Nutrition Considerations For Those On GLP1/GIP-RA Weight Loss Medications

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Disclosures

Nothing to disclose

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Objectives

- Explain how to calculate protein needs for those on GLP1/GIP RA medications.
- List 3 ways to combat GI side effects from GLP1/GIP RA medications.
- Describe 3 dietary changes that can help ensure nutrition adequacy for those on GLP1/GIP RA medications.

3

What's On Our Agenda

- The pathophysiology of obesity
- GLP1-GIP RA drugs
- Contraindications, warnings, precautions
- Working with people on these drugs

4

What's On Our Agenda

- Need for long-term use
- Coverage, cost, compounding and microdosing
- What's coming
- Wrap-up

5

The Pathophysiology of Obesity

6

“Pathways for satiety, hunger and energy expenditure have been programmed through millennia of human development to maintain a person's weight at the highest possible level.”

https://doi.org/10.17925/EE.2022.18.1.35

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“Thus, even if people with obesity temporarily succeed in losing weight, they immediately face millennia of adaptation leading to weight regain, often to an even greater level from where they started.”

https://doi.org/10.17925/EE.2022.18.1.35

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"Given the complex pathophysiology of obesity and the potent counterregulatory neuroendocrine pathways activated to counter weight loss, obesity can no longer be attributed to a lack of willpower."

https://doi.org/10.17925/EE.2022.18.1.35

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Obesity is a chronic progressive relapsing disease.

https://doi.org/10.1007/s11739-022-03129-z

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GLP1 / GIP-RA Drugs

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GLP1-RA

Glucagon Like Peptide 1 Receptor Agonist

GIP-RA

Gastric Inhibitory Polypeptide Receptor Agonist

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GLP1 and GIP Are Incretins

Incretins are hormones

They hit receptors in the pancreas, triggering the first-phase insulin response

They hit receptors throughout the body that help regulate appetite

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First-Phase Insulin Response

The initial rapid release of insulin from the pancreas that occurs after eating

Glucose-dependent

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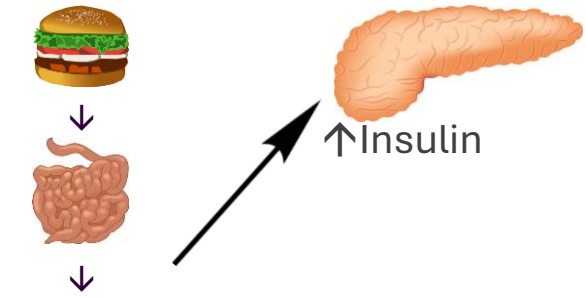

GLP1
&
GIP

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First-Phase Insulin Response

Responsible for ~50%+ of the insulin produced after eating

Blunted in people with T2D – starting in Pre-Diabetes

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Appetite Regulation

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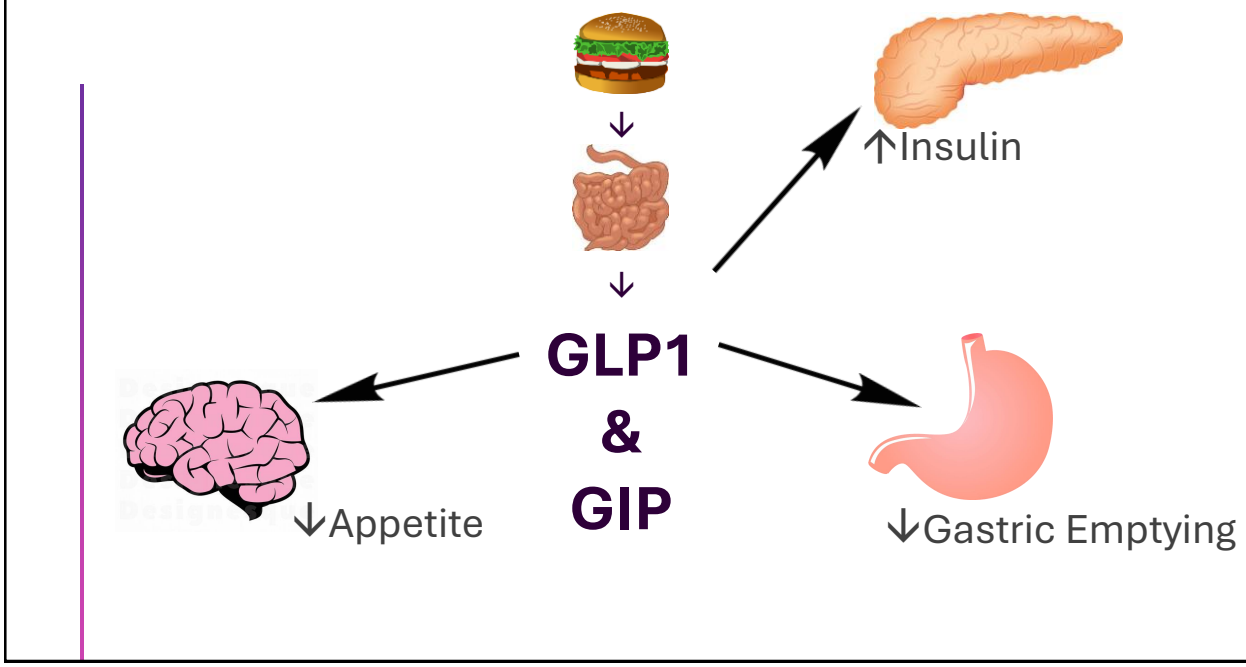

