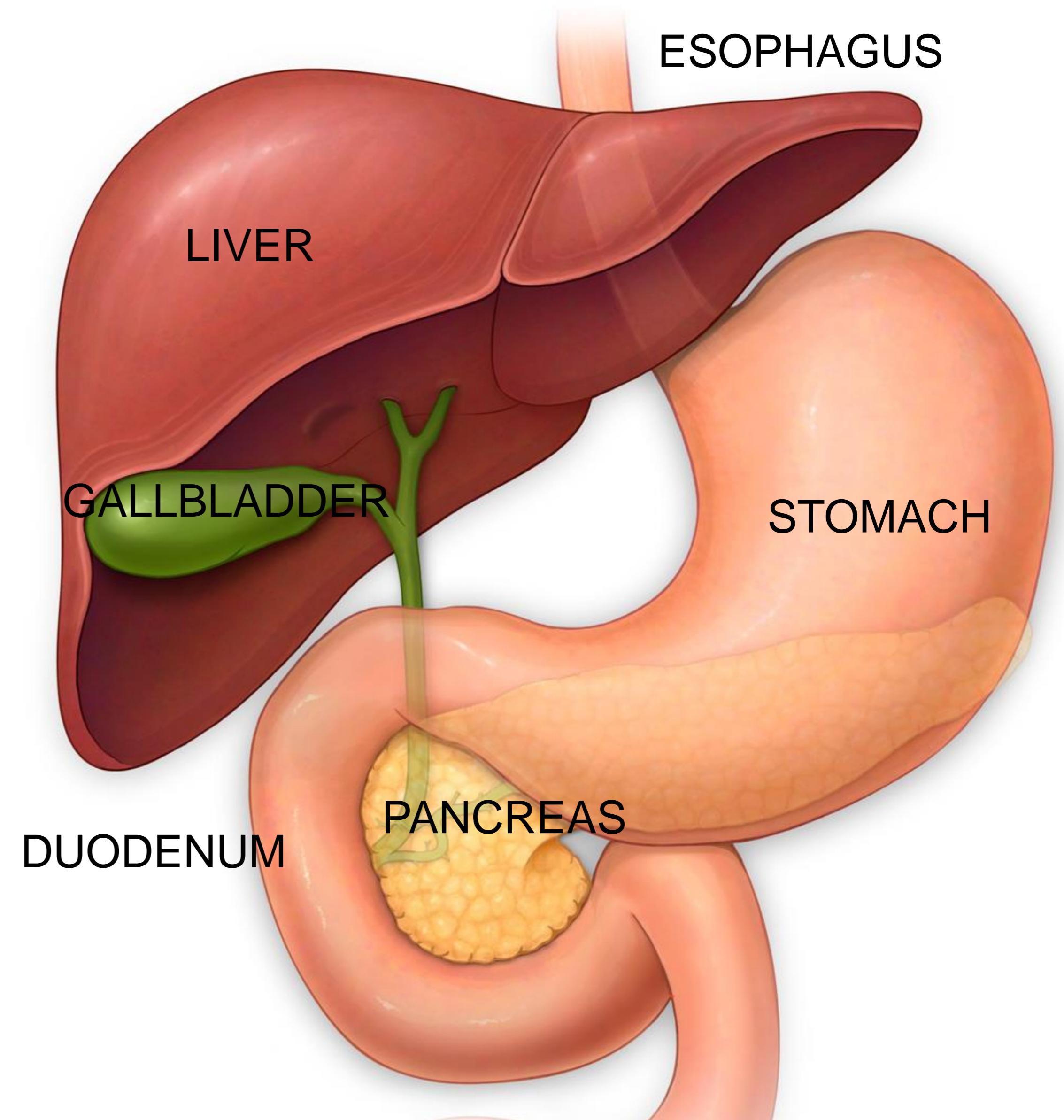
Laparoscopic
Roux-en-Y
Gastric Bypass

Laparoscopic
Vertical Sleeve
Gastrectomy

Revisional
Surgery

Normal Anatomy

- **Esophagus:** transports food from mouth to stomach
- **Stomach:** creates and secretes acid and digestive hormones and enzymes
- **Liver:** creates and secretes bile
- **Gallbladder:** stores bile that was made in the liver
- **Duodenum:** 1st part of small intestine, connected to the stomach, pancreas, bile & pancreatic ducts
- **Pancreas:** creates and secretes enzymes and hormones to digest starches, carbs, sugars



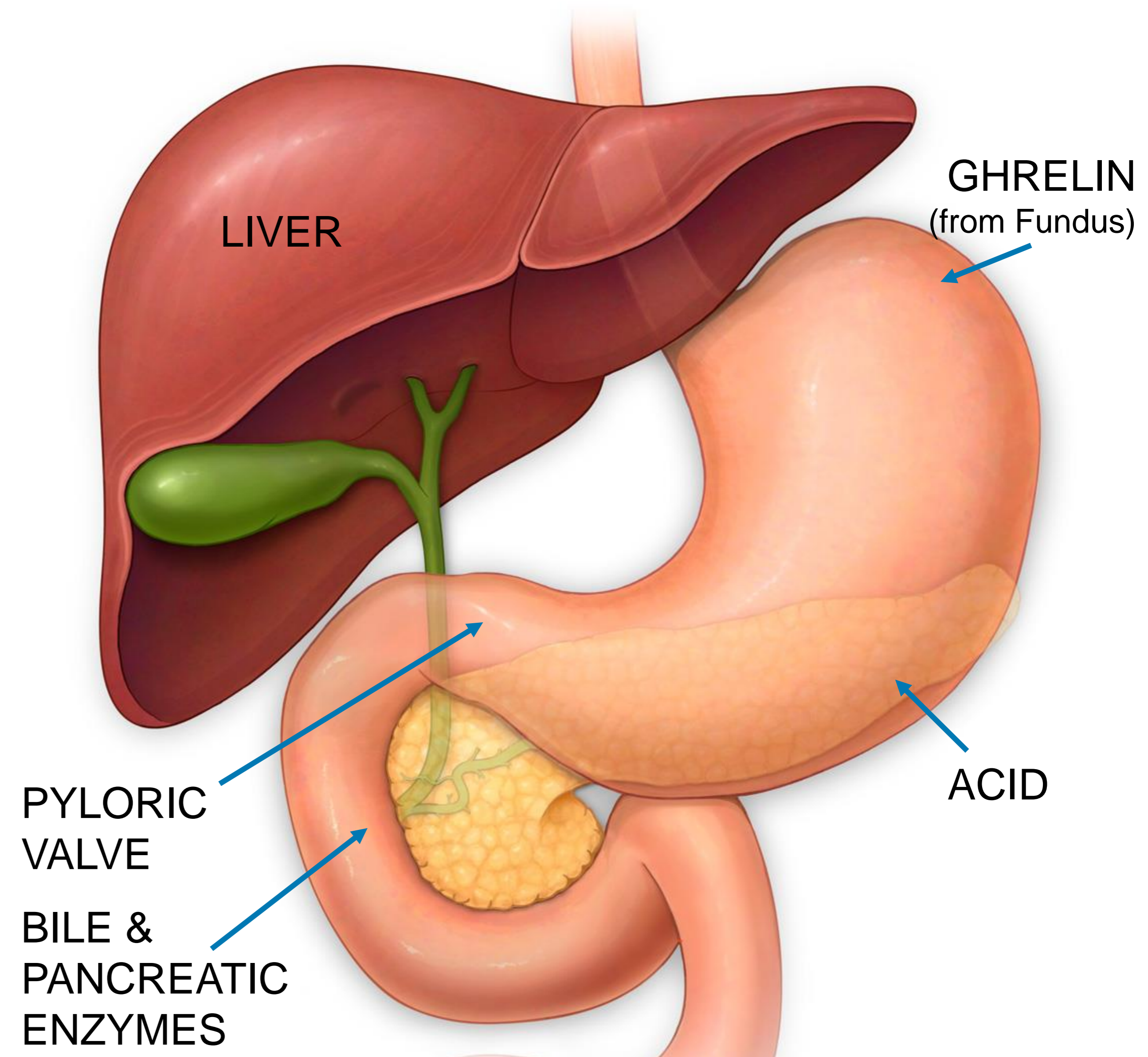
Normal Anatomy

Pyloric Valve – controls the rate of the release of food and liquid from stomach to the duodenum



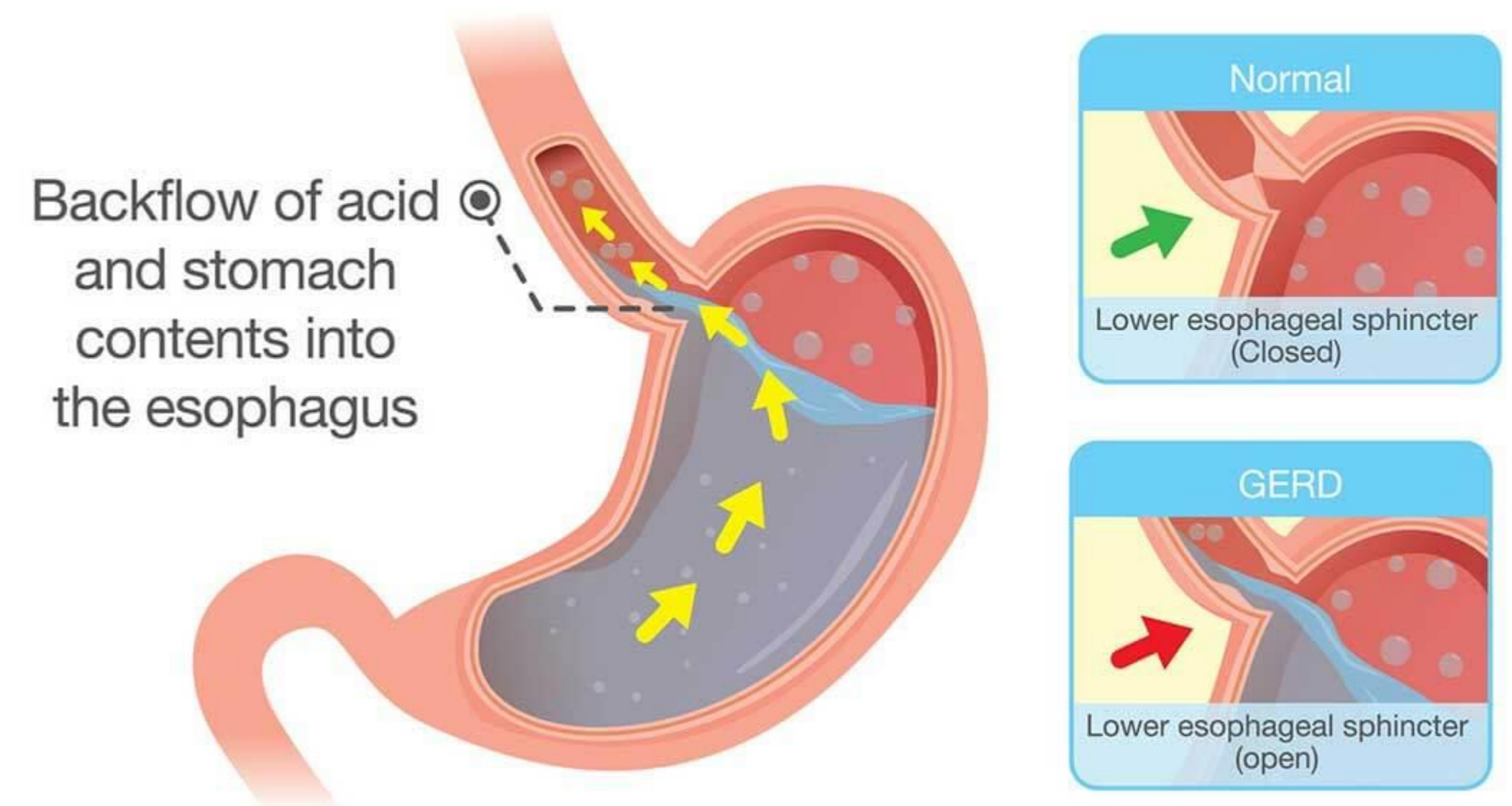
Normal Anatomy

- **Ghrelin:** Hunger Hormone. Mostly secreted in the fundus of the stomach.
- **Acid:** Helps digest food. Mostly secreted in the body of the stomach.
- **Bile:** Made in the liver and stored in the gallbladder. Released in the duodenum to help absorb fat.
- **Pancreatic Enzymes:** Made in the pancreas and released in the duodenum to absorb carbs, starches, and sugars.



