Research Evidence: GH Response to BFR Training

Study 1: Young Adult Males

Participants: 11 healthy men
Results: GH increased from 0.11 ± 0.03 → 8.6 ± 1.1 ng/ml
Conclusion: Short-term, low-intensity resistance exercise with BFR significantly stimulates GH.
Reference: Hemodynamic and hormonal responses to a short-term low-intensity resistance exercise with the reduction of muscle blood flow.

Study 2: Older Adults (~70 years)

Participants: 7 healthy older men (~70 years old)
Results: GH increased from rest to 30-min post-exercise, greater with BFR than without
Conclusion: A single bout of BFR increases GH in older adults, helping explain muscle and vascular adaptations.
Reference: Circulating hormone and cytokine response to low-load resistance training with blood flow restriction in older men.

Study 3: Young vs. Older Men

Participants: 10 young men and 10 older men
Results: Both groups had increased GH with BFR. Young men had greater maximal GH response.
Conclusion: All ages benefit from BFR. Younger men peak higher, but older adults still see significant GH response.
Reference: Growth hormone responses to acute resistance exercise with vascular restriction in young and old men.

Key Takeaways

- BFR increases GH dramatically across age groups.
- Low-intensity exercise with BFR is enough to stimulate significant hormonal response.
- Younger men reach higher GH peaks, but older adults still benefit greatly.
- Helps explain improvements in muscle growth, vascular health, and recovery.