Obesity Management in your Practice: Simple Recommendations to Improve Patient Care
By Dr. Sasha High FRCPC ABOM, High Metabolic Clinic

Obesity is a chronic disease

Obesity is a chronic and often progressive disease. Managing obesity is a lifelong process similar to other chronic diseases. Obesity Canada defines obesity as a "*complex chronic disease in which abnormal or excess adiposity impairs health, increases the risk of long-term medical complications and reduces lifespan.*"

- Decreases life expectancy
- Impairs normal functioning of body
- Can be caused by genetic factors

1 in 4 Canadians have obesity

BMI > 40 associated with a reduction in life expectancy of 8-10 years (an entire decade!)

Weight Bias and Stigma

70% of people living with overweight and obesity state that they experience stigma from healthcare providers.

Bias and stigma has a tremendous impact on the person with obesity. Many of these patients have been stigmatized for a long period of time.

Strategies to Approach the Topic of Weight

- Address your patient's other health concerns first
- Ask permission to discuss weight: "*Would it be alright if we discussed your weight today?"*
    - and ask permission to weigh the patient
- Avoid judgmental language ("fat", "obese", "unhealthy weight", "ideal weight", "weight problem"). Use patient-centred language.

The Brain's Role in Controlling Eating

1. Homeostatic control - hypothalamus, AgRP and POMC neurons - "eating for energy needs"
2. Hedonic eating - mesolimbic pathways - "eating for pleasure"
3. Executive control - frontocortical pathways - "decisions around what, how and when"

   All three areas have cross-talk via endocrine signalling. Brain receives signalling from periphery through hormonal messages from small intestine and adipose tissue.

Hedonic signalling can override homeostatic eating as well as cognitive function as most of the time the pre-frontal cortex is on auto-pilot and needs to be activated.

Cravings: Cravings is a learned behaviour driven by our genetic drive to consume calorie-dense foods, and the consumption of these foods producing pleasurable and memorable responses that cause us to seek more and more.

Psychoeducation of Patients

- Involves countering weight bias, sense of learned helplessness, or unrealistic expectations
- "I see that you've tried many different commercial diets. It sounds like you've really worked hard at this. Can I suggest that you actually **haven't received the right treatment** for the medical condition that you're dealing with?"
- ""Remember when we talked about the body's defense against weight loss? You've lost 20% of your body weight. Keeping your weight down from your highest weight is a **success** because your body is always trying to go back up. Remember - weight stability is actually the goal!"

Pillars of Obesity Treatment

1. Cognitive behavioural
2. Pharmacological
3. Surgical

Goal of Obesity Treatment: to help patients achieve the healthiest lifestyle that is enjoyable and sustainable (nutrition, exercise, sleep, stress) in order to achieve longterm weight management.

Example of Cognitive Behavioural Skills

- Self-monitoring
- Awareness of wanting
- Mindful eating
- Practising restraint
- Developing resilience in the face of setbacks
- Goal setting and action planning
- Problem solving (self-efficacy)
- Intrinsic motivation
- Values-guided committed action
- Psychotherapy (CBT, ACT, DBT)
    - Modify maladaptive thoughts about weight/shape/eating

- Challenge assumptions and unhelpful thinking patterns
- Enhance self-efficacy and coping skills

***Don't prescribe lifestyle interventions.**

Have patients set their own goals for behaviour change.

Pharmacotherapy indications

- Indicated for chronic weight management for individuals with:
  - BMI ≥30 kg/m2,
  - or ≥27 kg/m2 with comorbidities associated with excess body fat (e.g. type 2 diabetes, hypertension, dyslipidemia)

Category	BMI (kg/m²)
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Underweight	< 18.5
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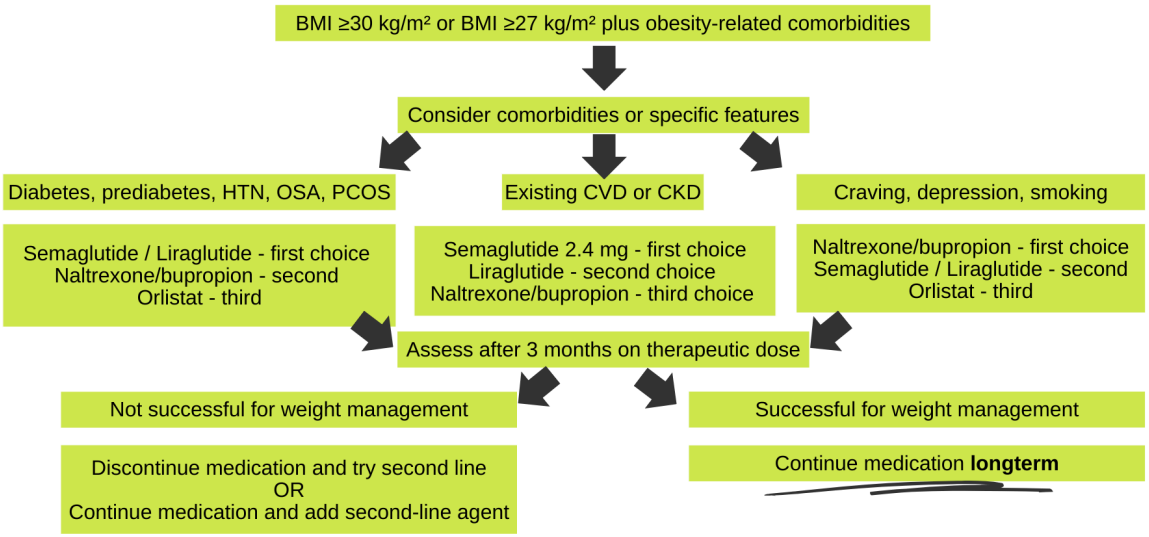
1. Rueda-Clausen C, et al. Canadian Adult Obesity Clinical Practice Guidelines: Assessment of People Living with Obesity. 2020. Available at: https://obesitycanada.ca/guidelines/assessment. Retrieved February 28, 2023.
2. Obesity Canada. Canadian Adult Obesity Clinical Practice Guidelines: Clinical Recommendations Quick Guide. 2020. Available at: http://obesitycanada.ca/wp-content/uploads/2020/11/CPG-Quick-Guide-English.pdf. Retrieved February 28, 2023.

- 4 Medications currently approved for chronic obesity management in Canada:
  - **Orlistat** (**Xenical**®)
  - **Liraglutide** (**Saxenda**®) 3.0 mg sc daily
  - **Naltrexone/bupropion** (**Contrave**®)
  - **Semaglutide** (**Wegovy**®) 2.4mg sc weekly

- 2025: **Tirzepatide** (Zepbound®) 2.5-15mg sc weekly

Pharmacotherapy algorithm



Pedersen SD, Manjoo P, Wharton S. Canadian Adult Obesity Clinical Practice Guidelines: Pharmacotherapy in Obesity Management. Published online August 4, 2020. Accessed August 4, 2020. https://obesitycanada.ca/guidelines/pharmacotherapy

In reality:

Pharmacotherapy algorithm IRL

Does this patient have private health insurance?

YES

On-label prescribing

Liraglutide 3.0mg (Saxenda)
$475/month

Contrave
$260/month

Semaglutide 2.4mg (Wegovy)
$400/month

NO

Semaglutide (Ozempic) 1mg*
$245/month

Tirzepatide (Mounjaro) 5-15mg*
$380-450/month for VIALS
($900 for PENS)

Wellbutrin/Naltrexone (Contrave)
$260/month

If financial barriers, consider **Metformin*** if underlying insulin resistance

Do they qualify for bariatric surgery?

off-label*

Secondary considerations:

Does this patient have a needle phobia?

Does the patient prefer once weekly to once daily administration?

How much weight would this patient benefit from losing?

Obesity pharmacotherapy needs to be continued longterm - even when patients reach weight maintenance or a “plateau”. Obesity is like every other chronic disease - treatment needs to be continued to maintain the weight lost otherwise regain is likely.

Obesity Management in your Practice: Simple Recommendations to Improve Patient Care

January 19, 2025

Sasha High MD FRCPC ABOM
High Metabolic Clinic

HIGH METABOLIC CLINIC

Faculty Disclosures

- Faculty: Sasha High MD

- Relationships with financial sponsors:
  - **Honoraria**: Novo Nordisk, Takeda, Bausch Health, Eli Lilly
  - **Ad Boards**: Novo Nordisk, Eli Lilly, Bausch Health
  - **Other**: Founder of the High Metabolic Clinic

This program has received financial support from the Novo Nordisk in the form of financial support.

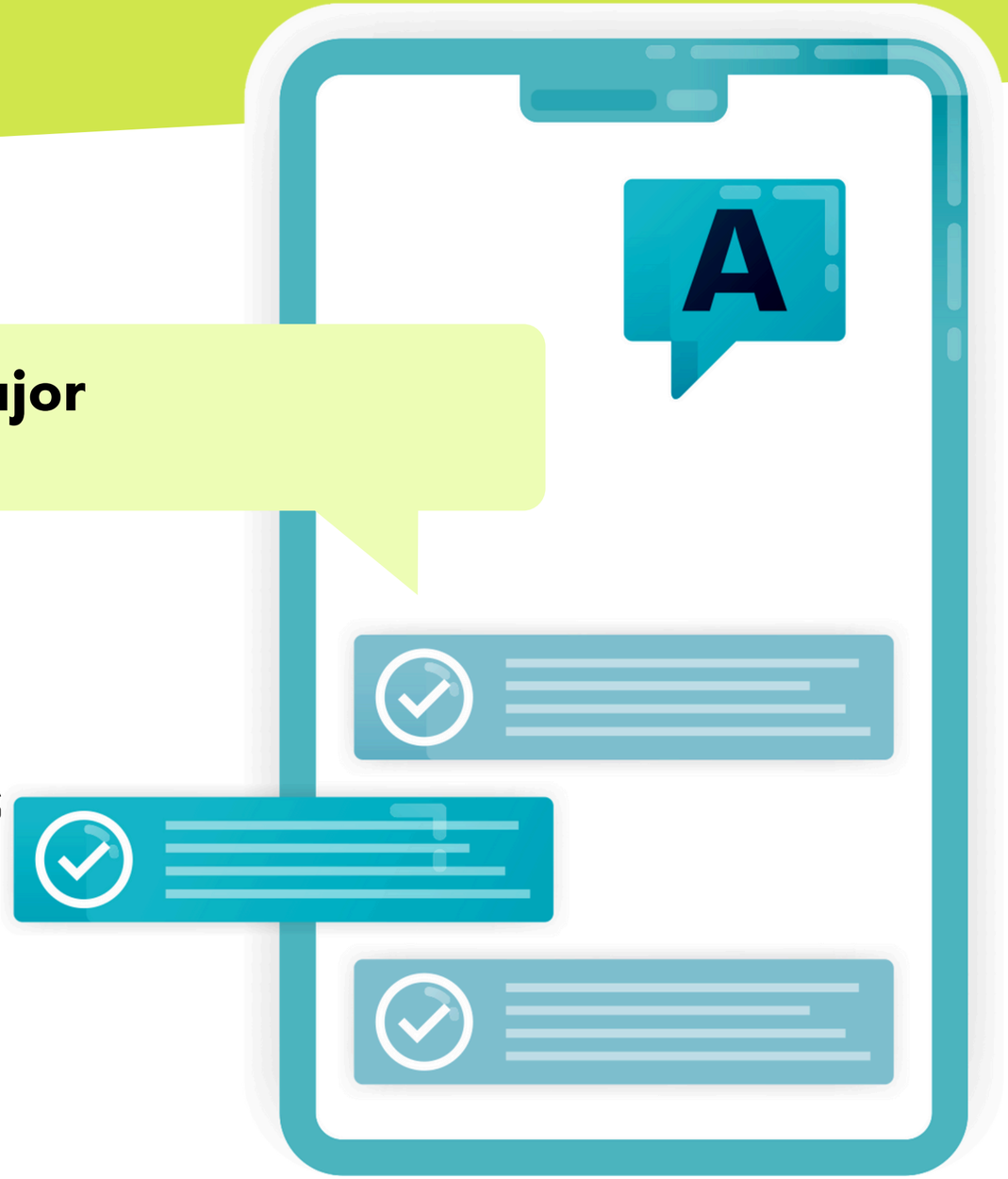
Objectives

1. High level overview of the **pathophysiology** of obesity
2. Provide **strategies for obesity management** in primary care, including **behavioural goals**
3. Individualize **obesity pharmacotherapy**

