

EXPLORING THE IMPACT OF CHRONIC DIETING, MAINSTREAM DIETS, AND MEDICATION ON METABOLISM AND WEIGHT MANAGEMENT

ANNA KASPERICK, RD, LN



#### **OBJECTIVES**

Understand the effects of chronic dieting and mainstream diets/interventions on metabolism.

Review practical ways to approach weight centric conversations in your life and practice



Two out of three U.S adults are overweight or obese.

49% of US adults try to lose weight each year.

Americans spend \$33 Billion on weight loss products each year.







Please note that programs that promise to "reset your metabolism" will not actually reset your metabolism.

## Understanding Metabolism

- -Metabolism: Energy Production + Energy Balance.
  - Hormones such as insulin, glucagon, leptin, and ghrelin regulate metabolism by influencing hunger, fullness, and nutrient absorption.
- -Factors influencing metabolism
  - Genetics
  - Age
  - Lean Muscle Mass
  - Activity Level
    - Environment

#### The Hormones

Metabolism: Energy Production + Energy Balance.

- Insulin Storage hormone (decrease BG)
- Glucagon Energy Release Hormone (increase BG)
- Leptin Fullness Hormone
- Ghrelin Hunger Hormone
- Glucagon-like peptide-1 (GLP-1, appetite regulation)
  - Stimulate Insulin
  - Inhibit Glucagon Release
  - Slow Gastric Emptying

## Defining GLP-1s

Trending weight loss medication

Synthetic GLP-1 receptor agonist

- Increase insulin secretion
- Inhibit Glucagon Release
- Slow Gastric Emptying

# Effects of Chronic Dieting on Metabolism

- Multiple studies have demonstrated the physiological repercussions of chronic weight cycling.
  - Research based on the National Weight Control Registry data has found that individuals who have a history of weight cycling tend to have lower metabolic rates compared to those who have maintained a stable weight.

#### Case Studies

55 year old female client prescribed a GLP-1 for blood sugar management, considering weight loss as an added benefit.

52 year old female client prescribed a GLP-1 for quick weight loss + restrictive diet (Optiva).

15 year old wrestler: chronically injured. Chronically under fueled + cutting weight + trying to meet needs for growth and development.

16 year old female multi sport athlete: Return to play athlete. Torn ACL. Over caffeinated? Suppressing her appetite.

Discussion

### The non negotiables

Maintaining a healthy weight and building lean muscle mass require a combination of sustainable lifestyle practices that promote balanced nutrition, regular physical activity, adequate sleep, and stress management.