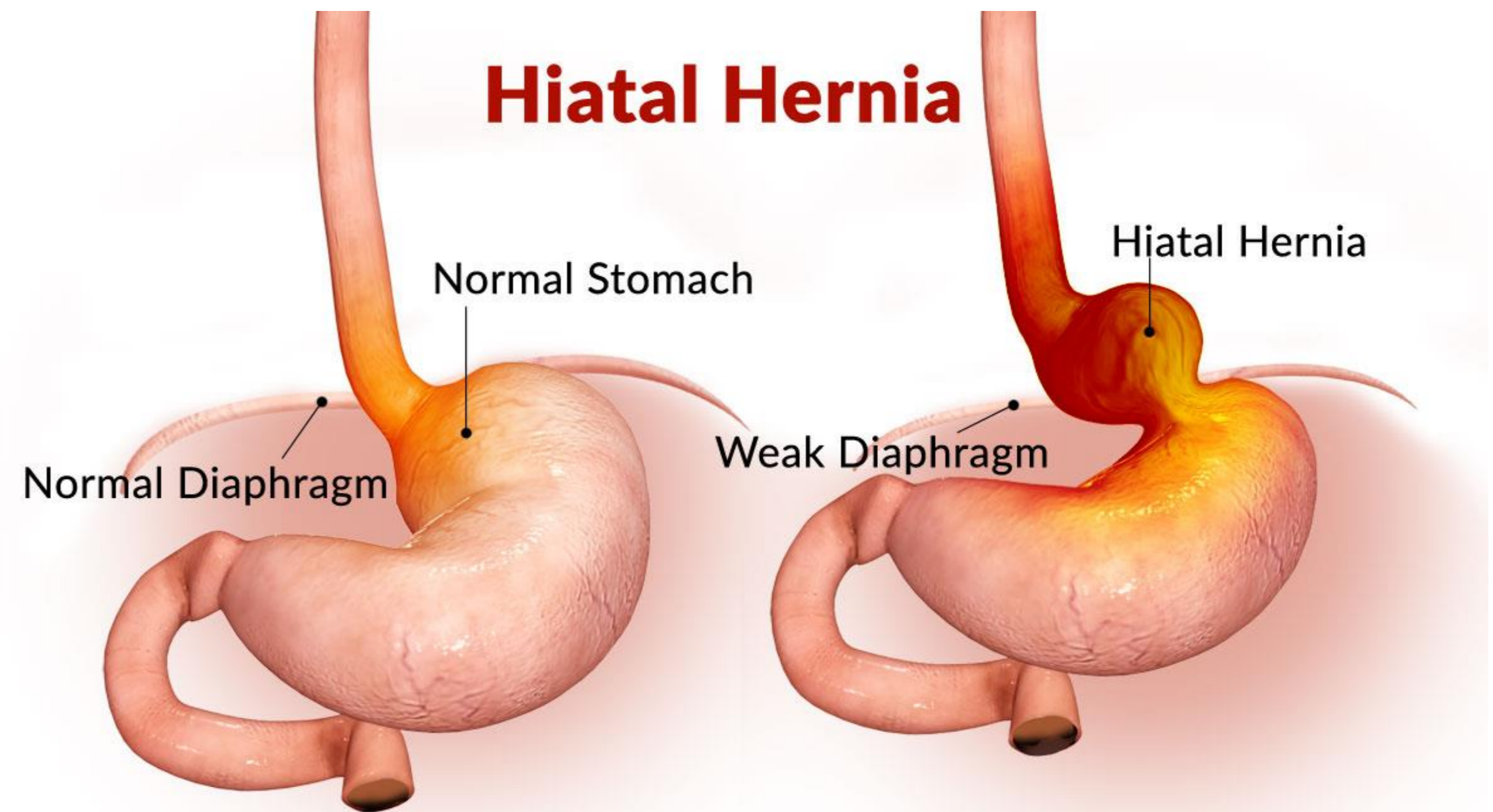
GERD: Gastroesophageal Reflux Disease

- Occurs when stomach acid flows back into the tube connecting your mouth to your stomach (esophagus).
- Symptoms
 - Typical
 - Burning sensation in your chest (heartburn)
 - Chest pain
 - Difficulty swallowing
 - Regurgitation of food or sour liquid
 - Sensation of a lump in your throat
 - Atypical
 - Chronic cough
 - Laryngitis
 - New or worsening asthma
 - Disrupted sleep



Hiatal Hernia

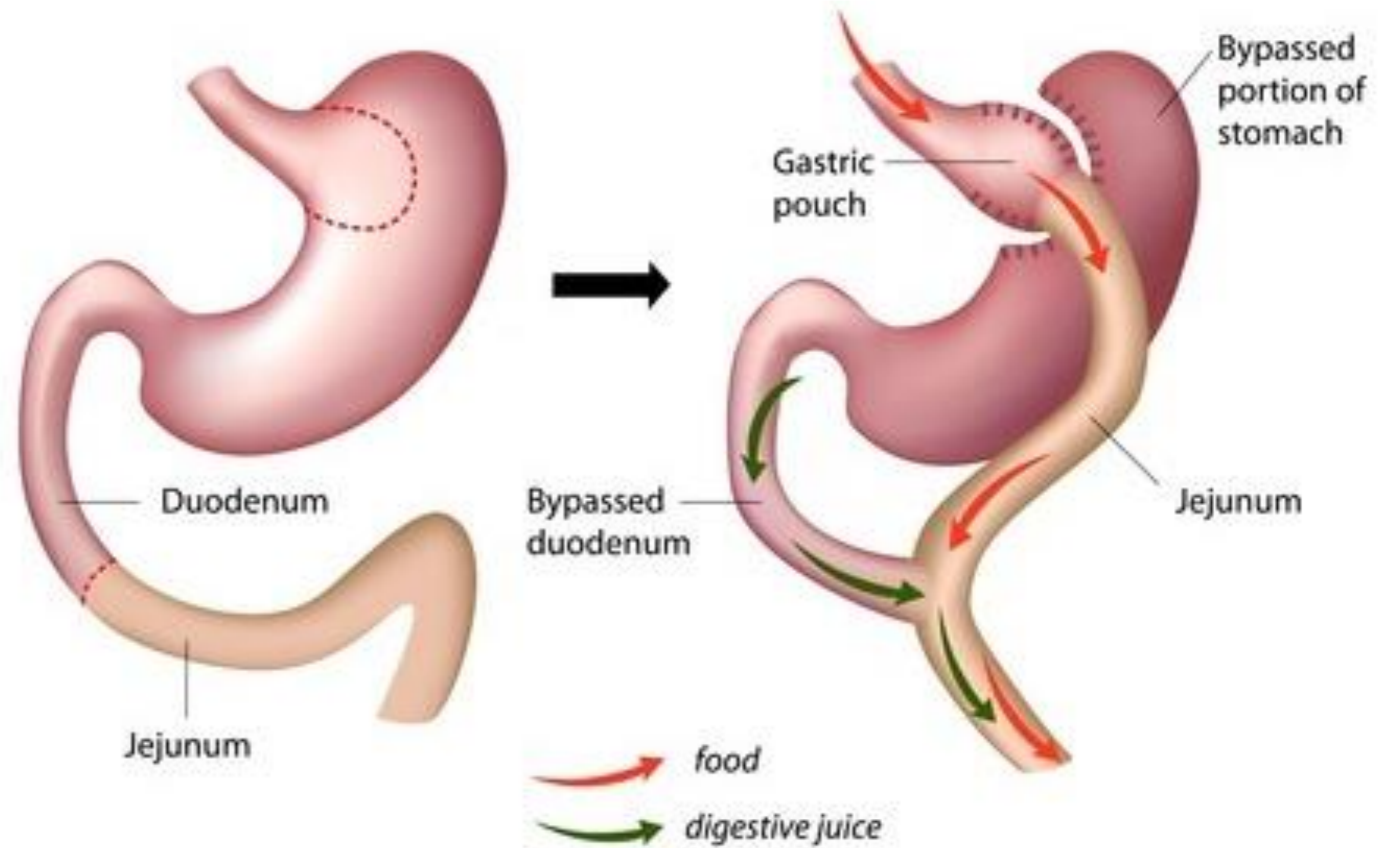
- Occurs when a weakness/gap in the diaphragm results in a portion of the stomach migrating into the chest from the abdominal cavity.
- Seen in at least 40% of bariatric patients
- Can cause GERD or make symptoms worse
- If present, hiatal hernia is corrected during bariatric surgery



