Casual Friday Series

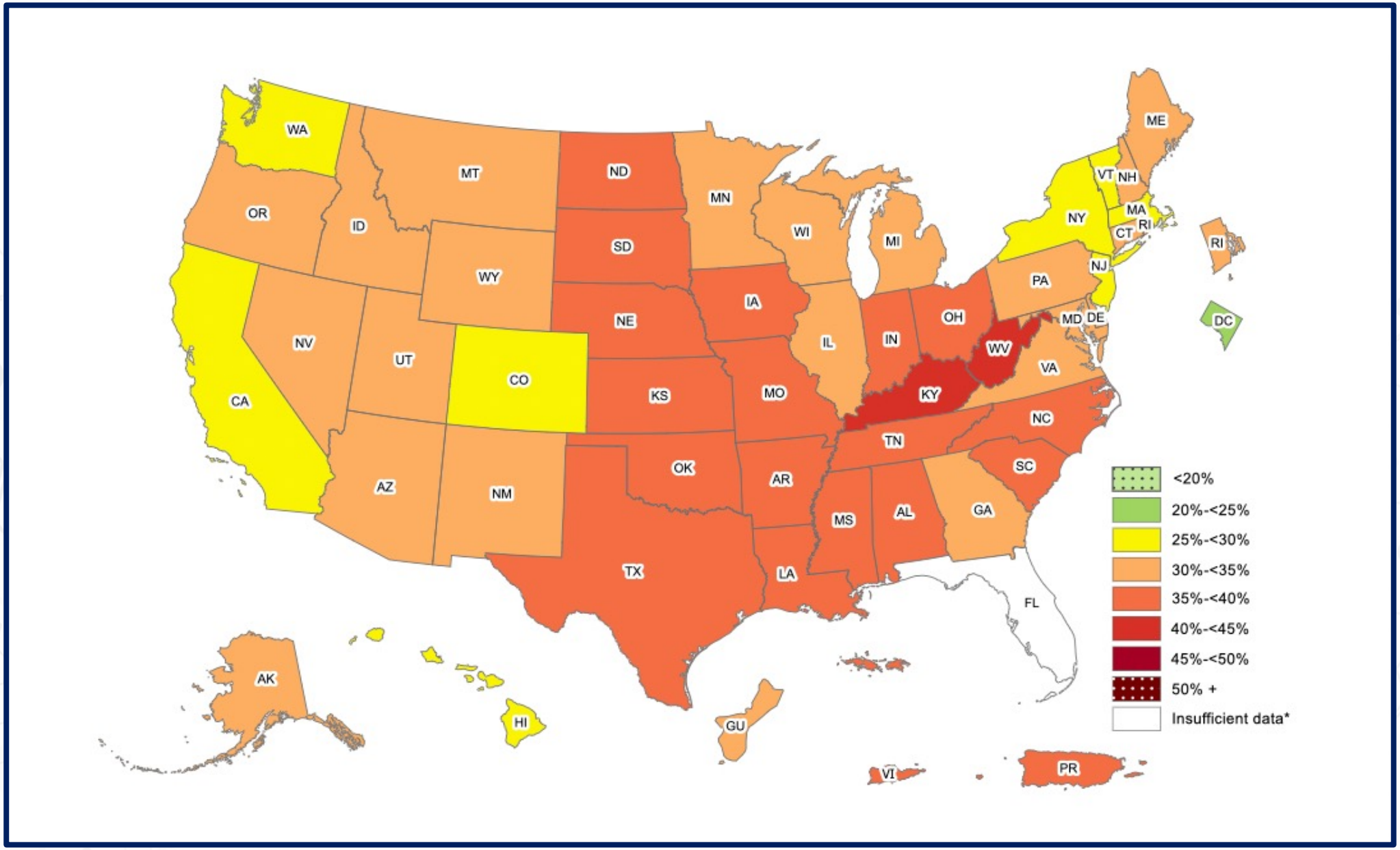
Advancements in Weight Loss Applications

A Biogenetix Clinical Presentation

BIOGENETIX.COM

Disclaimer

- *Information in this presentation is not intended to diagnose, treat, reverse, cure, or prevent any disease. While this presentation is based on medical literature, findings, and text, The following statements have not been evaluated by the FDA.*
- *The information provided in this presentation is for your consideration only as a practicing health care provider. Ultimately you are responsible for exercising professional judgment in the care of your own patients.*


