

Obesity: It's your chemistry, not your character!

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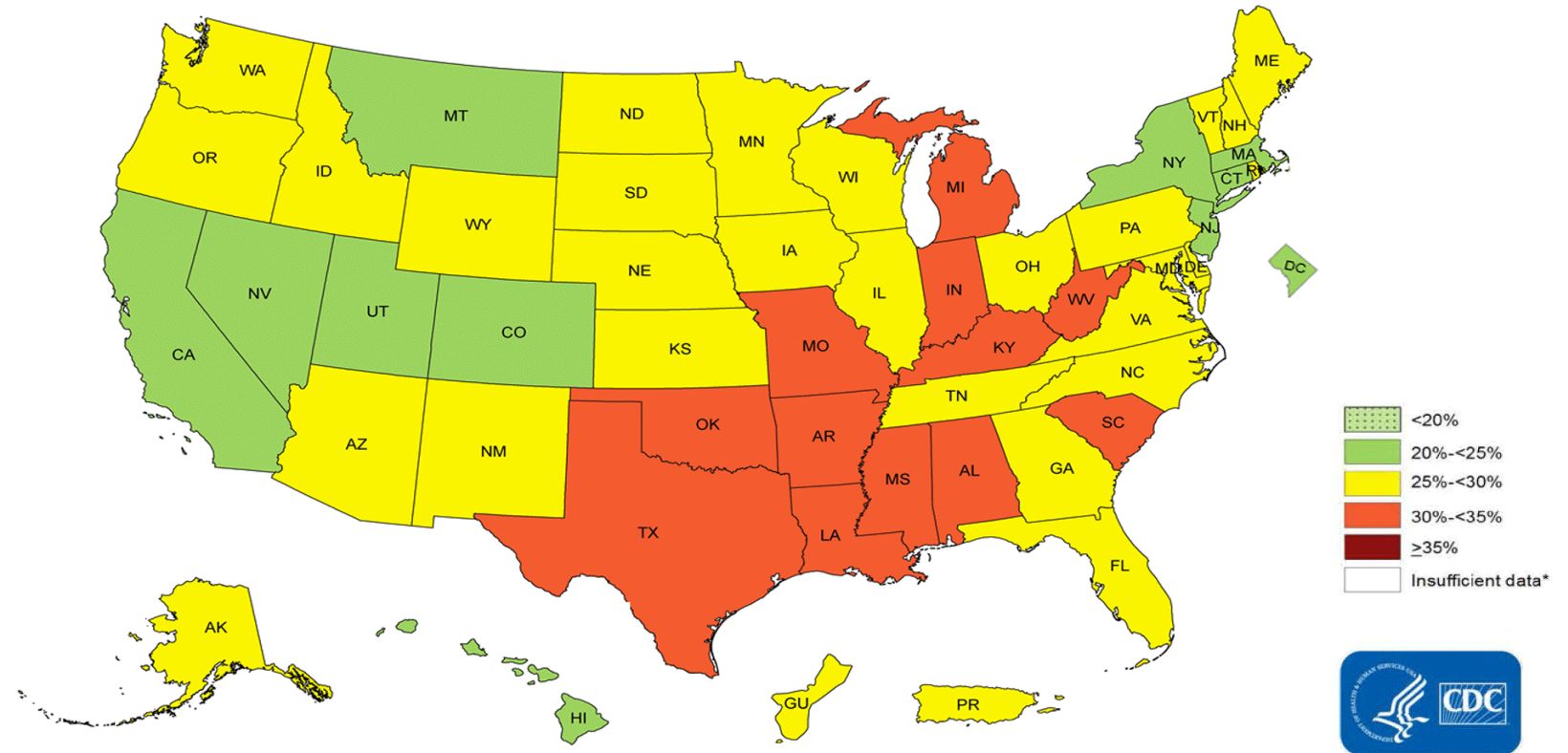


State of Obesity

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

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

2011 2012 2013 2014 2015 2016 2017 2018 2019

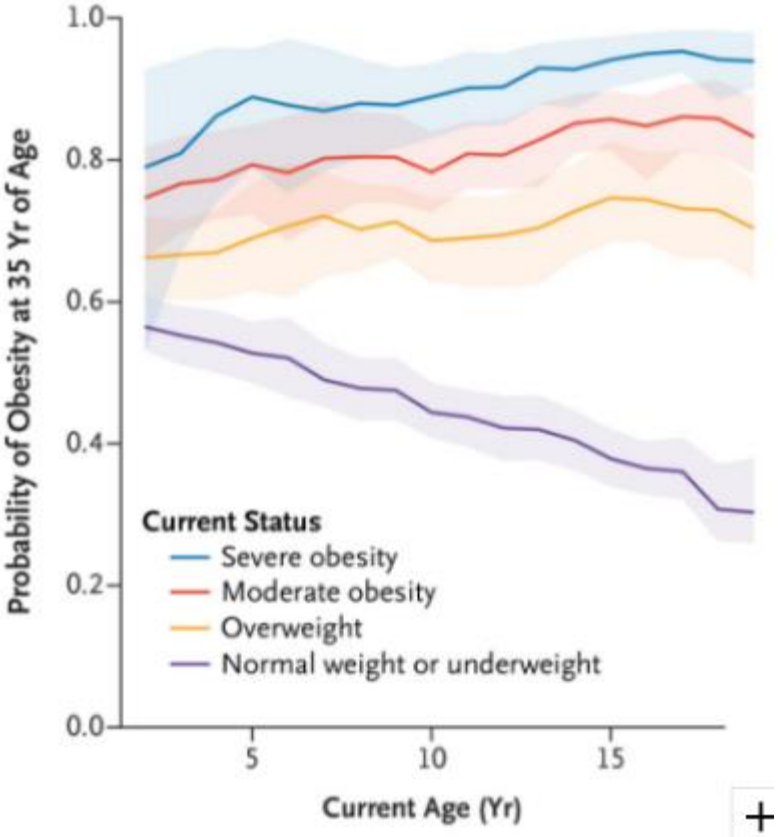


*Sample size <50 or the relative standard error (dividing the standard error by the prevalence) ≥ 30%.