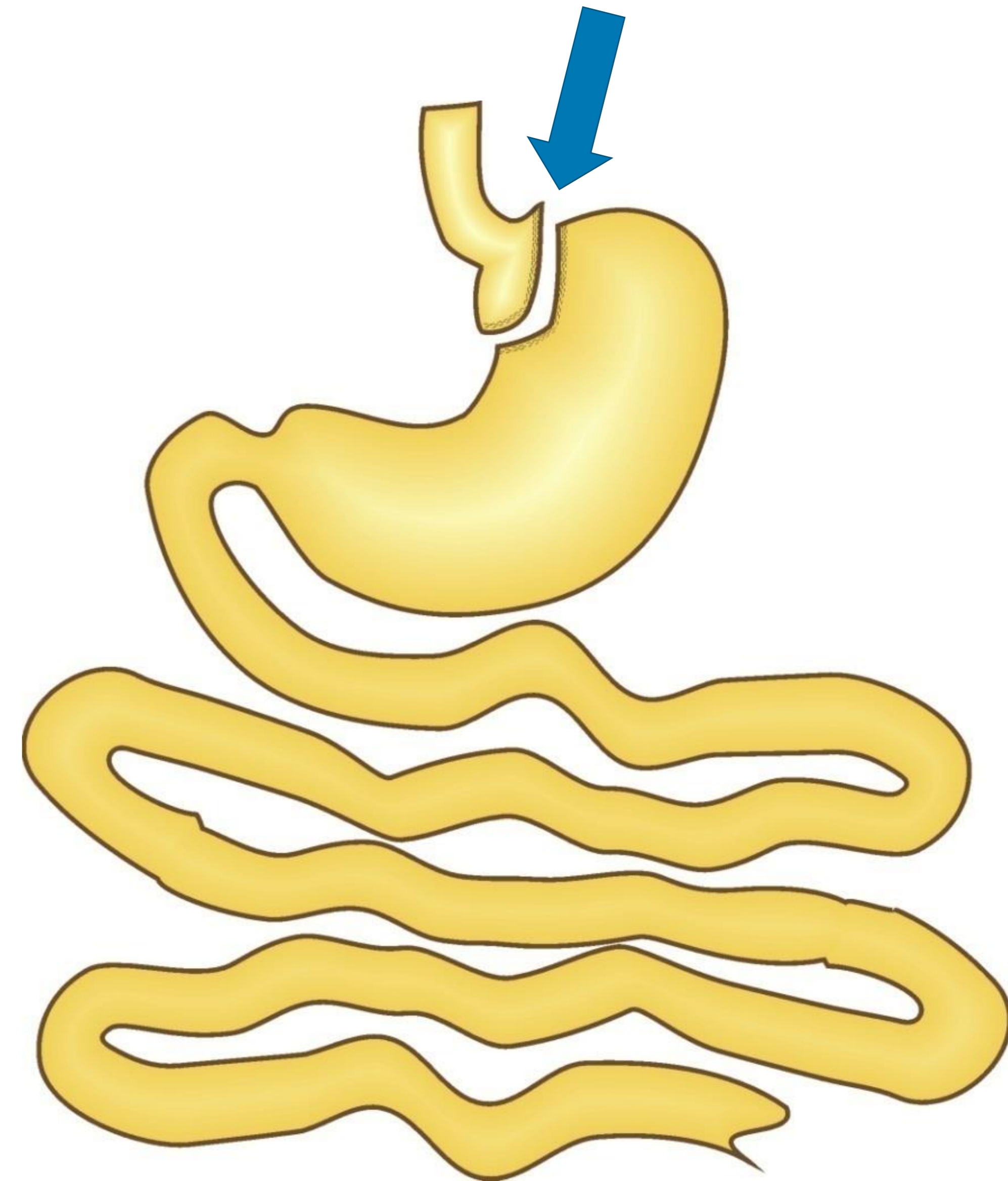
Understanding Your Surgical Options

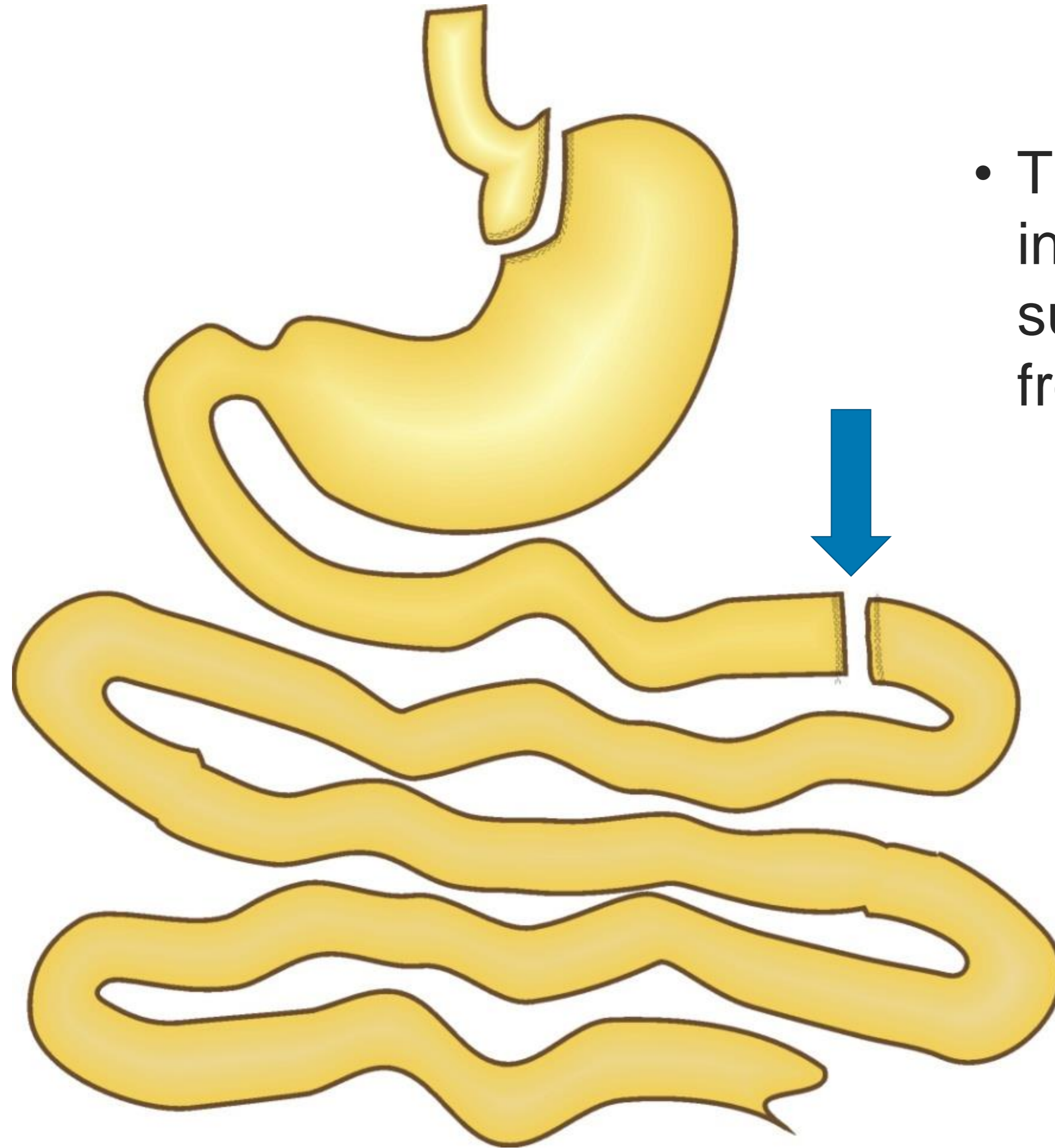


The Roux-en-Y Gastric Bypass (RYGB)



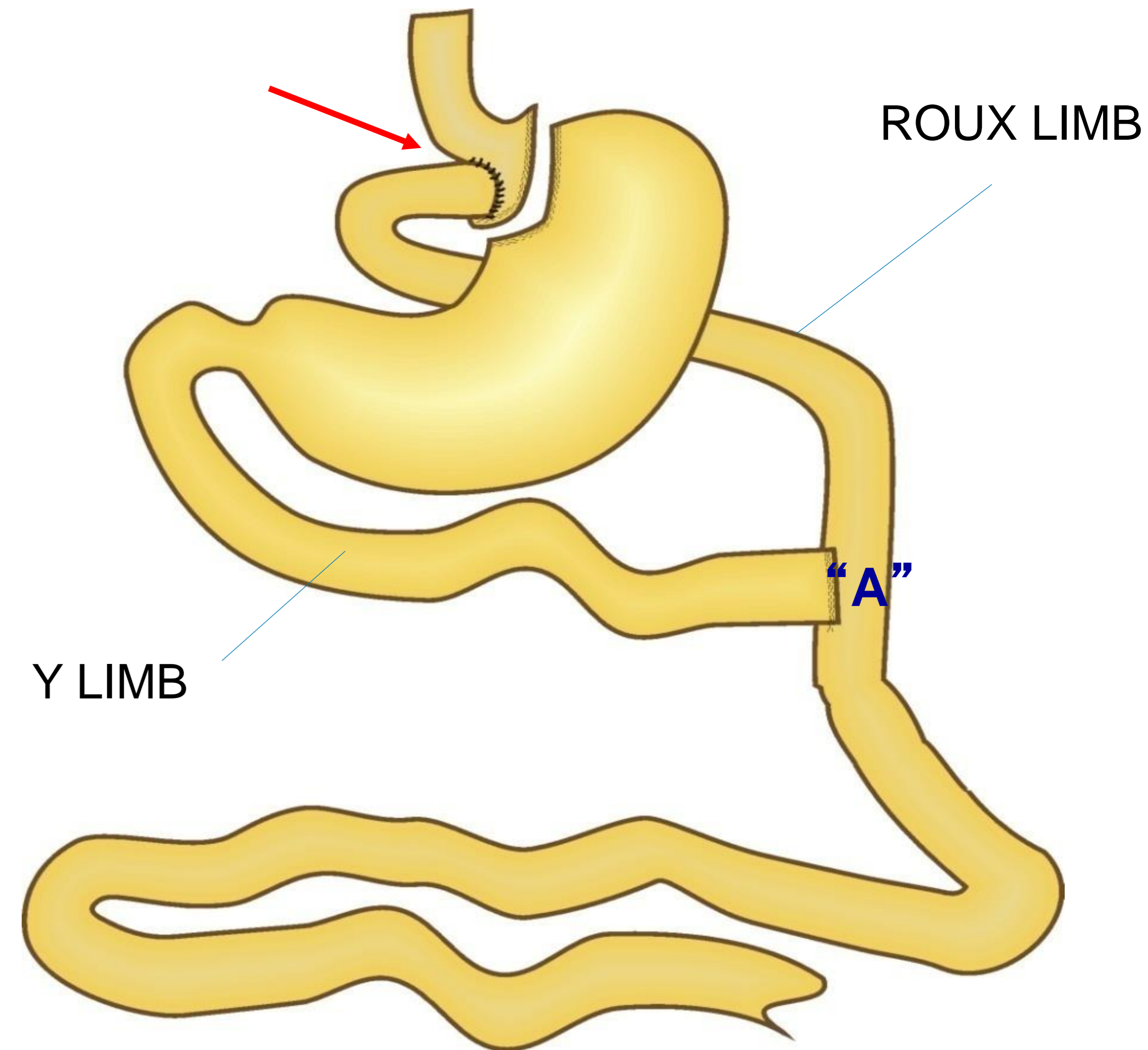
- The stomach is stapled into 2 pieces, one small and one large. The small piece becomes the “new” stomach pouch
- The pouch is 5% of the size of the old stomach, therefore holds much less food - generally about 1.5-2 oz in size
- The larger portion of the stomach stays in place, however, will lie dormant for the remainder of the patient’s life.



