

Androscoggin Valley Hospital: A Bariatric Satellite Site of Catholic Medical Center

**Surgical Weight Loss Options *For a
Healthier Tomorrow***

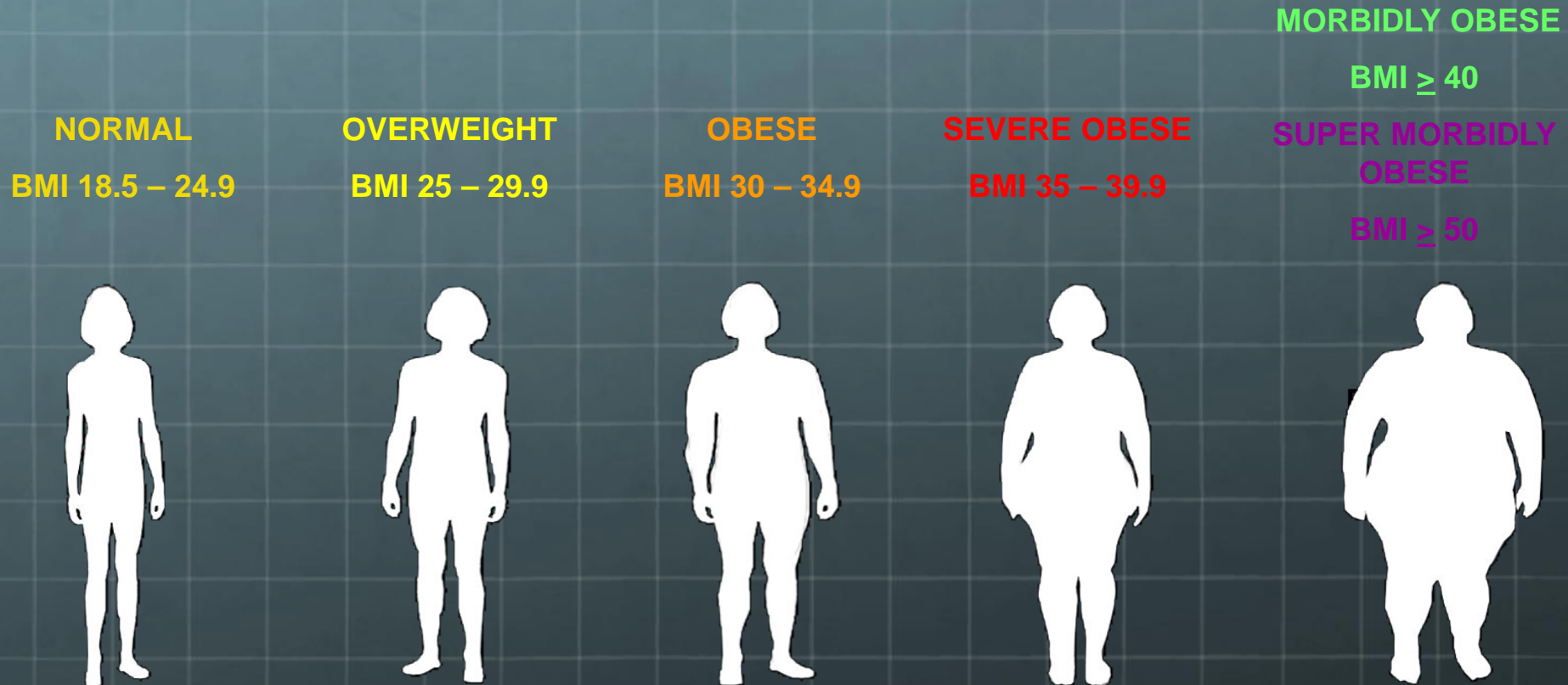


**Are you where you
want to be?**



What is Obesity?

Body Mass Index (BMI) = kg/m^2



Body Mass Index

$$\text{BMI} = (\text{Weight in Pounds} / (\text{Height in inches} \times \text{Height in inches})) \times 703$$