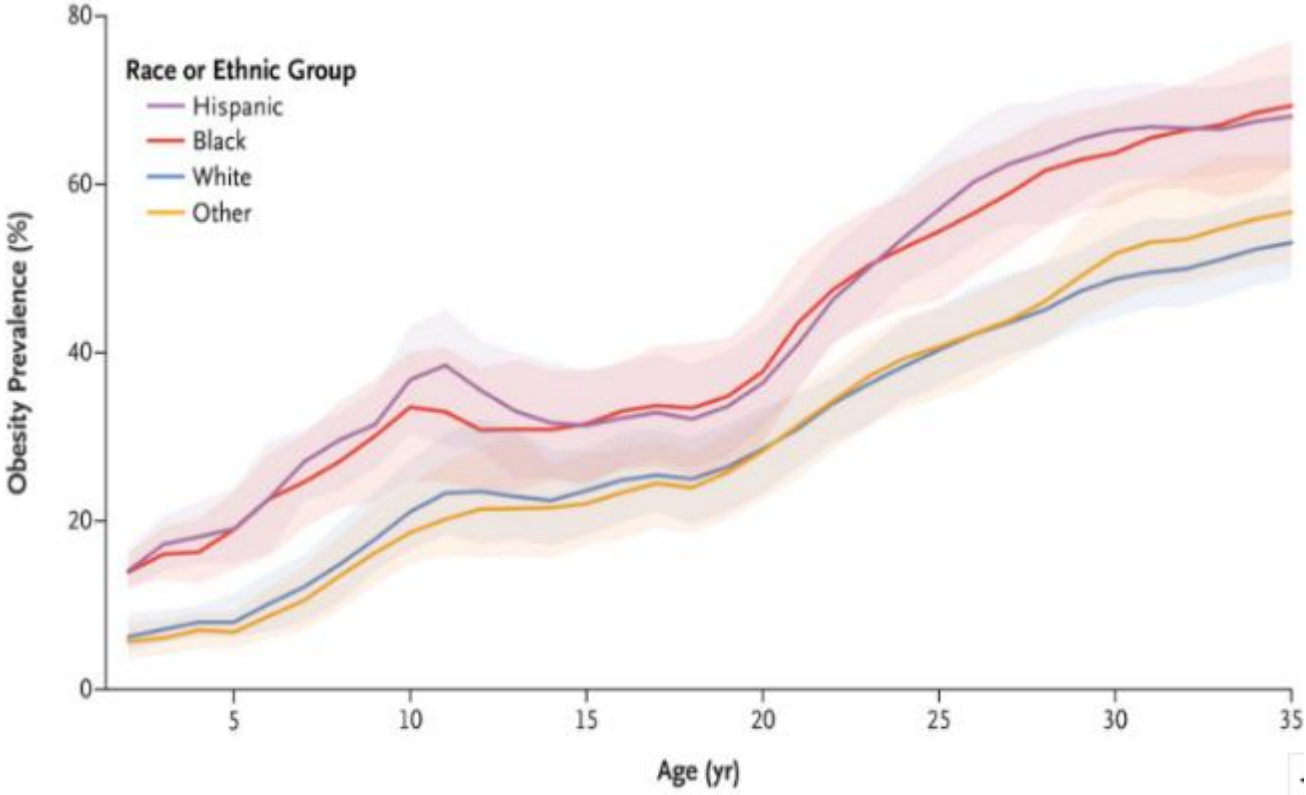


Adult obesity is a pediatric disease

Childhood Obesity Tracks into Adulthood

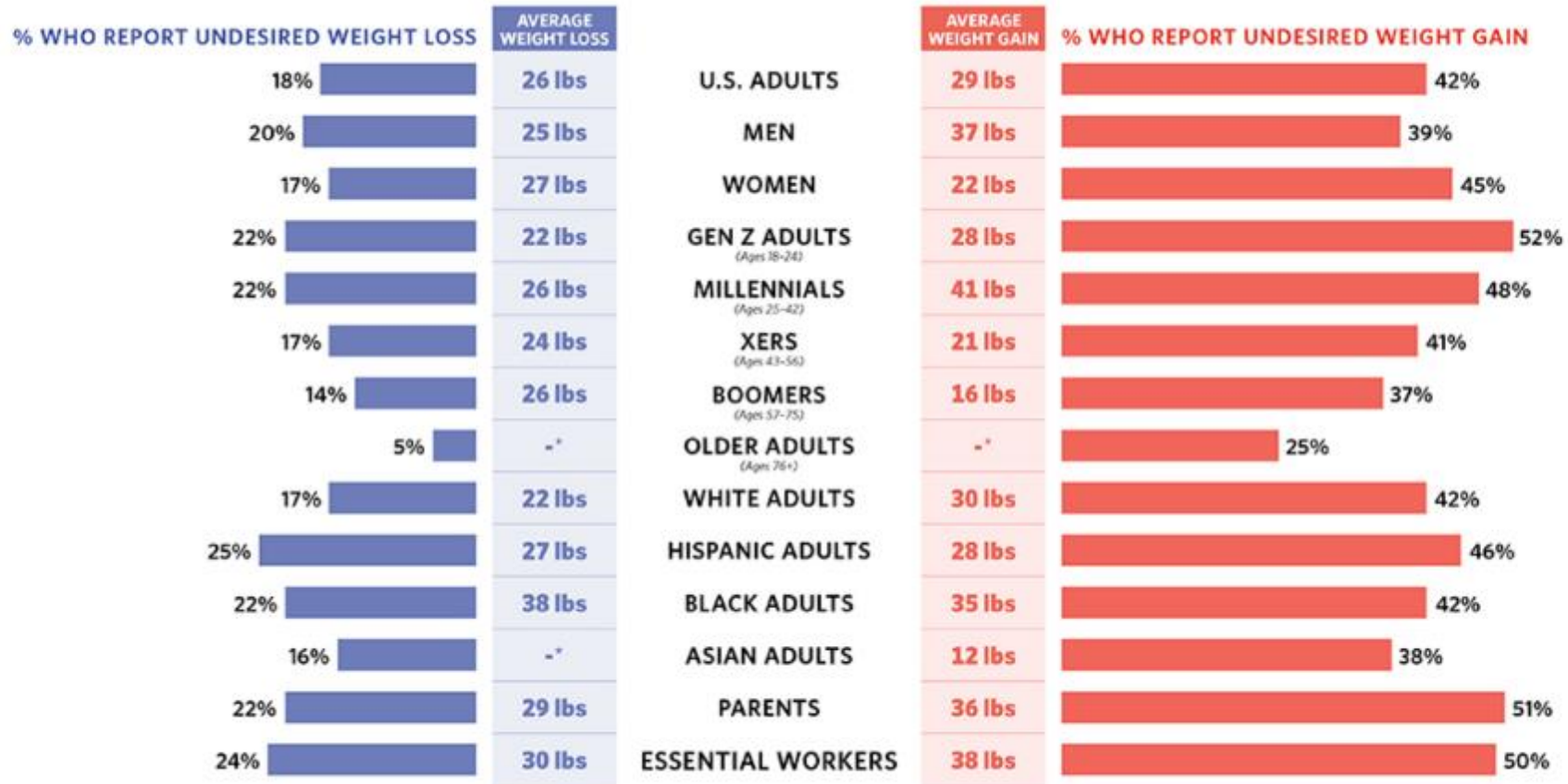


Significant Disparities Established at very young Age



Pandemic weight changes

JAMA scale data showed
1.5lb weight gain per month





Ultimate Challenge

% that believe obesity "is a disease"