Polling Question

Q **What do you consider the top 2 major contributors of obesity?**

1. Inflammation
2. Poor willpower
3. Impaired reward circuits
4. Impaired body weight homeostasis
5. Impaired self-regulation
6. Calories in, calories out



The role of the brain in controlling eating

Homeostatic eating

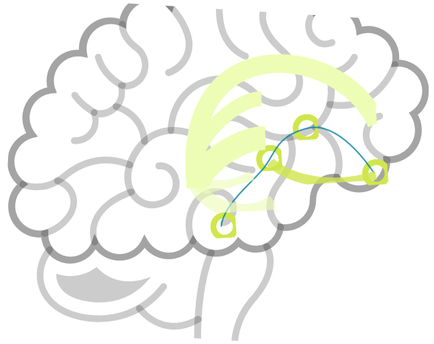
POMC neurons
decrease hunger

Ghrelin
increases hunger

Leptin
decreases hunger

GLP-1
increases satiety

Hedonic eating

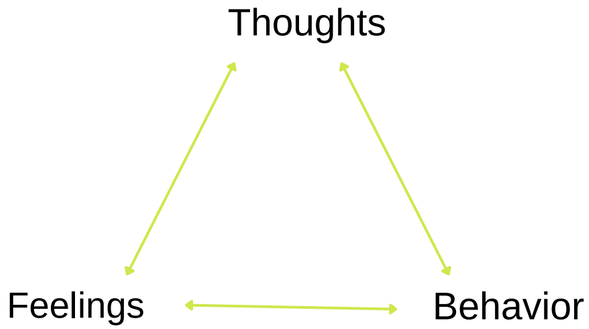


Mesolimbic pathways:

Dopamine:
the motivation/drive to eat

Opioid and cannabinoid receptors: the pleasure associated with food

Cognitive function

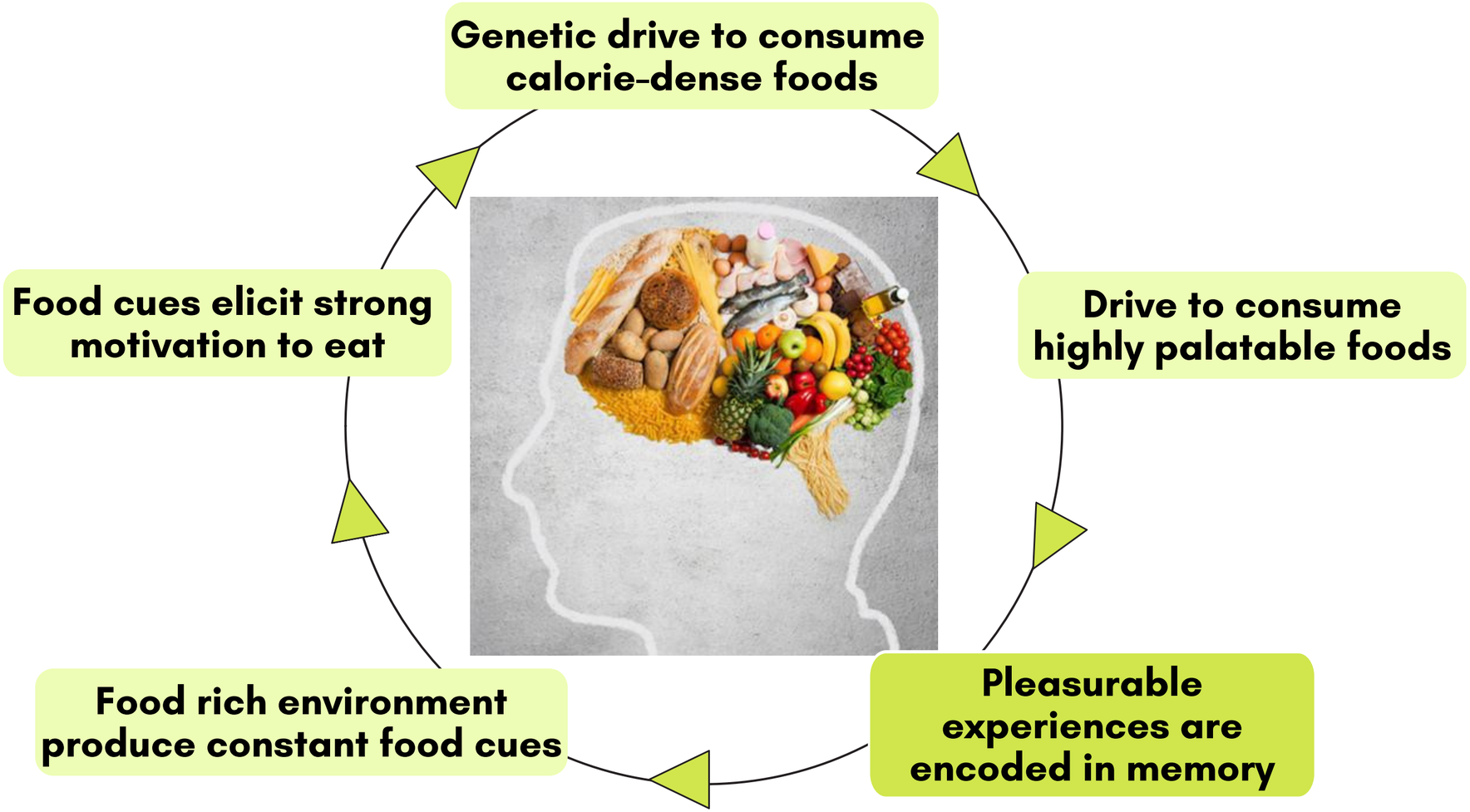


Prefontal cortex:
regulates eating behaviour and controls the decision to eat certain foods over others

Significant cross-talk mediated by endocrine signals

1. Reproduced from the Canadian Adult Obesity Clinical Practice Guidelines [The Science of Obesity. Lau, C.W., Wharton, S. 1-7, copyright notice] with permission from Obesity Canada/ Obésité Canada. 2. Berridge KC, et al. The American psychologist 2016; 71(8): 670-679

Cravings: a learned cycle of behaviour



In a food-scarce environment:
Responds to high fat and sugar foods
to aid survival

In a food-plentiful environment
Responds with reward-based eating behavior and cravings

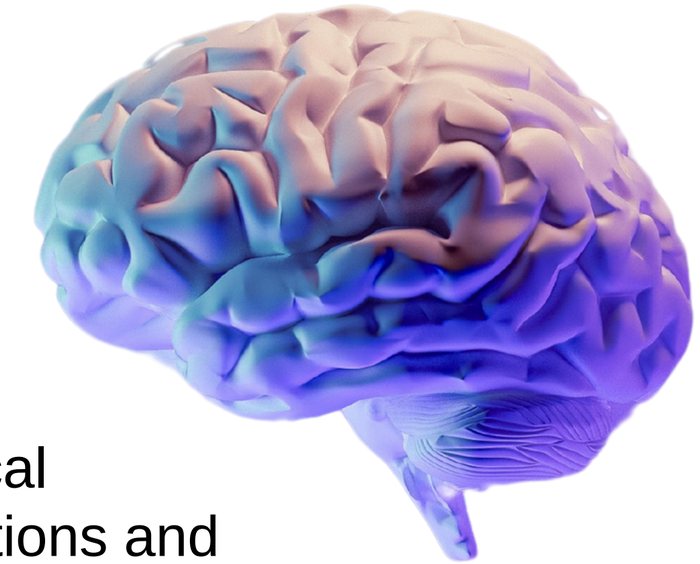
Sun W et al. Physiol Behav 2020;222:112878; Alonso-Alonso M et al. Nutr Rev 2015;73(5):296-307.

