# Update on Pharmacologic Therapy for Weight Loss: Considerations for Nurses

Krystal Pendergraft-Horne, DNP, FNP-C, RN, Assistant Professor
UNC Chapel Hill School of Nursing

## **Objectives**

- 1. Identify Key Weight Loss Medications
- 2. Understand Clinical Implications
- 3. Recognize Side Effects and Warnings
- 4. Discuss Patient Education Strategies
- 5. Evaluate Safety and Efficacy
- 6. Highlight Nursing Considerations

# Myth Vs. Fact Activity

Let's assess your existing knowledge surrounding weight loss medications before we jump into discussion!

Go to the following website:

Join.nearpod.com
Code will be
provided



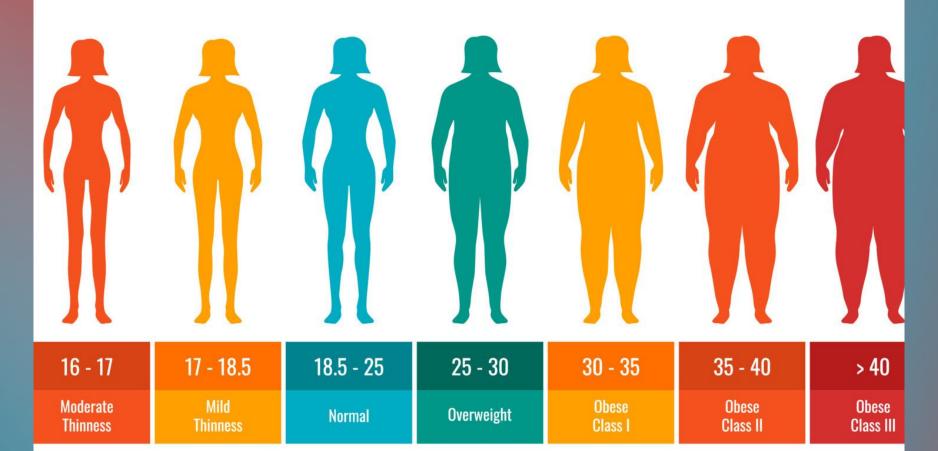
# **Examples of Social Media Influence**

- https://www.youtube.com/shorts/JmHPQzCK 110
- https://www.youtube.com/shorts/YdvaYsYTW
   WA
- https://www.youtube.com/shorts/ia6LzdOUn mg

# Social Media & Weight Loss Medications: Hype vs. Reality

- Weight loss medications are trending across TikTok, Instagram, and YouTube
- Social media can amplify unrealistic body expectations
- Off-label use and misinformation are common
- Patients may pressure providers for medications they saw online
- Nurses play a key role in clarifying facts and setting expectations

# BODY MASS INDEX (kg/m²)



## **Obesity as a Chronic Condition**

- Chronic, progressive, and relapsing disease
- Excessive fat accumulation that impacts health and increases the risk of conditions such as diabetes, hypertension, and cardiovascular disease.
- Influenced by multiple factors, including genetics, environment, metabolism, hormones, and behavior.
- Not just about diet and exercise—obesity involves complex neurohormonal regulation affecting appetite, satiety, and energy balance.

## **Obesity as a Chronic Condition**

- Associated with systemic inflammation, which contributes to chronic diseases like type 2 diabetes and non-alcoholic fatty liver disease (NAFLD).
- Treatment requires a multimodal approach including lifestyle changes, behavioral therapy, medications, and in some cases, bariatric surgery.
- Weight loss of 5-10% can improve health outcomes, reducing the risk of cardiovascular disease, diabetes, and joint-related complications.
- Stigma and bias can impact treatment—healthcare providers should approach obesity with compassion and evidence-based strategies.

## Weight Loss Medications

#### **Oral Medications:**

- Phentermine (Adipex-P, Lomaira)
- Orlistat (Xenical, Alli)
- Naltrexone/Bupropion (Contrave)
- Topiramate/Phentermine (Qsymia)

#### **Injectable Medications:**

- Liraglutide (Saxenda)
- Semaglutide (Wegovy)
- Tirzepatide (Zepbound)

## **Clinical Pearls**

- These medications are to be used in combination with dietary modifications and exercise
- AHA recommends
   150 minutes of
   moderate intensity
   aerobic activity



### **Mechanisms of Action: PO Meds**

- Phentermine: Appetite suppressant
- **Orlistat**: Lipase inhibitor reducing fat absorption
- Naltrexone/Bupropion: Affects appetite and reward pathways
- Topiramate/Phentermine: Appetite suppression and increased satiety

## Mechanism of Action: Vyvanse

- 1st FDA-approved medication to treat binge eating disorder
- Also used to treat ADHD
- Controls impulsive behavior
- Stimulant

# Mechanism of Action: Injectables

• GLP-1 Agonists: (Liraglutide, Semaglutide, Tirzepatide): Slows gastric emptying and promotes satiety, which decreases appetite.

Increases the production of beta cells

• These injectables **are not insulin** but they do increase insulin production.