65%

People with obesity

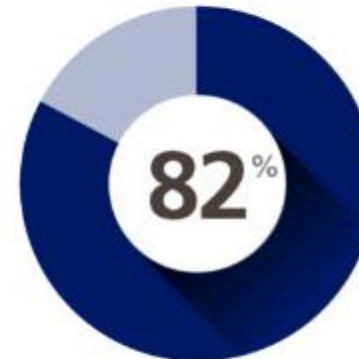


80%

Health care professionals



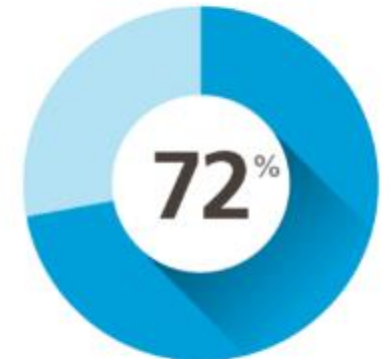
People with obesity



consider weight loss to be completely their own responsibility



Health care professionals



feel responsible to actively contribute to patients' weight loss efforts



Obesity

is a chronic treatable
multifactorial disease

- Obesity Definition
 - a disease in which excess body fat has accumulated to a level that may have an adverse effect on health.
 - Class 1. BMI 30-34.9
 - Class 2. BMI 35-39.9
 - Class 3. BMI ≥ 40

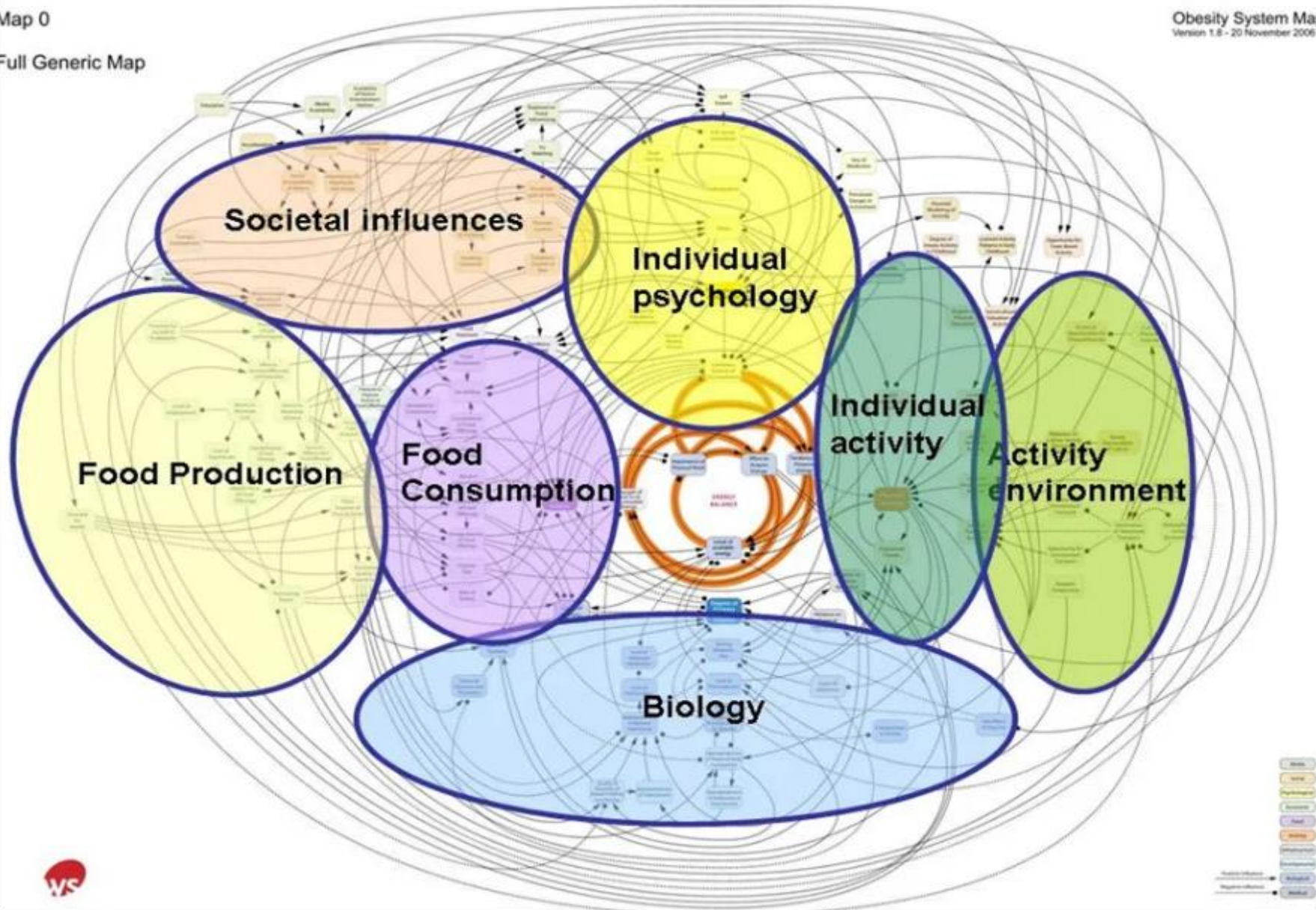


© World Obesity Federation

Map 0

Full Generic Map

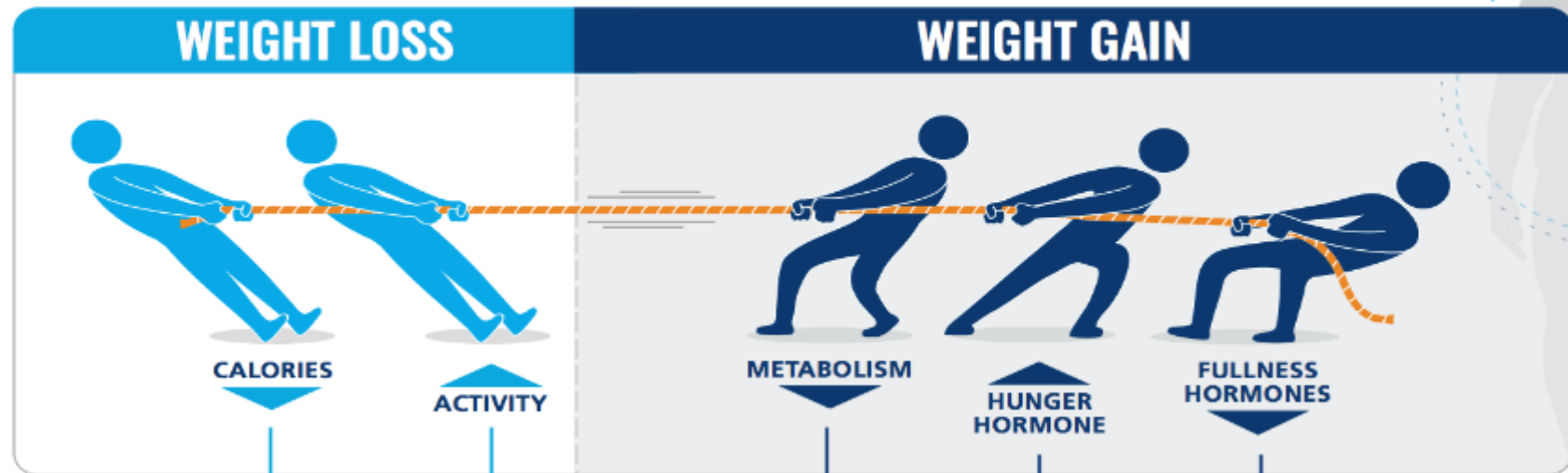
Obesity System Map
Version 1.8 - 20 November 2006



<https://obesitycanada.ca/snp/its-complicated-systems-science-and-obesity/>



The "Tug-of-War" of Weight Management



Decreased Calories

People may see results when they limit calories, by reducing the size of meals, for example.