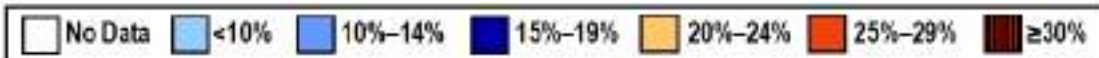
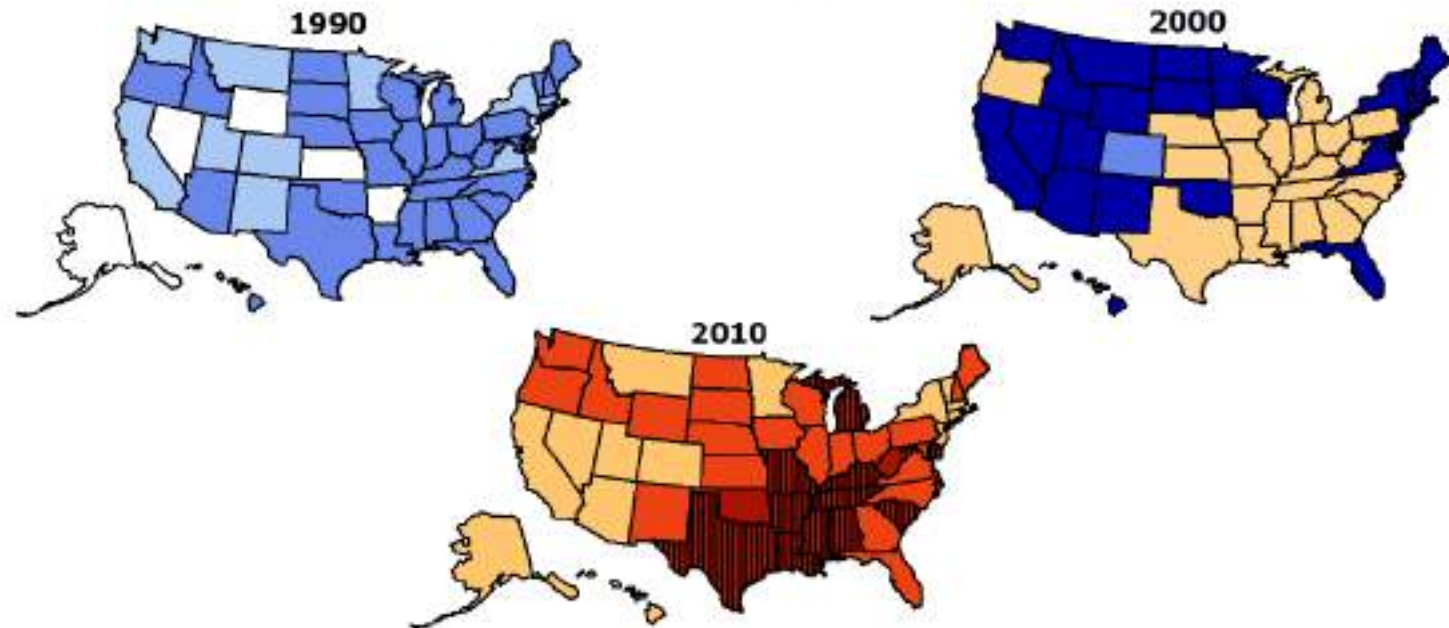
WEIGHT IN POUNDS (lbs)																							
	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	
HEIGHT IN FEET	4'5"	30	33	35	38	40	43	45	48	50	53	55	58	60	63	65	68	70	73	75	78	80	83
	4'6"	29	31	34	36	39	41	43	46	48	51	53	56	58	60	63	65	68	70	72	75	77	80
	4'7"	28	30	33	35	37	40	42	44	47	49	51	54	56	58	61	63	65	68	70	72	75	77
	4'8"	27	29	31	34	36	38	40	43	45	47	49	52	54	56	58	61	63	65	67	70	72	74
	4'9"	26	28	30	33	35	37	39	41	43	46	48	50	52	54	56	59	61	63	65	67	69	72
	4'10"	25	27	29	31	34	36	38	40	42	44	46	48	50	52	54	57	59	61	63	65	67	69
	4'11"	24	26	28	30	32	33	36	38	40	43	45	47	49	51	53	55	57	59	61	63	65	67
	5'0"	23	25	27	29	31	32	35	37	39	41	43	45	47	49	51	53	55	57	59	61	63	65
	5'1"	23	25	26	28	30	32	34	36	38	40	42	44	45	47	49	51	53	55	57	59	61	62
	5'2"	22	24	25	27	29	31	33	35	37	38	40	42	44	46	48	49	51	53	55	57	59	60
	5'3"	21	23	25	27	28	30	32	34	36	37	39	41	43	44	46	48	50	51	53	55	57	59
	5'4"	21	22	24	26	28	29	31	33	34	36	38	40	41	43	45	46	48	50	52	53	55	57
	5'5"	20	22	23	25	27	28	30	32	33	35	37	38	40	42	43	45	47	48	50	52	53	55
	5'6"	19	21	23	24	26	27	29	31	32	34	36	37	39	40	42	44	45	47	49	50	52	53
	5'7"	19	20	22	24	25	27	28	30	31	33	35	36	38	39	41	42	44	46	47	49	50	52
	5'8"	18	20	21	23	24	26	27	29	30	32	34	35	37	38	40	41	43	44	46	47	49	50
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	5'11"	17	18	20	21	22	24	25	27	28	29	31	32	34	35	36	38	39	41	42	43	45	45
	6'0"	16	18	19	20	22	23	24	26	27	29	30	31	33	34	35	37	38	39	41	43	43	45
6'1"	16	17	19	20	21	22	24	25	26	28	29	30	32	33	34	36	37	38	40	41	42	44	
6'2"	15	17	18	19	21	22	23	24	26	27	28	30	31	32	33	35	36	37	39	40	41	42	
6'3"	15	16	18	19	20	21	23	24	25	26	28	29	30	31	33	34	35	36	38	39	40	41	
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6'5"	14	15	17	18	19	20	21	23	24	25	26	27	29	30	31	32	33	34	36	37	38	39	
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6'7"	14	15	16	17	18	19	20	21	23	24	25	26	27	28	29	30	32	33	34	35	36	37	
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6'9"	13	14	15	16	17	18	19	20	21	23	24	25	26	27	28	29	30	31	32	33	34	35	
6'10"	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	34	35	

