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Ozempic Linked to Increased Risk of Blindness

Analysis by Dr. Joseph Mercola | September 07, 2024

STORY AT-A-GLANCE

- Ozempic and Wegovy, GLP-1 receptor agonists, are successful weight loss drugs. However, research suggests they may increase the risk of gastrointestinal issues and potentially impact vision that may lead to blindness
- A 2024 study found an association between semaglutide (Ozempic) and non-arteritic anterior ischemic optic neuropathy (NAION) in diabetic and obese patients, potentially leading to sudden vision loss
- GLP-1 receptor agonists may also increase risks of gastroparesis, biliary disease, pancreatitis, bowel obstruction and other adverse effects. Stopping the medication will in most cases normalize digestive function, but can lead to Ozempic rebound
- Boosting GLP-1 naturally by supporting gut health may be safer for weight loss. Akkermansia muciniphila, a beneficial gut bacterial strain, can be promoted through probiotics, dietary fiber and polyphenol-rich foods
- Berberine, a natural compound, has been dubbed "nature's Ozempic" for its potential to support weight loss, manage blood sugar and improve insulin sensitivity without the risks associated with pharmaceutical options

Ozempic and Wegovy, which contain the glucagon-like peptide 1 receptor agonist (GLP-1RA) semaglutide, continue to be blockbuster drugs for Danish pharmaceutical giant Novo Nordisk. A May 2024 report from Forbes noted that the company's overall sales doubled compared to the previous year, collecting a whopping $1.35 billion.[1]

While these options may seem convenient, the fixation on weight loss "magic bullets" may be doing more harm than good. Published research[2] has shown that semaglutide can increase your risk of serious gastrointestinal adverse events. One recent study suggests these drugs can put your vision at risk, too.

Ozempic May Increase Your Risk of Blindness

In a retrospective study[3] published by JAMA Ophthalmology on July 3, 2024, researchers suggest there's an association between semaglutide intake and non-arteritic anterior ischemic optic neuropathy (NAION) among Type 2 diabetics and/or obese and overweight participants.

For context, NAION is a condition marked by loss of blood flow to the optic nerve, which is the neural pathway connecting your eyes to your brain. Once blood flow is disrupted, blindness (without pain) can suddenly occur. According to Brightman and Women's Hospital, NAION causes "significant loss of vision in one eye immediately waking up in the morning," and that the loss remains stable once it occurs.[4]

In the JAMA Ophthalmology study, the authors selected papers published from December 1, 2017, to November 30, 2023 with a total of 16,827 participants. From this population, 710 were diagnosed with Type 2 diabetes, and 194 of them were prescribed semaglutide. Moreover, 979 were overweight or obese, and from this number, 361 were prescribed semaglutide.[5]

After accounting for covarying factors such as gender, age, systemic hypertension and hyperlipidemia, researchers determined the cumulative frequency of NAION from the population. Results showed that in the Type 2 diabetic subset, 17 NAION events occurred. In the overweight/obese subset, 20 NAION events were recorded.[6]

Using a model to calculate the risk of developing NAION, the analysis showed startling results. Semaglutide can substantially increase your risk of NAION compared to other conventional medications for diabetes and obesity. According to the researchers, using

this drug will make you 4.28 times more likely to develop NAION if you're diabetic, and 7.64 times more likely if you're overweight/obese.[7]

Note, however, that the study was observational. "Future study is required to assess causality," the researchers said, as they didn't go into the specifics of how semaglutide can lead to NAION. However, the study still has merits — all NAION cases prescribed with semaglutide were confirmed by experienced neuro-ophthalmologists. To their knowledge, this study is the first to look at the link between semaglutide and NAION.[8]

A Closer Look Into the Link Between Semaglutide and Retinopathy

While the JAMA Ophthalmology study was the first to investigate the link between semaglutide and NAION, it's not the first instance other researchers discovered a link between semaglutide and eye damage, specifically in the context of diabetic neuropathy.

