Lifestyle and Medical Treatment of Obesity

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Disclosures

No conflicts of interest

Quick Plan

- Review counselling around diet and exercise for weight loss
- Discuss medical therapy of obesity with semaglutide (Ozempic/Wegovy), including dosing, counselling and cost

Not covered (but open to questions!):

- Bariatric surgery
- Contrave (bupropion-naltrexone)
- Other medical therapies (orlistat, phentermine)

Definition of Obesity (Globe and Mail article)

Obesity is a prevalent, complex, progressive and relapsing chronic **disease**, characterized by abnormal or excessive body fat (adiposity), that impairs health.



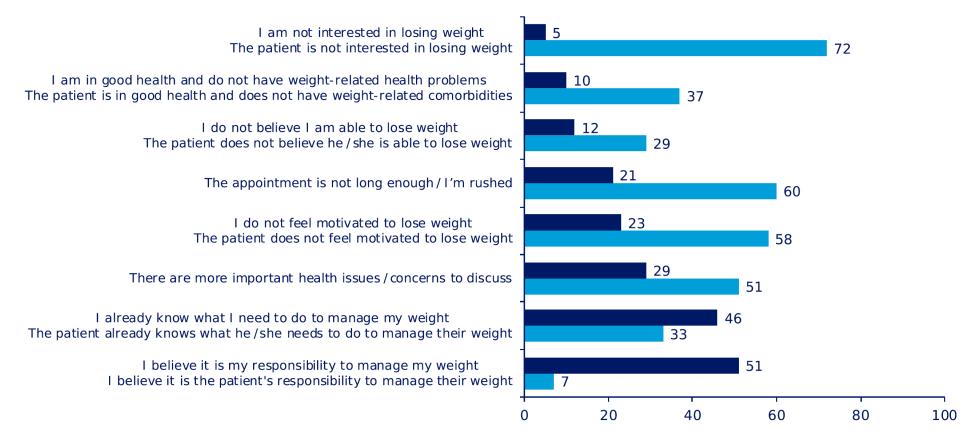
A weight-loss drug everyone wants is exposing myths about obesity

People living with obesity and clinicians say discussion around Wegovy and Ozempic has veered down a toxic road, highlighting long-standing biases against people whose health is severely affected by carrying extra weight

CARLY WEEKS > HEALTH REPORTER PUBLISHED JANUARY 12, 2023 UPDATED JANUARY 13, 2023 Weeks, C. January 2023. A weight-loss drug everyone wants is exposing myths about obesity. Globe and Mail. <u>https://www.theglobeandmail.com/canada/article-weight-loss-</u> drug-ozempic-wegovy-obesity/. Accessed Jan 24, 2023

ACTION Trial





Respondents (%)

Sharma, AM, Bélanger, A, Carson, V, et al. Perceptions of barriers to effective obesity management in Canada: Results from the ACTION study. Clin Obes. 2019; 9:e12329. https://doi.org/10.1111/cob.12329

When/How to Bring It Up

- Anytime is reasonable, especially when dealing with a related comorbidity (HTN, diabetes, sleep apnea)
- Always ask permission
- Use patient-first language "people who carry extra weight"
- Remember: your patient has probably suffered from weight stigma before.

"I think your knee pain is from osteoarthritis. We'll do some xrays and a few other tests to make sure I'm not missing something. I have therapies that will help it. One thing that might help your knee pain is weight loss; I wonder if we could talk about some treatment options for that. Is that okay?"

Counselling on Diet:

- Focus on fibre, unsaturated fats, and good protein intake (about 0.8g/kg/day)
- Avoid/limit sugars (esp coffee with cream/milk/sugar, soda, juice, energy drinks) and processed foods
- Food logging is helpful for patient understanding, but I do not typically require this, nor ask to see it

"In general, I encourage people to focus on foods that help them feel full, which are vegetables and whole grains (quinoa, wild rice, oats), adequate protein intake, and unsaturated fats. I encourage them to avoid, or focus away from, foods that don't help them feel as full, like liquid sugars, refined sugars, or processed foods."