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Appetite Regulation

Not powerful enough to override mechanisms that encourage eating

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GLP1/GIP RA Can Improve Both

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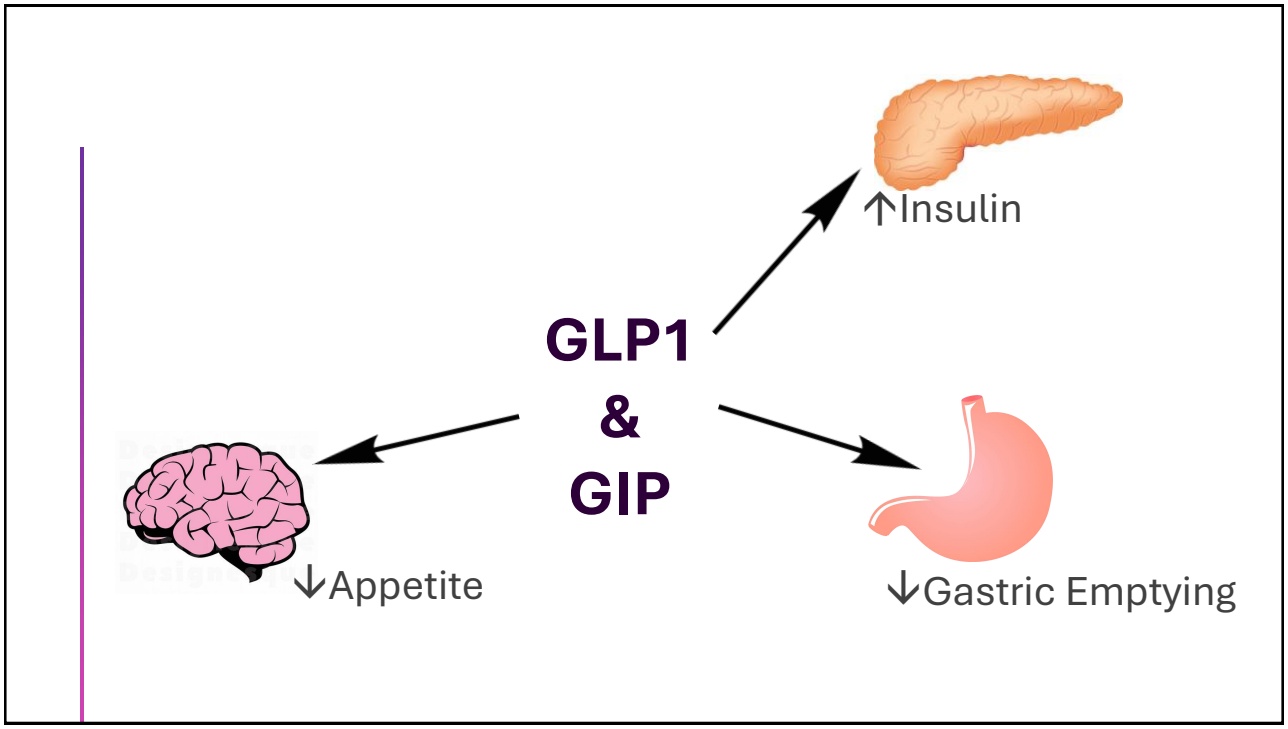
↑Insulin
GLP1
&
GIP
↓Appetite
↓Gastric Emptying

