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THE GLP-1 BOOM: BREAKTHROUGH OR BACKLASH?

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From Hormone to Medicine: The GLP-1 Effect

GLP-1 (glucagon-like peptide-1) is a natural hormone involved in blood sugar control and appetite signalling. GLP-1 receptor agonists are medicines that imitate these effects in a longer-acting manner and are primarily used to treat type 2 diabetes and, in some formulations, chronic weight management. Examples include semaglutide and liraglutide, which are also marketed under various well-known brand names.



Figure 1: The Use of Injectable GLP-1 Medications for Weight Management and Glucose Control

GLP-1 receptor activation can increase insulin secretion when glucose is elevated, reduce glucagon, slow gastric emptying, and suppress appetite, which together improves glucose control and often reduces food intake. Numerous individuals report experiencing immediate fullness or diminishing cravings, which is why alterations in weight are often associated with the management of diabetes (Zheng et al., 2024).

It is important to acknowledge that these are not cosmetic effects. They are metabolic effects that have become clinically significant for people with diabetes and for some people living with obesity, especially when cardiovascular risk is involved. A large clinical trial found that semaglutide reduced major cardiovascular events in adults with overweight or obesity and established cardiovascular disease, even among those without diabetes (Lincoff et al., 2023).

Weight Loss Hype vs. Medical Reality

Weight loss is a visible outcome, and visible outcomes spread quickly online. That is one reason GLP-1 medicines became headline topics. Another possibility is that modern lifestyles present significant challenges to long-term weight control, so a treatment that reduces appetite may appear to be a "solution" when compared to the daily effort of eating right and exercising (Dombrowski et al., 2014).

However, describing GLP-1 medicines as a shortcut can be misleading. First, these medicines are prescription therapies with clear indications and limitations. For example, the U.S. Food and Drug Administration (FDA) approves different labels for semaglutide depending on the formulation and

intended use, with some products indicated for glycaemic control in type 2 diabetes and others for chronic weight management, and certain labels also including cardiovascular risk reduction indications.

Second, weight loss outcomes are strongly shaped by long-term use and long-term habits, not just the medicine. In a follow-up study, participants regained a significant portion of lost weight after semaglutide was discontinued, showing that long-term planning matters.

A 2026 systematic review and meta-analysis published in The BMJ reported that stopping weight-management medications is commonly followed by weight regain and partial reversal of cardiometabolic improvements. This does not mean the medicines do not work; rather, obesity and metabolic risk often behave like chronic conditions, so expectations should remain realistic.

Social media often amplifies a "shortcut" narrative by prioritising transformation images over medical context, eligibility criteria, side effects, and follow-up. Consistent with this, studies analysing online GLP-1 content highlight the risk of misinformation and inappropriate use when prescription treatment is framed as a social trend (Fong et al., 2024).

Beneficial Breakthrough or Harmful Hype?

This trend is neither wholly beneficial nor wholly detrimental. The efficacy of these medications is dependent upon their use and purpose.

Reasons for this trend may be beneficial:

1. GLP-1 therapies offer proven clinical benefits for high-risk patients, including reduced major cardiovascular events in selected populations (Lincoff et al., 2023).
2. Increased public discussion can reduce stigma by shifting obesity away from moral judgement and towards evidence-based care, especially when the focus remains on health outcomes rather than appearance.
3. They can produce clinically meaningful weight loss for eligible patients, which often improves cardiometabolic risk factors such as blood pressure, glucose control, and lipid profiles, especially when combined with lifestyle changes.

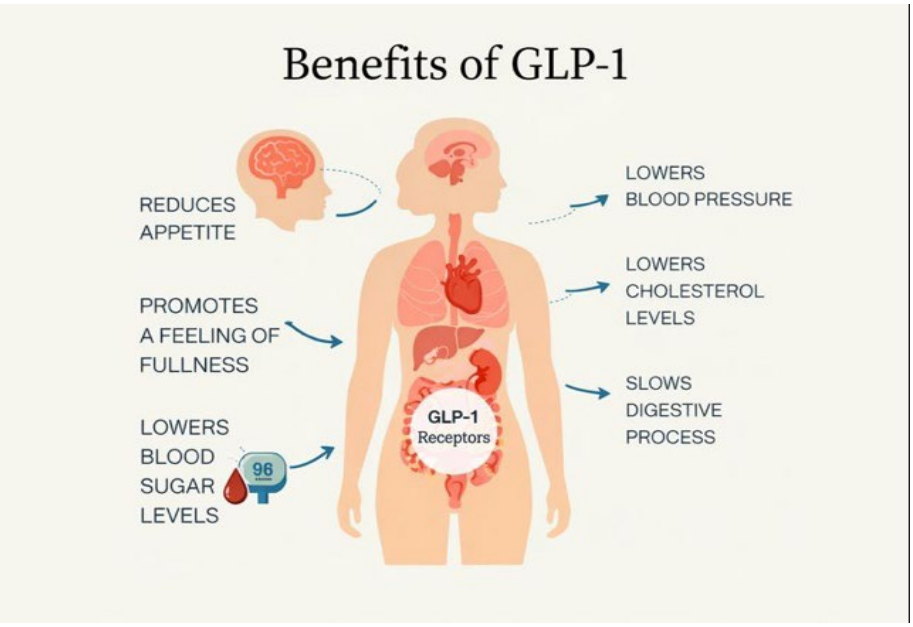

Figure 2: The Benefits of GLP-1 for Appetite Regulation, Blood Glucose Control, and Cardiovascular Health

Reasons for this trend may be problematic:

1. When GLP-1 medicines are sought mainly for cosmetic goals, the boundary between healthcare and consumer culture can blur, raising ethical concerns about access, affordability, and medical necessity as demand expands (Savla et al., 2025).
2. Supply and access pressures. Increased demand can contribute to shortages and disrupt care for patients who rely on these medicines for diabetes management or clinically indicated obesity treatment.
3. High demand can attract counterfeit products and scams, and repeated warnings from the U.S. Food and Drug Administration (FDA) about fake semaglutide in the supply chain highlight the importance of avoiding unverified sellers.
4. Online narratives can fuel misinformation and unrealistic expectations by downplaying side effects, overpromising results, or implying "DIY" use, and studies of social media content show that incomplete reporting can distort public understanding.
5. Even when obtained legitimately, GLP-1 therapy requires medical screening and ongoing monitoring, so casual use without follow-up can increase preventable adverse effects and complications.

A Smarter Way to Think About GLP-1

GLP-1 medicines can be highly beneficial when prescribed for the right patient, for the right medical indication, and with proper supervision. However, they are not beauty tools or lifestyle "hacks" and using them primarily for appearance can lead to misuse and unnecessary risk. The most responsible approach is to keep the discussion grounded in evidence: what the medicines do, who they are appropriate for, what the trade-offs are, and why clinical oversight and long-term planning matter.

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