Brown J, Clarke C, Johnson Stoklossa C, Sievenpiper J. Canadian Adult Obesity Clinical Practice Guidelines: Medical Nutrition Therapy in Obesity Management. Available from: https://obesitycanada.ca/guidelines/nutrition. Accessed January 23, 2023.

Nicolaas E.P. Deutz, Jürgen M. Bauer, Rocco Barazzoni, Gianni Biolo, Yves Boirie, Anja Bosy-Westphal, Tommy Cederholm, Alfonso Cruz-Jentoft, Zeljko Krznariç, K. Sreekumaran Nair, Pierre Singer, Daniel Teta, Kevin Tipton, Philip C. Calder. Protein intake and exercise for optimal muscle function with aging: Recommendations from the ESPEN Expert Group, Clinical Nutrition, Volume 33, Issue 6, 2014, Pages 929-936, ISSN 0261-5614, https://doi.org/10.1016/j.clnu.2014.04.007.

Counselling on Exercise

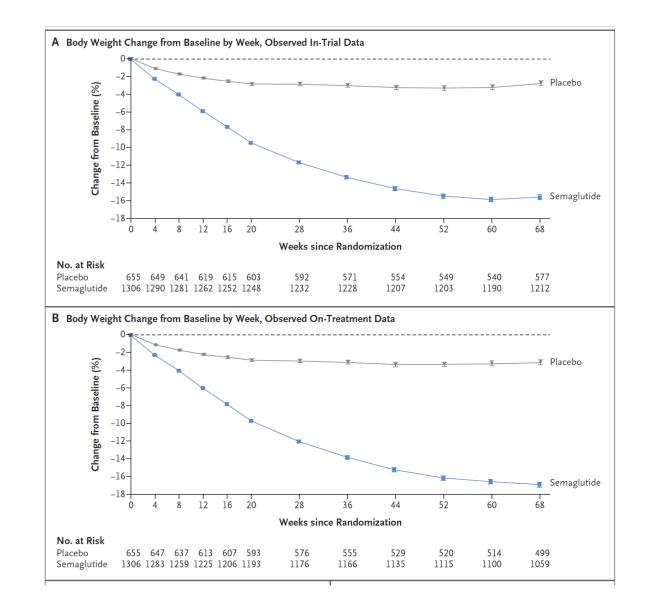
- Exercise helps cardiovascular health, QoL, physical function, mood, and **weight maintenance**.
- Little-to-no role in weight **loss**
- Identify activities the patient enjoys (walking, yoga, aquacise, weight training)
- Target 150min/week of moderate intensity exercise (can talk during, can't sing)
- "I understand your joint pain makes many activities uncomfortable. Is there an activity that does not cause you pain, that you enjoy? How about we set a goal to do 15 minutes of that, twice a week, over the next four weeks?"

Semaglutide

GLP-1 agonist, small intestinal hormone that acts to decrease appetite, delay gastric emptying, and promote glucose-dependent insulin release

Does GLP-1 deficiency play a role in obesity?

"Reminds the brain that it is not starving"



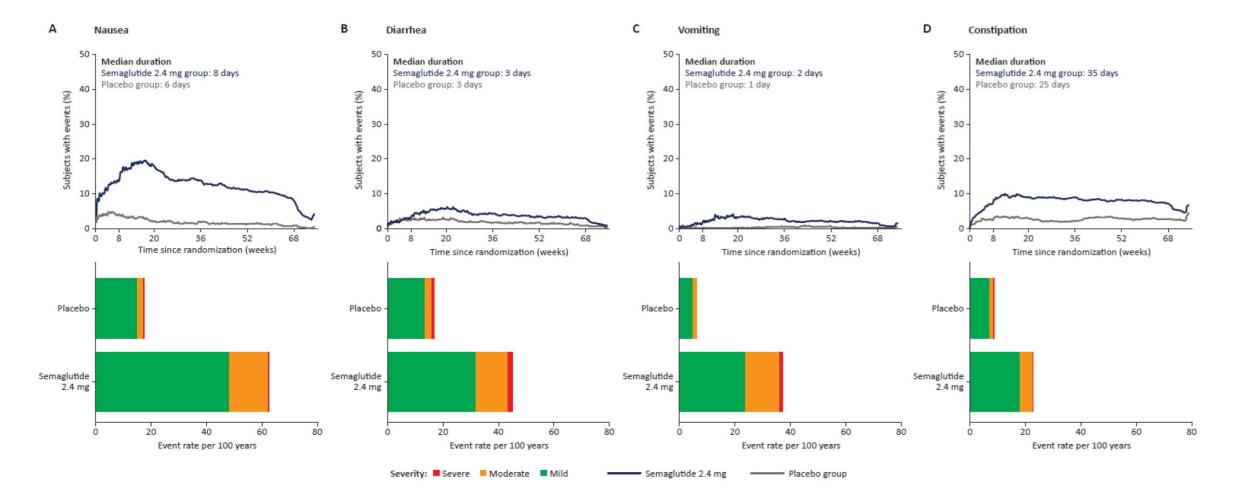
For Whom?