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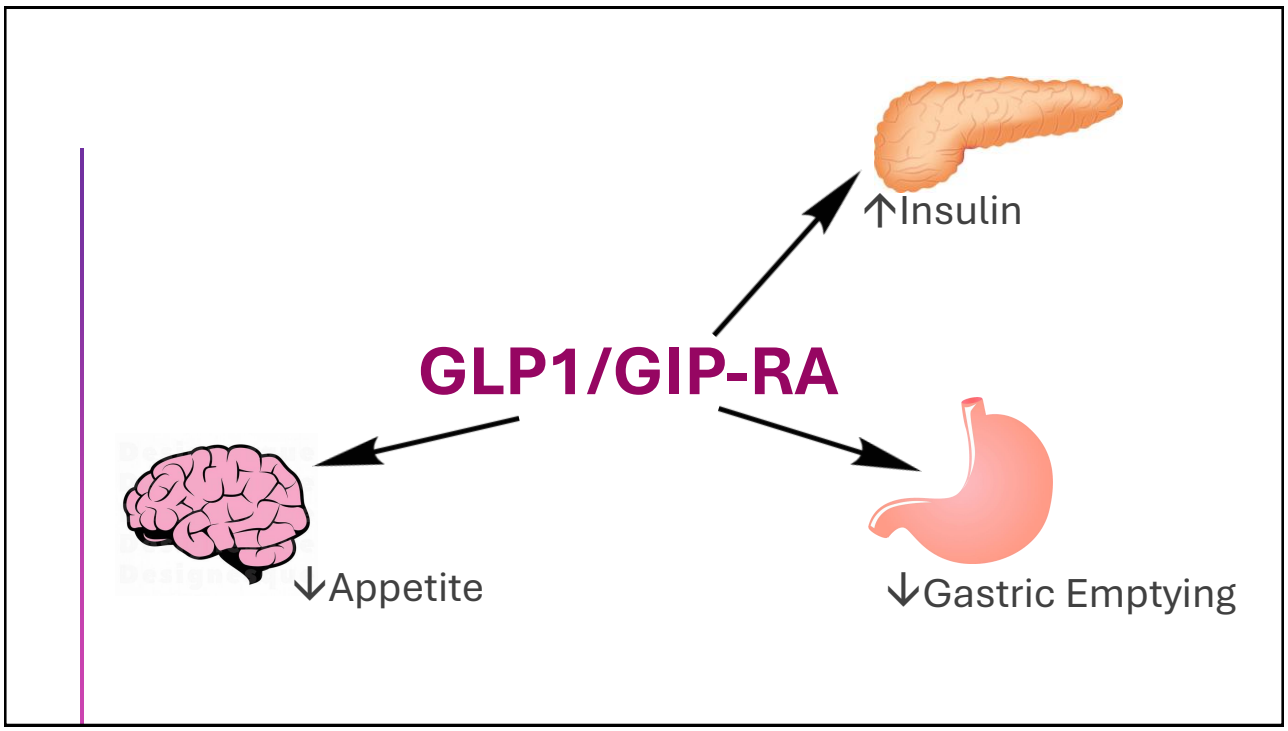
↑Insulin
GLP1/GIP-RA
↓Appetite
↓Gastric Emptying

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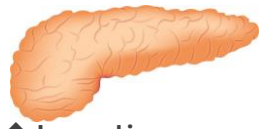

↑Insulin

GLP1/GIP-RA

Restores First Phase Insulin Response
Keeps body of β cells robust

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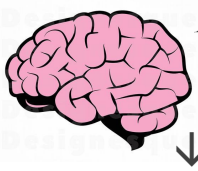
GLP1/GIP-RA work at a supraphysiologic level

GLP1/GIP-RA



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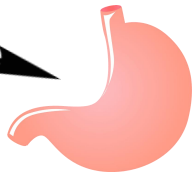