WA
OR
CA
ID
NV
MT
WY
UT
AZ
CO
NM
ND
SD
NE
KS
OK
TX
MN
IA
MO
AR
LA
WI
IL
MS
MI
IN
KY
TN
AL
OH
WV
GA
FL
SC
NC
VA
PA
NY
MD
DE
NJ
CT
RI
MA
VT
NH
ME
DC
AK
HI
GU
VI
PR
<20%
20%-<25%
25%-<30%
30%-<35%
35%-<40%
40%-<45%
45%-<50%
50% +
Insufficient data*

US Doctors' Group Adopts New Policy on Healthy Weight Assessment

By Nancy Lapid
June 15, 2023

(Reuters) - The American Medical Association (AMA) on Wednesday said it will advise doctors to pay less attention to body mass index (BMI) in determining if a patient is at a healthy weight, saying the measure does not predict disease risk equally well across racial and ethnic groups.

BMI, a ratio of weight to height, has long been used to define underweight, "normal" weight, overweight, obesity and morbid obesity, despite mounting evidence that it is an inaccurate predictor of health risks on an individual level.

At the influential physician group's annual meeting in Chicago, members voted adopt a new policy that says BMI should be just one factor in determining whether a patient is at a healthy weight. Other measures such as body composition, belly fat, waist circumference, and genetic factors are also important, the AMA said.

There have been "issues with using BMI as a measurement due to its historical harm (and) its use for racist exclusion," the AMA said.


HEALTH
188 Comments
BMI standards are 'racist': American Medical Association
By Asia Grace
June 20, 2023 | 2:34pm | Updated


The Racist and Problematic History of the Body Mass Index
Explaining the racist roots behind BMI — and why it's not the standard of health it's been made out to be.


POLICY
The Racist Roots of Fighting
Prescribing weight loss to


The really old, racist and non-medical origins of the BMI
By Maani Truu

Adult BMI Calculator – Results

Recalculate BMI

For the information you entered:

Height: 5 feet, 10 inches

Weight: 185 pounds

Your BMI is **26.5**, indicating your weight is in the **Overweight** category for adults of your height. BMI is a screening measure and is not intended to diagnose disease or illness. For more information, visit About Adult BMI.

Discuss your BMI category with your healthcare provider as BMI may relate to your overall health and well-being. Your healthcare provider might determine possible reasons for overweight and recommend support or treatment. Having excess weight can increase risk for chronic conditions, such as high blood pressure, type 2 diabetes, and high cholesterol. Take this 1-minute prediabetes risk test.

Maintaining a weight in the healthy BMI range is one way to support overall health as you age. For more information about lifestyle approaches, visit Healthy Weight.

BMI: Overweight

BMI	Weight Status
Below 18.5	Underweight
18.5 — 24.9	Healthy Weight
25.0 — 29.9	**Overweight**
30.0 and Above	Obesity

Adult BMI Calculator – Results

Recalculate BMI

For the information you entered:

Height: 6 feet, 0 inches

Weight: 225 pounds

Your BMI is **30.5**, indicating your weight is in the **Obesity** category for adults of your height. BMI is a screening measure and is not intended to diagnose disease or illness. For more information, visit About Adult BMI.

Discuss your BMI category with your healthcare provider as BMI may relate to your overall health and well-being. Your healthcare provider might determine possible reasons for obesity and recommend support or treatment. Having obesity can increase risk for chronic conditions, such as high blood pressure, type 2 diabetes, and high cholesterol. Take this 1-minute prediabetes risk test.

Maintaining a weight in the healthy BMI range is one way to support overall health as you age. For more information about lifestyle approaches, visit Healthy Weight.

BMI: Obesity

BMI	Weight Status
Below 18.5	Underweight
18.5—24.9	Healthy Weight
25.0—29.9	Overweight
30.0 and Above	**Obesity**

EU Investigates Ozempic, Weight-Loss Drug Saxenda After Suicidal Thoughts Reported

By Ludwig Burger and Maggie Fick
July 11, 2023

In clinical trials for Ozempic and Saxenda, Novo excluded people with a history of psychiatric disorders or recent suicidal behavior.

Sanofi's Acomplia, which never won U.S. approval, was withdrawn in Europe in 2008 after being linked to suicidal thoughts.