... And Who Not?

- BMI > 30 OR BMI > 27 with weight-related complication (HTN, DLD, OSA or CVD), with or without diabetes
- Very few drug interactions
- NAFLD: will not go into detail here

- eGFR < 15 (caution if <30)
- History of MEN2A or medullary thyroid cancer (personal or family)
- Women of child-bearing age (not studied in pregnancy)
- Recent pancreatitis

Side Effects (review from STEP 1)



Wilding et al., Once Weekly Semaglutide in Adults with Overweight and Obesity. NEJM 2021, 384: 989-1002. Accessed Jan 23, 2023

Ozempic (semaglutide): off-label use

Red box (starter box)

2mg of medication with a selectable dose of 0.25mg and 0.5mg

Green box (maintenance box)

4mg of medication with **only** 1mg dose selectable. Select 0.5mg by dialing **38 clicks** on the pen.



Semaglutide Dosing and Counselling

0.25mg once weekly for four weeks.

If no side effects by four weeks \rightarrow increase to 0.5mg/week for four weeks \rightarrow increase to 1mg/week

If still having side effects, stay at same dose until resolved.

If side effects are intolerable; STOP

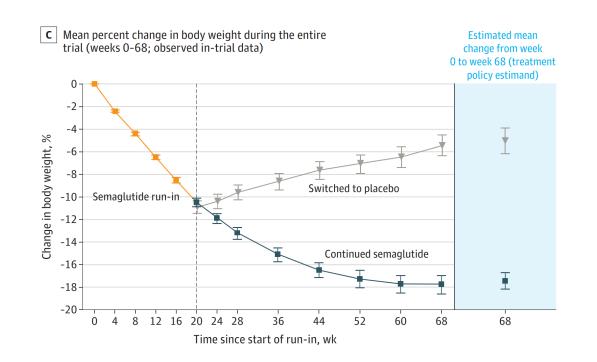
How to use Ozempic:

https://www.ozempic.com/how-to-take/ozempic-pen.html

Dr. Akshay Jain: Top Tips to Reduce Nausea on GLP-1 Agonists: <u>https://www.youtube.com/watch?v=gn5pg9uXh6c</u>

"So, How Long Do I Stay On This?"

- Obesity is a chronic disease, like hypertension, diabetes, or asthma
- Treatment tends to be chronic
- Lifestyle may help with some weight maintenance if stopped



Rubino D, Abrahamsson N, Davies M, et al. Effect of Continued Weekly Subcutaneous Semaglutide vs Placebo on Weight Loss Maintenance in Adults With Overweight or Obesity: The STEP 4 Randomized Clinical Trial. JAMA. 2021;325(14):1414–1425. doi:10.1001/jama.2021.3224

Coverage

- Cost of one pen = \$250, or ~\$200 at Costco
- Diabetics: now only need to have tried METFORMIN before Special Authority
 - Stop linagliptin or other DPP4-inhibitors, as they only get coverage for one
 - Avoid glyburide/gliclazide; weight gain
- Check extended coverage providers
 - Check Saxenda (liraglutide) as well
- Stay at 0.5mg/week to extend pen life and cut cost in half
 - **38 clicks** on the 4mg pen, as it does not have a 0.5mg dose marker.