The pathophysiology of obesity is complex

Psychology

Genetics

Peripheral hormones

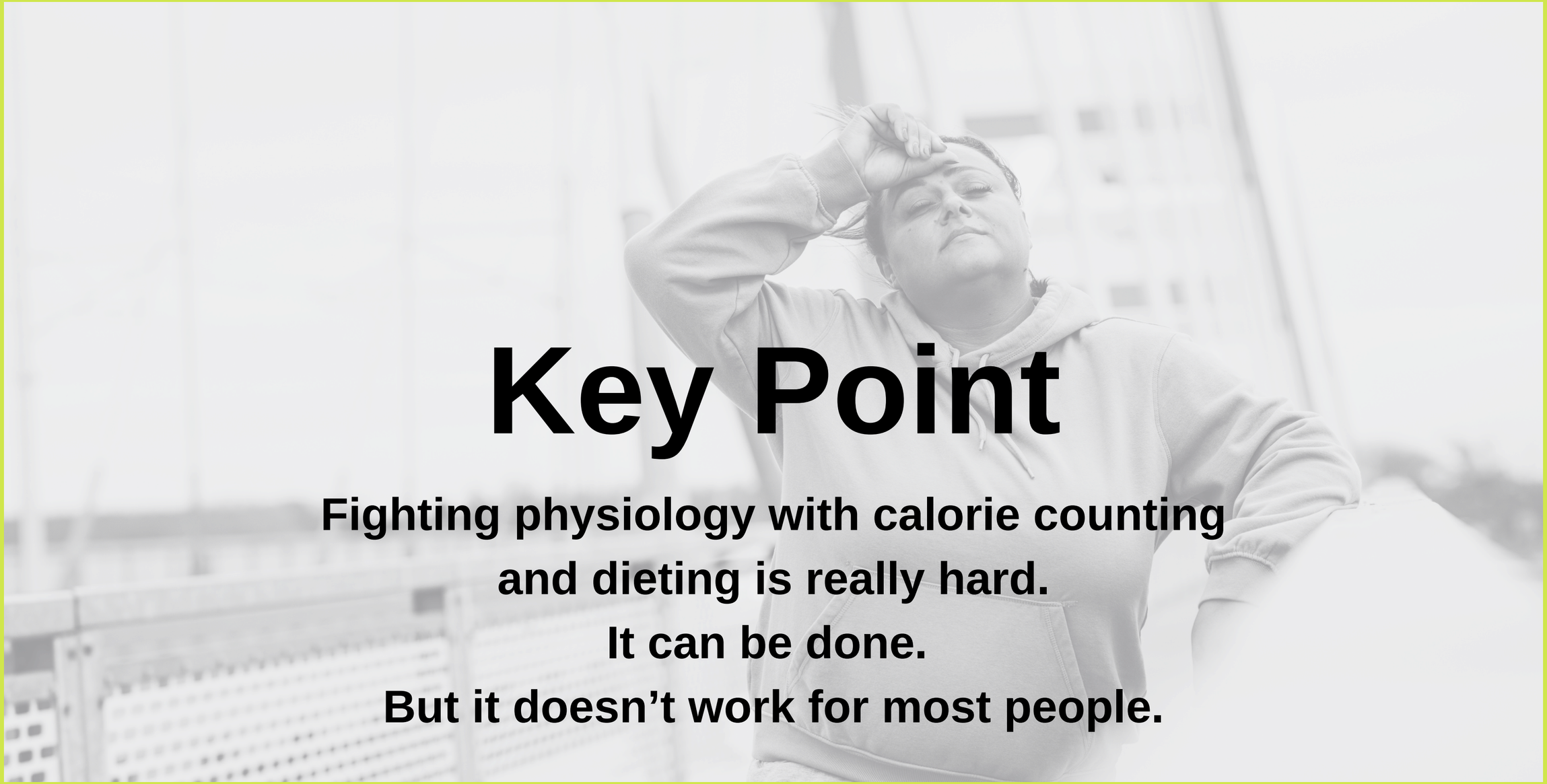


Hyperpalatable Food environment

Medical conditions and medications

Age, ethnicity, sex Menopause

Sociocultural factors



Key Point

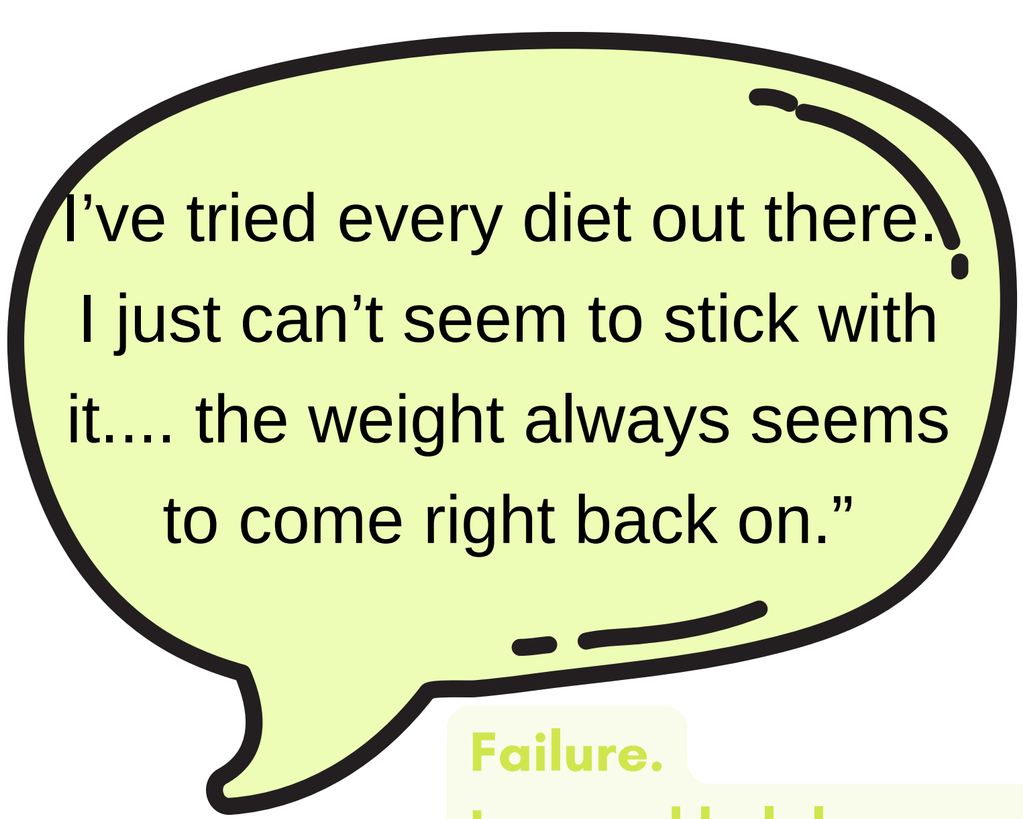
Fighting physiology with calorie counting and dieting is really hard.

It can be done.

But it doesn’t work for most people.

Psychoeducation involves countering a patient's own internalized weight bias

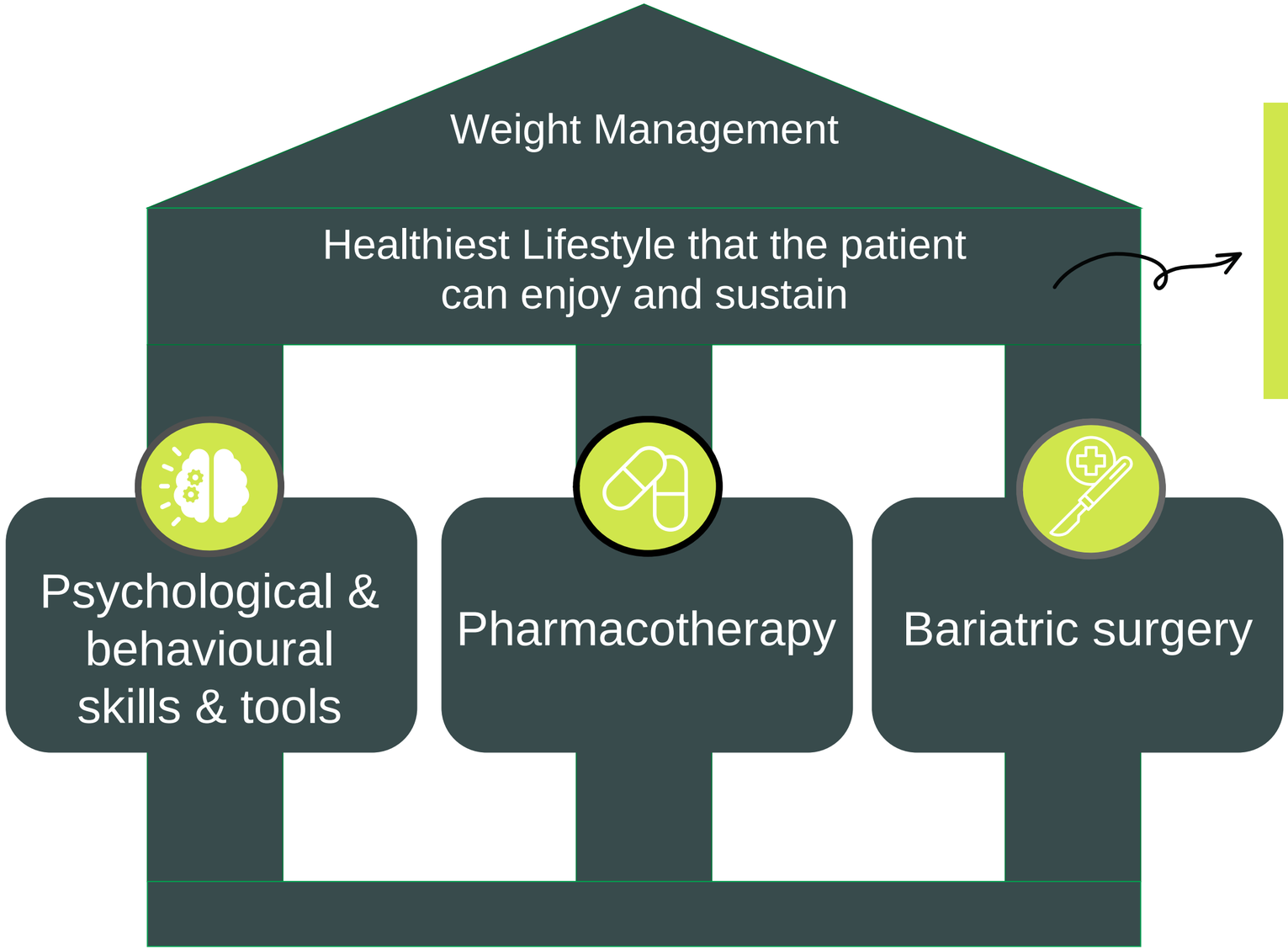
Listen for clues when a patient is sharing their Weight History.



Failure.
Learned helplessness.

Validation.
Countering bias & blame.

Pillars of Obesity Treatment



Lifestyle Pillars:

1. Nutrition
2. Physical activity
3. Sleep
4. Stress

Psychological & behavioural skills and tools

Filling the void between

KNOWING

and

DOING

"I *know* what I should be doing... I'm just *not doing it*."

Psychological & behavioural skills and tools

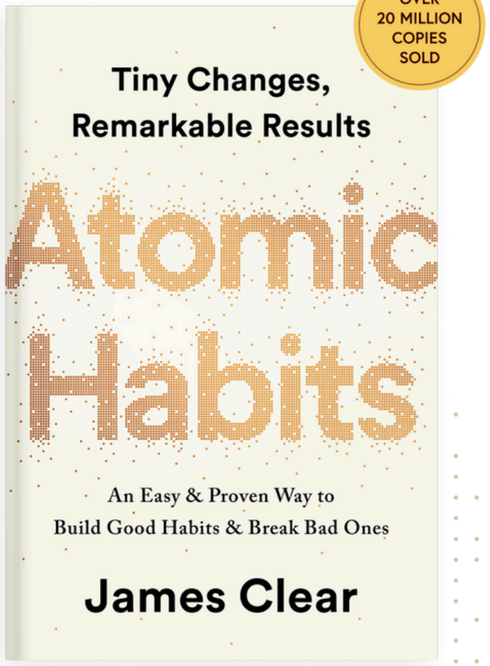
A healthier lifestyle is the RESULT of applying behavioural skills and tools that go beyond willpower

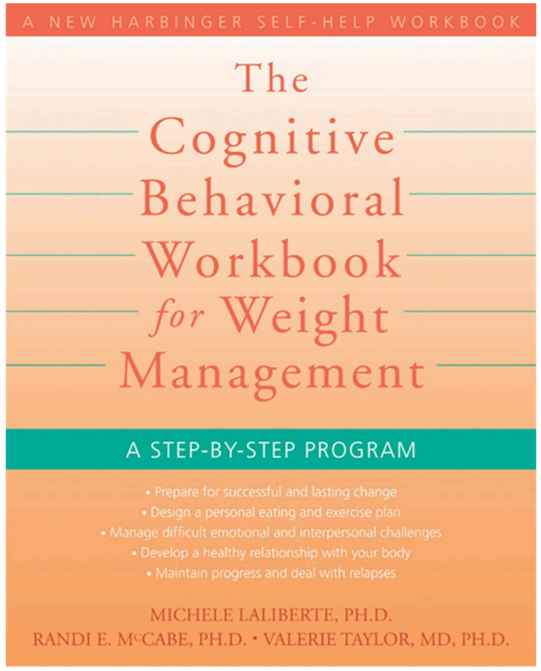
- Self-monitoring
- Awareness of wanting
- Mindful eating
- Practising restraint
- Developing resilience in the face of setbacks
- Goal setting and action planning
- Problem solving (self-efficacy)
- Intrinsic motivation
- Values-guided committed action
- Psychotherapy (CBT, ACT, DBT)
  - Modify maladaptive thoughts about weight/shape/eating
  - Challenge assumptions and unhelpful thinking patterns
  - Enhance self-efficacy and coping skills

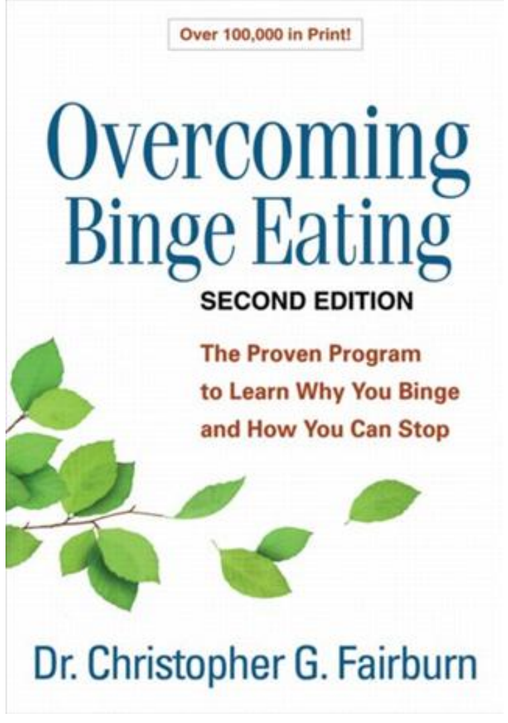
Most people **know** what they "**should**" be doing,

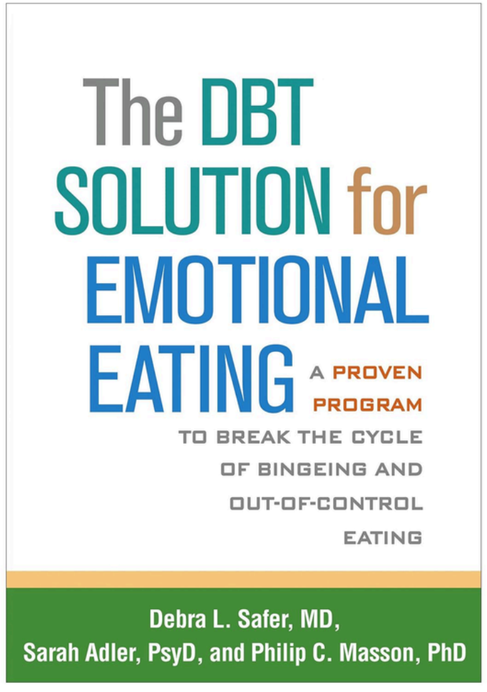
they need **skills** to build consistency, resilience, sustainability

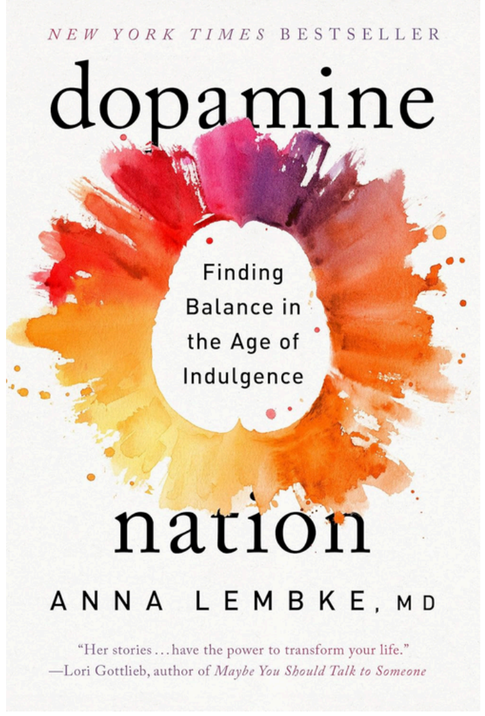
Books











Podcasts

Time Saving Tip

“I don’t have time to do CBT with my patients in my busy office!”