Acomplia was designed to modify parts of the nervous system that regulate appetite. New weight-loss drugs such as Wegovy regulate appetite by mimicking a gut hormone, and not directly interfering with brain chemistry.

Diet pills Contrave by Orexigen Therapeutics and Qsymia by Vivus Inc, approved in the U.S. in 2014 and 2012, respectively, carry warnings on their labels about increased risk of suicidal thoughts.

'Staggering' Weight Loss and Benefits in Body Composition With Tirzepatide

Becky McCall
May 19, 2023

DUBLIN — Substantial reductions in body weight across body mass index (BMI) categories, as well as improved body composition, were achieved with tirzepatide (Mounjaro) in adults for chronic weight management, according to the latest results of the SURMOUNT-1 study.

The new analysis showed that up to 63% of participants achieved a reduction in body weight of at least 20%, and all three tirzepatide doses (5 mg, 10 mg, and 15 mg) led to substantial, clinically meaningful, and sustained body-weight reduction compared with placebo at 72 weeks of follow-up.

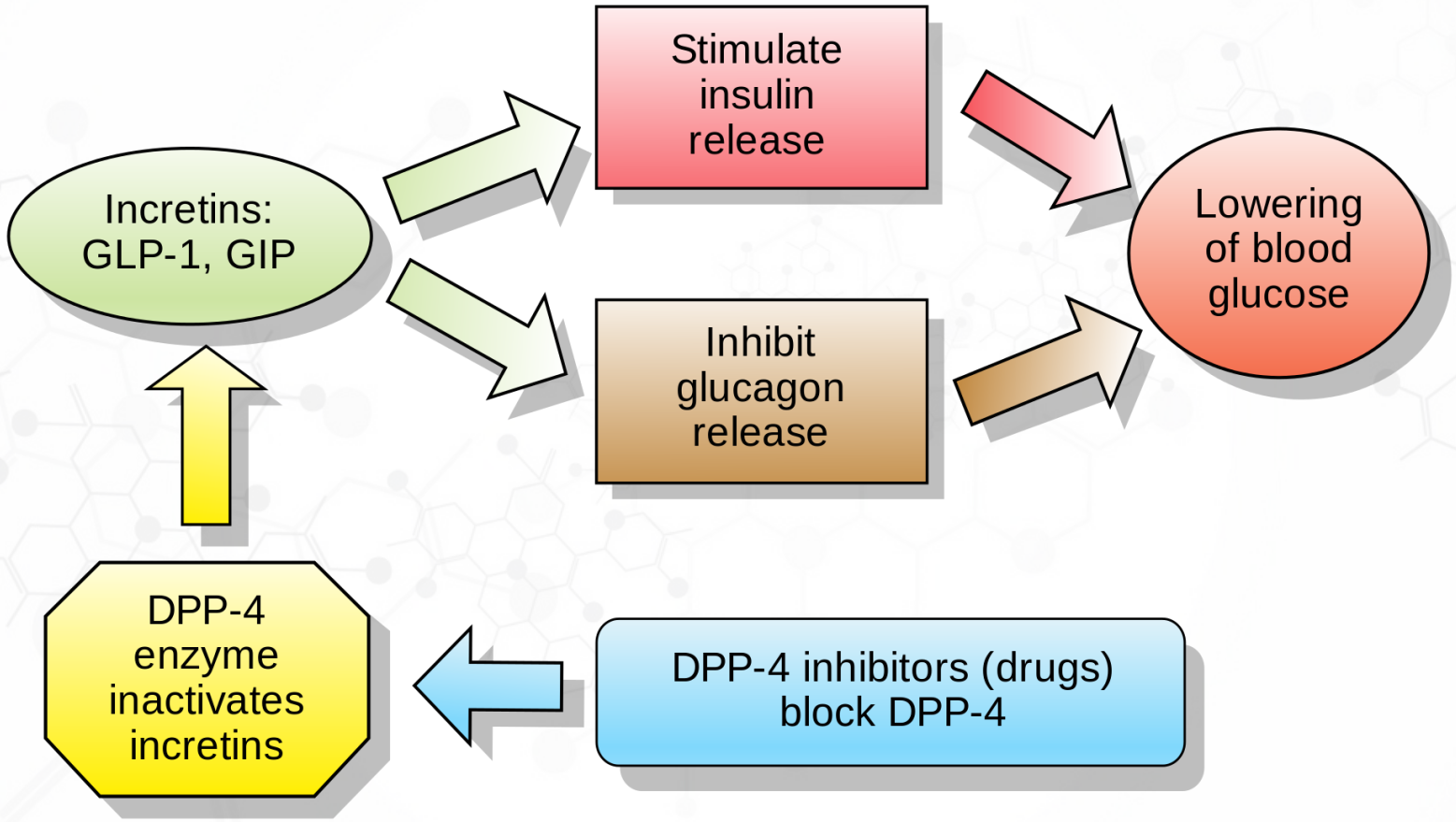
Mean weight loss was –16.0%, –21.4%, and –22.5% with tirzepatide 5 mg, 10 mg, and 15 mg compared with –2.4% for placebo (all $P < .001$ vs placebo). And among participants taking the highest 15-mg dose of tirzepatide, 96%, 90%, and 78% of patients achieved weight reductions of at least 5%, 10%, and 15%.