Obesity Increasing in United States

Obesity Trends* Among U.S. Adults

BRFSS, 1990, 2000, 2010

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

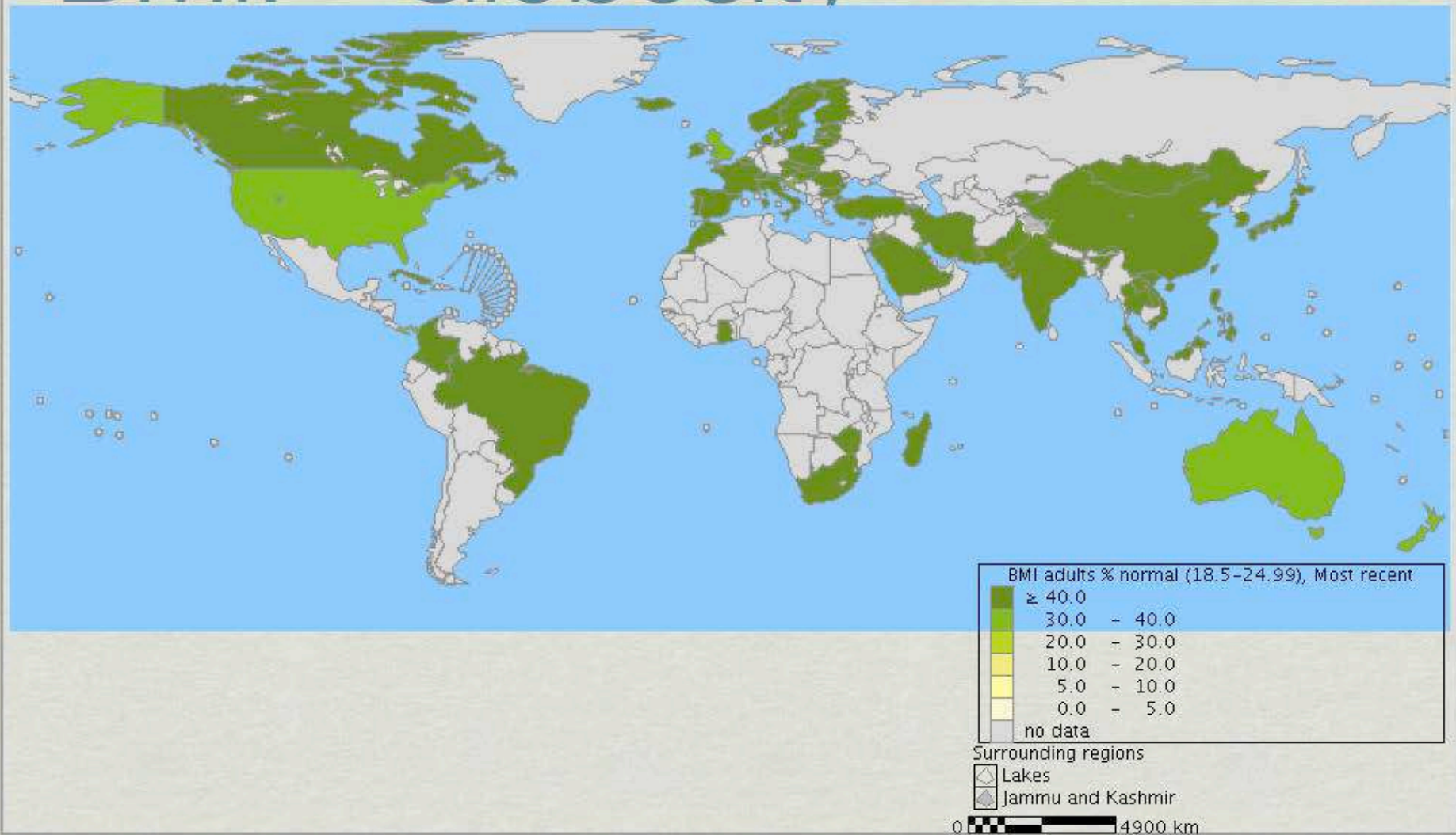


Source: Behavioral Risk Factor Surveillance System, CDC.

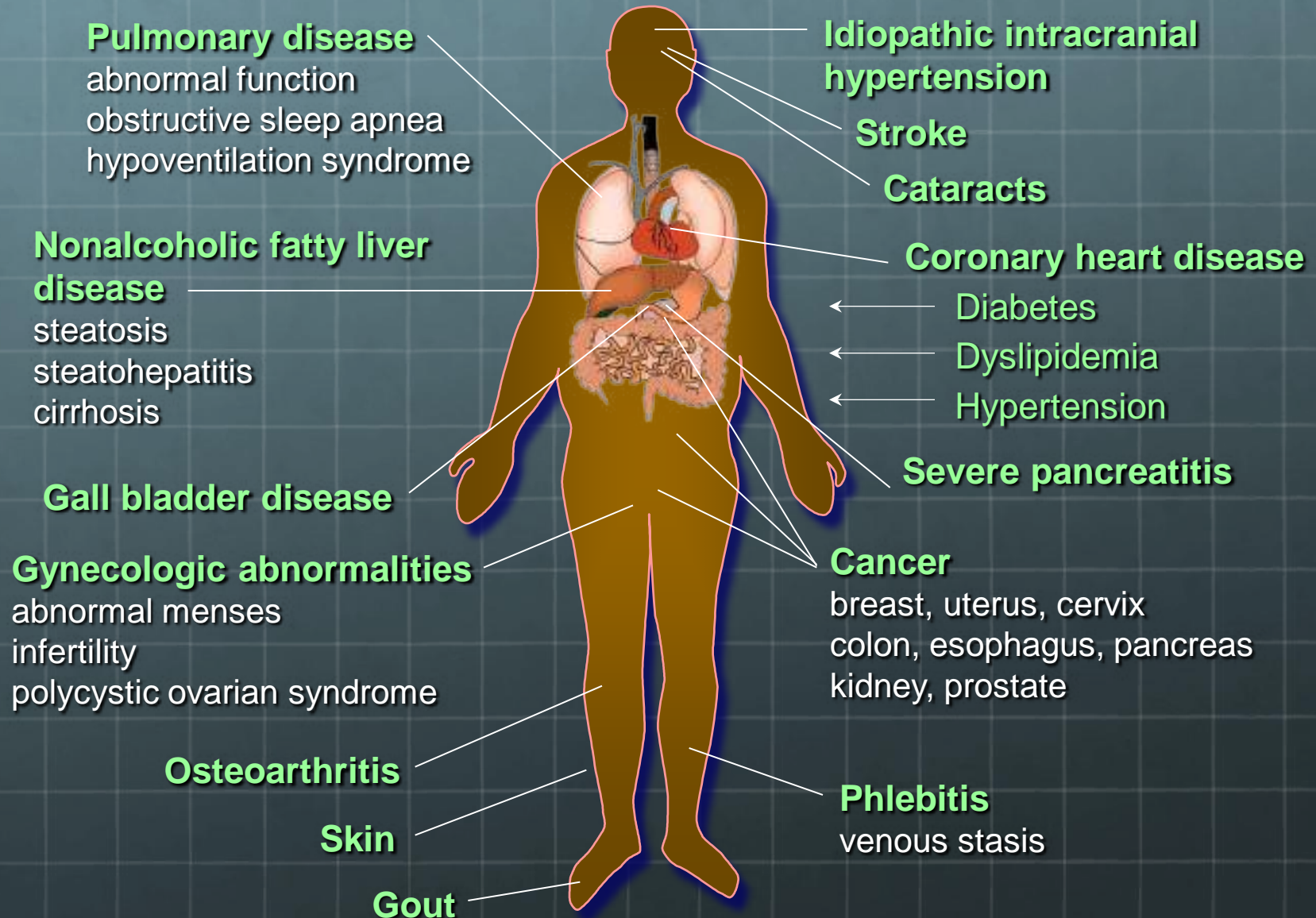


World Health Organization

BMI: “Globesity”