Increased Activity

And find ways to increase physical activity, like taking regular walks around the block. But the body reacts to weight loss by trying to regain weight.

Slower Metabolism

Metabolism (burning calories) slows down and gets more efficient, requiring fewer calories to do its job.

Increased Hunger Hormone

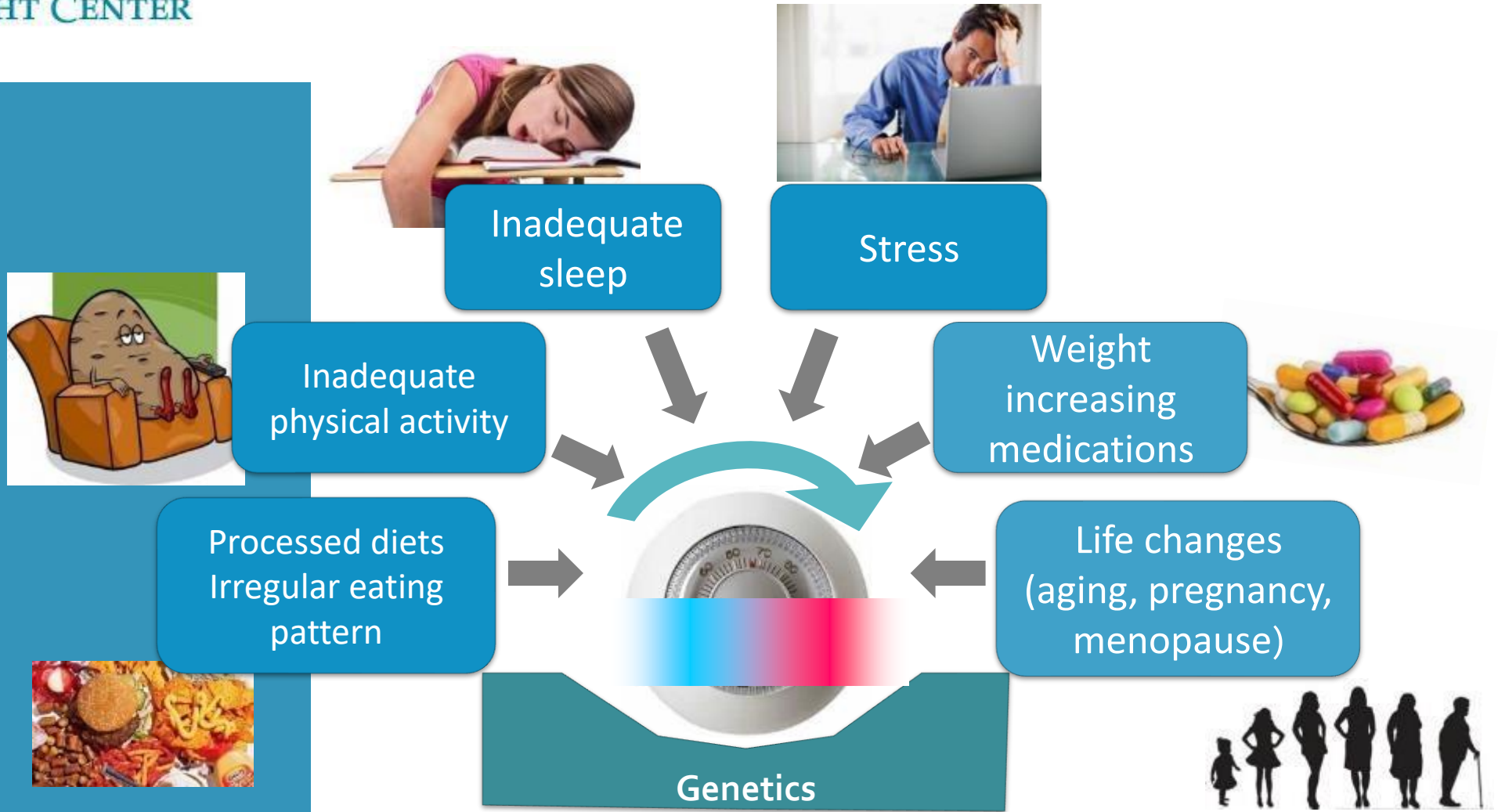
Hormonal signals can also change. The body increases a hunger hormone, called the ghrelin hormone, which tries to get you to eat more calories.

Decreased Fullness Hormones

And the hormones that tell the brain it's time to stop eating, the "feeling full" signals, decrease. *These are just some of the factors that make weight regain so common.*