# Semaglutide



# Clinical Indications for Weight Loss Mediations

#### **Indications:**

- - BMI ≥30 kg/m² or BMI ≥27 kg/m² with comorbidities
- Patients with obesity-related conditions (e.g., diabetes, hypertension)

#### **Contraindications**

- Pregnancy and lactation
- Uncontrolled hypertension (Phentermine, Contrave)
- History of pancreatitis (GLP-1 agonists)
- Seizure disorders (Bupropion component of Contrave)



# Side Effects & Black Box Warnings

#### **Common Side Effects:**

- Nausea, vomiting, diarrhea, pancreatitis (GLP-1 agonists)
- Dry mouth, insomnia (Phentermine, Vyvanse)
- Oily stools, GI discomfort (Orlistat)

#### **Black Box Warnings:**

- -Contrave: Risk of suicidal thoughts (Bupropion component)
- **GLP-1 Agonists**: Risk of thyroid C-cell tumors (animal studies)
- -Qsymia: Risk of fetal harm (teratogenicity)

### Literature Review

### **Animal Studies (Rodents):**

- GLP-1 receptor agonists caused C-cell tumors in rats and mice when given longterm at high doses.
- The mechanism is believed to be GLP-1 receptor stimulation of C-cells, which are involved in calcitonin secretion in rodents.
- These findings led to a **black box warning** in the U.S. for medications like liraglutide (Saxenda) and semaglutide (Wegovy).

## **Patient Education Strategies**

- Emphasize adherence to prescribed regimen
- Educate on potential side effects and warning signs
- Promote lifestyle modifications (diet, exercise)
- Set realistic expectations for weight loss
- Monitor for mental health concerns (acute psychosis from insomnia, suicidal ideation)

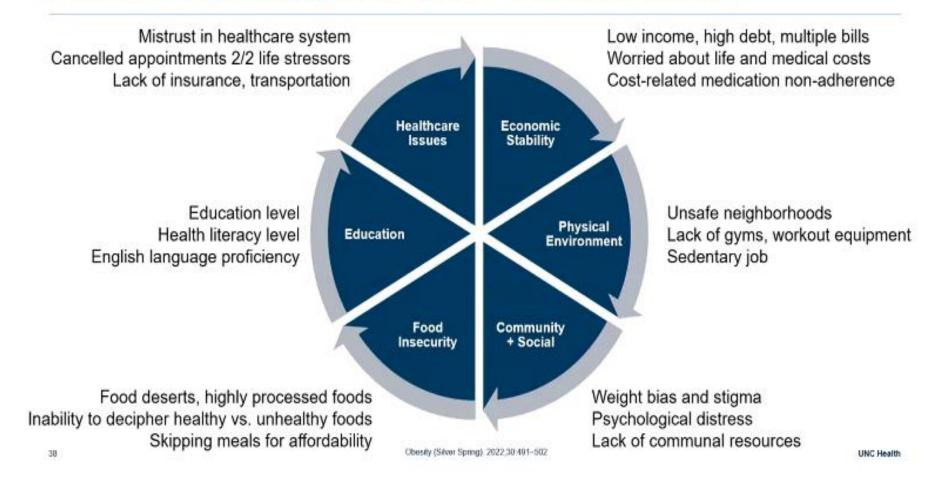
## Safety and Efficacy

- **Semaglutide (Wegovy):**14-15% weight loss in clinical trials
- Tirzepatide (Zepbound): Up to 20% weight loss
- **Qsymia & Contrave:** Moderate weight loss with lifestyle changes
- Long-term safety data still emerging, particularly for GLP-1 agonists

## **Efficacy Notes from the Literature**

Medication/	Average Weight	Notes
Intervention	Loss	
Semaglutide (Wegovy)	~15% of body weight	Observed in STEP clinical trials
Tirzepatide (Zepbound)	15–22% of body weight	Based on SURMOUNT trials
Phentermine/Topira mate (Qsymia)	~9% of body weight	Oral combination medication
Orlistat (Xenical)	~5% of body weight	GI side effects, modest efficacy
Lifestyle changes alone	~5–7% with intensive support	Often difficult to sustain long-term

#### **Barriers to Weight Management: Social Determinants of Health**



## Nursing Considerations

- Monitor patients for adverse effects and adherence
- Assess vital signs, especially blood pressure
- Educate on proper medication administration (e.g., injection sites for GLP-1s, titrating doses safely)
- Counsel patients on lifestyle interventions
- Screen for contraindications and drug interactions



# Occupational Health Nursing Considerations

- Consider workplace wellness
   opportunities: safe spaces to exercise,
   nutrition support.
- Emphasize realistic expectations: 5-10% weight loss is clinically significant.
- Reinforce lifestyle changes: Meal planning, hydration, stress management.
- Discuss stigma and promote body-positive language in the workplace.
- Be mindful of equity in access—some meds are costly or not covered.
- Reinforce the importance of ongoing support.



## **Key Take-aways**

- Weight loss medications are valuable tools but require careful monitoring.
- Nurses play a key role in education, adherence, and safety.
- Always consider patient-specific factors when recommending weight loss interventions.

Questions?

#### Contact me:

Krystal PendergraftHorne
DNP, RN, FNP-C
Assistant Professor of
Nursing
Kpendergrafthorne@unc.edu