↓Gastric Emptying

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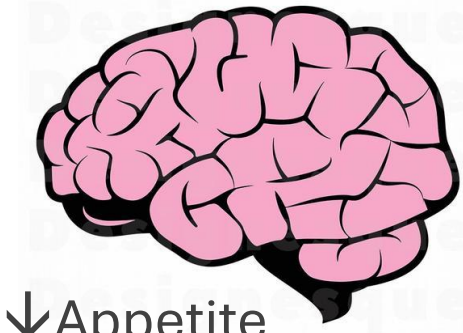
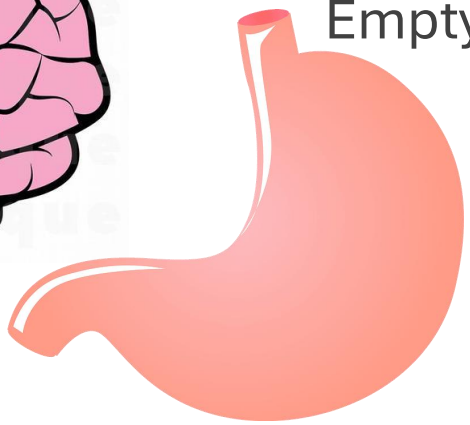


↓Appetite



↓Gastric Emptying

Supraphysiologic level =
greater than what the body does naturally

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Obesity has complex pathophysiology.

These drugs impact physiology.

26

These drugs impact physiology

Slow stomach emptying

27

People get full quicker…

and stay full longer.

28

These drugs impact physiology

Reduce appetite and overrides the mechanisms that push people to eat

29

Quiets food “noise”.

Food does not trigger urge to eat unless hungry.

30

31

Decrease caloric intake by ~16-39%

DOI: 10.1016/j.obpill.2024.100121

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This presents a seismic shift with how we help people lose and maintain weight.

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Let's Meet the GLP1/GIP RA Drugs

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Pr Saxenda®
liraglutide injection

wegovy®
semaglutide injection

zepbound®
(tirzepatide) injection

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Incretin/GLP1/GIP-RA Drugs Weight Loss and Diabetes Brand Names		
Generic	**For Weight Loss**	**For Diabetes**
liraglutide	Saxenda	Victoza
semaglutide	Wegovy	Ozempic
tirzepatide GLP1 / GIP RA	Zepbound	Mounjaro

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Mnemonics
Vic plays the **Sax** every day (**Vic**toza = **Sax**enda, taken daily)
We're off to see the Wizard of **Oz** (**We**govy = **Oz**empic)
Boun rhymes with **Moun** (Zep**boun**d = **Moun**jaro)

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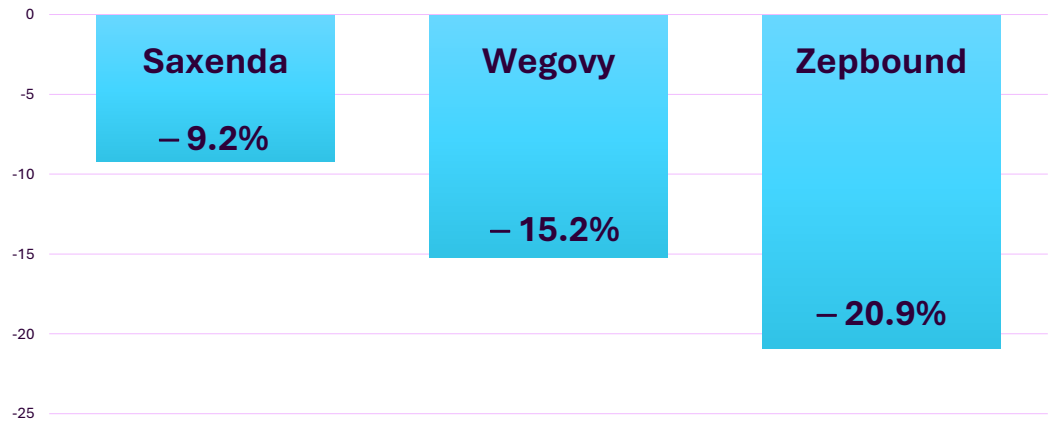
Weight Reduction on Highest Dose of Each Medication



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Improvements in Obesity-Associated Complications and Comorbidities with Weight Reduction

2–5%	Blood glucose Triglycerides
5–10%	Systolic and diastolic blood pressure HDL cholesterol Hepatic steatosis Knee pain and function in osteoarthritis Urinary stress incontinence Polycystic ovary syndrome (improved menstrual cyclicity, reduced serum androgens) Male hypogonadism Quality of life
10–15%	Gastroesophageal reflux disease (improved symptom severity and frequency) Obstructive sleep apnea (decreased Apnea-Hypopnea Index) Steatohepatitis (improvement in MASH activity score) Female infertility
>15%	Remission of T2D

Almandoz JP, et al. Nutritional considerations with antiobesity medications. Obesity. 2024 Sep;32(9):1613-1631

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Incretin Drug Contraindications

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Contraindications
Rare Thyroid Conditions

All Incretin drugs

41

Contraindicated if a personal or family history of…

Medullary thyroid carcinoma (MTC)

or

Multiple Endocrine Neoplasia Syndrome Type 2 (MEN2)

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Thyroid concerns warrant a conversation.