Psychoeducation can be as simple as countering internalized bias, affirming positive action, and helping patients set realistic goals in conversation.

WOOP + 4

1

WISH

“What is one thing you’d like to start working on this week? Or before your next appointment?”

2

OUTCOME

“Why is that important to you?”

3

OBSTACLE

“What do you think could get in the way of your goal?”

4

PLAN

“How would you like to set up a plan toward this goal?”

1 - 4

“How confident are you on a scale from 1 to 4 that you will accomplish this goal?”

+ SMART

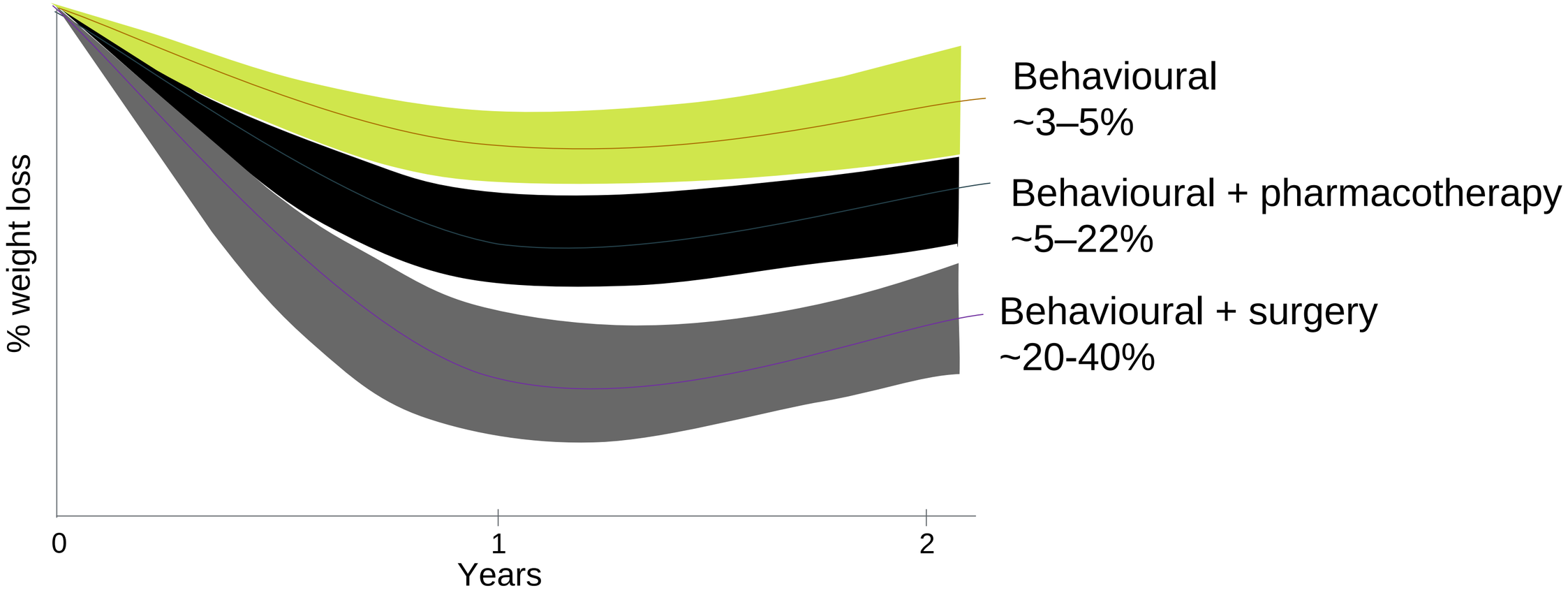
Practical Tip

Don’t prescribe lifestyle interventions.
Have patients set their own goals for behaviour change.

They will be much more likely to follow through.

***Set behaviour goals not weight loss goals*.**

Many patients will not achieve their weight management goals with behavioural changes alone



Modified from Lau et al. CMAJ 2007;176(8 suppl):Online-1–117

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Pharmacotherapy for obesity in Canada

*Off-label

Contrave

5-8%

Naltrexone/bupropion[1]
μ-opioid antagonist +
DA/NE reuptake inhibitor

Wegovy *Ozempic

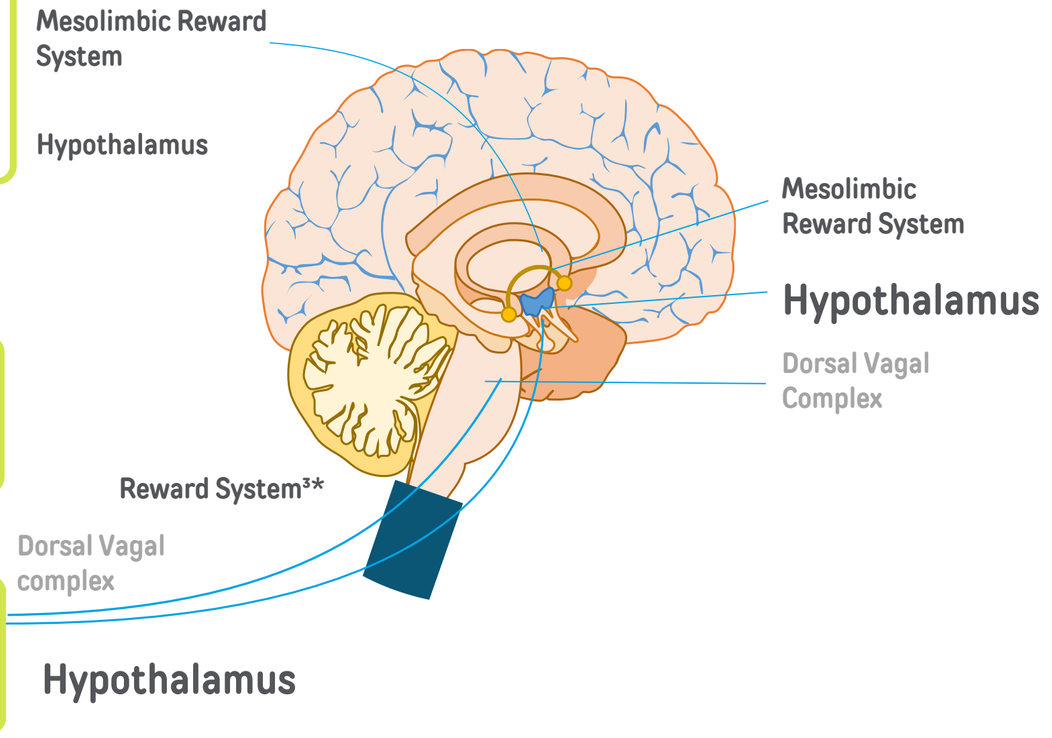
15-17%

Semaglutide
GLP-1 receptor agonist

Saxenda

8-10%

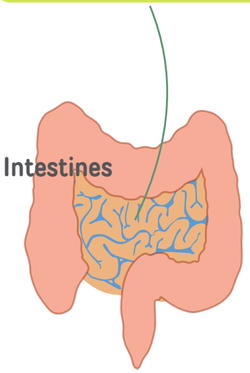
Liraglutide[2]
GLP-1 receptor agonist



3-5%

Xenical

Orlistat[4]
Lipase inhibitor



2025: Tirzepatide (Zepbound®) 2.5-15mg sc weekly *Mounjaro

Coming soon🤞.... Cagrisema, Retatrutide, Orforglipron, and more!

1. Ornellas T, Chavez B. P T. 2011;36(5):255–262; 2. Shah M, Vella A. Rev Endocr Metab Disord. 2014;15(3):181–187; 3. Reproduced from the Canadian Adult Obesity Clinical Practice Guidelines [The Science of Obesity. Lau, C.W., Wharton, S. 1-7, copyright notice] with permission from Obesity Canada/ Obésité Canada; 4. Yanovski SZ et al. JAMA. 2014;311:74-86.

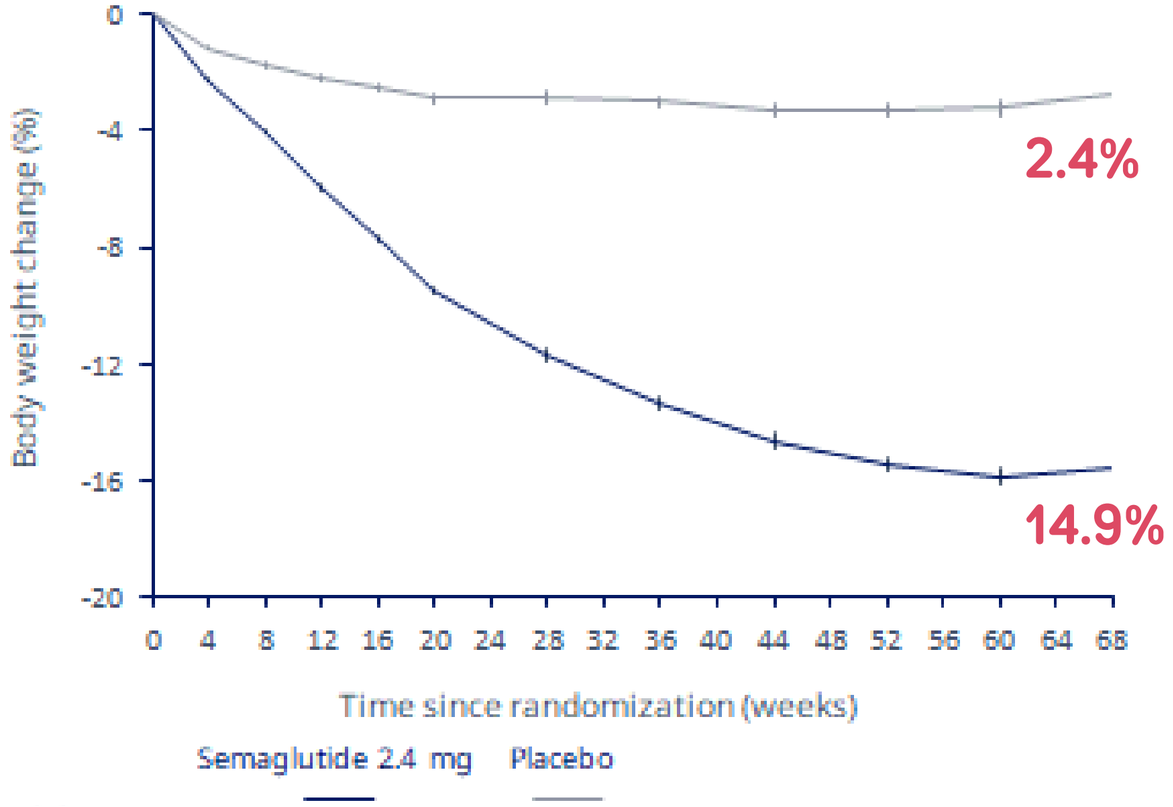
Semaglutide administration

- Once weekly GLP1 receptor agonist
- SC injection
- Side effects can be minimized by slower titration