Set Point Factors

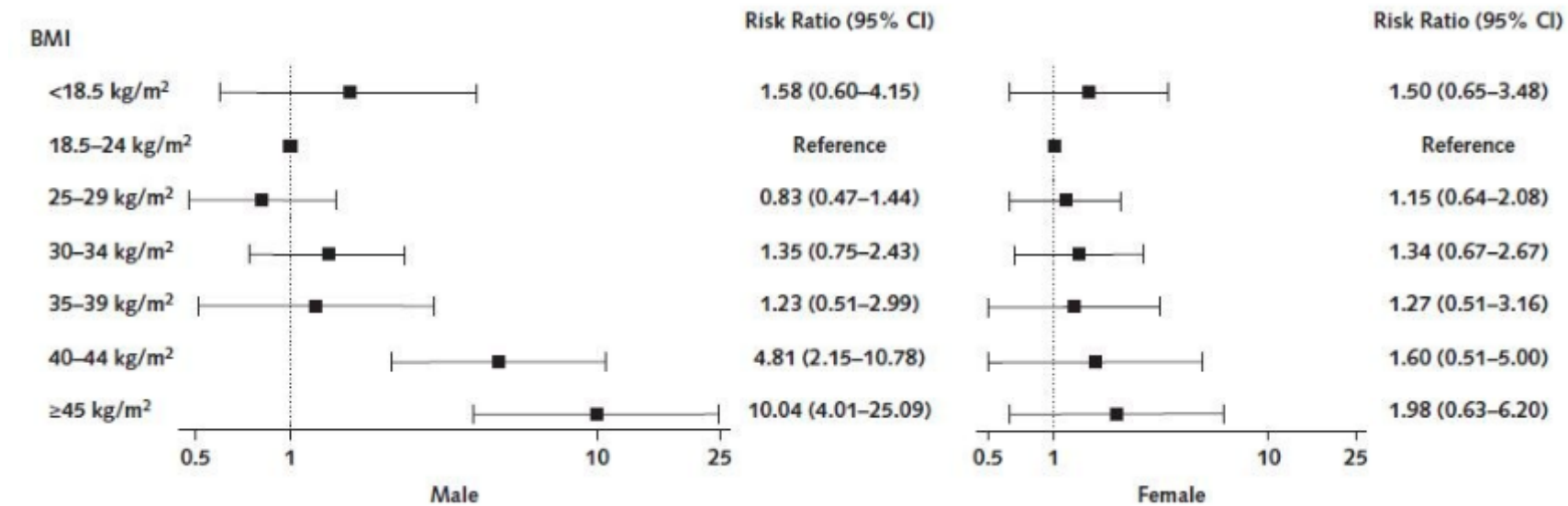
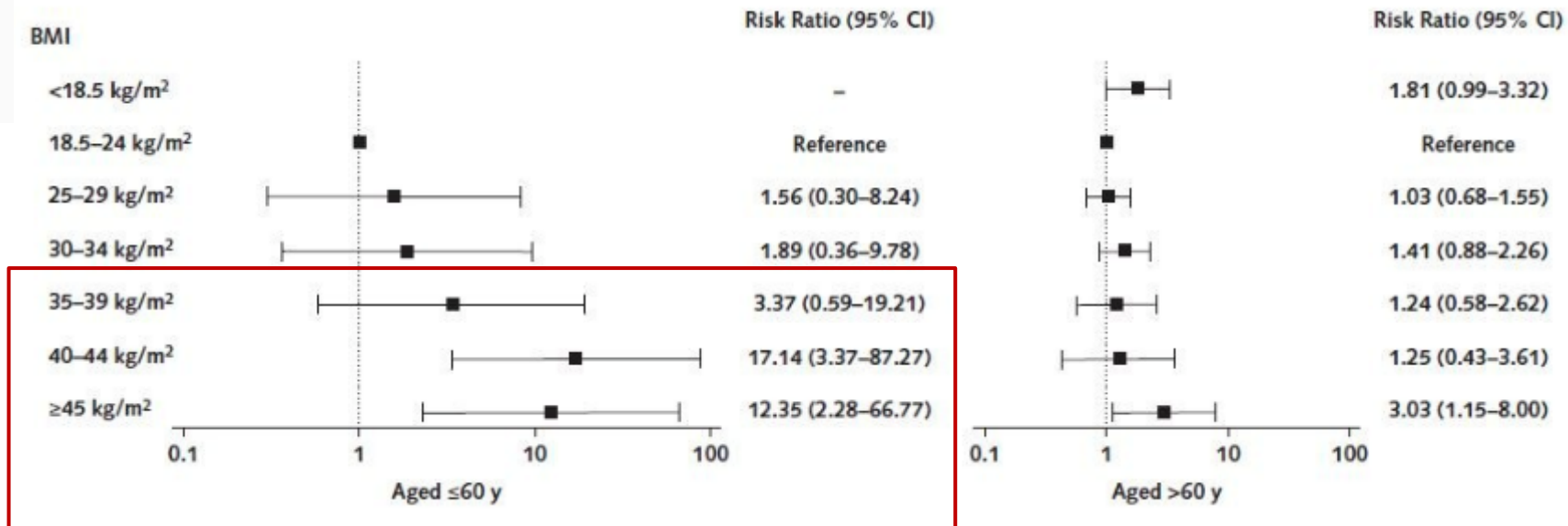


Obesity and Mortality Among Patients Diagnosed With COVID-19: Results From an Integrated Health Care Organization

Sara Y. Tartof, PhD, MPH, Lei Qian, PhD, MS, Yennis Hong, MPH, Rong Wu, MA, ... View all authors

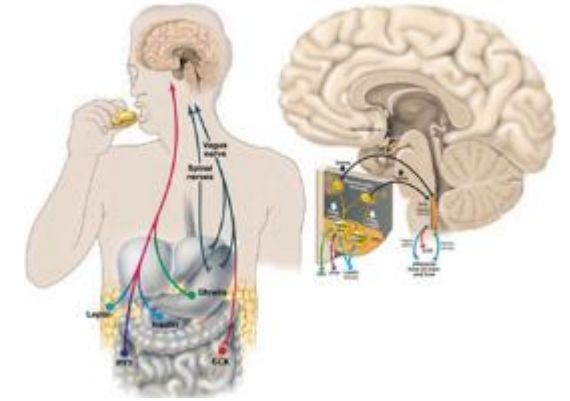
Annals of Internal Medicine

Risk of death from COVID-19





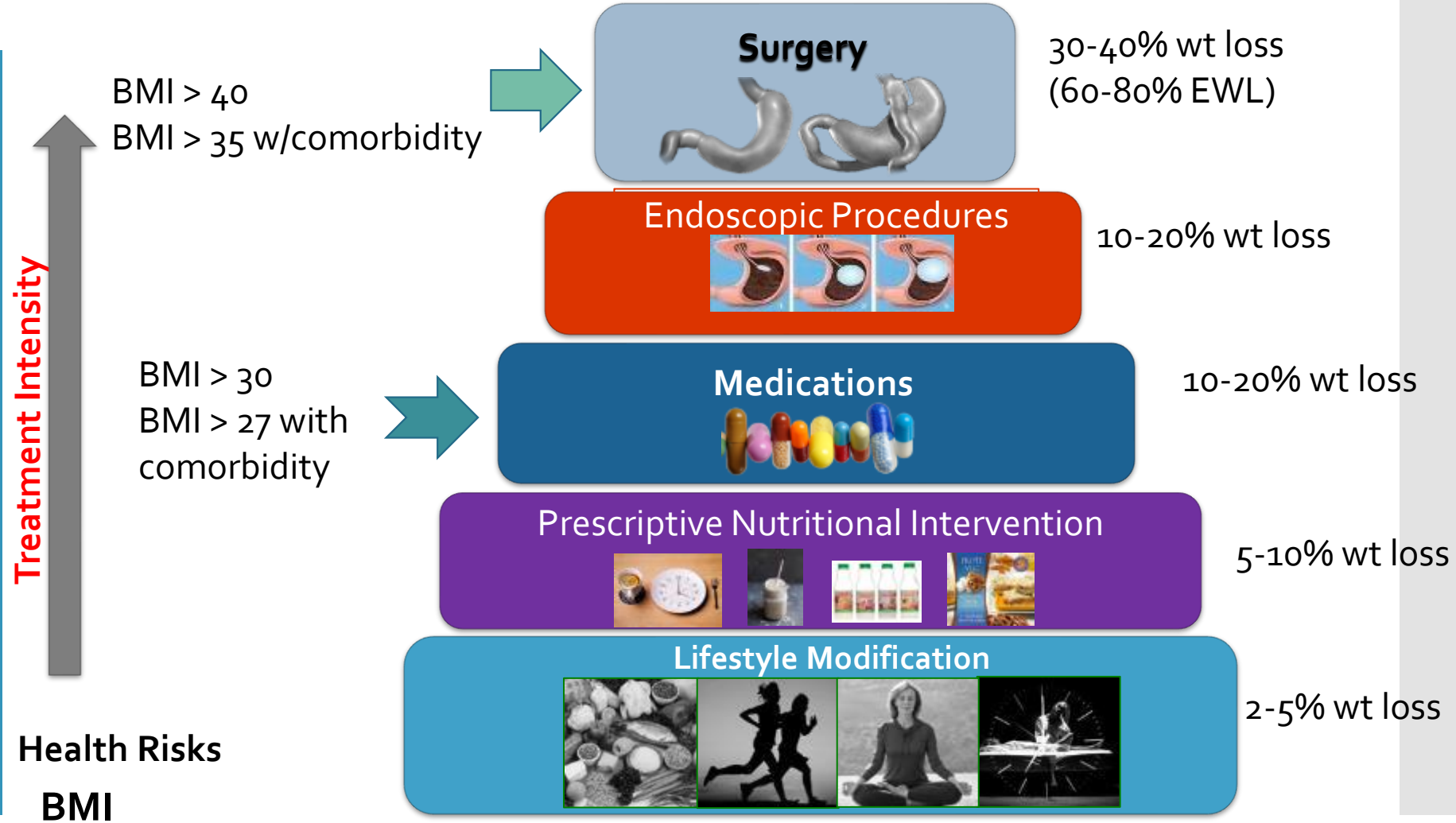
What works for obesity treatment?