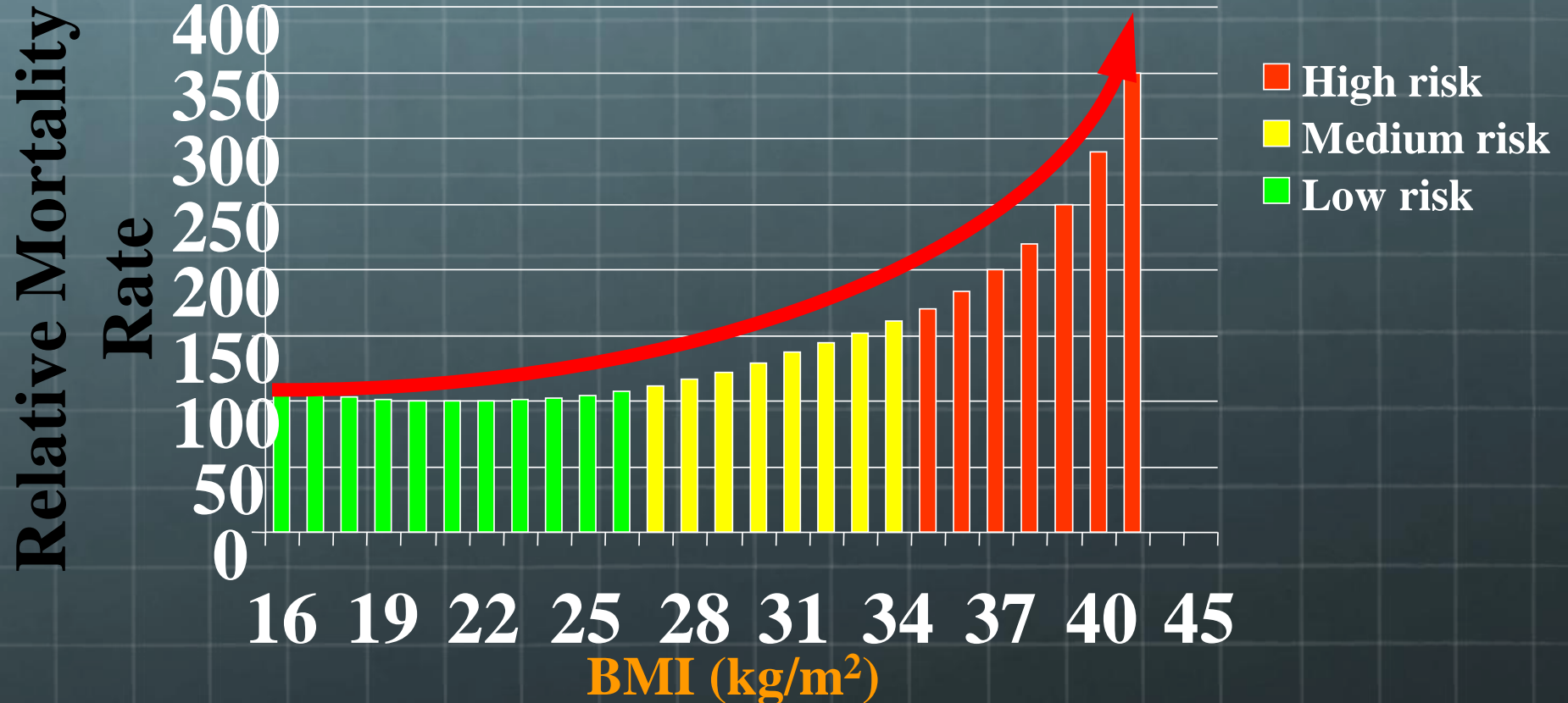


Obesity affects health in many ways












And this is why we worry!

Exponential Increase in Risk of
Dying with increasing BMI



Causes of Obesity

-  Genes
-  Metabolism
-  Culture
-  Socioeconomic Status
-  Behavior
-  Lack of sleep
-  Medications
-  Gut flora
-  Obesogens
-  Environment

Treating Obesity

- Diet
- Exercise
- Weight-loss programs
- Medications
- Hypnosis
- Counseling
- Surgery



Best Practices to Transform Your Future: The Multidisciplinary Approach to Obesity at CMC







Evaluation

Health status	OTC health care provider
Eating habits	OTC nutritionist
Exercise habits	OTC exercise physiologist
Psychological status	Mental health provider
Applicability of surgery	OTC health care providers

Education

Health status	OTC health care provider
Individualized nutrition plan	OTC nutritionist
Individualized exercise plan	OTC exercise physiologist
Best behavioral habits	Mental health provider
Details of weight loss surgery	OTC staff and surgeons Support group members

Education: Lifestyle Changes

-  Mindful eating
-  Staples of change
-  Food and emotions
-  Dealing with 'high-risk' eating situations
-  Bridging social support
-  Development of a personal lifestyle change plan