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Warnings and Precautions

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Gallstones / Gallbladder disease

Pancreatitis

Gastroparesis

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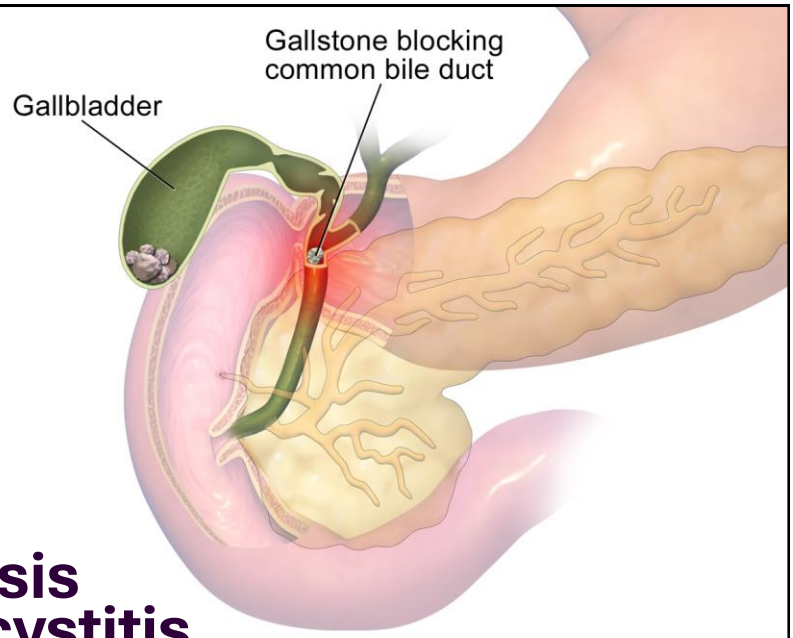

Cholelithiasis And Cholecystitis

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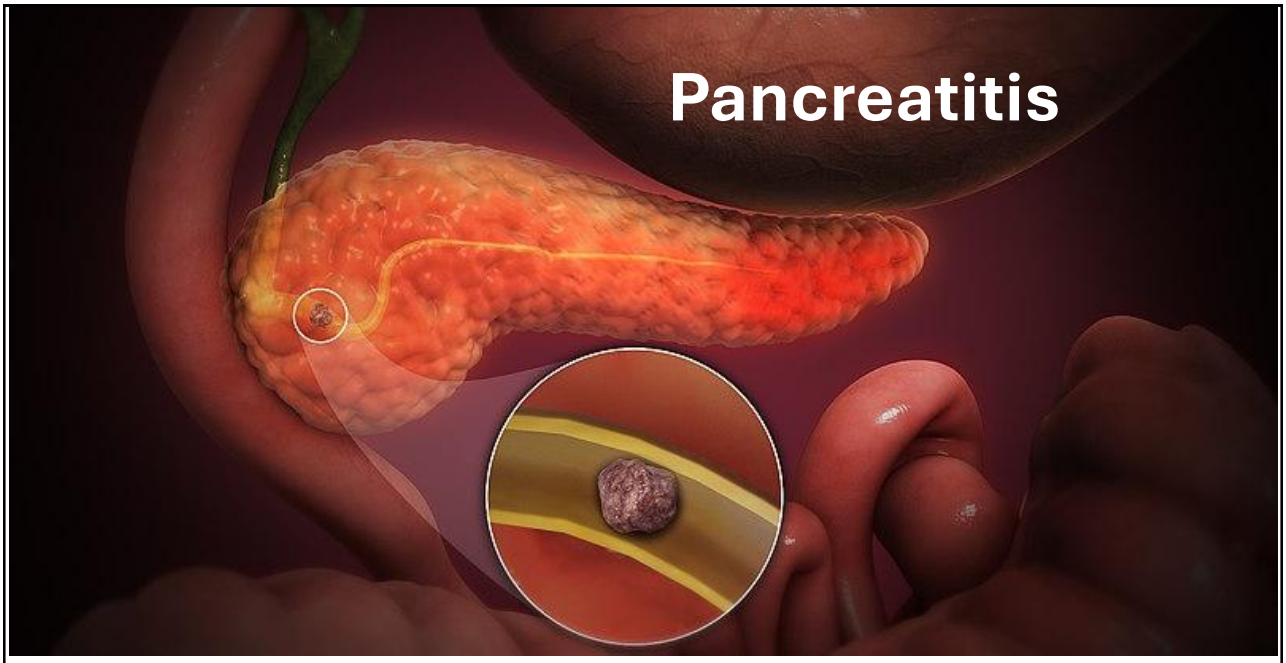