For example, a 2023 study[9] published in Diabetologia noted that during the trial phase of semaglutide (back in 2016), the drug was observed to increase the risk of retinopathy, especially when you're already diabetic. In another study,[10] semaglutide was linked to significantly higher rates of retinopathy complications, such as blindness and vitreous hemorrhage.

What are the factors contributing to this complication? According to a study published in the World Journal of Diabetes, uncontrolled Type 2 diabetes may be a contributing factor when semaglutide is taken. Specifics include longer diabetes duration, higher initial HbA1c in the blood and higher insulin-treatment rate when the trials began.[11] In short, if you're already chronically diabetic, taking Ozempic can significantly increase your risk for retinopathy.

Interestingly, the study highlights the crucial role of gut health with managing diabetes, and how a healthy gut may help lower the risk of diabetic retinopathy:[12]

"Gut dysbiosis, i.e., the chronic disequilibrium within the many different microbial colonies, seems associated with several inflammatory/metabolic diseases and central nervous system (CNS) disorders, including retinopathy as an expression of the emerging concept of the so-called 'microbiota-retina axis.'

Indeed, as longstanding diabetes is associated not only with retinopathy but also with significant intestinal dysbiosis, relevant changes in the bacterial population might trigger the onset of retinopathy via their influence on the lipid content of both retinal and CNS tissues …"

Inhibiting Your GLP-1 Receptor May Have Other Side Effects

Taking GLP-1RAs can be disastrous to your health. A 2021 study[13] published in the Journal of Investigative Medicine noted that that these drugs can increase your risk of gastroparesis (stomach paralysis), a condition that slows or stops the movement of food from your stomach to the small intestine.

The study presented two patients. The first is a 52-year-old woman with well-controlled diabetes. She visited the clinic of the researchers, hoping to solve her post-meal epigastric pain, which was marked by fullness, bloating and nausea. Upon tracing her medical history, they discovered that she had been taking semaglutide injections for a month before her symptoms appeared.[14]

After testing, it was discovered that semaglutide caused delayed gastric emptying. Consequently, the drug was stopped for six weeks, and another round of tests showed that gastric emptying improved.[15]

The second patient, a 57-year-old female, had a similar case. She had Type 2 diabetes for 16 years and had been taking weekly dulaglutide (another GLP-1RA) injections for 15 months. Tests revealed that the drug caused delayed gastric emptying, and stopping the injections normalized gastric movement.[16]

Another study,[17] published in JAMA, noted that in addition to gastroparesis, GLP-1RAs can also increase the risk of biliary disease, pancreatitis and bowel obstruction.

EudraVigilance, the European Medicine Agency's system for monitoring adverse reactions in drugs, also noted metabolic, nutritional, urinary, cardiac and eye disorders associated with semaglutide.[18]

Other published studies have linked GLP-1RAs in the development of pancreatic carcinoma[19] and acute kidney injuries.[20] Rodent studies have also shown Wegovy to cause thyroid C-cell tumors at doses similar to those used in humans and is a contraindication for patients with a history of medullary thyroid carcinoma.[21] Moreover, Wegovy's product label warns users of the following adverse reactions:[22]

Acute pancreatitis	Acute gallbladder disease
Hypoglycemia	Acute kidney injury
Hypersensitivity reactions, including anaphylactic reactions and angioedema	Diabetic retinopathy complications among Type 2 diabetics
Heart rate increase	Suicidal behavior and ideation

Boost Your GLP-1 Receptor Instead Through Polyphenol-Rich Foods

Going back into the role of your gut microbiome, boosting GLP-1 expression, instead of inhibiting it, may be better for weight loss. One way to do this is by colonizing your gut with Akkermansia muciniphila, a type of bacteria that naturally secretes a GLP-1-inducing protein. Researchers noted in a study published in the journal Nature Microbiology:

> *"A. muciniphila increases thermogenesis and glucagon-like peptide-1 (GLP-1) secretion in high-fat-diet (HFD)-induced C57BL/6J mice by induction of uncoupling protein 1 in brown adipose tissue and systemic GLP-1 secretion."*

The importance of Akkermansia in supporting gut health cannot be emphasized enough. In **my interview with Georgi Dinkov**, I explain why Akkermansia is such a keystone species. However, many people lack this specific microbe, which I believe is caused by insufficient energy production, resulting in oxygen leakage into the gut.