Wegovy

Semaglutide marketed specifically for weight loss

Was supposed to be in Canada fall 2022; too popular ⊗

Likely won't see for a while.

Unclear if third-parties will cover it.



https://www.wsj.com/articles/why-you-cant-find-wegovy-theweight-loss-drug-11670108199. Accessed Jan 23 2023

When to refer to an obesity specialist

- Whenever you want! 😳
- Especially bariatric surgery candidates
 - BMI > 40
 - BMI > 35 with any weight-related complications
- Most medical therapy candidates
 - BMI > 30, especially with weight-related complications
 - BMI > 27 if weight-related complications
- NAFLD

Quick Take Away Tips

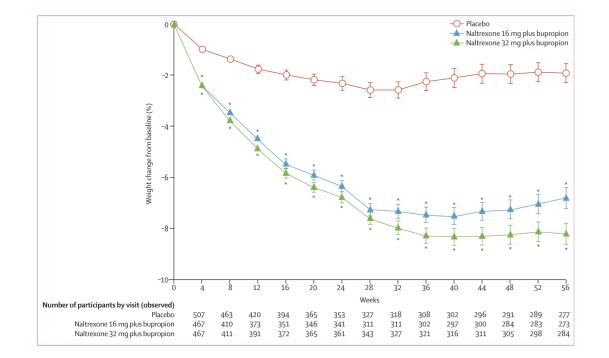
- Diet: focus on vegetables, whole grains, unsaturated fats and adequate protein intake, focus away from liquid/processed sugar
- Exercise: helpful for overall health and weight maintenance, start low, go slow, and use something they enjoy
- Ozempic is an expensive but generally well-tolerated chronic medication that is effective for most patients
- Apply for special authority for diabetic patients, consider reduced dosing, and look into third-party coverage
- Refer to an obesity specialist if patient meets criteria for bariatric surgery

Supplementary: bupropion-naltrexone

Decreased dopamine in the mesolimbic system (planning, reward) causes strong cravings for sweets and suppresses anorexic signal \rightarrow "dessert stomach"

Bupropion increases dopamine in this area and promotes anorexic signal

Naltrexone prevents feedback inhibition via opioid receptors



Greenway FL, Fujioka K, Plodkowski RA, Mudaliar S, Guttadauria M, Erickson J, Kim DD, Dunayevich E; COR-I Study Group. Effect of naltrexone plus bupropion on weight loss in overweight and obese adults (COR-I): a multicentre, randomised, double-blind, placebo-controlled, phase 3 trial. Lancet. 2010 Aug 21;376(9741):595-605. doi: 10.1016/S0140-6736(10)60888-4. Epub 2010 Jul 29. Erratum in: Lancet. 2010 Aug 21;376(9741):594. Erratum in: Lancet. 2010 Oct 23;376(9750):1392. PMID:

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For Whom?

And For Who Not?

- BMI > 30 or BMI > 27 with HTN or DLD, with or without diabetes
- Patients looking to decrease smoking or alcohol use
- Patients with concomitant mood or pain disorder (not on opioids)

- Watch for multiple drug interactions
- Warn about rare potential for increased suicidality
- Anyone taking opioids regularly
- Uncontrolled HTN
- Seizure disorder
- Anorexia/bullemia
- Glaucoma

Dosing and side effects

Bupropion XL 150mg daily for two weeks

THEN add naltrexone 12.5mg (quarter pill) once daily for two weeks

THEN increase bupropion to 300mg once daily

THEN increase naltrexone to 25mg once daily

Bupropion SFX

 Headache, GI side effects, sleep disturbance (take early in the day), anxiety, mood swings, rare increased suicidality or myoclonus

Naltrexone SFX

- Mainly GI side effects
- OPIOIDS WON'T WORK

Cost

- Both medications very cheap (Contrave, the brand name, is not)
- Prescriber can sign Collaborative Prescribing Agreement to automatically get special authority for naltrexone for their patients
- BC Pharmacare > Limited Coverage Drugs > Naltrexone

Questions?

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https://www.aroga.com/referral-forms/