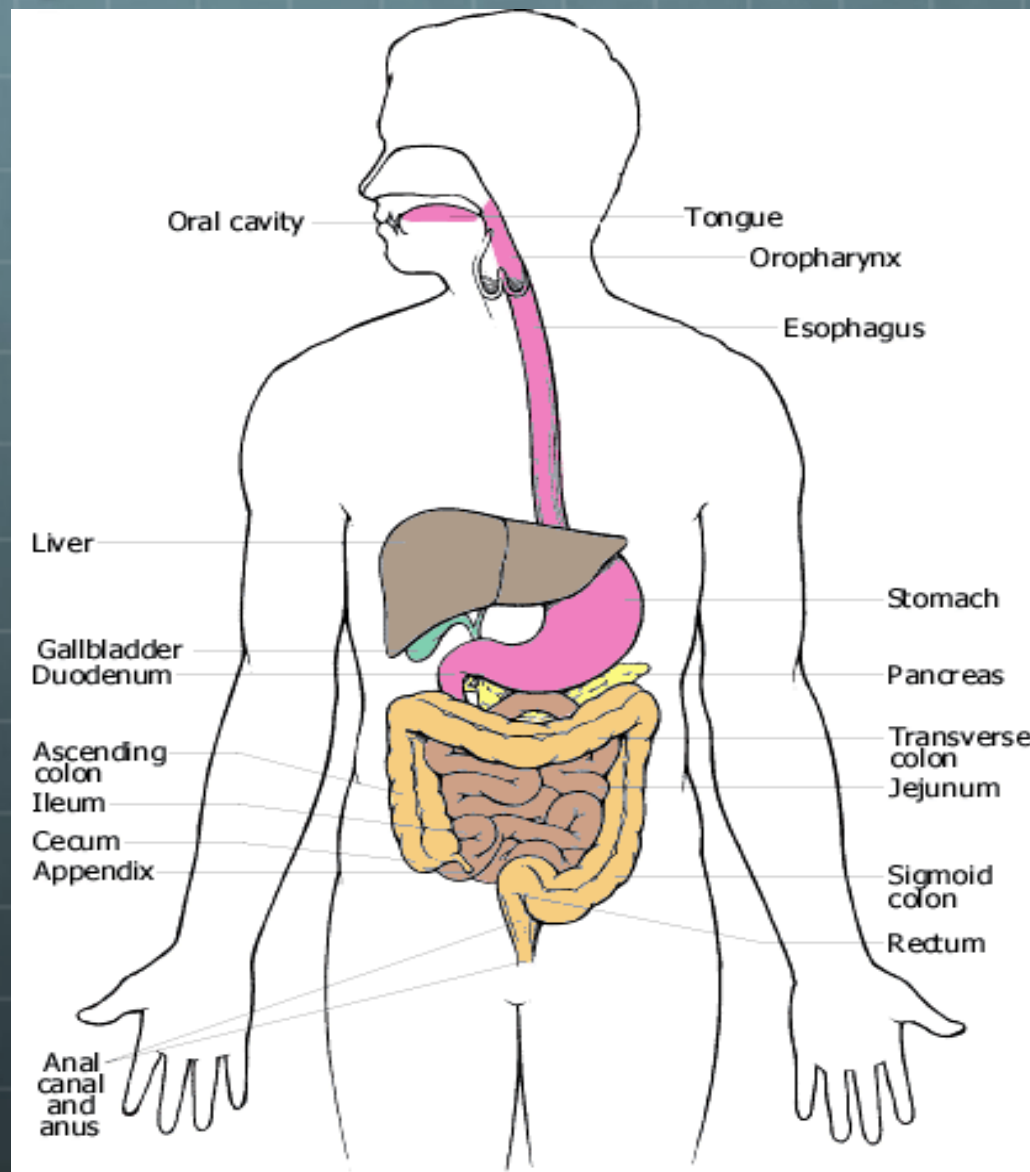
Requirements for Weight Loss Surgery

- BMI > 40 or
BMI 35 - 39 with other co-morbidities
- Prior weight loss attempts
- Payor source
- Ability to meet payor qualifications