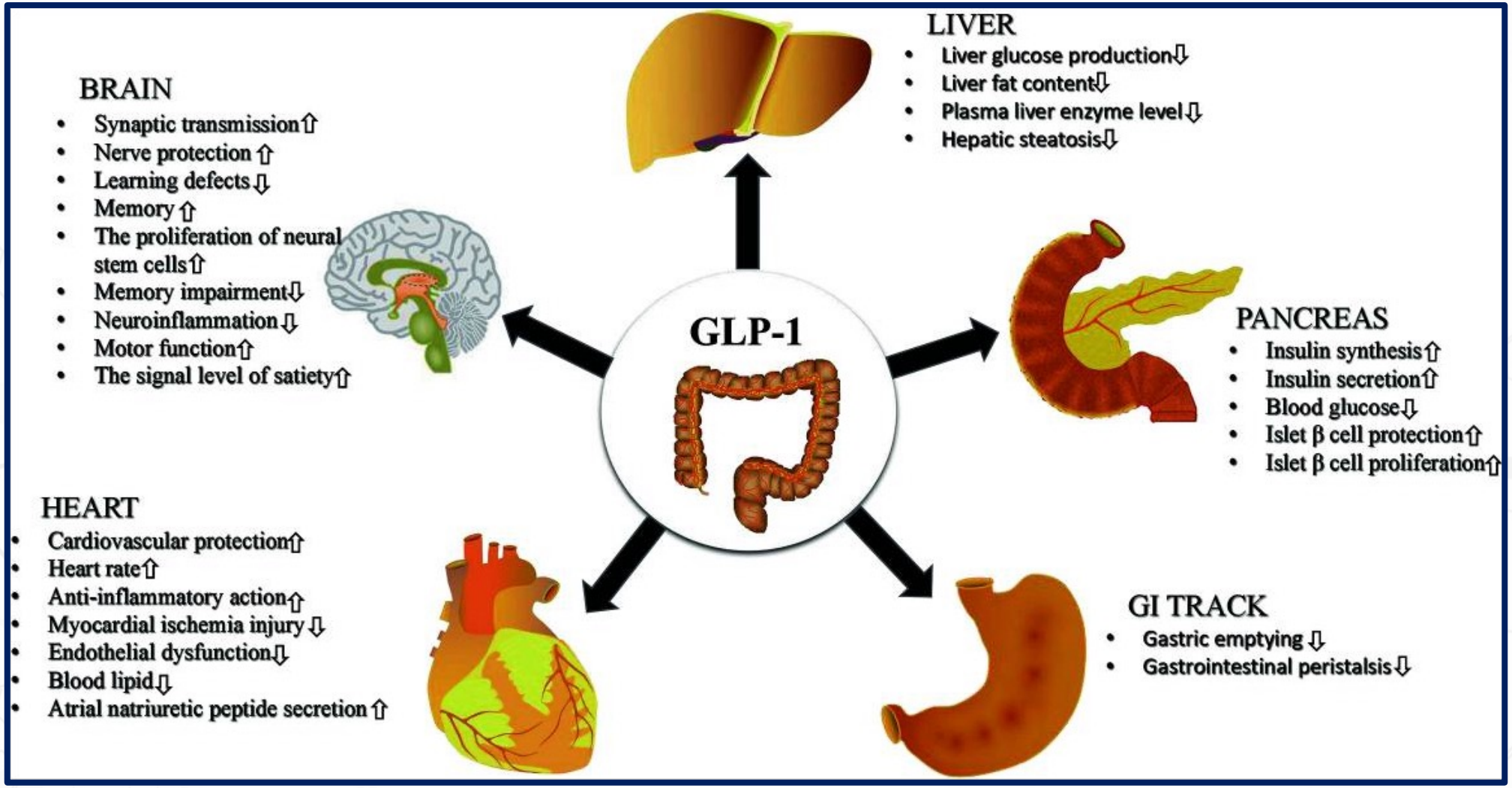
Mounjaro (tirzepatide) is currently the only class of drug that is both a glucagon-like peptide-1 (GLP-1) and a glucose-dependent insulinotropic polypeptide (GIP) receptor agonist. GLP-1 and GIP are incretins, naturally occurring hormones in your body that stimulate insulin secretion in response to increased blood glucose levels after you eat.