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Gastroparesis

A delay in the emptying of the stomach into the small intestine.

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Nonarteritic Anterior Ischemic Optic Neuropathy - *NAION*

- Cause of blindness
- Rare
- Risk overlaps with those taking incretin drugs

Good podcast episode that discusses NAION / GLP1 relationship: https://tinyurl.com/sskevkxe

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Working With People On These New Drugs

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Nutrition Guidelines For People On Incretin Drugs

1. Manage side effects
2. Lose slowly
3. Work with the new physiology
4. Emphasize good nutrition
5. Hydrate well
6. Exercise – including strength training

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Manage GI Side Effects

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55

Constipation
Up Water

56

Constipation
Up Fiber

57

Constipation
Up Fiber

58

Slow The Weight Loss

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Doses can go up every 4 weeks

Saxenda

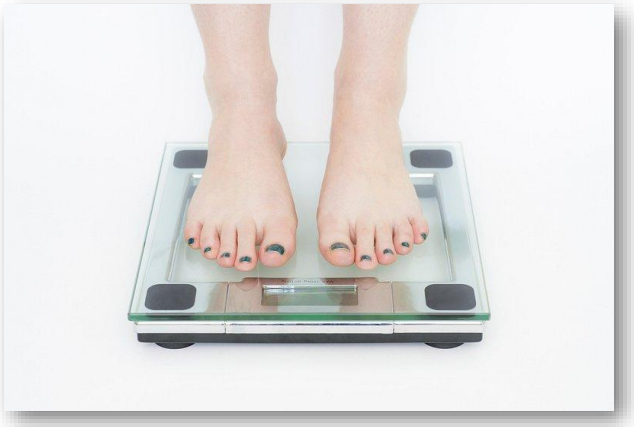
Wegovy

Zepbound

60

Slow The Weight Loss

1 pound per week maximum



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Slow The Weight Loss
Keep Dosage As Low As Necessary

- 1 pound per week maximum
- Maintains more lean mass
- Allows the time for behavior changes to become routine

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Work With The New Physiology

63

Managing junk

Watch for emotional issues

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Emphasize Nutrient Density

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Each Meal – Protein and Produce

69

Push the Protein

70

How much protein?

At least 1 g / kg day

1.2-1.6 g / kg day

20-30+ g / meal

71

How much protein for people a high BMI?

Calculate using target body weight

or

BMI of 30

72

How Much Protein?

Pounds	Kg	1.2 g-1.6 /kg
150	68	80-110
200	91	110-145
250	114	140-180

73

How Much Protein?

Pounds	Kg	1.2 g-1.6 /kg	.5-.75 g / lb
150	68	80-110	75-115
200	91	110-145	100-150
250	114	140-180	125-190

.5-.75 g / lb - a little more user friendly for clients

74

Getting In That Protein

Breakfast – can be tough

Vegetarians – can be tough

Protein powders and shakes can help

75

Troubleshoot Breakfast

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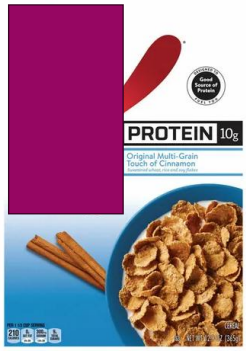
PROTEIN-PACKED
100% WHOLE GRAINS
[redacted]
POWER CAKES
FLAPJACK & WAFFLE MIX
BUTTERMILK
14g PROTEIN


[redacted]
18G PROTEIN
PROTEIN CUPS
cinnamon spice
instant oatmeal
No Added Sugar / 185 Calories
Gluten & Glyphosate Free


NEW!
[redacted]
PROTEIN OATS
1 Simple Ingredient
60% PROTEIN
10g PROTEIN
NET WT 32 OZ (2 LB) 907g