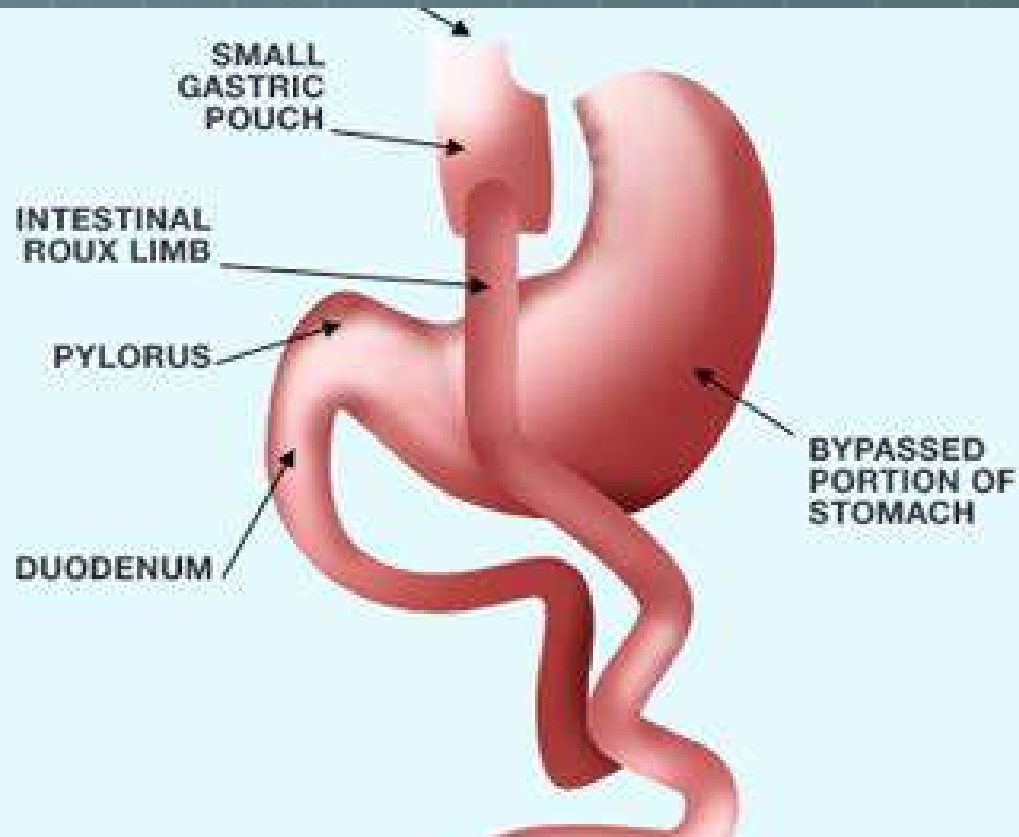
Weight Loss Surgeries at CMC

- Gastric Bypass
- Sleeve Gastrectomy
- Adjustable Gastric Banding

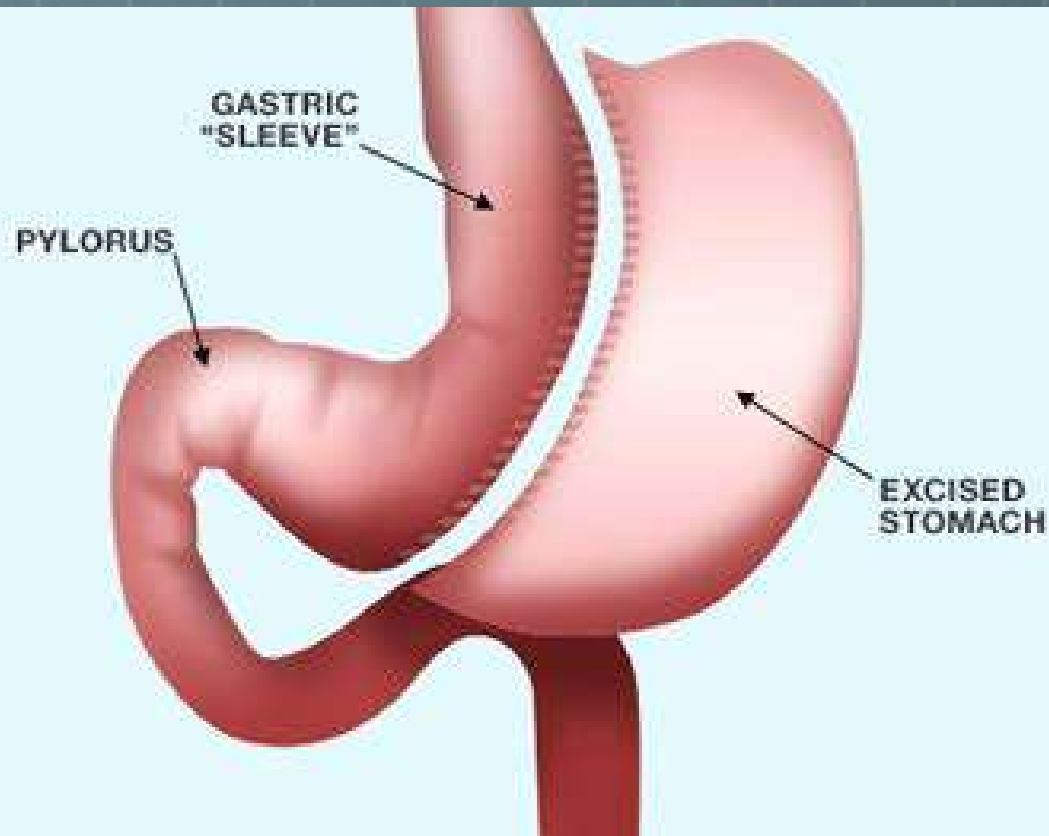
Anatomy of the Gastrointestinal Tract



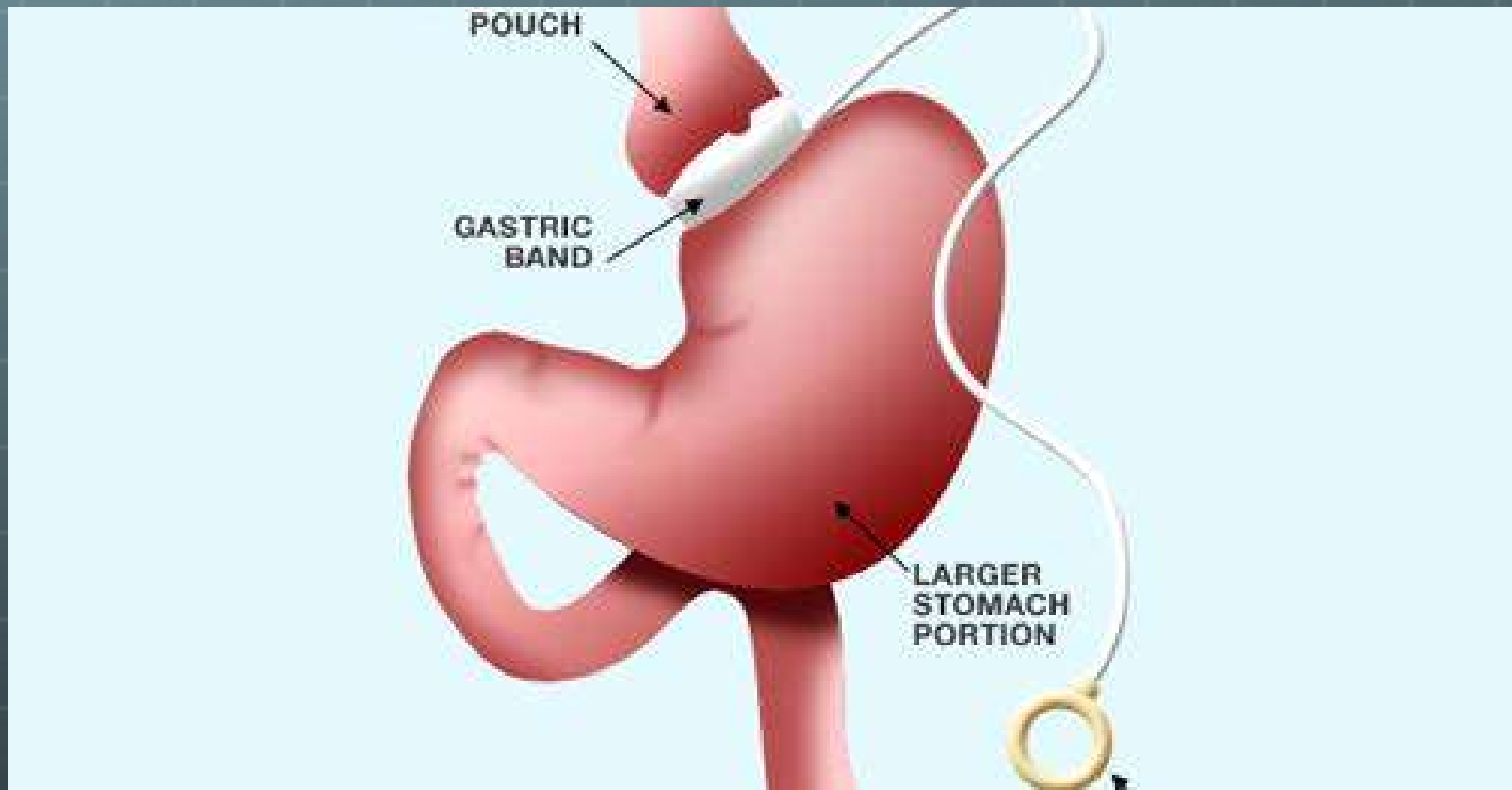
Gastric Bypass



Sleeve Gastrectomy



Adjustable Gastric Banding









Benefits of Minimally Invasive Surgery versus Open Surgery

- Smaller incisions
- Less pain
- Quicker recovery
- Better wound healing
- Decreased risk of hernia

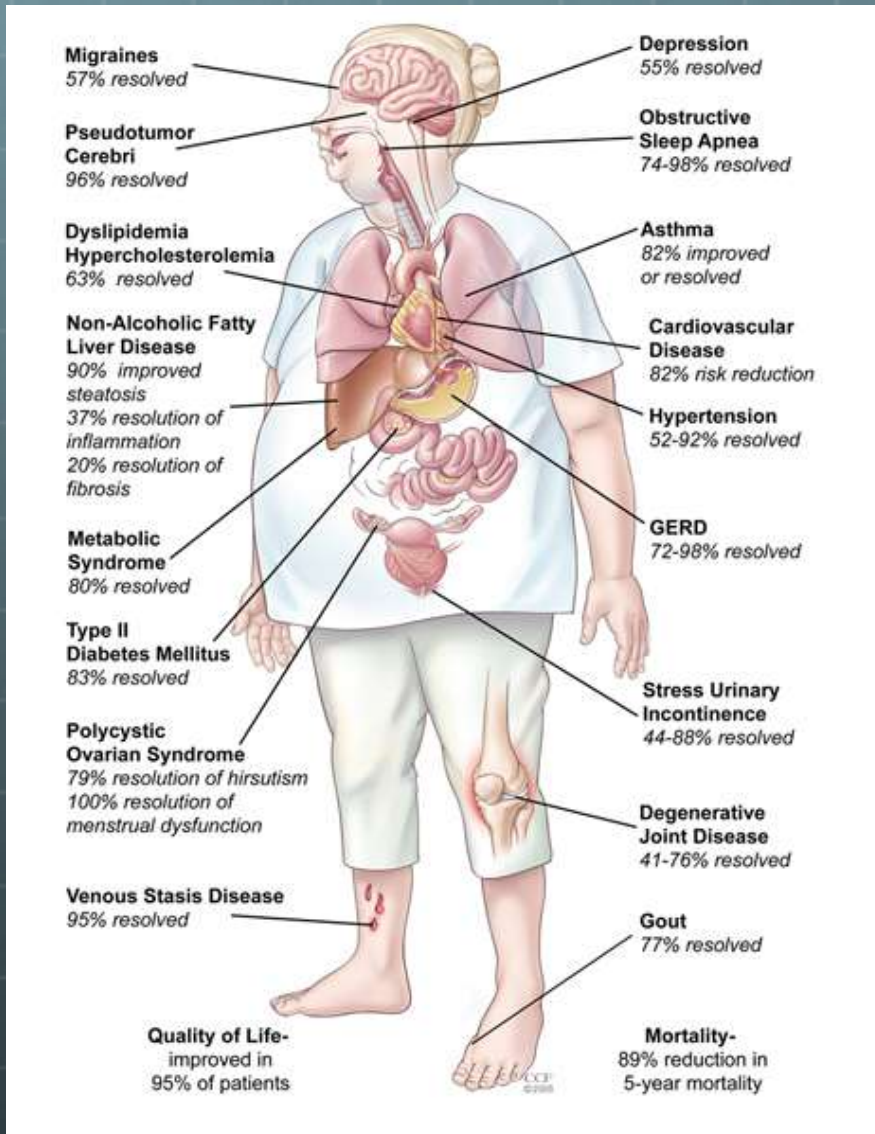


Initial post-surgery course

-  General anesthesia
-  Telemetry
-  Usually no tubes
-  Specific oral intake progression
-  2 night hospitalization
-  Return to work in 2 weeks

Which procedure is BEST?
It depends...

Health issues to improve



Diabetes



Obstructive sleep apnea








Polycystic ovarian syndrome



Heartburn/hiatal hernia

Health issues present

-  Previous abdominal or intestinal surgery
-  Reflux
-  Hiatal hernia
-  Inflammatory bowel disease
-  Heart disease with stents

Potential Complications

- Death
- Bleeding
- Leakage
- Blood clots
- Infection
- Heart issues
- Nausea/vomiting