- **S**tructure
 - Programs, meal replacements
- **A**ccountability
 - Programming, follow up visits, virtual care, technology
- **M**etabolic alterations to promote fat loss
 - **Surgery, medications**, dietary patterns, exercise intensity, sleep
- **E**nvironmental stimulus control
 - Meal replacements, CBT, Acceptance based therapy

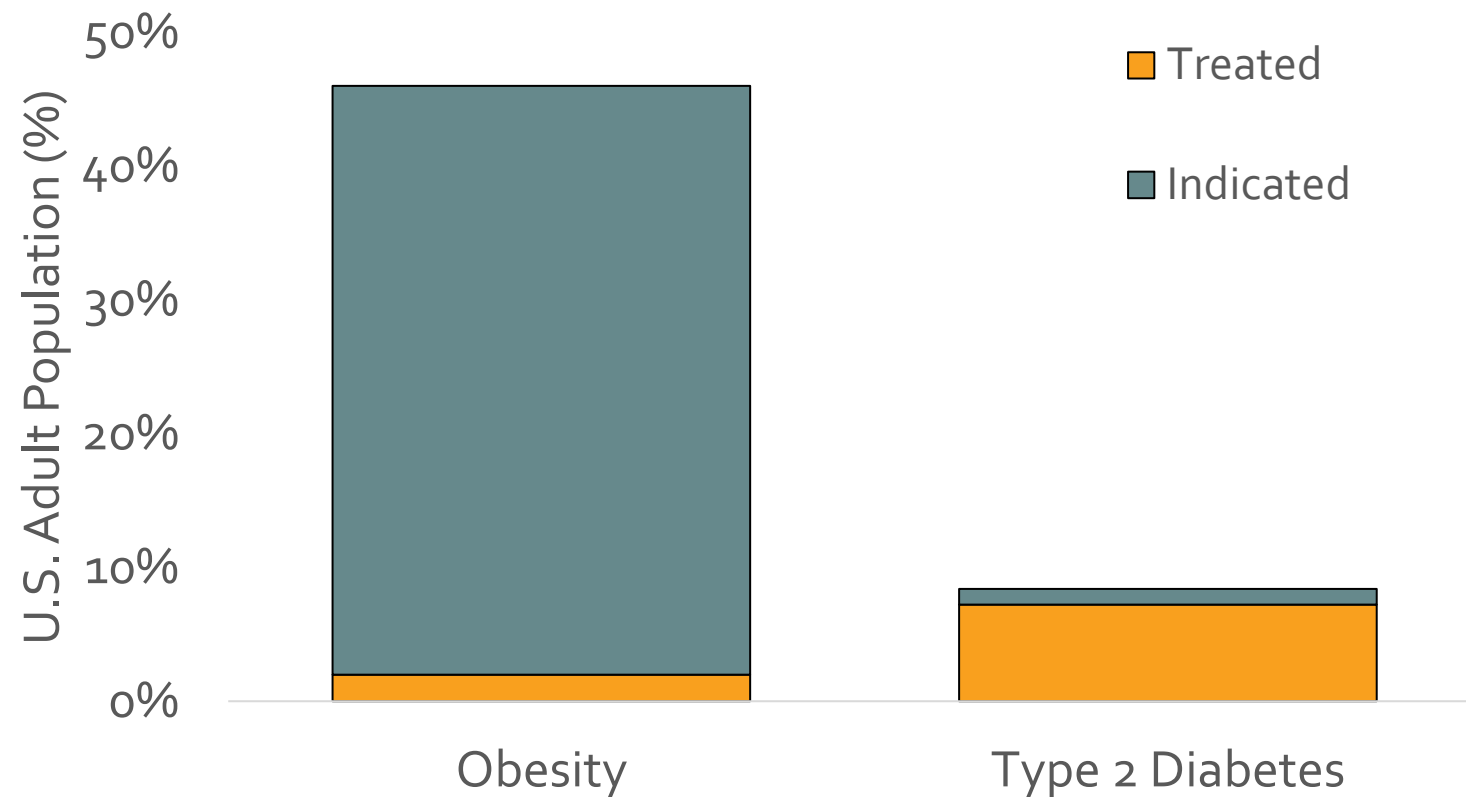
Obesity Treatment Pyramid

Treatment Challenges



Obesity is
undertreated


Relative Utilization of Anti-obesity vs Diabetes Pharmacotherapy