GLP-1 works to slow digestion, causing you to feel fuller longer after eating. Tirzepatide imitates these hormones helping to promote weight loss in patients with obesity.

In comparison, Ozempic is solely a GLP-1 agonist and only activates one hormone receptor.

https://joinfound.com/blogs/posts/mounjaro-vs-ozempic#:~:text=Lilly%27s%20tirzepatide%20imitates%20these%20hormones,only%20activates%20one%20hormone%20receptor.





https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8419463/

Review > Diabetes Metab. 2013 May;39(3):195-201. doi: 10.1016/j.diabet.2013.03.001.
Epub 2013 May 2.

Incretin dysfunction in type 2 diabetes: clinical impact and future perspectives

The incretin effect refers to the augmentation of insulin secretion after oral administration of glucose compared with intravenous glucose administration at matched glucose levels. The incretin effect is largely due to the release and action on beta-cells of the gut hormones glucose-dependent insulinotropic polypeptide (GIP) and glucagon-like peptide-1 (GLP-1). This system has in recent years had considerable interest due to the success of incretin therapy as a glucose-lowering strategy in type 2 diabetes. In non-diabetic subjects, the incretin effect is responsible for 50-70% of insulin release during oral glucose administration. In type 2 diabetes patients, the incretin effect is impaired and contributes to only 20-35% of the insulin response to oral glucose. The reason for the defective incretin effect in type 2 diabetes has been the subject of many studies. Although the reports in the literature are mixed, most studies of GIP and GLP-1 secretory responses to oral glucose or a mixed meal have shown fairly normal results in type 2 diabetes. In contrast, the insulinotropic effects of both GIP and GLP-1 are impaired in type 2 diabetes with greater suppression of insulin secretion augmentation with GIP than with GLP-1. The suggested causes of these defects are a defective beta-cell receptor expression or post-receptor defects secondary to the diabetes milieu, defective beta-cell function in general resulting in defective incretin effect and genetic factors initiating incretin hormone resistance. Identifying the mechanisms in greater detail would be important for understanding the strengths, weaknesses and efficacy of incretin therapy in individual patients to more specifically target this glucose-lowering therapy.

Diabetologia. 2017; 60(8): 1390–1399.
Published online 2017 May 19. doi: 10.1007/s00125-017-4289-0
PMCID: PMC5491562
PMID: 28526920

Effects of semaglutide on beta cell function and glycaemic control in participants with type 2 diabetes: a randomised, double-blind, placebo-controlled trial

Christoph Kapitza,[✉1] Kirsten Dahl,[2] Jacob B. Jacobsen,[2] Mads B. Axelsen,[2] and Anne Flint[2]

This study investigated the effects of 12 weeks of once-weekly s.c. semaglutide treatment on various aspects of beta cell function in participants with type 2 diabetes. It was demonstrated by IVGTT that semaglutide treatment increased first- and second-phase insulin secretion threefold and twofold, respectively, compared with placebo. Correspondingly, levels of glucagon and glucose were decreased with semaglutide vs placebo. Similar findings have been reported for once-daily liraglutide, which significantly increased both first- and second-phase insulin secretion after 14 weeks of treatment in participants with type 2 diabetes [7].

Results from the AST under hyperglycaemic conditions showed that maximal insulin capacity had improved following semaglutide treatment. Despite insulin levels prior to the test being higher in semaglutide-treated participants than in participants receiving placebo, insulin levels increased immediately in response to the stimulus and remained high for the duration of the test. This effect could contribute to the reported efficacy of semaglutide in improving glycaemic control [23], particularly as recent research suggests that individuals with sustained endogenous insulin-secreting capacity may benefit more from GLP-1RA therapy [24].