- Need for additional surgery
- Strictures
- Nutritional deficiencies
- Change in bowel habits
- Dehydration
- Ulcers
- Hair loss
- Hernias
- Unlisted complications



Bariatric Surgery Reduces

5 YEAR MORTALITY RATES BY 89%

SURGERY

0.68%

NO SURGERY

6.17%

Original Article

Perioperative Safety in the Longitudinal Assessment of Bariatric Surgery

The Longitudinal Assessment of Bariatric Surgery (LABS) Consortium

N Engl J Med
Volume 361(5):445-454
July 30, 2009

Male

History of DVT

BMI > 50

Sleep apnea

Unable to walk 61 meters



The NEW ENGLAND
JOURNAL of MEDICINE

Modifiable risk factors

Pre-op Optimization

- Diagnosis and treatment of medical issues
 - Sleep apnea/CPAP
 - Diabetes/optimization of HA1c
 - Coronary artery disease
 - Thyroid disease
 - H.pylori
- Tobacco free/Drug free
- Best nutrition practices
 - Mindful eating
 - Weight loss
 - Prehabilitation/conditioning
 - Liver shrinkage
 - Support groups



Zumba by Melissa



Tuesdays
5 PM at
the OTC



Post-Op Back on Track Shopping Tours

- Struggling with losing excess weight?
- Hit a weight loss plateau?
- Looking for diet and meal planning inspiration?