Certain foods, particularly those rich in polyphenols, can nourish the growth of Akkermansia in your gut and support overall health. Healthy sources include berries, broccoli, apples, ginger, onions, green tea and carrots.[23] A study[24] published in the International Journal of Molecular Sciences explains why Akkermansia is linked to better health:

> *"Akkermansia muciniphila is a mucosal symbiont considered a gut microbial marker in healthy individuals, as its relative abundance is significantly reduced in subjects with gut inflammation and metabolic disturbances.*
>
> *Dietary polyphenols can distinctly stimulate the relative abundance of A. muciniphila, contributing to the attenuation of several diseases, including obesity, Type 2 diabetes, inflammatory bowel diseases, and liver damage."*

Nature Already Has Its Own Ozempic

A naturally occurring compound found in goldenseal, barberry, Oregon grape and tree turmeric, berberine has been dubbed as "nature's Ozempic" because of its ability to support weight loss naturally.[25] According to a study published in Molecules,[26] its properties may help with the management of Type 2 diabetes, obesity, atherosclerosis, cancer and cardiovascular complications. The researchers outline how these benefits occur:

> *"It positively contributes to elevated levels of fasting, postprandial blood glucose, and glycosylated hemoglobin, while decreasing insulin resistance. It stimulates glycolysis, improving insulin secretion and inhibits gluconeogenesis and adipogenesis in the liver; by reducing insulin resistance, berberine also improves ovulation.*

> *The antiobesity action of berberine has been also well-documented. Berberine acts as an anti-sclerotic, lowering the LDL and testosterone levels. The alkaloid exhibits an anti-inflammatory property by stalling the expression of cyclooxygenase 2 (COX-2) and prostaglandin E2."*

These findings have been verified in other published research as well. According to one systematic review, berberine may help regulate blood sugar levels and improve insulin sensitivity.[27] This is an important factor because insulin resistance is closely linked to weight gain and obesity, and addressing these may improve insulin sensitivity, and thus, weight loss.[28]

Another study[29] published in Frontiers in Cellular and Infection Microbiology found that berberine may help "alleviate the pathological conditions of metabolic disorders, and the mechanism is related to the regulation of gut microbiota." Moreover, berberine's ability to regulate the gut microbiota may boost its absorption.

Minimize Linoleic Acid Intake for Better, Long-Term Results

I believe that the elusive magic bullet for weight loss the world is chasing will not exist in our lifetime. As the evidence has shown, relying on drugs that alter your body's essential functions puts you at risk of debilitating health issues. And once you get off Ozempic/Wegovy, you're likely to gain back the weight you've lost. According to a report,[30] most people who stop semaglutide injections regain two-thirds of lost weight — a phenomenon known as "Ozempic rebound."

For safer, healthier weight loss, it's important to address one of the biggest factors currently driving the obesity epidemic — excess consumption of linoleic acid (LA). It's an omega-6 fat found in seed oils widely used in cooking. Prominent examples include soybean, cottonseed, sunflower, rapeseed (canola), corn and safflower oil.[31]

In addition to avoiding any food cooked or made with these oils, ditch the processed foods, fast foods and restaurant foods. If you absolutely must go out to have a meal, check out the Templeton List,[32] which lists restaurants known for their healthier food

offerings. They consider criteria such as locally sourced, sustainable ingredients and usage of healthy oils in cooking.

Finally, I recommend minimizing your LA consumption to below 5 grams (or even better, below 2 grams) per day, which is similar to what our ancestors' intake before the widespread appearance of chronic health conditions plaguing modern society today. To learn more about the danger of LA, read my article "**Linoleic Acid — The Most Destructive Ingredient in Your Diet.**"

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