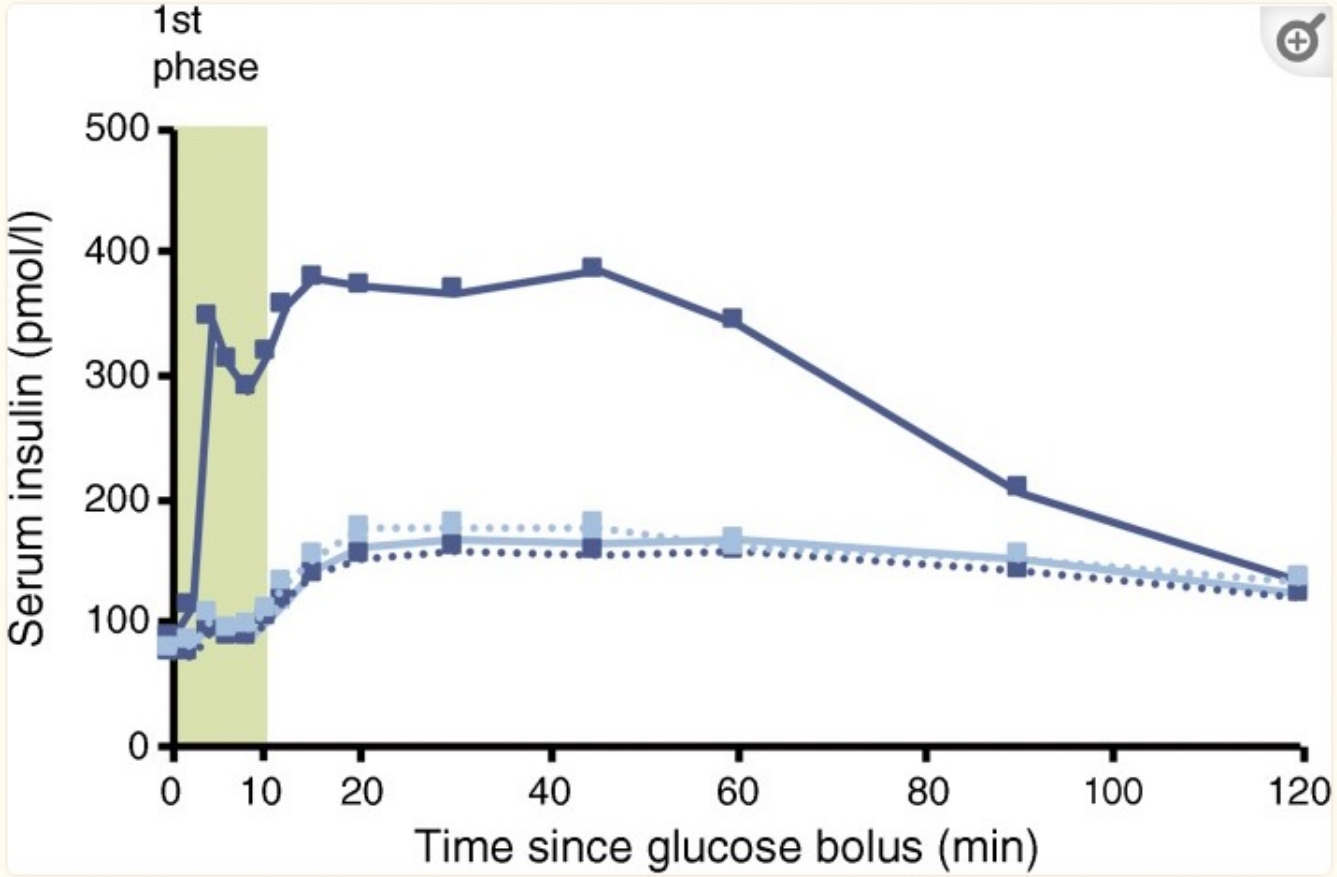


Fig. 2

Geometric mean insulin response to an IVGTT in participants with type 2 diabetes before and after 12 weeks of treatment with semaglutide ($n = 37$, dark blue) or placebo ($n = 37$, light blue). One participant who received an incorrect glucose dose was excluded from all IVGTT analyses. Dotted lines represent baseline values and solid lines represent end of treatment values

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5491562/

The Wedge Protocol