STEP 1: Weight loss with Semaglutide 2.4mg

Observed body weight change over time

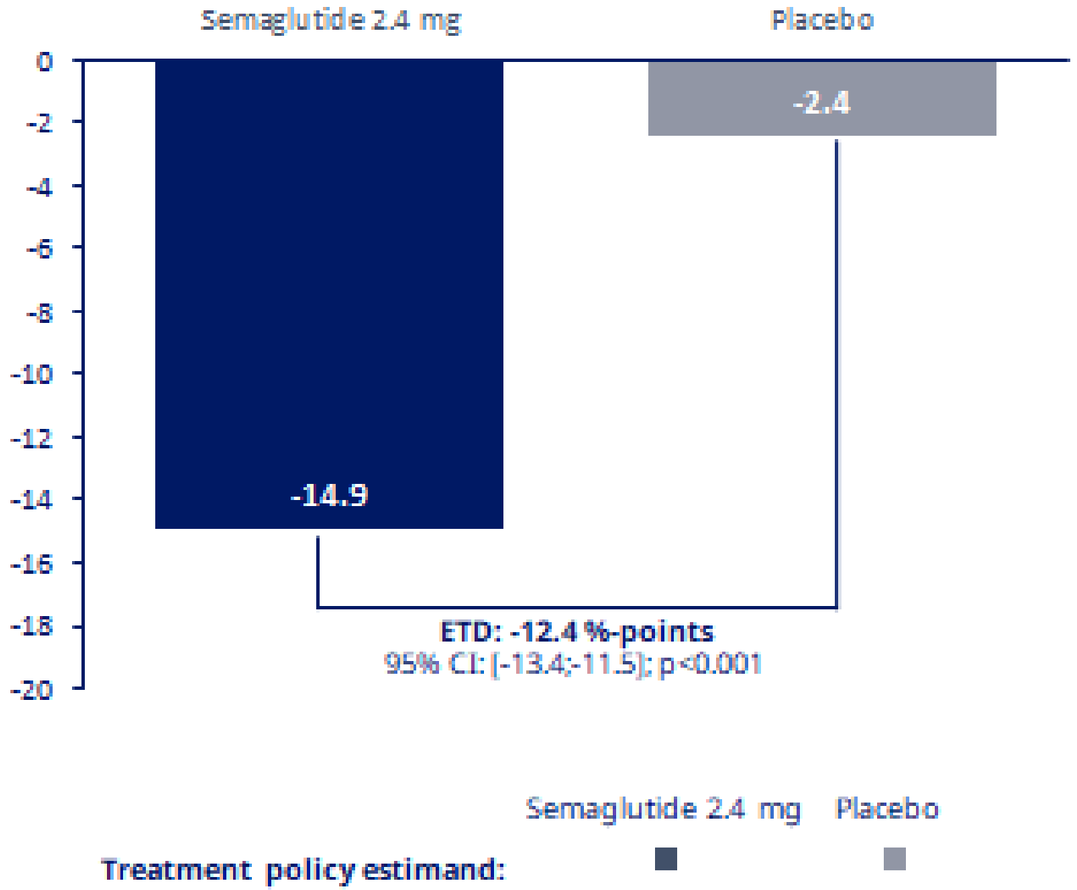
(Mean at baseline: 105.3 kg)



In-trial:

Error bars are +/- standard error of the mean.
CI, confidence interval; ETD, estimated treatment difference.
Wilding et al. N Engl J Med 2021;384:989-1002, *Wao Nordisk data on file

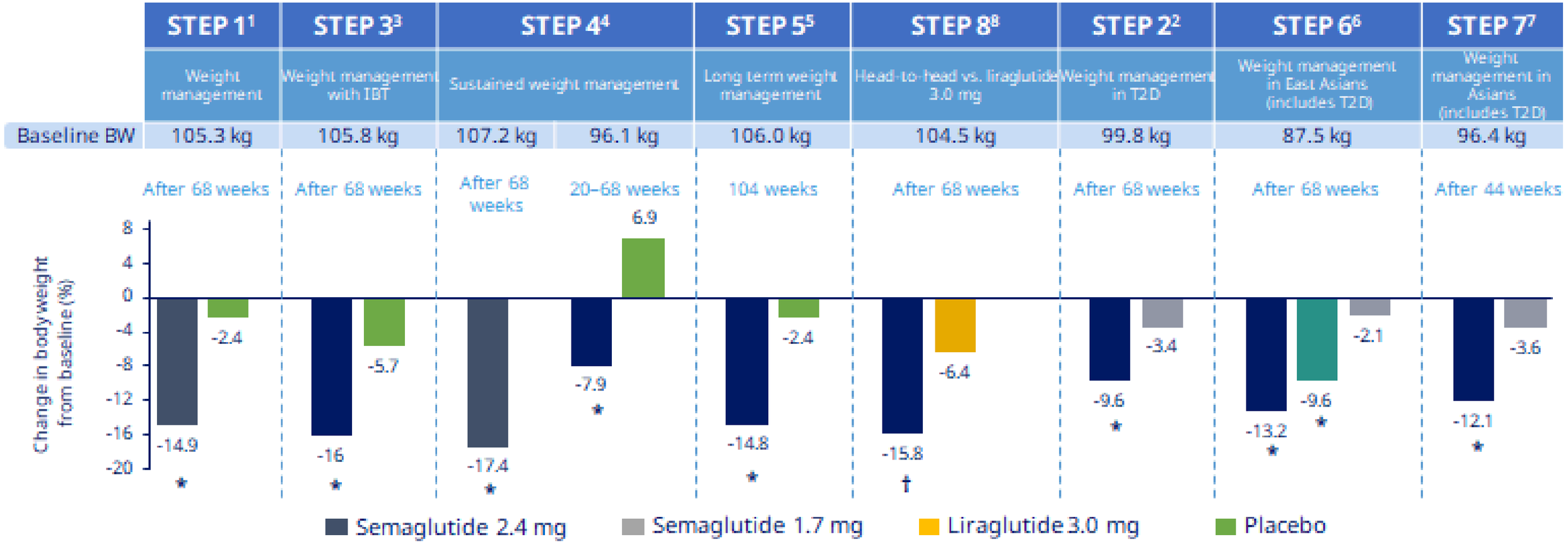
Estimated change from baseline to week 68



Treatment policy estimand:

Weight loss across the STEP trials (Semaglutide 2.4mg)

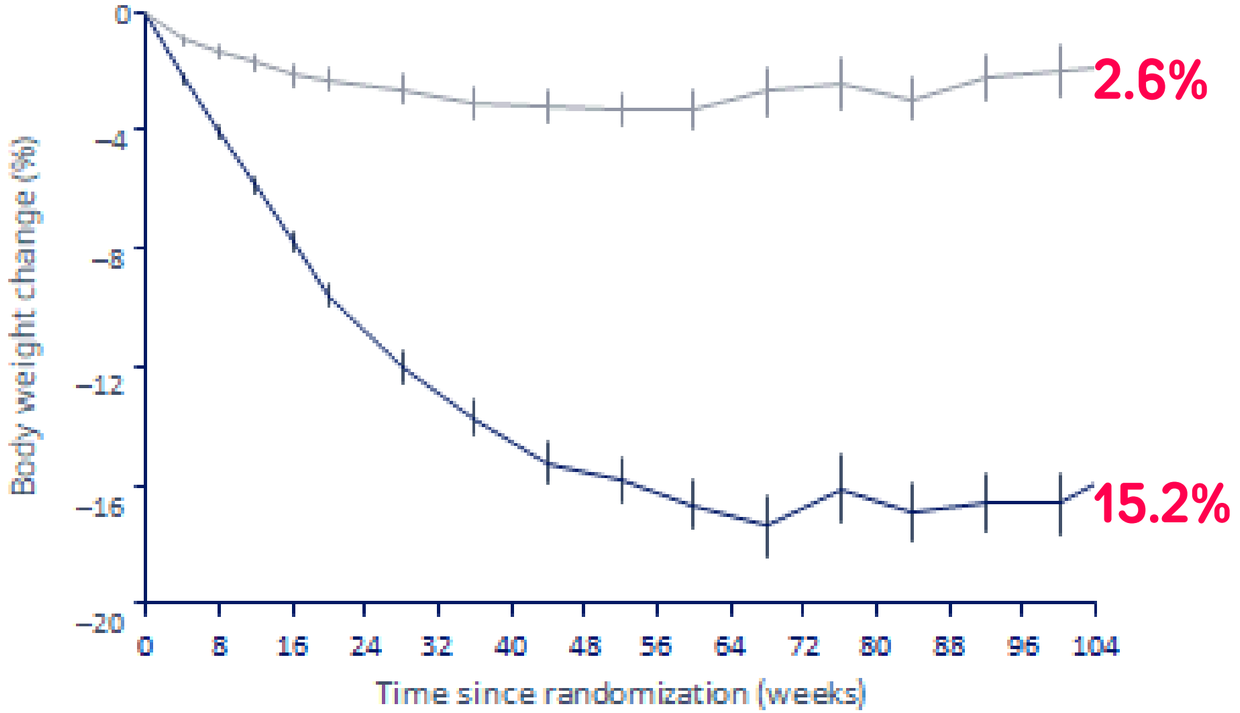
Semaglutide 2.4 mg once-weekly in participants with overweight or obesity



In-trial: Evaluates the treatment effect under the time from randomization to the last contact with a trial site, regardless of any discontinuation

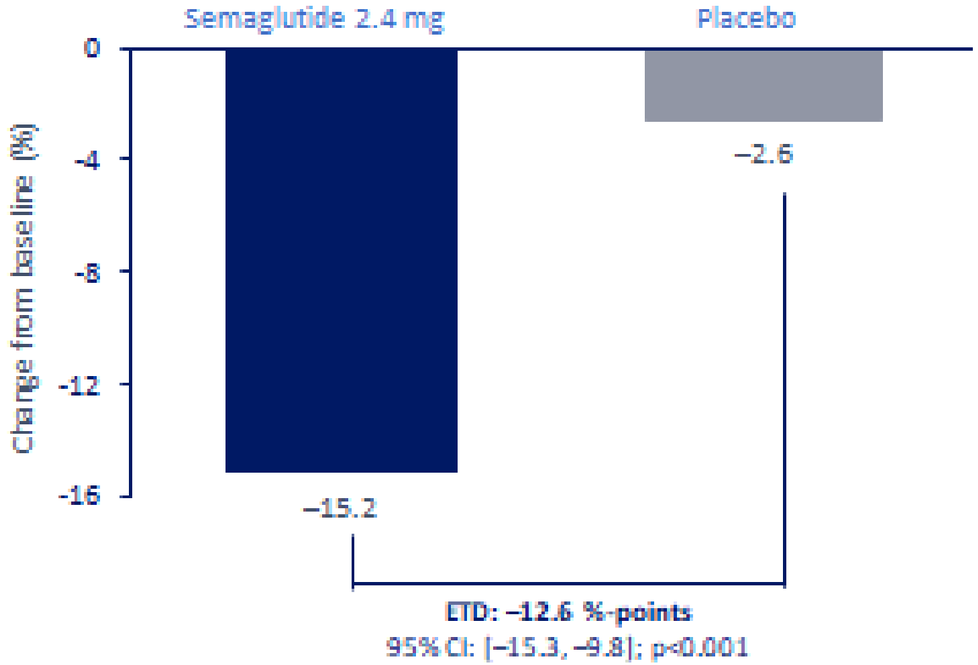
STEP 5: Body weight change at 2 years on treatment

Observed mean change over time
(Mean at baseline: 106.0 kg)