[redacted]
PROTEIN 10g
Original Multi-Grain
Touch of Cinnamon


NEW LOOK
SAME TASTE
[redacted]
ALMOND HONEY
3 INGREDIENTS. NOTHING ARTIFICIAL.
18G PROTEIN
NET WT. 2.1 OZ (60 G)


PROTEIN WAFFLES
NEW
[redacted]
10 Waffles
PROTEIN WAFFLES
14g PROTEIN
NET WT 12.3 oz (350g)

77


Lactaid
PROTEIN
2% Reduced Fat Milk
[redacted]
ENJOY MILK AGAIN!
PROTEIN
2% Reduced Fat Milk
Fortified with Ultra-Filtered Skim Milk
Grade A | Vitamins A&D | Ultra-Pasteurized
Lactose Free
13g PROTEIN
Real Milk
NO DISCOMFORT!
52 FL OZ (1.54 L)


Lifebelle's
HIGH PROTEIN
Lowfat Milk
[redacted]
CREAMERY
Please Rinse and Return for Deposit
ORGANIC
From the Willamette Valley


[redacted]
LESS 50% SUGAR than regular milk
MORE 50% PROTEIN 10% more than regular milk
no ARTIFICIAL GROWTH HORMONES
FAT FREE
ultra-filtered milk
LACTOSE FREE
CONTAINS 9 ESSENTIAL NUTRIENTS


2% REDUCED FAT
WITH DHA OMEGA-3 + FIBER
4g FIBER
[redacted]
WITH DHA OMEGA-3
SUPPORTS BRAIN HEALTH*
2% REDUCED FAT
40% LESS FAT THAN WHOLE MILK
ULTRA-FILTERED MILK
50% LESS SUGAR
13g PROTEIN
125mg DHA OMEGA-3
LACTOSE FREE
HALF GALLON (64 FL OZ) 1.89 L

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Protein Powders

https://tinyurl.com/3fkk6f5y

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Collagen

Very User Friendly

Dissolves easily in cold or hot liquids

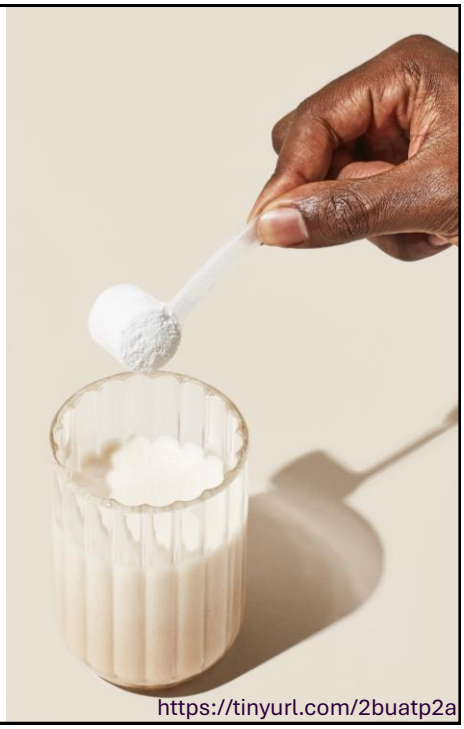
Nearly tasteless

Different names, same thing…

Hydrolyzed Collagen

Collagen Peptides

Collagen Hydrolysate



https://tinyurl.com/2buatp2a

80

81

Focus On Fruit And Vegetables

82

Focus On Fruit And Vegetables

- Make it easy

83

84

85


mango
CHUNKS
Ready to Eat
USDA ORGANIC
EXCELLENT SOURCE OF VITAMIN C
KEEP REFRIGERATED
Nutrition Facts Servings: about 2. Serv. size: 5 oz (142g).
Amount per serving: Calories 90, Total Fat 0.5g (1% DV), Sodium 0mg (0% DV), Total Carb. 21g (8% DV), Fiber 2g (7% DV), Total Sugars 19g, Protein 1g. Potas. (6% DV), Vit. A (6% DV), Vit. C (50% DV).
Not a significant source of saturated fat, trans fat, cholesterol, added sugars, vitamin D, calcium and iron.
Ingredients: Organic Mango.
Distributed By: Wegmans Food Markets, Inc.
Rochester, NY 14603
Certified Organic By Americert International
Product of Nicaragua
Best If Enjoyed By
06/12/20
02158101
NET WT 9 OZ (255 g)

