Growth Hormone (GH) Response to BFR: Student Handout

Key Concept

Blood Flow Restriction (BFR) training dramatically increases growth hormone (GH) release compared to traditional exercise — about 25 times greater.

What the Slide Shows

- Exercise without BFR: GH > 0.32 ng/ml
- Exercise with BFR: GH > 8.49 ng/ml
- This equals a 25x greater release of GH.

Why Growth Hormone Matters

- Muscle growth & repair — stimulates protein synthesis and tissue healing.
- Fat metabolism — enhances fat breakdown and supports lean body composition.
- Collagen & connective tissue — strengthens tendons, ligaments, and joints.
- Anti-aging & regeneration — supports cellular repair, vitality, and recovery.

Why BFR Is So Effective

- Creates a low-oxygen (hypoxic) environment in muscles.
- Amplifies metabolic stress, triggering a stronger hormonal response.
- Even with light loads, GH release mimics or exceeds heavy training.

Student Takeaway

Traditional exercise releases some GH, but BFR supercharges the response.
With a 25x increase in GH, athletes can recover faster, build stronger tissues, and achieve more with less mechanical load.
BFR = more results with less weight.