In-trial: Semaglutide 2.4 mg — Placebo

Estimated mean change from baseline to week 104



Treatment policy estimand: Semaglutide 2.4 mg — Placebo

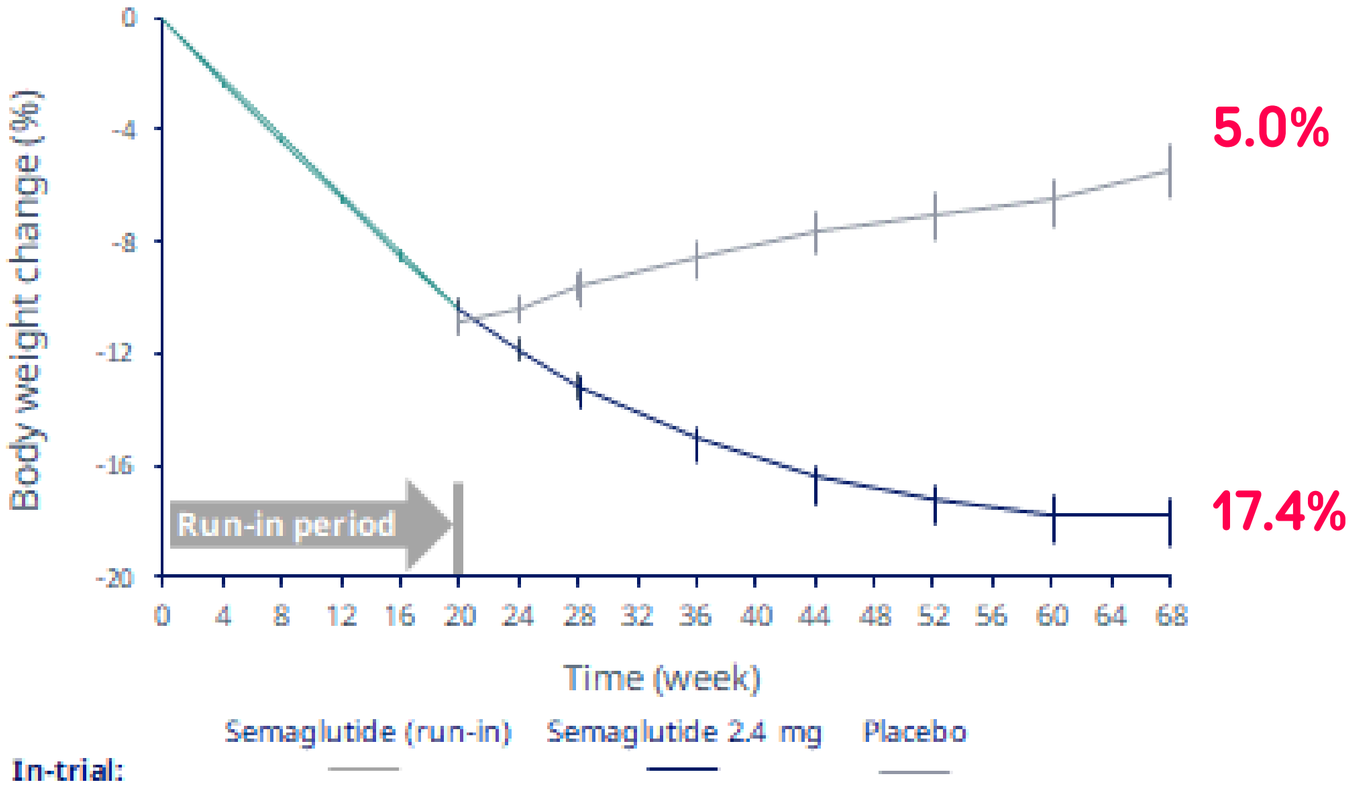
Treatment policy estimand assesses treatment effect regardless of treatment discontinuation or rescue medication; Trial product estimand assesses treatment effect if trial product was taken as intended.
CI, confidence interval; ETD, estimated treatment difference
Semaglutide 2.4 mg, 2.4 mg once-weekly subcutaneous injection

STEP 4: What happens if you stop treatment?

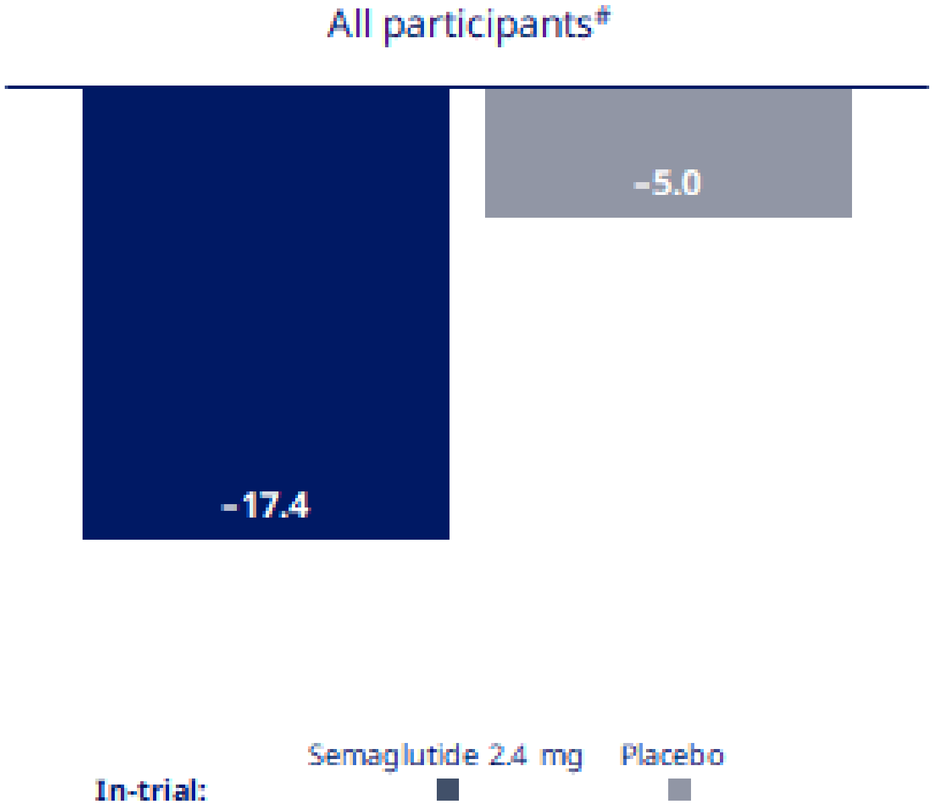
Weight change from week 0 to 68

Observed body weight change over time

(Mean at week 0: 107.2 kg)



Estimated change from week 0 to week 68



Practical Tip

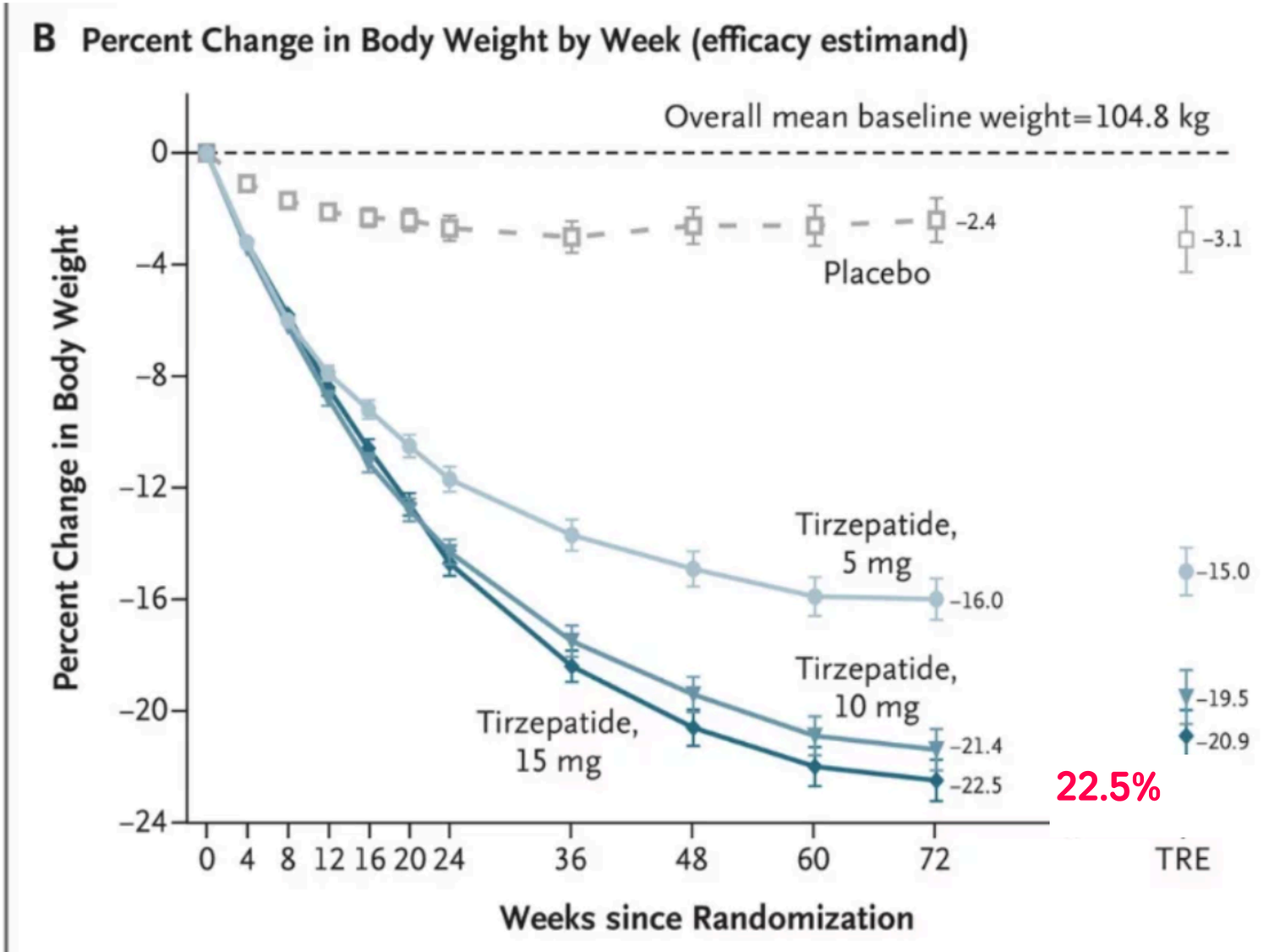
Continue obesity treatment even in “maintenance phase”.

Even if their BMI is “normal”.

Even if they think it is “no longer working”.