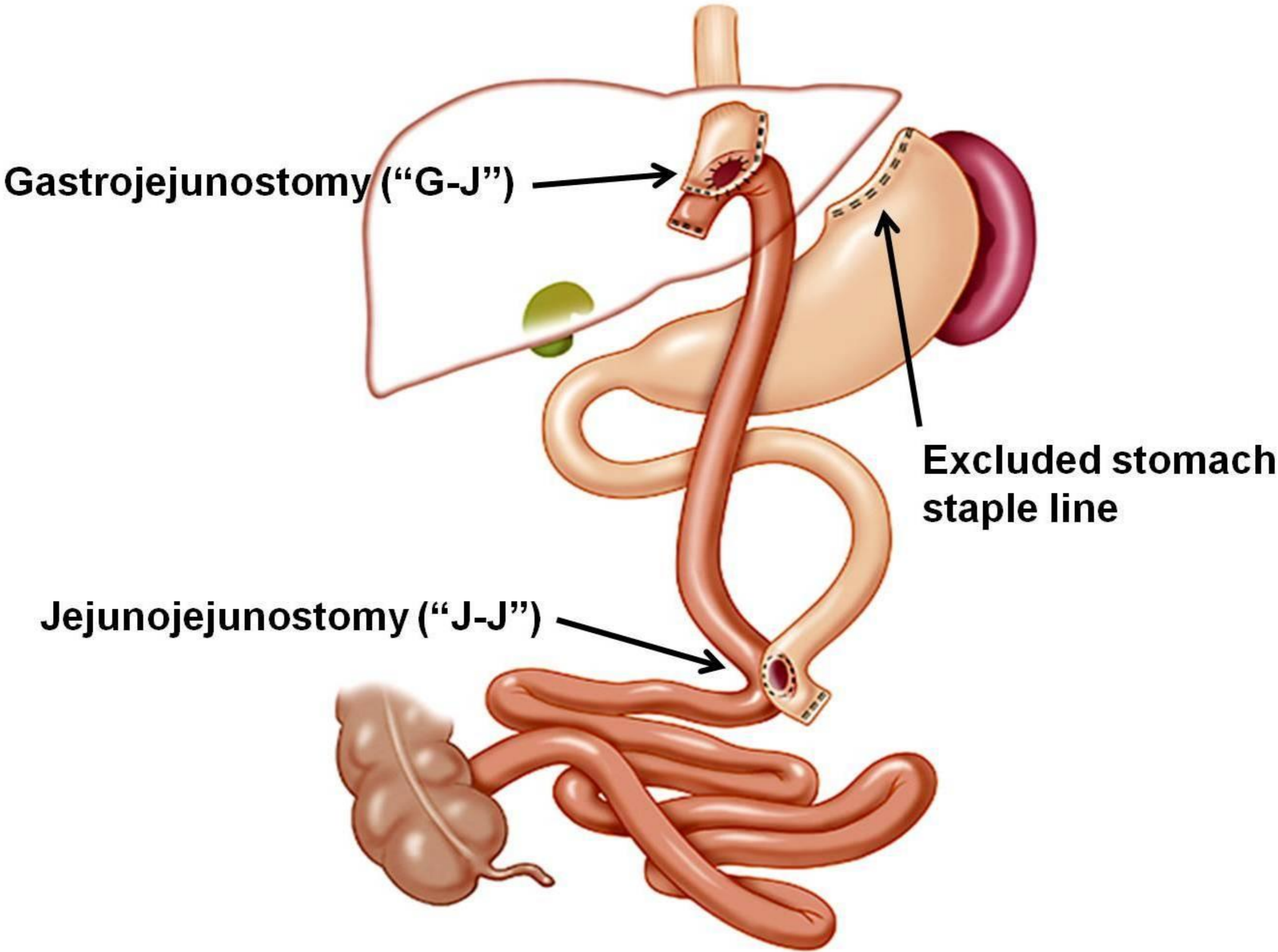


- The beginning section of the small intestine (the jejunum) is divided using a surgical stapler approximately 40-60 cm from the end of the stomach.

- The end of the Roux limb is then attached to the newly formed pouch (red arrow)
- The Roux limb carries food to the intestines
- The Y limb carries digestive juices from the pancreas, gall bladder, liver and duodenum to the intestines
- The food and the digestive juices mix where the Roux limb and Y limb meet (“A”) – this is referred to as the “common channel” – where the food and the digestive juices finally meet or are “re-united”.



The final arrangement of the lap RYGB.

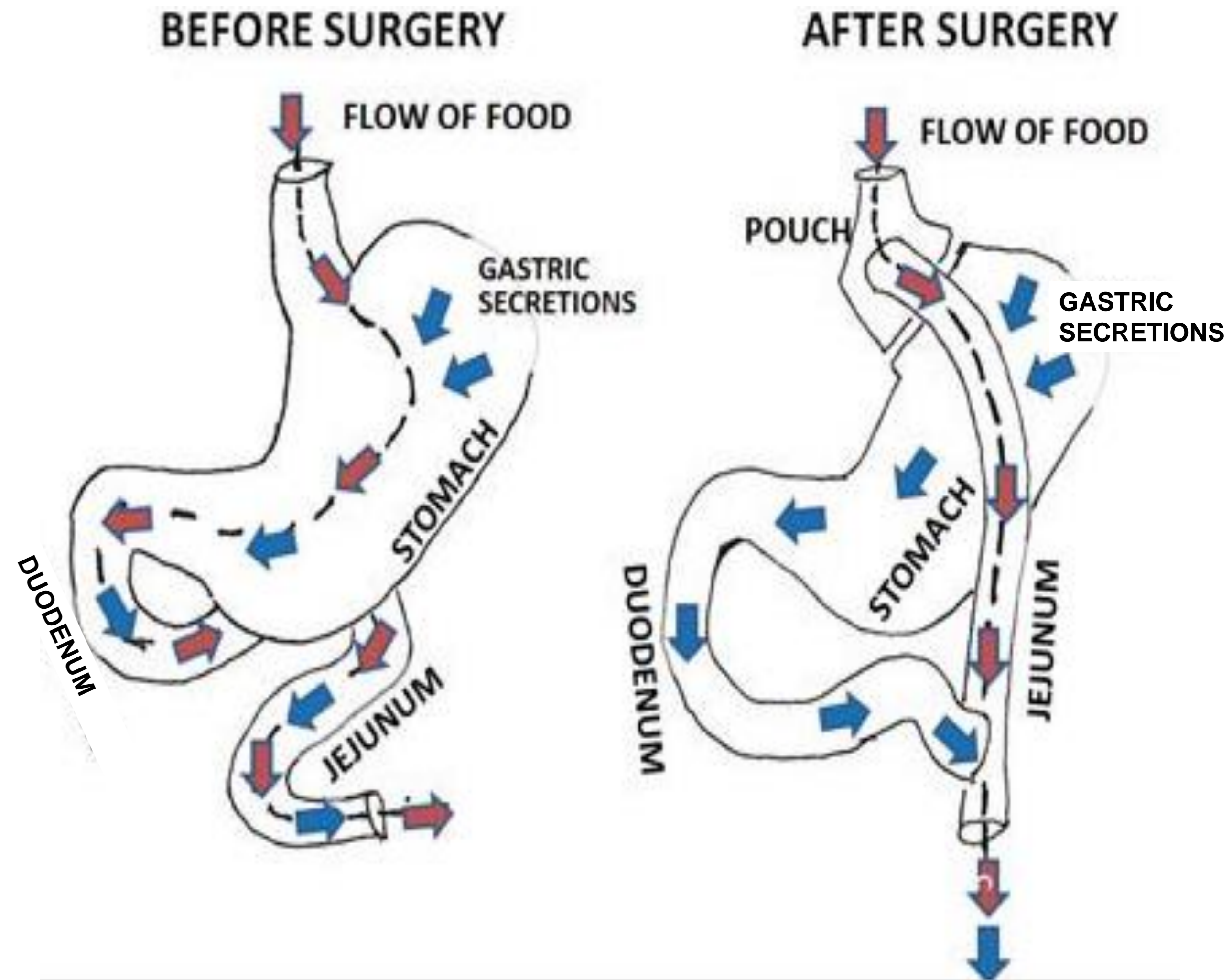


The Roux-en-Y (RYGB) Gastric Bypass

Consequences for GERD

The Pylorus

- Food separated from digestive juices UPSTREAM
- Results in decreased GHRELIN → Decreased appetite (hormonal effect)
- Small 1-2 oz pouch → less food consumed (restriction effect)
- Food reunified with digestive juices DOWNSTREAM (less absorption & hormonally mediated effects on blood glucose, metabolism, etc.)