86

87

Smoothies… fresh fruit not necessary

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Easy Vegetables

89

90

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Focus On Fruit And Vegetables

- Make it easy
- Remind people servings are small
- Focus on a consistent daily intake
- Some with every meal

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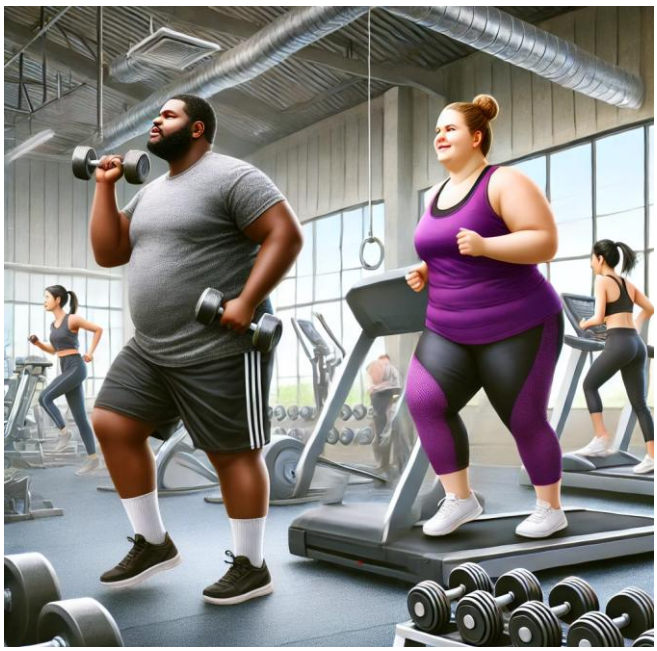
Hydrate Well

93

94

Increase Exercise

95



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Coverage, cost, compounding and microdosing

97

Indications and Medicare Coverage

Indication	Medicare Coverage
Overweight with 1+ comorbidity	NO
Obesity	NO
WEGOVY ONLY – Reduce risk of major adverse cardiovascular events with established CVD and either obesity / overweight.	YES
ZEPBOUND ONLY – Moderate-to-severe obstructive sleep apnea (OSA) and obesity	YES

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Compounding and Microdosing

- Many online compounding companies, some use dietitians
- Microdosing with vials/syringes using branded/ compounded formulations
- Microdosing using peptides

99

Monthly Cost

	Out of pocket Coscto Pricing 2/2025	Manufacturer Savings	Compounded
Saxenda (liraglutide)	$1343	Unknown	$150
Wegovy (semaglutide)	$1340	If no coverage $650	$250-300
Zepbound (tirzepatide)	$1080	Lilly Direct $350-$500	$400-$450

100

Will most people need to be on them long-term?

101

Most Probably

Newest SURMOUNT trial research – people on tirzepatide regained 7% of their bodyweight in the 17 off-treatment period.

102

Long term use warrants a conversation.

103

- Fallacy that most will be able to maintain their weight loss without the help of these medications
- There's something insidious in the meds that MAKES people gain weight if they go off of them

104

- Resistance to being on this for "the rest of their life!"
- Remember, obesity is a chronic disease….

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What's coming?

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Drugs In The Pipeline

Drug	Delivery
retatrutide	Weekly injectable
CagriSema	Weekly injectable
mazdutide	Weekly injectable
survodutide	Weekly injectable
orforglipron	Daily pill
MariTide	Monthly injection

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Let's Wrap it Up!

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These New Drugs are Game Changing

Changes physiology

Make note of contraindications and warnings

Side effects – mild and tolerable

Get regular eye exams

109

Nutrition Guidelines For People On Incretin Drugs

Manage side effects

Lose slowly

Work with the new physiology

Exercise – including strength training

110

Nutrition Guidelines For People On Incretin Drugs

Protein, Produce and Plenty of Water

Protein

- 1.2-1.6 g protein / kg of target wt or BMI of 30
- 20-30+ grams per meal

Fruit / Veg with every meal

Keep well hydrated

111

These drugs are game-changing and our role has never been more important.

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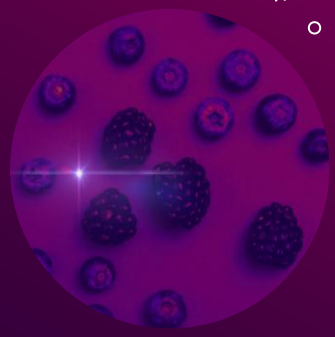
THANK YOU



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