Do you stop the Perindopril once blood pressure is at target?

coming soon...
SURMOUNT-1: Tirzepatide efficacy (dual GLP1/GIP agonist)



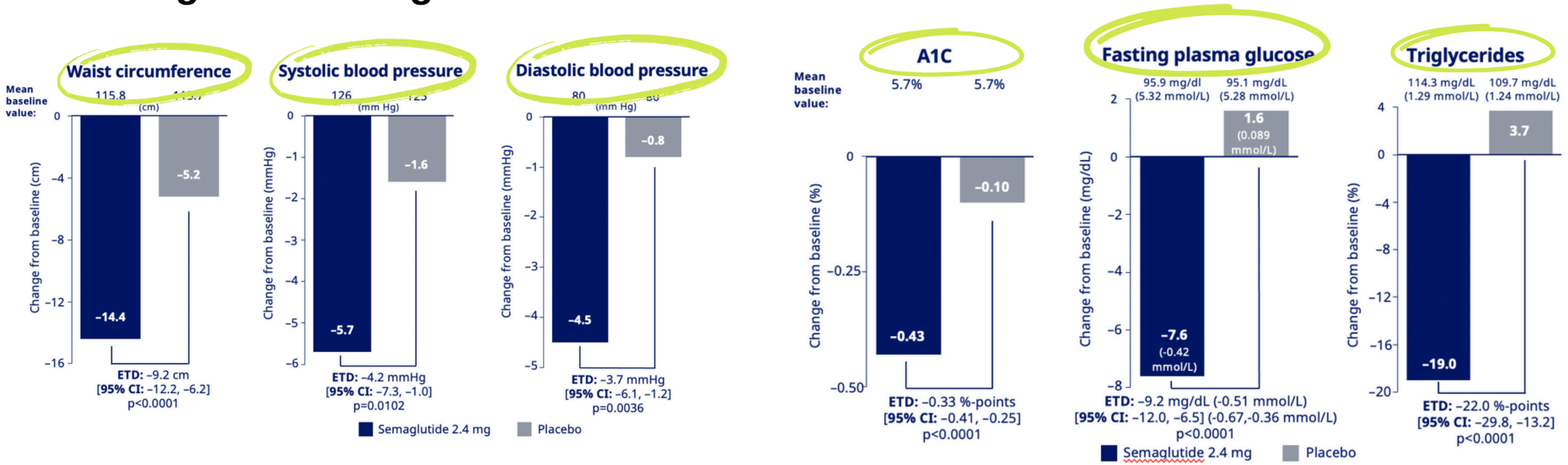
Tirzepatide administration

- Once weekly GLP1 receptor agonist
- SC injection
- Side effects can be minimized by slower titration

Beyond the scale

STEP 5: Cardiovascular risk factor reduction at 2 years

with Semaglutide 2.4mg



Semaglutide 2.4mg decreased:

Waist circumference

sBP

dBP

A1c, FBS

TG

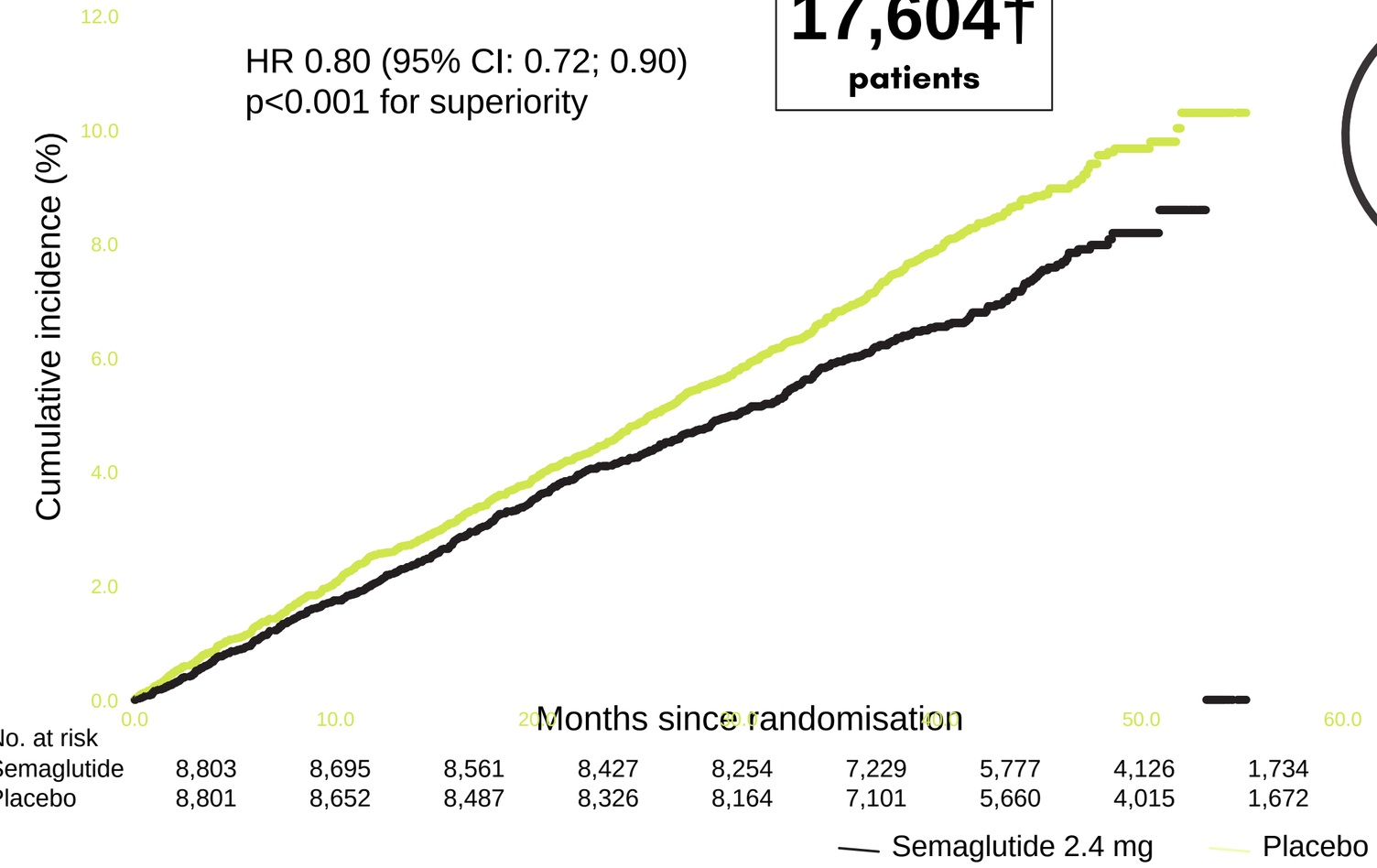
Change from baseline to week 104 based on the treatment policy estimand (assesses treatment effect regardless of treatment discontinuation or rescue intervention). CI, confidence interval; ETD, estimated treatment difference. Garvey et al. Nat Med 28, 2083–2091 (2022).

SELECT: 20% reduction in MACE

with Semaglutide 2.4mg

17,604†
patients

HR 0.80 (95% CI: 0.72; 0.90)
p<0.001 for superiority



No. at risk									
Semaglutide	8,803	8,695	8,561	8,427	8,254	7,229	5,777	4,126	1,734
Placebo	8,801	8,652	8,487	8,326	8,164	7,101	5,660	4,015	1,672

Semaglutide 2.4 mg — Placebo

Semaglutide 2.4 mg significantly reduced **the risk of MACE by 20%** compared with placebo in people with obesity and established CVD, without T2D1,2

All three components (death from CV causes, non-fatal MI and non-fatal stroke) contributed to MACE risk reduction

Mean follow-up time was 39.8 months

Cumulative incidence (using the Aalen–Johansen method) of the composite MACE primary endpoint. The HR was estimated using a Cox proportional hazards regression model. The proportion of participants with MACE was 6.5% with semaglutide 2.4 mg and 8.0% with placebo. MACE was defined as death from CV causes, non-fatal myocardial infarction, or non-fatal stroke.
CI, confidence interval; HR, hazard ratio; MACE, major adverse cardiovascular events; MI, myocardial infarction.

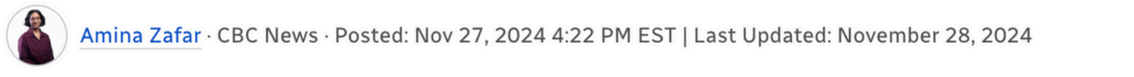
1. Lincoff AM et al. N Engl J Med 2023;DOI:10.1056/NEJMoa2307563; 2. Novo Nordisk A/S. Company announcement, 8 August 2023. Available at: https://www.novonordisk.com/content/nncorp/global/en/news-and-media/news-and-ir-materials/news-details.html?id=166301. Accessed October 2023.

November 2024

Health

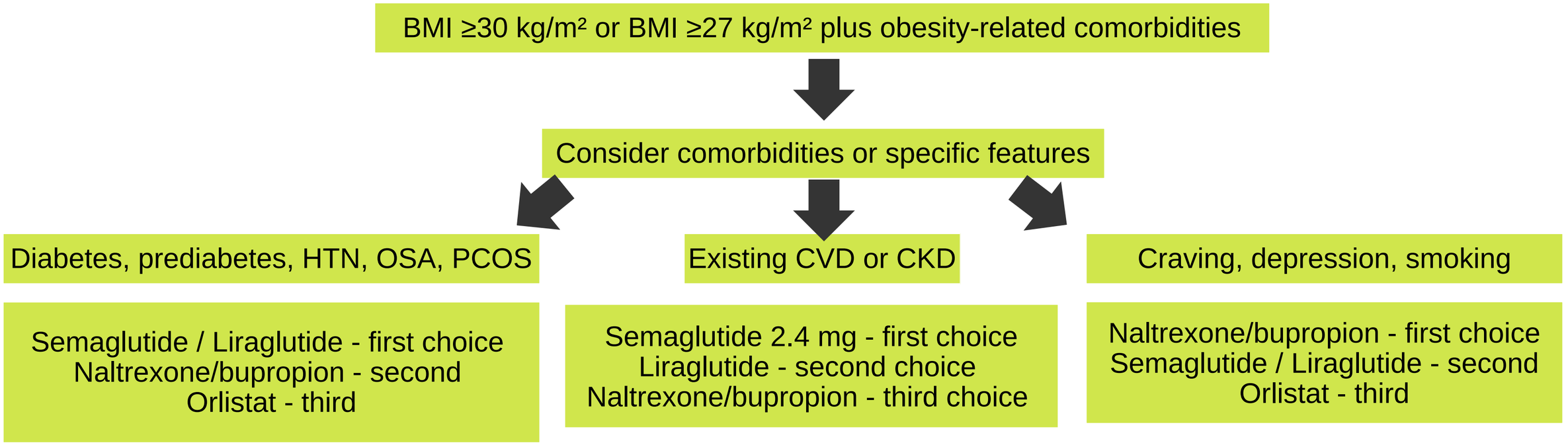
Wegovy is a weight-loss drug. Health Canada says it can now be used to curb heart-attack risk

Treatment supports both chronic weight management and to reduce heart risk



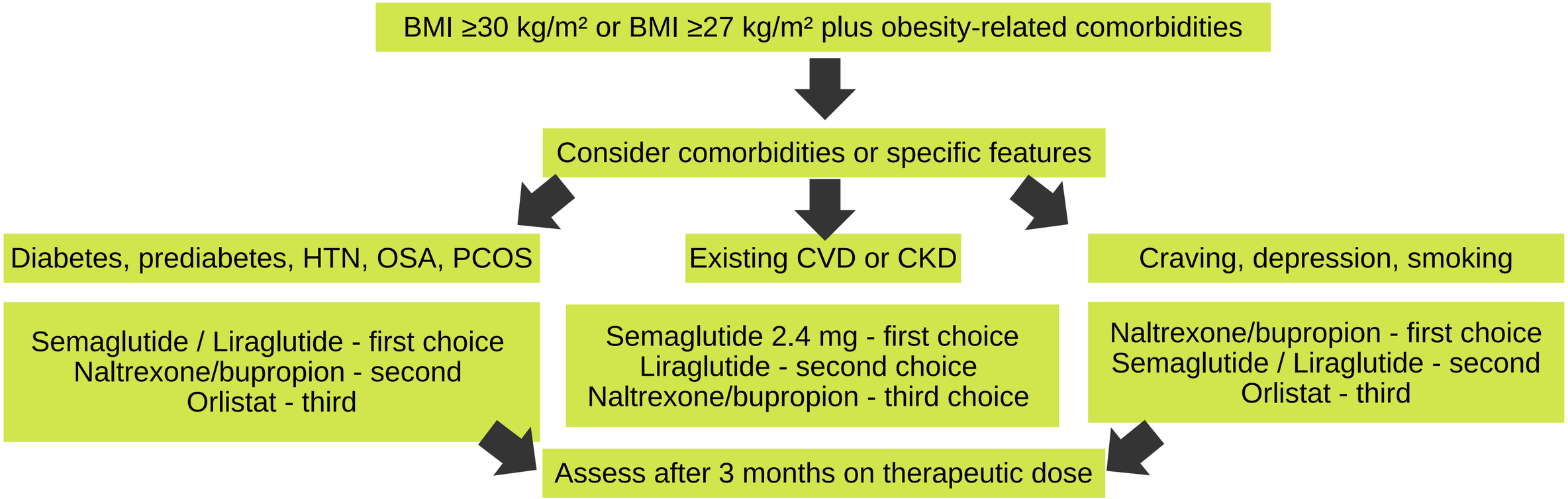
Amina Zafar · CBC News · Posted: Nov 27, 2024 4:22 PM EST | Last Updated: November 28, 2024

Pharmacotherapy algorithm



Pedersen SD, Manjoo P, Wharton S. Canadian Adult Obesity Clinical Practice Guidelines: Pharmacotherapy in Obesity Management. Published online August 4, 2020. Accessed August 4, 2020. https://obesitycanada.ca/guidelines/pharmacotherapy

Pharmacotherapy algorithm



What is “success”?

