

GLPs – Diabetes, Weight Loss, and So Much More

*Your Weekly Newsletter by
Dr. Nick Sieveking*



Could the new class of peptides, GLP-1, 2, & 3, be the “silver bullet” for slowing down the aging process? Quite possibly! The first GLP-1 (Exenatide) was FDA approved over 20 years ago for the treatment of type 2 diabetes. As these drugs became more widely used, physicians and patients quickly noticed their powerful effect on weight reduction.

Over the last two decades, the transformation of GLP agonists has been remarkable—with few, reversible side effects. As both a plastic surgeon and a functional medicine physician, I see firsthand how these medications are changing lives.

Patients are:

- Losing unwanted weight
- Lowering their risk of diabetes
- Reducing the long-term health risks tied to insulin resistance

And with that weight loss often comes skin laxity, leading to an increased demand for aesthetic procedures such as facelifts, neck lifts, breast lifts, and tummy tucks.

At Sieveking Plastic Surgery, we are proud to be among the first in our region offering the latest 3rd-generation GLP peptide—Retatrutide. This table summarizes the evolution of GLP-1 receptor agonists, including their approval timeline and unique properties.

Generation	Drugs	FDA Approval (US)
First Gen	Exenatide (Byetta) Exenatide ER (Bydureon) Lixisenatide (Adlyxin)	2005, 2012, 2016
Second Gen	Liraglutide Dulaglutide Semaglutide* Albiglutide	2010+
Third Gen	Tirzepatide* Retatrutide*	2022+
<i>*Available now at Sieveking Ageless Solutions</i>		

Receptor Effects of GLP-1, GIP, and Glucagon

In addition to their generational differences, GLP-based therapies act on three key receptors—each with unique physiological effects that contribute to weight loss, glucose control, and metabolic health.

Receptor	Main Role	Key Effects
GLP-1 Receptor Semaglutide Tirzepatide Retatrutide	Regulates insulin secretion and appetite	• Enhances insulin release from pancreatic β-cells • Suppresses glucagon from α-cells • Slows gastric emptying • Promotes satiety and reduces appetite
GIP Receptor Tirzepatide Retatrutide	Amplifies insulin response to meals	• Stimulates insulin secretion in response to oral glucose • Enhances fat metabolism and storage • Modulates satiety/reward pathways in the brain
Glucagon Receptor Retatrutide	Regulates glucose and energy balance	• Increases hepatic glucose production (gluconeogenesis, glycogenolysis) • Promotes lipolysis and fat oxidation • May increase energy expenditure and thermogenesis

Glucagon-Like Peptides GLP-1,2,&3

Heart &

Blood Vessels

- Lowers Blood Pressure
- Reduces "Bad" Cholesterol
- Proven to reduce Heart Attacks & Strokes

Stomach &

Intestines

- Promotes "fullness" by slowing gastric emptying
- Reduces Glucose "Spikes" after meals

Liver

- Decreases Glucose Production
- Reduces "Fatty Liver"

Brain

- Suppresses Appetite
- Reduces Food Craving
- Possible memory enhancement

Lungs

- reduces Airway inflammation
- helps with COPD and Asthma

Pancreas

- Increases Insulin Secretion
- Improves Blood Sugar Control
- Reduces A1C

Kidneys

- reduces inflammation
- Slows progression of Kidney Disease

Fat Cells

- Promotes Fat Breakdown
- Reduces "Bad" Visceral Fat

Closing Note

We are entering a new era in both longevity medicine and aesthetic surgery. GLP agonists not only support weight loss and diabetes prevention, but also contribute to healthier, more confident lives.

If you're curious about whether these treatments are right for you, schedule a consultation with us today.

To your health,
Nick Sieveking

SPECIAL OFFER

--Through October 2025--

Mention this newsletter and receive your first injection of the GLP-3 *Retatrutide* **FREE***

Come experience this health-promoting peptide first hand.

**Patients must be deemed eligible following brief medical history questionnaire.*



REFER A FRIEND!

Encourage a friend to sign up for our weekly newsletter and receive **\$10** in “***Sieveking Age Management Dollars***”. Use these dollars towards any service at Sieveking Plastic Surgery, Sieveking Ageless Solutions, and Sieveking MoreGlow MedSpa.

There is no limit!

STAY TUNED!

Be on the lookout for next week’s newsletter on Mommy Makeovers, the first of a three-part series highlighting breast surgery!

[Schedule Appointment](#)



Sieveking Plastic Surgery

1200 Old Hillsboro Rd., B2, Franklin,
TN 37069
info@sievekingplasticsurgery.com
615-321-1010

[Unsubscribe](#)

Ageless Solutions

615-678-7784