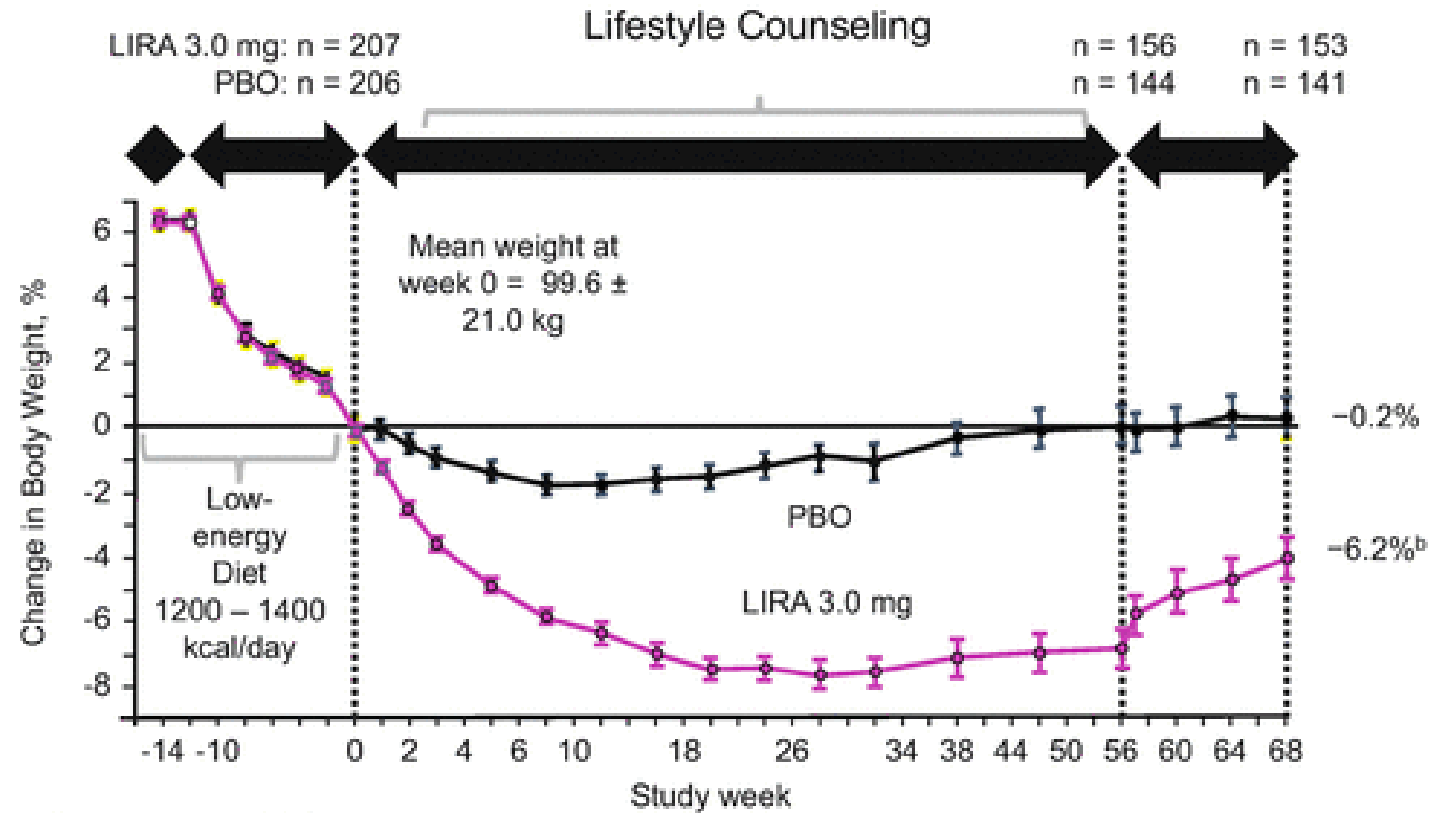
Thomas CE, et al. *Obesity*. 2016;24:1955-1961.



Weight maintenance and additional weight loss with liraglutide after low-calorie-diet-induced weight loss: The SCALE Maintenance randomized study

T A Wadden , P Hollander, S Klein, K Niswender, V Woo, P M Hale & L Aronne on behalf of the NN8022-1923 Investigators⁸

International Journal of Obesity 37, 1443–1451 (2013) | [Download Citation](#)

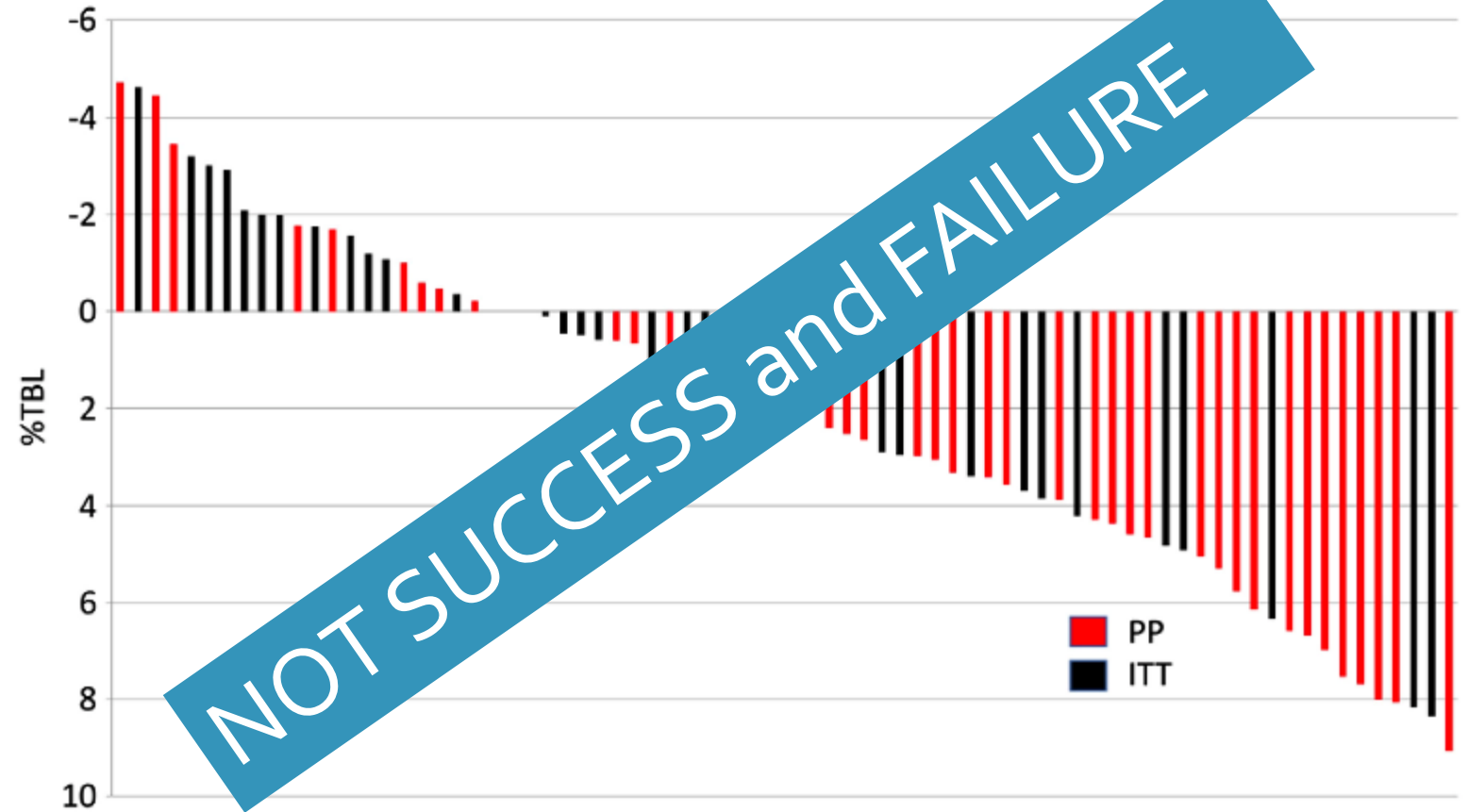


LIRA, liraglutide; PBO, placebo.