- 5% weight loss after 3 months on full therapeutic dose
- Weight maintenance after patient lost significant weight through lifestyle changes
- Weight stability if patient was on an upward trajectory prior to therapy

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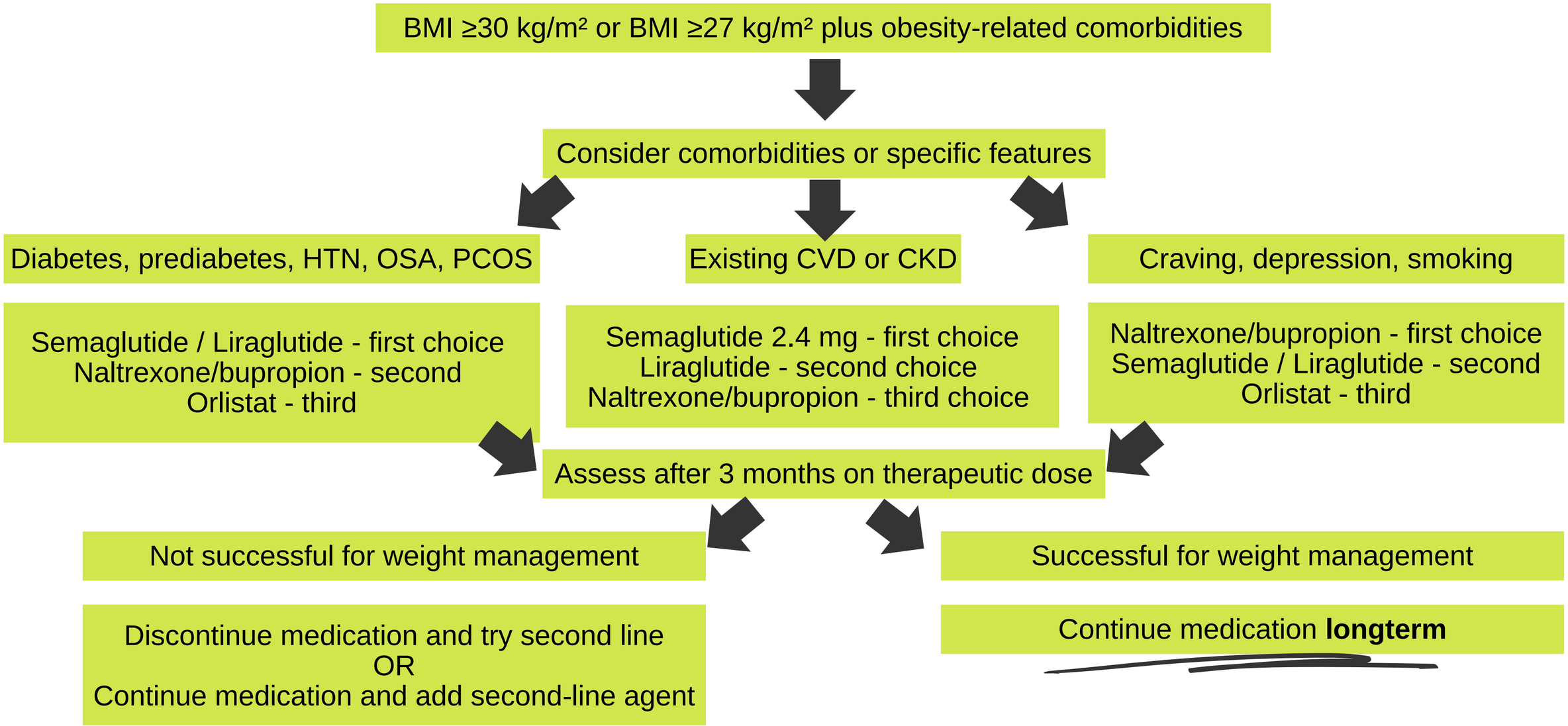
Pharmacotherapy algorithm



Pedersen SD, Manjoo P, Wharton S. Canadian Adult Obesity Clinical Practice Guidelines: Pharmacotherapy in Obesity Management. Published online August 4, 2020. Accessed August 4, 2020. https://obesitycanada.ca/guidelines/pharmacotherapy

Pharmacotherapy algorithm IRL

Does this patient have private health insurance?

YES

On-label prescribing

Liraglutide 3.0mg (Saxenda)
$475/month

Contrave
$260/month

Semaglutide 2.4mg (Wegovy)
$450/month

NO

Semaglutide (Ozempic) 1mg*
$230/month

Tirzepatide (Mounjaro) 5-15mg*
$380-450/month for VIALS
($900 for PENS)

Wellbutrin/Naltrexone (**Contrave)**
$260/month

If financial barriers, consider **Metformin*** if underlying insulin resistance

Do they qualify for bariatric surgery?

off-label*

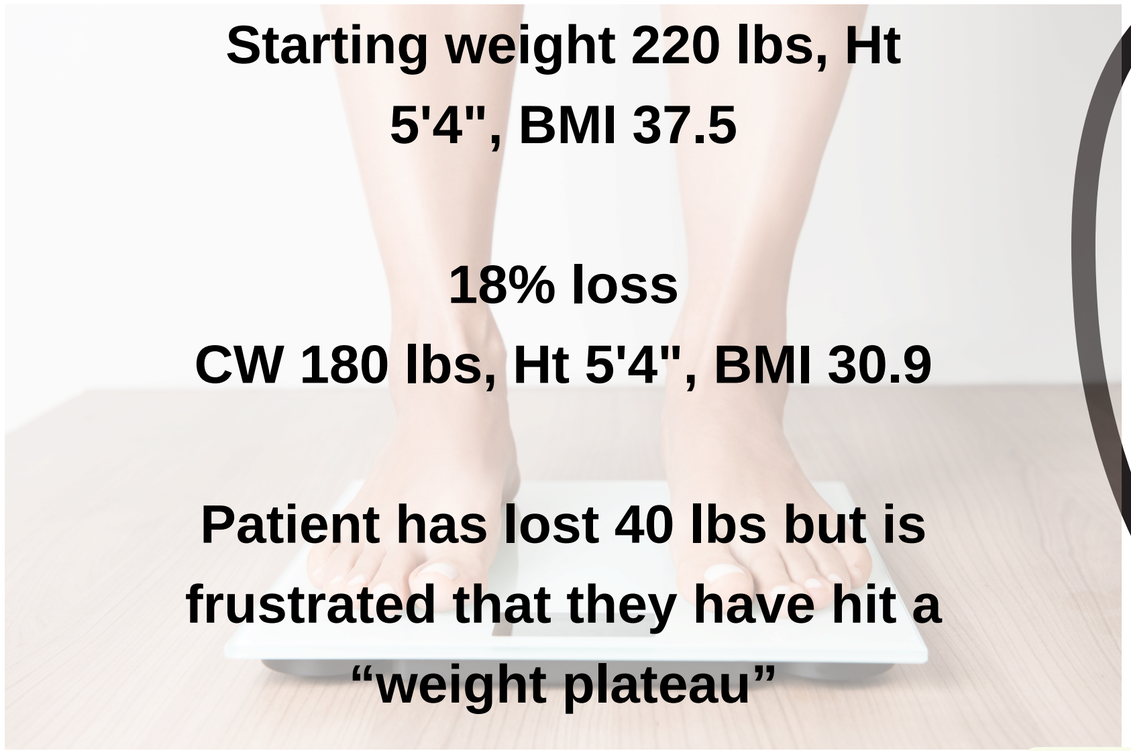
Secondary considerations:

Does this patient have a needle phobia?

Does the patient prefer once weekly to once daily administration?

How much weight would this patient benefit from losing?

Psychoeducation involves addressing patient's weight loss expectations



Example:

Starting weight 220 lbs, Ht 5'4", BMI 37.5

18% loss

CW 180 lbs, Ht 5'4", BMI 30.9

Patient has lost 40 lbs but is frustrated that they have hit a "weight plateau"

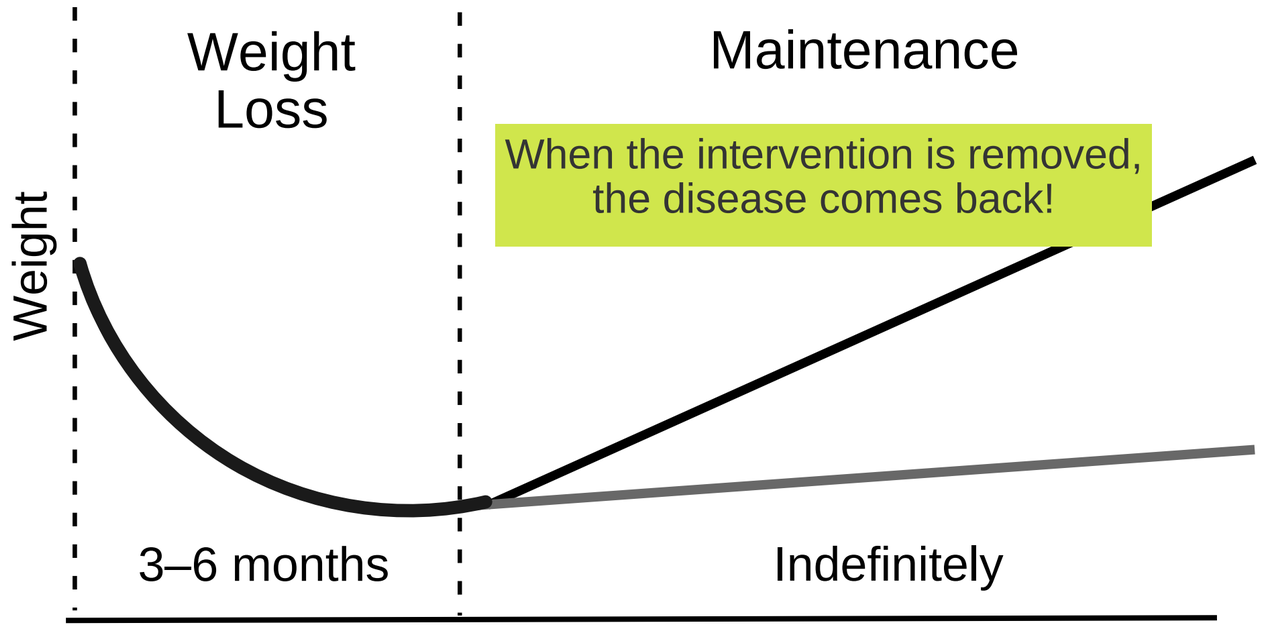
"Remember when we talked about the body's defense against weight loss? You've lost 18% of your body weight. Keeping your weight down from your highest weight is a **success** because your body is always trying to go back up. Remember - weight stability is actually the goal!"

Affirmation.
Reframe expectations.

What’s the LONG-TERM plan?

- Obesity, like other chronic conditions (e.g. hypertension, type 2 diabetes) requires a long-term strategy to manage

- Psychoeducation around the pathophysiology of obesity, metabolic adaptation beneficial in promoting medication compliance



Clinicians and patients don’t get to *choose* when this weight plateau happens. It is often not a patient’s “ideal weight” (or expectation)

Ryan DH, et al. Arch Intern Med 2010;170(2):146

Practical Tips

1. **Don’t treat to BMI or weight targets**
2. **Address weight loss expectations by speaking in % weight lost and comparing to RCTs**
3. **Help patients understand that weight “plateau” = WIN (i.e. maintenance)**
4. **Continue treatment even in “maintenance phase”**

Key Points

Obesity treatment can be life-changing and can result in improved cardiometabolic health.

Psychoeducation to address patient's expectations for treatment helps with compliance.

What to do in practice tomorrow?

- Have the conversations - Ask for permission.
- Be compassionate.
- Offer hope beyond calorie counting.
- Help patient’s set their own realistic health behaviour goals.
- Treat obesity like any other chronic medical condition.

Thank you!

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High on Life Podcast

@sashahighmd

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