

7. GLP-1 Medicines- Science & Technology

Obesity- GLP-1 therapies. Classifying obesity as a "chronic disease requiring lifetime care," the WHO has issued its first-ever guidelines endorsing GLP-1 receptor agonists (originally for diabetes) for weight loss in adults. To address access barriers like high costs, the WHO emphasizes an integrated approach involving lifestyle changes and proposes the manufacturing of generic versions.

Strategic Shift

First-Ever Guidelines- The World Health Organization (WHO) has released its inaugural guidelines for the use of GLP-1 (Glucagon-Like Peptide-1) weight-loss drugs.

Global Strategy- This move is part of a broader global strategy to combat the escalating obesity crisis.

Redefining Obesity- WHO has explicitly classified obesity as a "chronic disease requiring lifetime care," moving away from viewing it solely as a lifestyle issue.

Access Initiatives- To improve accessibility, WHO has proposed- Manufacturing generic versions of these drugs.

Pre-qualification of medicines to allow international organizations to procure them for developing countries.

Understanding Obesity- Definitions & Statistics

WHO Definition- Obesity is defined as having a Body Mass Index (BMI) of 30 or higher in adults.

BMI Calculation- It is a metric derived from an individual's weight and height.

Health Risks- Obesity significantly increases the risk of- Type-2 diabetes, Cardiovascular diseases, Hypertension, Other chronic conditions

Global Statistics- Over 1 billion people globally live with obesity. This figure includes 188 million children and adolescents.

India Scenario (NFHS-5 Data)- 24% of women are overweight or obese. 23% of men are overweight or obese.

Key Guidelines Issued by WHO

Conditional Endorsement for Adults- GLP-1 therapies are recommended for long-term obesity management in adults.

Exclusion- The guidelines currently exclude pregnant women.

Rationale- There is clear evidence demonstrating significant weight loss and metabolic benefits.

Integrated Treatment Approach- Medication alone is not sufficient. WHO emphasizes a comprehensive care model

GLP-1 drugs must be paired with intensive behavioural interventions, which include- Dietary modifications. Structured physical activity programmes.

Equity and Access Concerns-

Warning- Rapid adoption of these drugs without supporting policies on pricing, access, and supply chains may exacerbate global health inequalities.

Projected Reach- Even with accelerated manufacturing efforts, it is estimated that GLP-1 drugs will reach less than 10% of potential beneficiaries by the year 2030.

About GLP-1 Medicines

Classification- GLP-1 receptor agonists are a class of medications.

Origin- They were originally developed and approved for the treatment of Type-2 diabetes.

Biological Function- They mimic the natural hormone Glucagon-Like Peptide-1.

Regulatory Status- These drugs are already included in the WHO Essential Medicines List specifically for diabetes management.

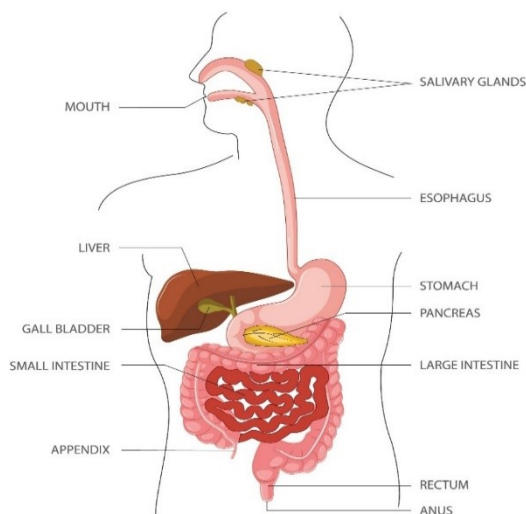
Barriers to Access- Prohibitive high costs. Limited production capacity. Supply-chain constraints.

Mechanism of Action

Function	Description
Insulin Regulation	They enhance insulin release from the pancreas and reduce blood glucose levels.

Appetite Suppression	The drugs interact with the brain to reduce appetite and induce satiety (feeling of fullness).
Digestion Control	They slow down stomach emptying, which leads to a lower overall calorie intake.
Metabolic Improvement	They improve metabolic markers, lowering the risk of heart disease and kidney complications.
Weight Loss	Long-term usage results in significant and sustained weight loss.

DIGESTIVE SYSTEM



Applications and Therapeutic Uses

Type 2 Diabetes–Primary use is to improve blood glucose control.

Obesity & Weight Loss– Increasingly prescribed due to their potent appetite-suppressing effects.

Cardiovascular Protection– Certain GLP-1 drugs have been shown to reduce the risk of heart attack and stroke in high-risk diabetic patients.

Current Market Status

Approved Therapies– Currently, there are 12 GLP-1 therapies approved globally for the treatment of either obesity or Type-2 diabetes.

Pipeline– According to WHO, another 40 agents are in active development, targeting various indications and utilizing different formulations.

Source– <https://www.who.int/news-room/questions-and-answers/item/obesity-glp-1-therapies#---text=Based%20on%20current%20WHO%20recommendations,been%20tested%20in%20this%20population>