*Free Monthly Shopping Tours facilitated by an OTC
Registered Dietitian are available for you!*

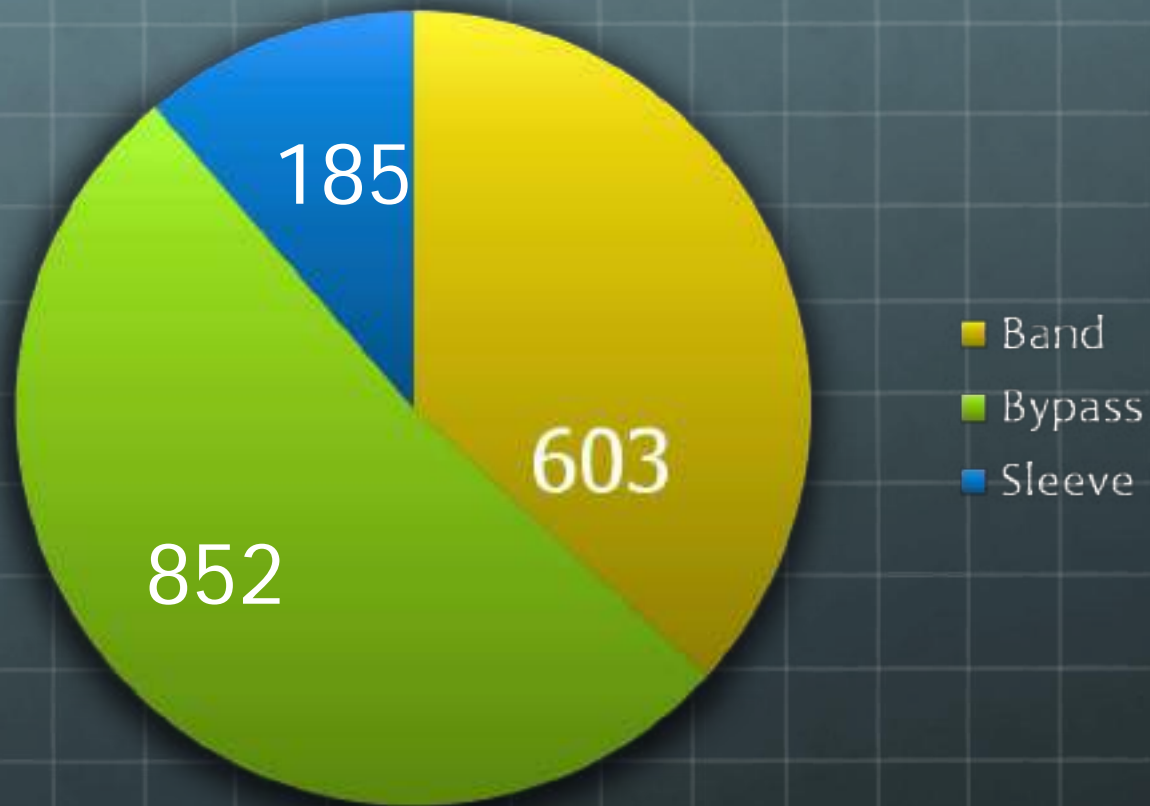


Total Bariatric Cases



1640

Bariatric Cases by Type

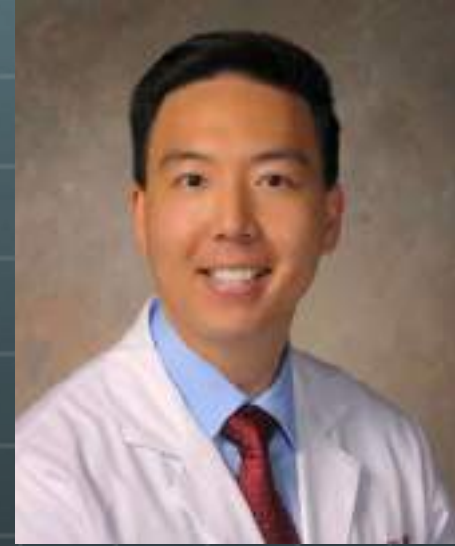


MBSAQIP

METABOLIC AND BARIATRIC SURGERY
ACCREDITATION AND QUALITY IMPROVEMENT PROGRAM

ACCREDITED CENTER

Surgeons



Dr. Campbell Dr. Catania Dr. Wood Dr. Wu

Center of Excellence Status



Outcomes

- 🌐 Excess weight loss
- 🌐 Resolution of medical issues
- 🌐 Complications



Post-Bariatric Diet Progression

Water



Phase 1: Clear liquids



Phase 2: Full liquids and protein shakes



Phase 3: Pureed



Fluids
Protein
Vitamins

Phase 4: Ground



Phase 5: Regular



Pregnancy After Bariatric Surgery



Maternal and Neonatal Complications

	Morbidly Obese	Post-Bariatric Surgery
Gestational diabetes	22.1-27%	0-8%
Preeclampsia	3.1%	0%
Premature delivery	7.1%	7.7%
Low birth weight	10.6%	7.7%
Macrosomia	14.6%	7.7%
Internal hernia		8.3%
C-section	28%	43%

Post-bariatric surgery complications were similar to non-obese controls

NEXT STEPS

- 🌐 OTC form
- 🌐 PCP referral
- 🌐 Check insurance coverage/requirements