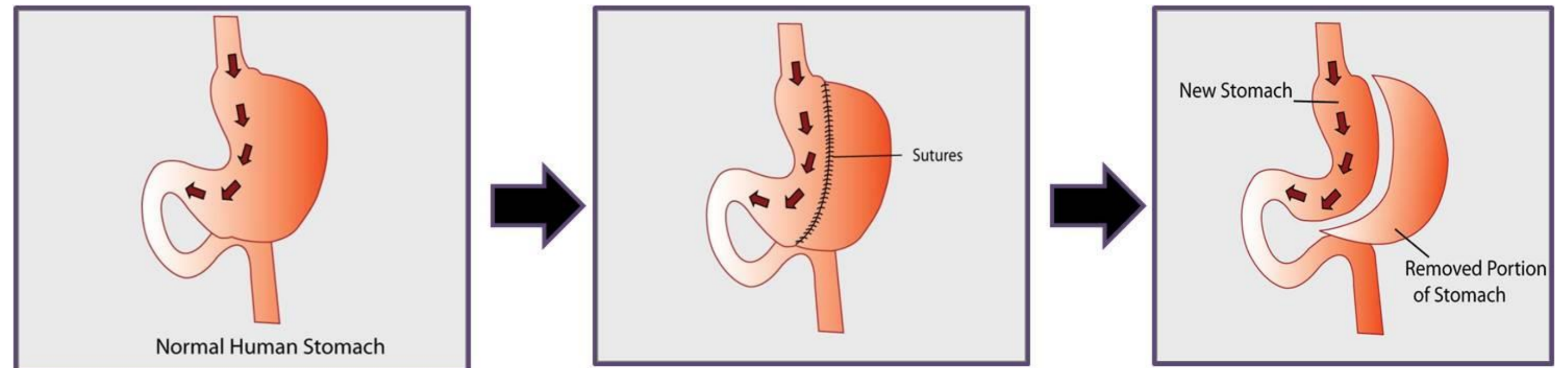


The Roux-en-Y (RYGB) Gastric Bypass

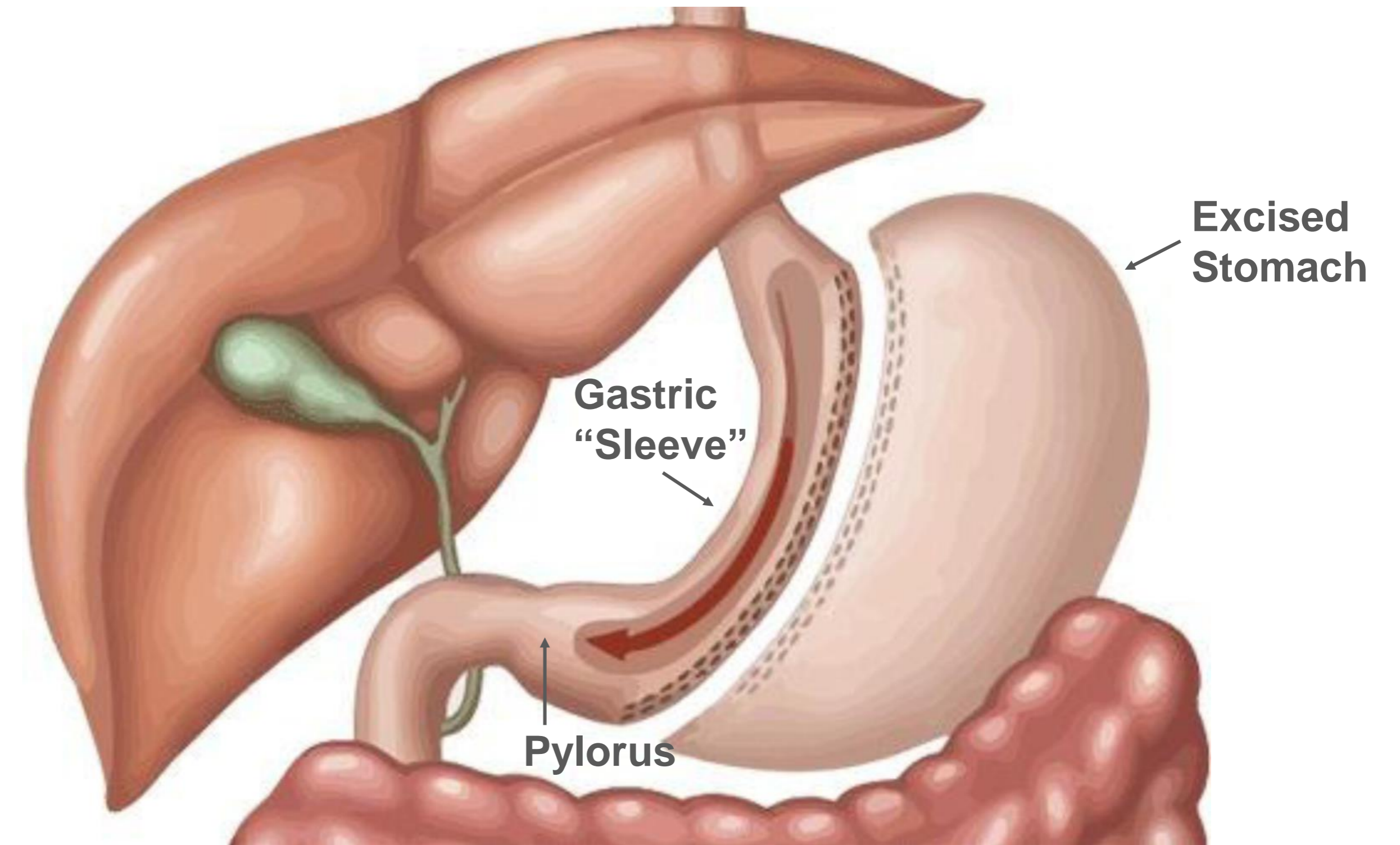
The Bottom Line

- RYGB is the gold standard procedure.
- It has existed for over 50 years in various forms.
- It is a laparoscopic procedure, with 6 small incisions.
- The procedure lasts about 2 hours.
- Requires a 1-2 night hospital stay.
- Requires liquid diet (stage 2 post-op) for two weeks after surgery.
- Requires 2-4 weeks recovery, away from work.
- Accounts for 18-20% of all procedures in the US and the world.

The Vertical Sleeve Gastrectomy (VSG)



- The esophagus is still connected to the acid-producing portion of the stomach
- The sleeve capacity is 3-6 oz
- Pylorus/Pyloric valve still part of the circuit
- The sequence in which food mixes with gastric juices (acid, bile, pancreatic enzymes) does not change
- Fundus is resected (whereas in bypass fundus is preserved)



The Vertical Sleeve Gastrectomy (VSG) Procedure Recap

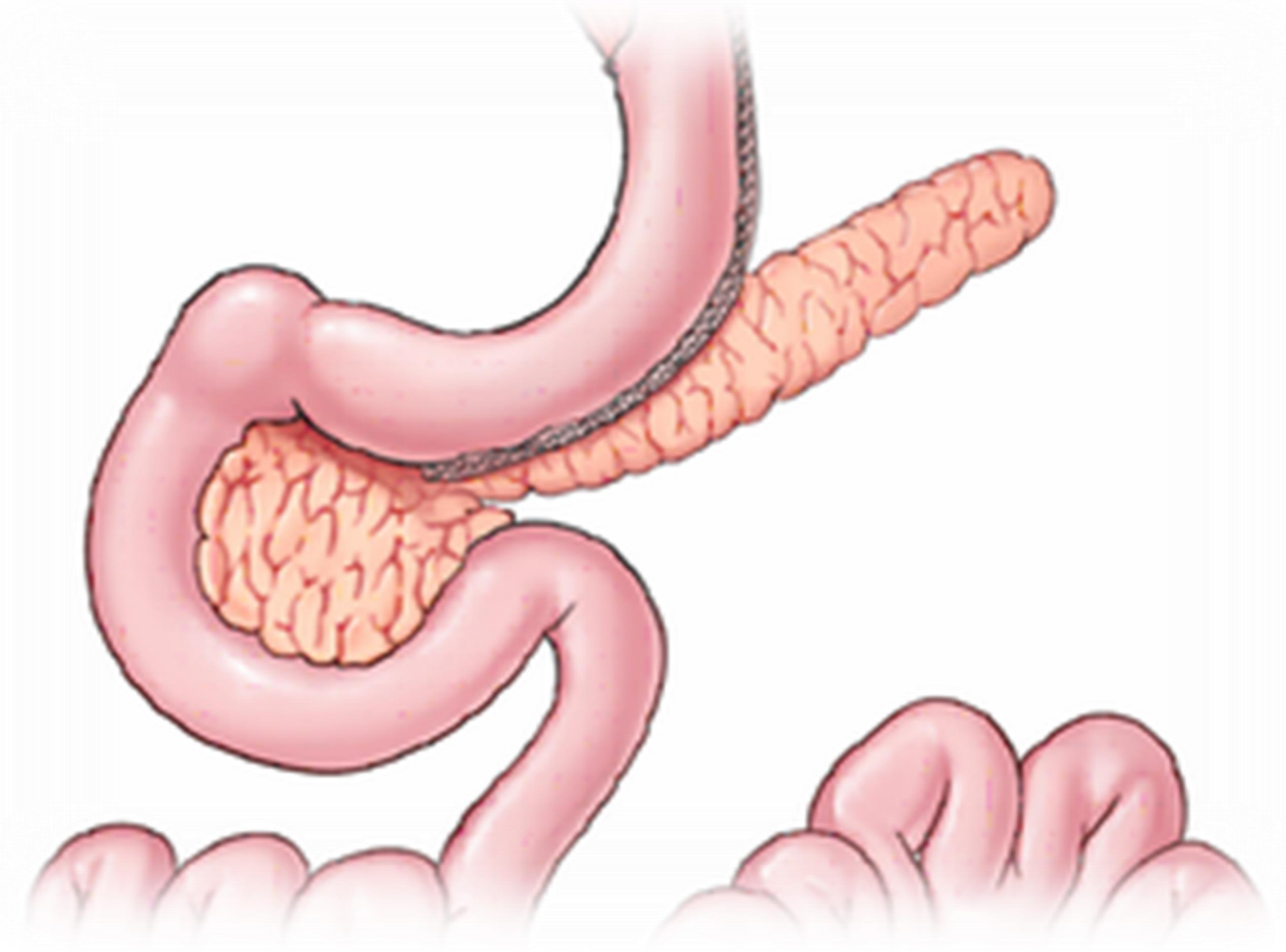
The VSG creates a 3-6 oz capacity narrow high-pressure tube that maintains relationship between the esophagus, stomach, pylorus, duodenum, and pancreas.

Preserves normal mixing of food with gastric juices (acid, bile, pancreatic enzymes)

Fundus resected → Less Ghrelin → decreased hunger

Restriction → less consumption

Narrow tube → faster transit → less absorption



Consequences and Important Differences between RYGB and VSG

- GERD (Heartburn and reflux) is a potential consequence of the VSG procedure.
- The VSG is larger than the gastric pouch of the RYGB → **less weight loss** than RYGB.
- The “brake” is still present, which means “**dumping**” is **not an issue**. This also creates more pressure, which is what increases the likelihood of reflux.
- **Malabsorption is not an issue.**
- Results in **decreased hunger**, similar to the RYGB.



The Vertical Sleeve Gastrectomy (VSG)

The Bottom Line

- VSG is the relatively new kid on the block.
- The procedure has existed for about 13 years.
- It is a laparoscopic procedure with 6 small incisions.
- The procedure lasts 1 hour.
- Requires a 1-2 night hospital stay.
- Requires liquid diet (stage 2 post-op) for 4 weeks after surgery.
- Requires 2-4 weeks recovery, away from work.
- Accounts for 60-70% of all bariatric procedures in the US and in the world.

Revisional Bariatric Surgery

Common Types

Conversion

- Band to bypass
- Sleeve to bypass (due to the complications of GERD)
- Nissen to bypass
- VBG to bypass

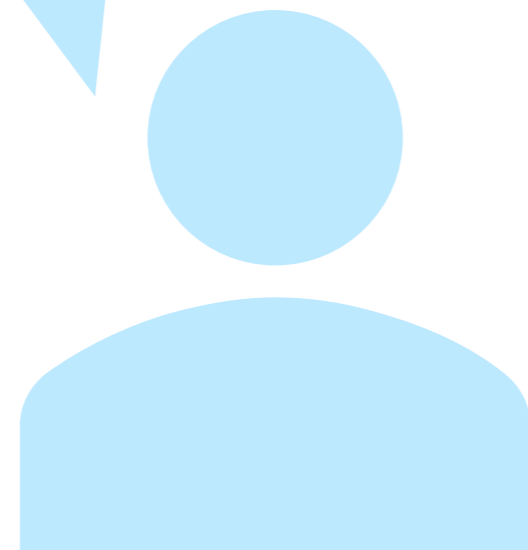
Corrective

- Conversion procedures for patient who didn't meet weight loss goals
- Re-pouch
- Re-sleeve
- Fistula resection
- Limb lengthening/adjustment

Reversal

Revisional Bariatric Surgery Common Questions

Can a band be converted to a sleeve?



Can a band be removed at the same time as the bypass?



What situations require conversion of a sleeve to a bypass?



Revisional Bariatric Surgery

Important Considerations Based on Recent Studies:

Conversion of band to VSG may be associated with a higher risk of short-term complications, such as leak, when compared to band to RYGB conversion.

Conversion of band to VSG done in two stages may result in lower complication rates.

Band to RYGB done in two stages may result in lower complication rates.



Making a Decision about Treatment



How to decide on an operation?

Which is the best option?

Which is the safest option?

Which will provide me the best results?

Which operation is the least invasive?

How to decide on an operation?

Let's reframe the questions...

Which is the best option?

- There's no "best" option

Which is the safest option?

- They're equally safe overall

Which will provide me the best results?