P < 0.0001 at week 56 for liraglutide vs. placebo



Responders and non- responders





Pediatric obesity treatment: age 12 and above

- Surgery if $> 140\%$ of 95%tile BMI
- Earlier surgery in adolescence better outcome than waiting until adults
- Only a few FDA approved options
 - Liraglutide 3mg as of this month!
 - Orlistat for many years but side effects are challenging
 - Benzphetamine (stimulant side effect issues)





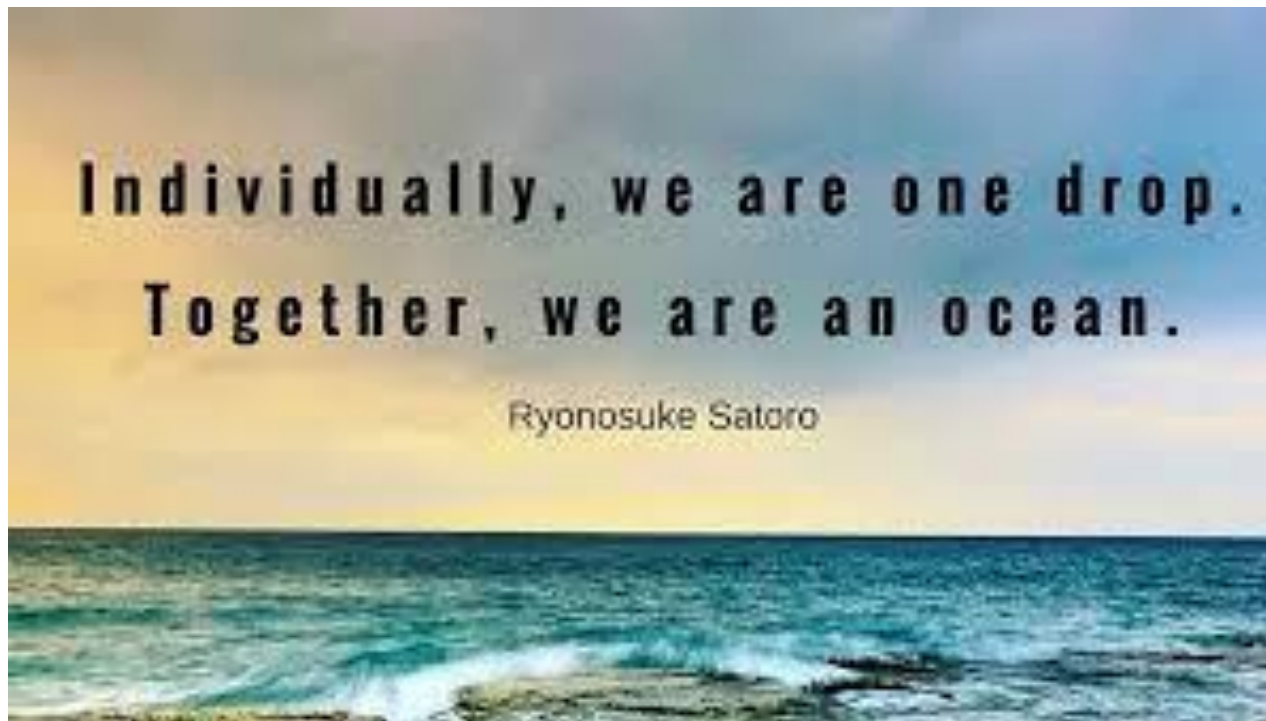
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Call to Action!

Individually, we are one drop.
Together, we are an ocean.

Ryunosuke Satoro





What insurers CAN DO:

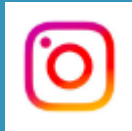
- Include anti-obesity medications, surgery and lifestyle support programs as a standard benefit given obesity is a disease.
- Cover the diagnosis of obesity for physician visits
- Consider altering prior authorization restrictions to improve access to care and decrease cost of care.
 - We employ 3 FTE to process PAs and they all are approved
- Educate on the disease of obesity to members, develop population health outcome tracking systems.
 - It's your chemistry, NOT your character!
- Work to reduce weight bias and stigma
 - Use person first language: people with obesity, not obese people
- Support TROA (Treat and Reduce Obesity Act) and local Medicaid coverage for obesity treatment
- Partner with the Obesity Action Coalition

Thank YOU!

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Obesity Treatment Outcomes



Weight loss %	% of patients in behavior programs (WW, IBT)	% of patients with surgery at 10 years ³	% patients on liraglutide 3mg (Saxenda©) Plus IBT	% patients on semaglutide 2.4mg weekly ¹	% patients on phentermine/topiramate 15/92mg (Qsymia©)	% patients on bupropion/Naltrexone (Contrave©) (Plus IBT)
> 5%	48% ²	96.6%	63% (74%) ⁵	90%	67%	42% (66%) ⁴
> 10%	25% ²		33% (52%) ⁵	75%	47%	21% (41%) ⁴
> 15%	12% ⁵		(36%) ⁵	56%	32%	10% (29%) ⁴
> 20%	10% ³	72%		36%	15%	
> 30%	4% ³	40%				

1. Wadden T, Bailey TS, Billings LK, *et al.* Semaglutide 2.4 mg and Intensive Behavioral Therapy in Subjects with Overweight or Obesity (STEP 3). Presented at the 38th Annual Meeting of The Obesity Society (TOS) held at ObesityWeek®, November 2–6, 2020 [Oral 084].

2. *Lancet*. 2011 Oct 22; 378(9801): 1485–1492.

3. *JAMA Surg*. 2016 Nov 1;151(11):1046-1055.

4. *Obesity (Silver Spring)*. 2011 Jan; 19(1): 110–120.

5. *Obesity (Silver Spring)*. 2019 Jan;27(1):75-86



Support for Your Organization: Implementation Tools

View the following list of materials to learn how to implement chronic weight management benefit programs.

Quickly share several resources with others by using the "email" button below.

Calculate the cost of obesity

Use the metrics below to analyze the financial impact obesity has on absenteeism and presenteeism in your organization to determine the importance of managing this disease

▶ If you do not know the breakdown of your workforce's BMI, consider filling in only the information for Class I to create a benchmark. If you know the cost of obesity per employee in your organization, replace the approximate costs with your company-specific numbers for a more accurate representation.

OBESITY | The approximate cost of obesity in your organization

	YEAR			YEAR		
	CLASS I (BMI 30-34.9 kg/m ²) ^a	CLASS II (BMI 35-39.9 kg/m ²) ^a	CLASS III (BMI ≥40 kg/m ²) ^a	CLASS I (BMI 30-34.9 kg/m ²) ^a	CLASS II (BMI 35-39.9 kg/m ²) ^a	CLASS III (BMI ≥40 kg/m ²) ^a
	\$ 3,709	\$ 4,329	\$ 4,726	\$ 3,709	\$ 4,329	\$ 4,726
	# employees	# employees	# employees	# employees	# employees	# employees
MALE COSTS ^{b,a}	\$0	\$0	\$0	\$0	\$0	\$0
	\$ 4,261	\$ 4,981	\$ 5,315	\$ 4,261	\$ 4,981	\$ 5,315
	# employees	# employees	# employees	# employees	# employees	# employees
FEMALE COSTS ^{b,a}	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COSTS	\$0	\$0	\$0	\$0	\$0	\$0