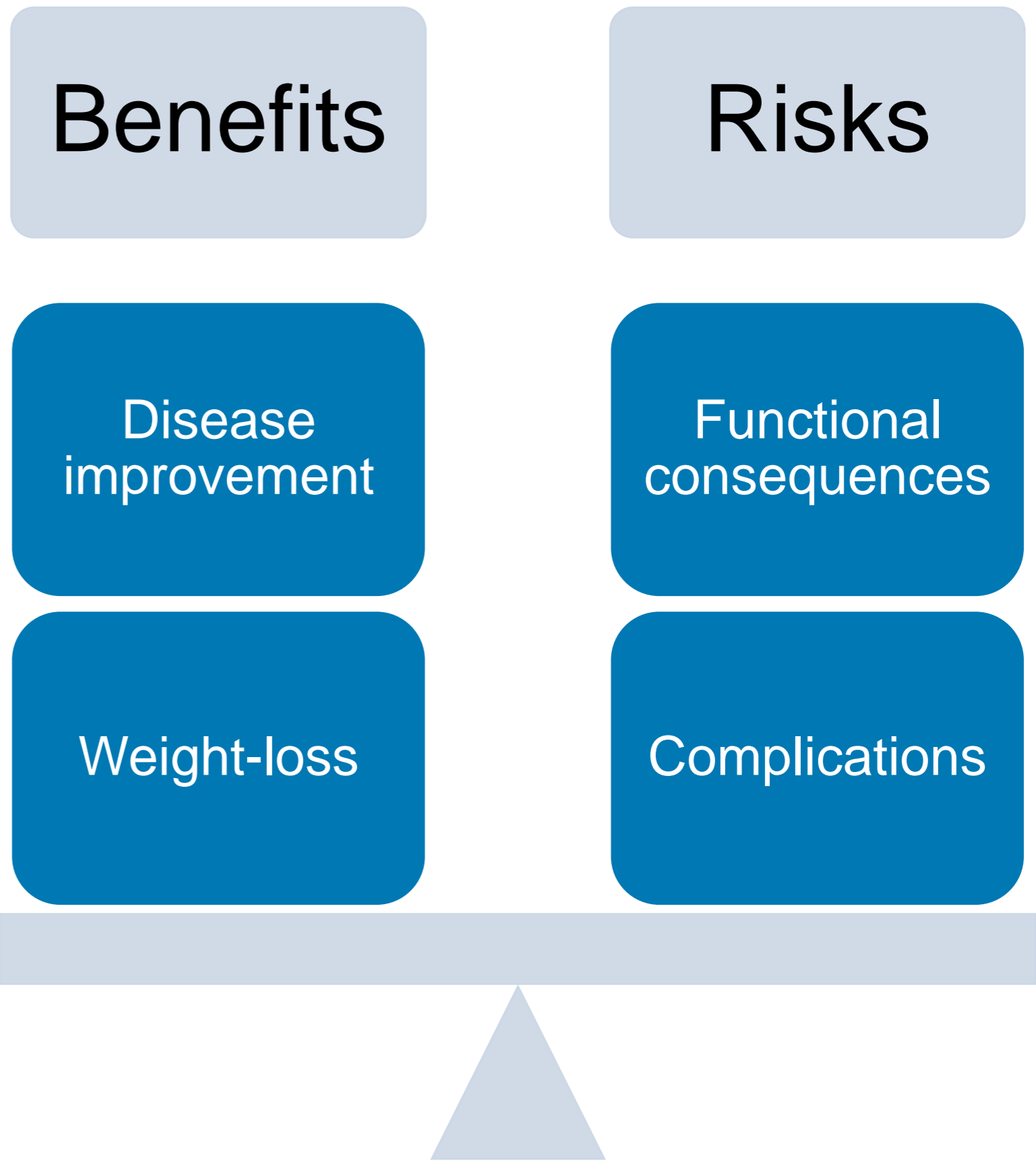
- No operation can provide the best results

Which operation is the least invasive?

- They are both equally invasive in terms of incisions and recovery

So then how do I decide?

The decision to choose a bariatric operation is aligning your personal convictions with the balance that exists for each operation, in terms of benefits and risks.



Bariatric Surgery | Outcomes & Risks (PCORnet Bariatric Study)

Operation	RYGB	VSG
OUTCOMES		
Total weight loss (TWL) at 1 year	31 %	25%
TWL at 5 year	26%	19%
Weight loss failure at 5 years (<5% weight loss from baseline.)	3.3 %	12.5%
Diabetes Remission (HbA1c <6.5 after 6 months without meds); 5 year	86 %	84%
Remission rate at 5 years: Insulin users	73%	66%
Diabetes relapse rate	33%	42%

- Overall rate of remission was 10% higher for RYGB vs VSG
- Lower rate of remission for patients > 65 years

COMPLICATIONS

	RYGB	VSG
Overall Complication Rate	8%	5%
Major complications in 30 days after surgery	3.2%	2.4%
5 years reoperation and reintervention rate	20%	18%
<i>Short-Term Complications</i>		
Leak	0.3%	0.3%
Bleeding	1%	2%
PE/DVT	1%	1%
Death	0.2%	0.2%
<i>Medium-Long Term Complications</i>		
Ulcer	1-16%	Minimal
Stricture	1-2%	1-2%
Fistula	1-2.6%	Minimal
Dumping	5%	Minimal
Small Bowel Obstruction	1.2-4.5%	0%
Malnutrition	5-7%	Minimal
Reflux/GERD	Treatment	10-30%

Other Considerations

- Overall RYGB has better weight loss, better chance of DM remission, less DM relapse, more reoperation/reintervention/rehospitalization as compared to VSG
- RYGB is associated with a higher risk of kidney stones.
- RYGB is associated with a higher risk of anemia and iron deficiency, and in some cases, may require iron transfusion post-operatively.



Bariatric Surgery | Decision Analysis

Those patients who are more interested in the potential greater weight loss and reversal of medical problems AND are more tolerant of the specific long-term risks and required lifestyle will choose a RYGB.

Those patient who don't need the greater benefit of the RYGB and/or are less risk-tolerant of the long-term consequences and lifestyle of the RYGB, will choose a VSG.



There are other factors which may impact treatment choice...

NSAIDS

GERD

Type 2
Diabetes

Previous
Abdominal
Surgery

Individualized Metabolic Surgery Score for Procedure Selection for Patients with Type 2 Diabetes

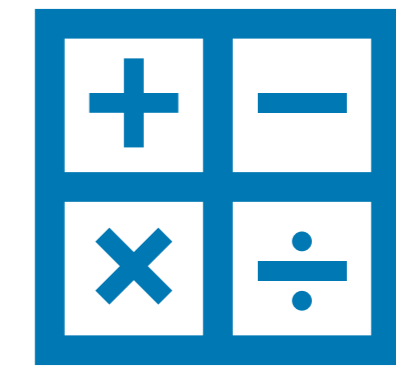
- Preop # diabetes medications (oral and injectable)
- Preop Insulin use
- Preop Duration of Diabetes (years)
- Preop Glycemic control (A1c < 7%)

Score helps determine severity of disease.

Severity of disease impacts likelihood of long-term resolution of T2D.

This impacts how suitable a bypass, which may have higher risk, is for a patient with T2D (risk vs. benefit)

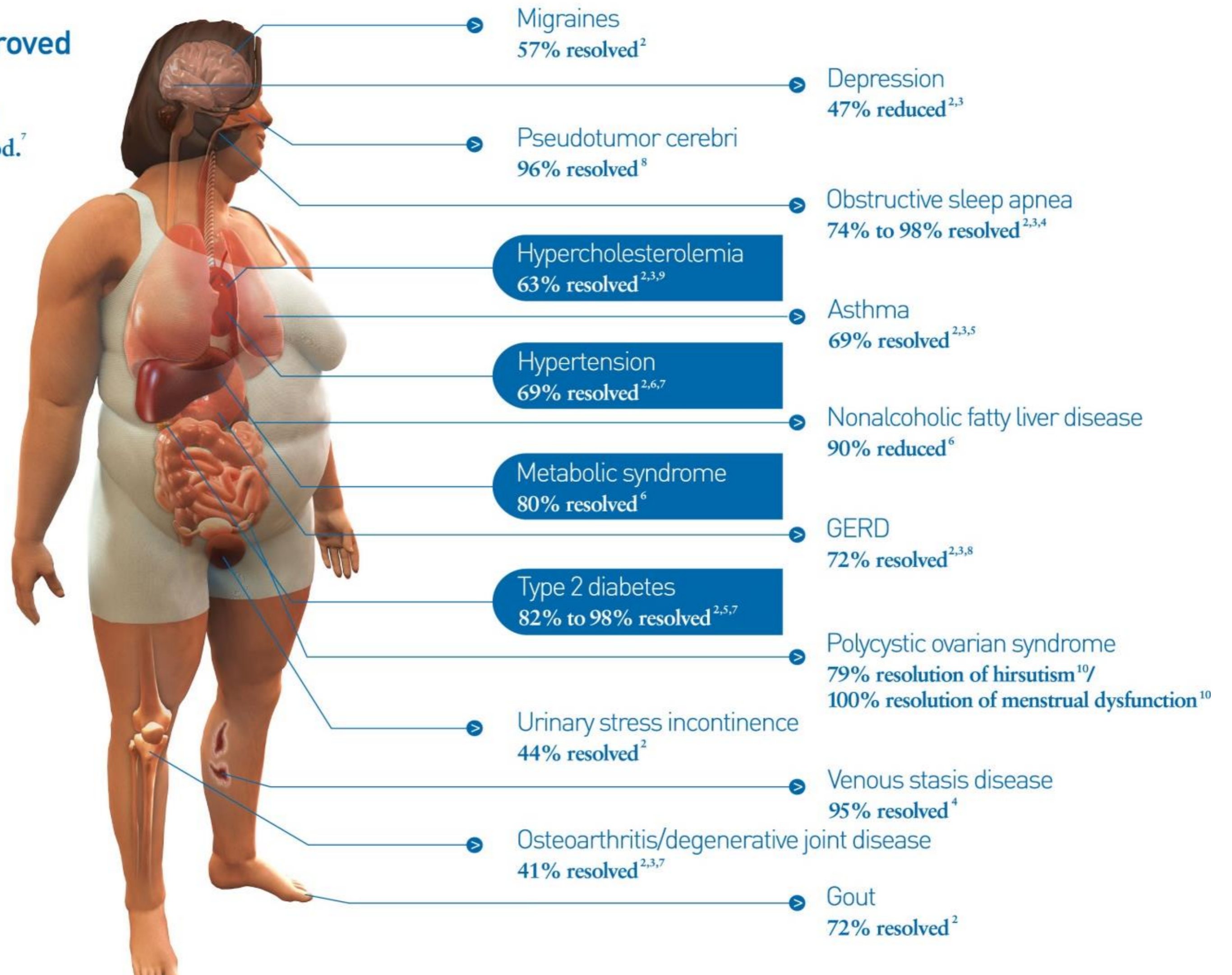
[Risk Calculator](#)



Resolution of Co-Morbidities after Bariatric Surgery

Quality of Life Improved in 95% of patients.^{2,5}

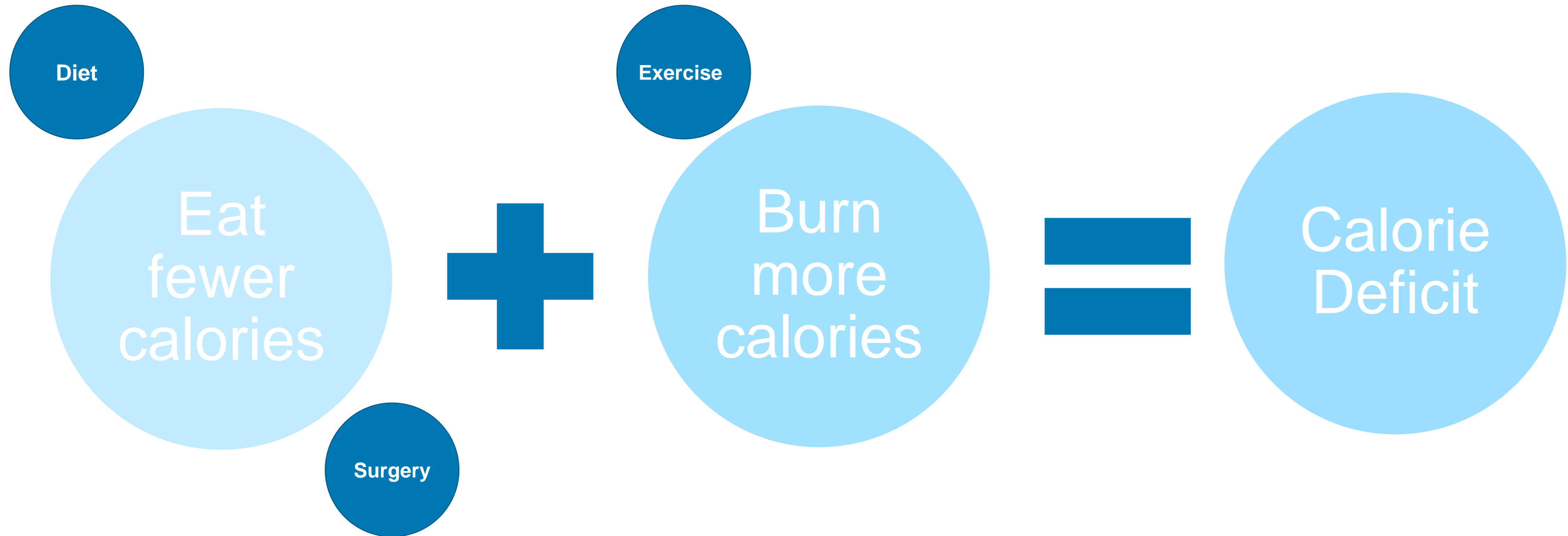
Mortality Reduced by 89% in five-year period.⁷



Weight-loss and Weight-loss Maintenance



How to create a calorie deficit



The downside of calorie deficit



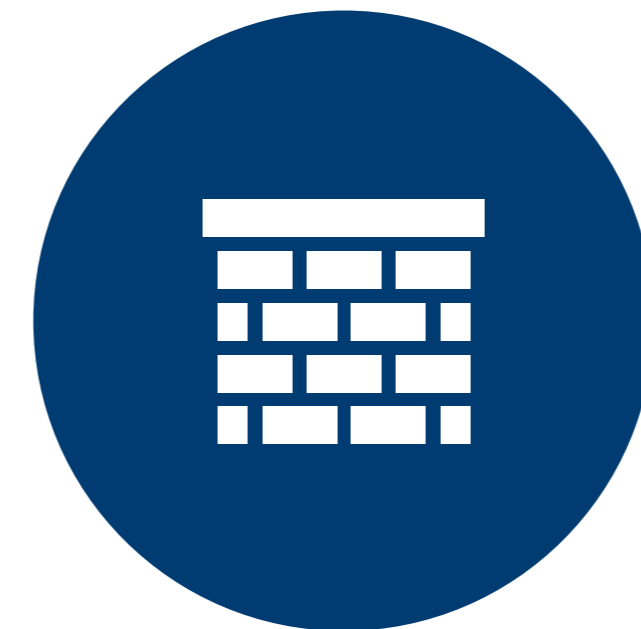
Calorie deficit **ALSO** results in **muscle loss** (you don't just lose fat)



MUSCLE MASS is the #1 determinant of your metabolism



Muscle loss → decrease in basal metabolic rate (BMR)



Decrease in BMR → decrease in calorie deficit → plateau and you hit a wall

How do you build muscle mass?

Adequate Fuel

At least 1-1.5 gm protein/kg body mass/day

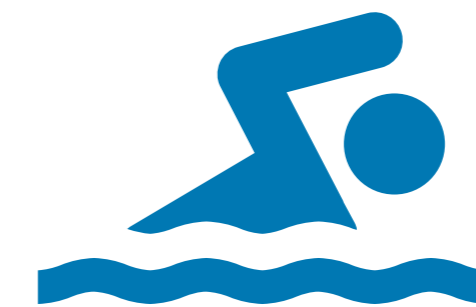
For example, a 90 kg individual would have at least 90, but as high as 135 grams of protein per day



Adequate Exercise (Resistance Training)

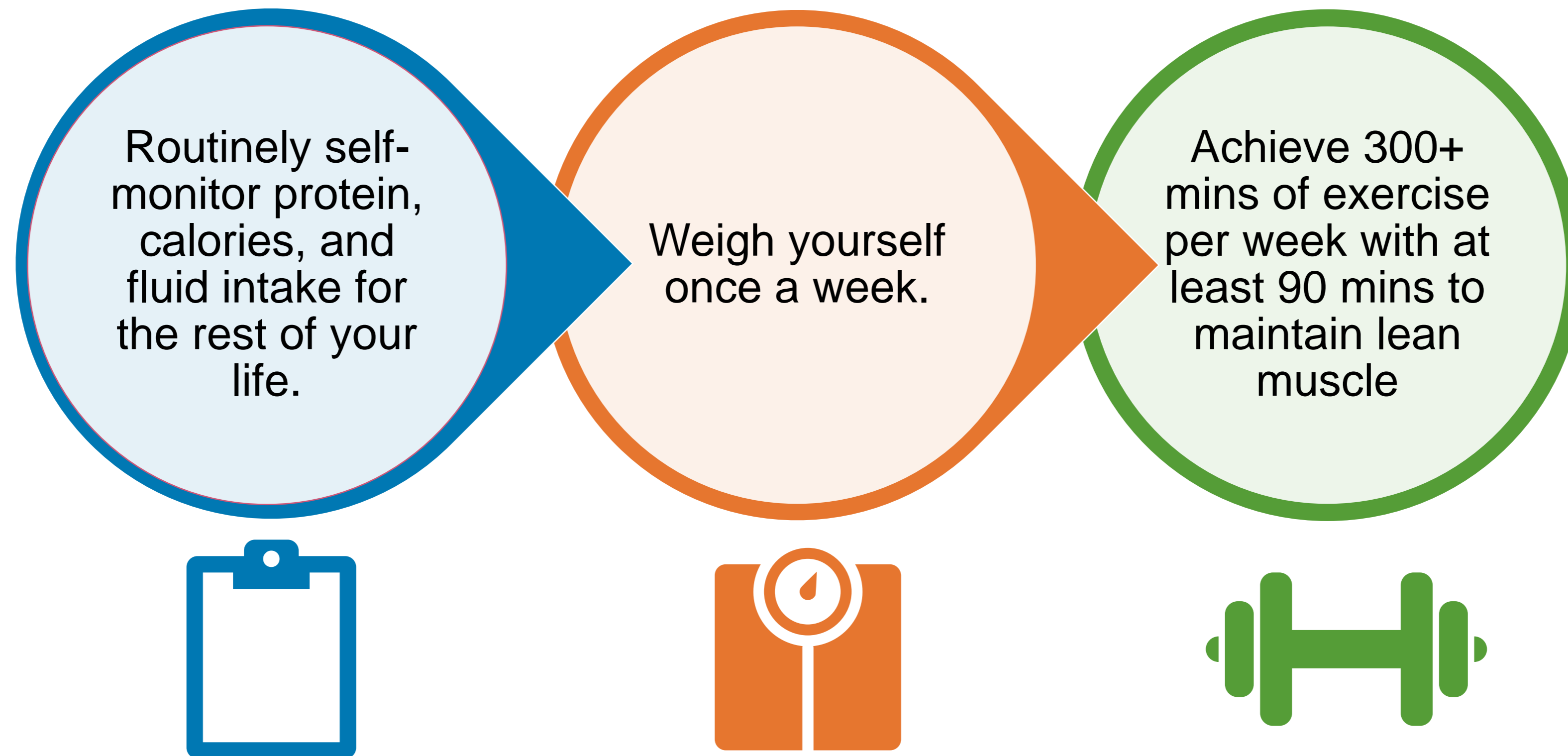
At least 90 + minutes of resistance training a week, in addition to “cardio”

- Free weights/body weight/machine weights/resistance bands/Pilates/yoga/swimming
- Personal trainer who can tailor a plan for you with these goals in mind of functional fitness and high-quality muscle mass retention



Maintaining Healthy Weight-Loss

The American College of Sports Medicine and the National Weight Control Registry Recommend:



Next Steps: Paving the Path to Success



IMPORTANT CONSIDERATIONS

STOP

- Use of any tobacco or nicotine products creates a significant safety risk both before and after surgery. If you need resources to quit, please inform a member of our team.
- Avoid marijuana or other recreational drug use, which can also create risks for surgery and be counter-productive to your weight-loss.
- Carbonated beverages, sugary beverages, caffeinated, and alcoholic beverages must be eliminated prior to surgery. Work on eliminating these from your diet now.
- Consider contraception carefully. Pregnancy immediately after bariatric surgery could be high risk for both mother and child.

CONTRAINDICATIONS FOR SURGERY

- Individuals with a substance use disorder, eating disorder, or major psychiatric illness must receive treatment and resolution prior to be considered for surgery.
- Individuals actively using tobacco or nicotine products cannot have surgery.
- Women who may become pregnant (within 2 years) are not eligible for surgery.
- Individuals who are looking for a quick-fix and are unwilling to engage in all aspects of the program and care management plan may wish to consider alternative options to surgery.



Start Creating Healthy Habits Now



The bariatric dietitians will help you as you integrate the healthy habits and food plan needed prior to surgery and for long term success.

HEALTHY HABITS

- Daily food records
- Establish a regular meal and snack schedule
- Bariatric friendly menu planning and food preparation
- Weigh and measure proteins and foods (learn portion sizes)
- Eat lean protein first, healthy carbohydrates (vegetables, fruits, legumes), whole grains and healthy fats
- Mindful eating: eat slowly, chew each bite 20-30x, stop when full
- Hydration: wean off carbonated, caffeinated, sugary, and alcoholic beverages
- Daily vitamins
- Physical Activity

START NOW

Take a multivitamin daily

64+ oz of water or sugar free fluids daily

Your journey starts today



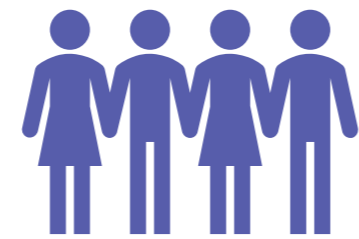
Evaluate your commitment to the journey



Start keeping records of your current lifestyle & habits



Start making changes today



Build a good social support structure



Take ownership of your journey and don't lose momentum



Take advantage of the many resources available to you in the program

Next Steps

Within the next two weeks:

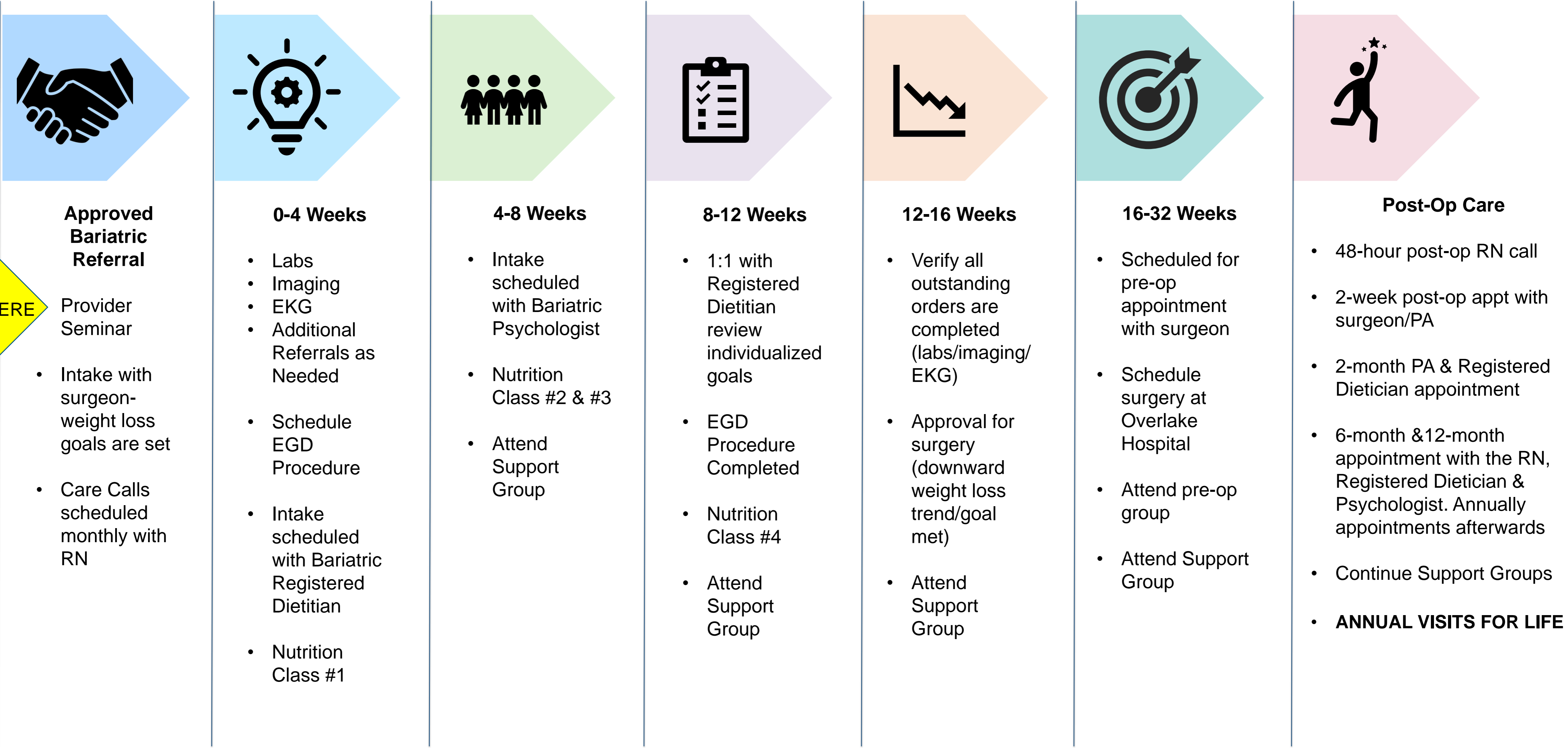
We will contact you to schedule your next appointment for a video visit with a provider. You will also be scheduled for an afternoon nutrition education class as well as a care call with an RN from the team.

Before your next appointment:

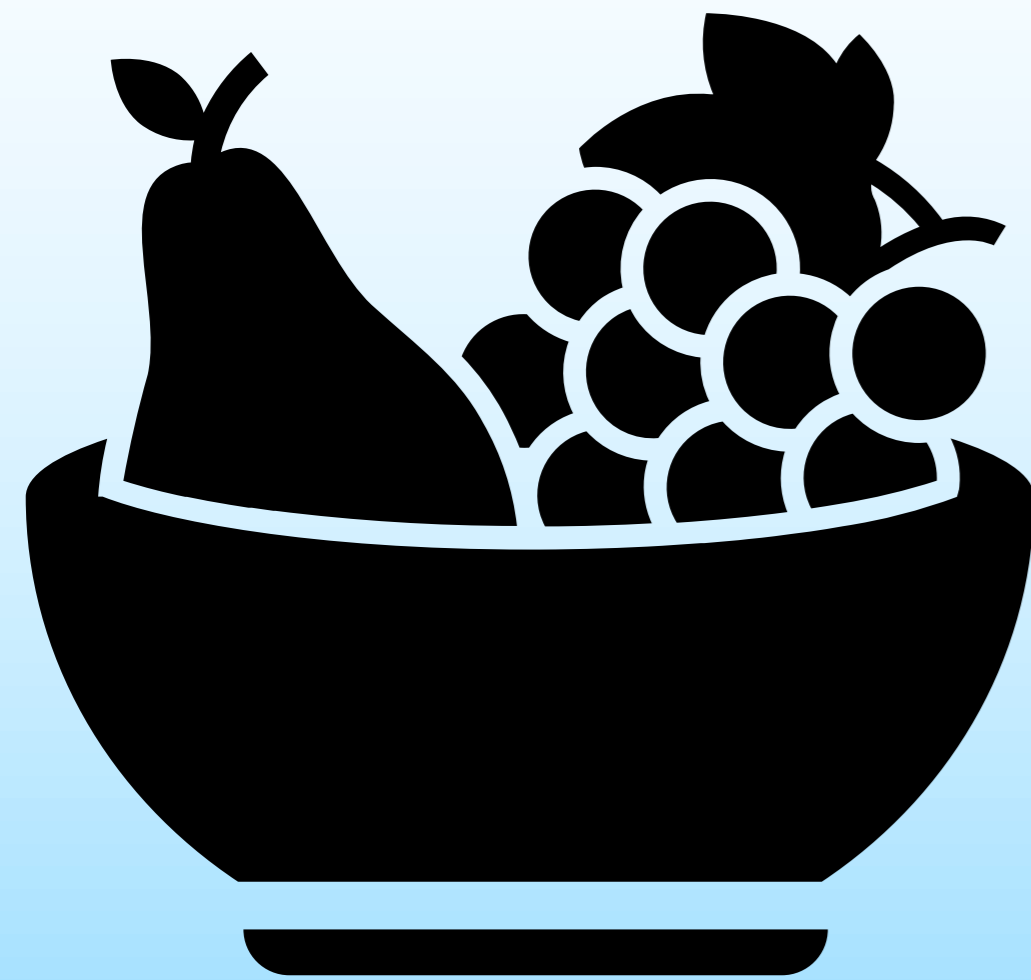
Contact Member Services at 1-888-844-4607 if you have questions regarding your coverage & benefits for Bariatric Care and Surgery.



Bariatric Program Overview

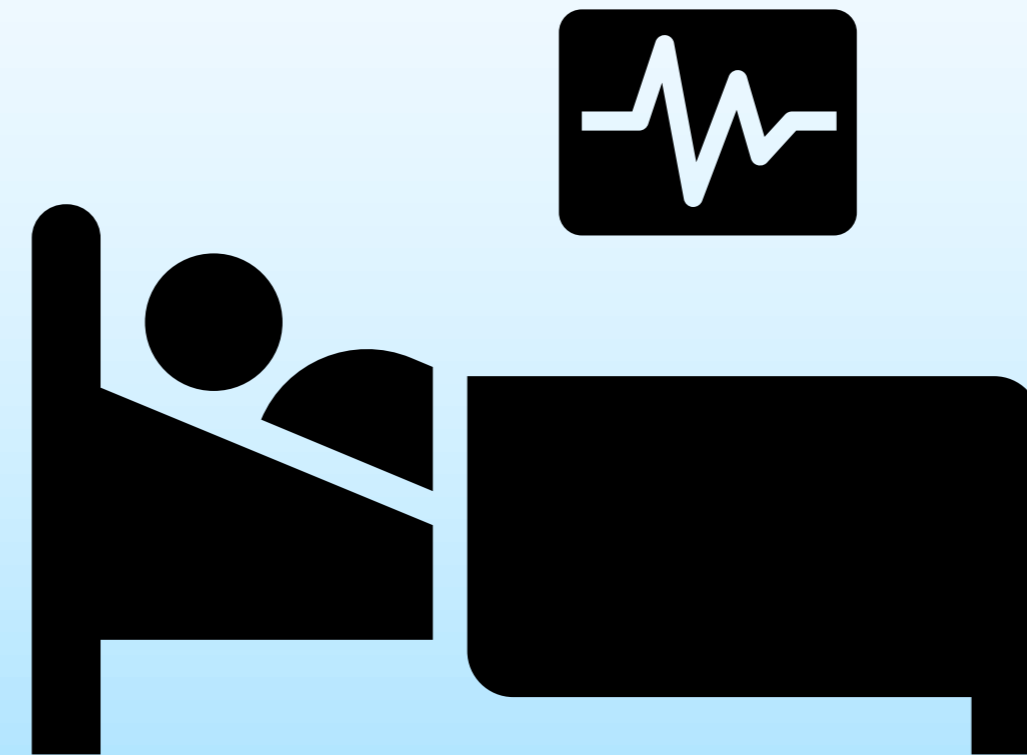


Patient led journey contingent on patient progression through the program.



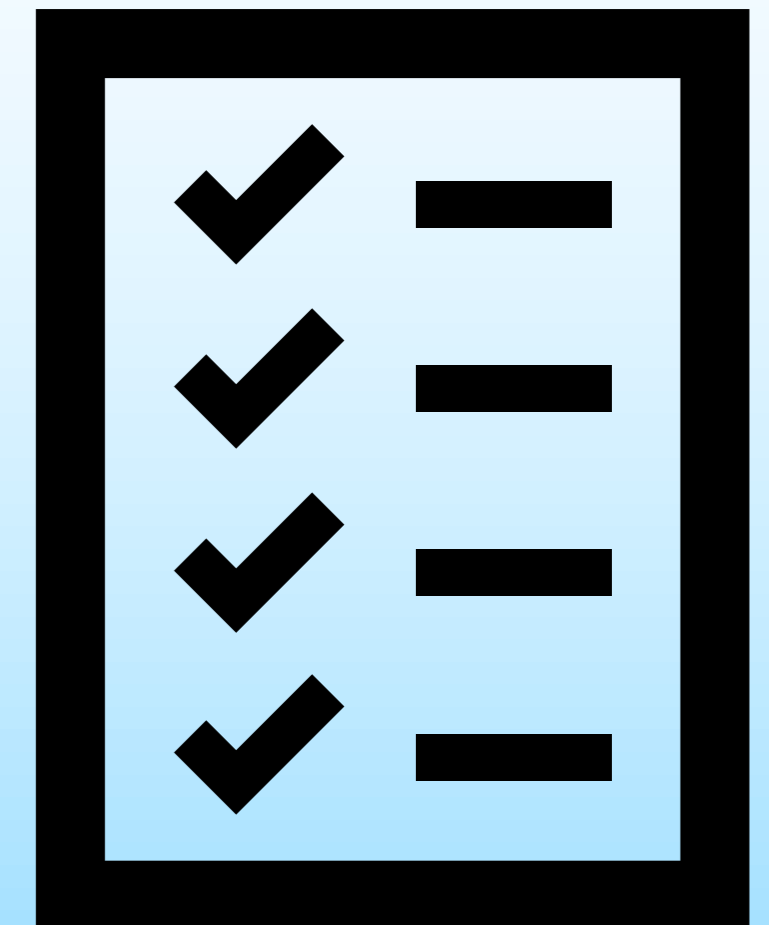
Food Intake

Exercise



Proper Procedure

Long term follow-up care



4 Pillars of Success

Q&A



Frequently Asked Questions

1. If I have hiatal hernia and reflux how does it affect the operation?
2. If I don't have my gallbladder, how will that affect my surgery? If I do still have my gallbladder, will it be taken out at the same time?
3. What is the best operation for me?
4. I have Diabetes, I thought bypass is the right operation for me
5. I've had previous abdominal surgeries am I still a candidate
6. Can I get pregnant after this surgery, how soon?