The Muscle Reset

Muscle, Metabolism & Medicine: The New Formula for Aging Younger

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Why Muscle Matters

Muscle is more than strength—it's strategy. Often overlooked outside of the gym, **skeletal muscle is one of the most powerful organs in the body**, regulating everything from metabolism and inflammation to cognition and hormone balance. It's your biological insurance policy—one that determines how you age, how resilient you feel, and how long you remain independent and capable.

Unfortunately, most people lose 3–8% of their muscle mass each decade after 30[1]—a decline that accelerates with age, stress, underfueling, and hormonal shifts. This slow fade of strength and lean mass is called **sarcopenia**, and it's one of the biggest predictors of frailty, chronic disease, and loss of independence later in life. When muscle health declines, it creates a domino effect that impacts every system in your body, accelerating aging and increasing disease risk.

At ResetOne, we see **muscle as medicine**—and preserving it isn't optional if you want to stay active, energetic, and metabolically resilient.

Muscle is a leading indicator of **healthspan**—how long you live with strength, independence, and vitality—not just lifespan[2].

This white paper outlines:

- Why muscle is a key marker of healthy aging—and how to protect it
- The science behind training, hormones, metabolism, and recovery
- How advanced tools like peptides and hormone therapy can amplify results

Longevity isn't just about living longer. It's about **living better, stronger, and with more capacity at every stage**.

Let's Dive In

1. Muscle: The New Longevity Marker

Muscle isn't just about movement—muscle tissue functions as an **endocrine organ**, producing powerful signaling molecules called **myokines**[3] that communicate with every system in your body.

These include:

- **Muscle-Brain Axis:** Boosts BDNF, neurogenesis, memory, and mood
- **Muscle-Metabolic Axis:** Enhances insulin sensitivity, fat oxidation, and satiety regulation
- **Muscle-Immune Axis:** Produces anti-inflammatory cytokines and supports tissue repair
- **Muscle-Bone Axis:** Stimulates bone density, structural integrity, and calcium metabolism

When we build and maintain muscle, we support:

- **Blood sugar control**
- **Hormonal resilience**
- **Reduced inflammation**
- **Stronger bones and joints**
- **Better brain aging**

Loss of muscle isn't just weakness—it's a signal that the systems supporting vitality are declining. It's time to change the metric of aging from weight and BMI to **body composition and strength**.

More muscle = longer healthspan.

2. Body Composition > BMI

At ResetOne, we focus on **muscle-to-fat ratio**, not just the number on the scale. Weight alone tells us very little about your healthspan potential—but **body composition** reveals how well your body is equipped to age with energy, stability, and metabolic resilience.

Why it matters:

- **Lean mass** (primarily muscle) is protective. It improves glucose regulation, supports hormonal balance, and increases your resting metabolic rate—the number of calories your body burns just to keep you alive.
- **Visceral fat**, on the other hand, is harmful. It accumulates around your organs and actively contributes to systemic inflammation, insulin resistance, and chronic disease. Elevated visceral fat is strongly associated with higher risk of **cardiovascular disease**, **type 2 diabetes**, and **Alzheimer's disease**.
- **Subcutaneous fat** (fat under the skin) is less dangerous, but excess amounts still signal imbalances in metabolism or hormone regulation.

What does healthy body composition look like?
While optimal percentages vary based on age, sex, and activity level, here are general targets for adults:

Metric	Women (% body fat)	Men (% body fat)
Athletic/Optimal	18–24%	10–16%
Healthy Range	25–30%	17–22%
Visceral Fat (ideal)	<10% of total fat	<10% of total fat

Aiming for more lean mass and less visceral fat is key. The exact number isn't as important as the trend—*are you gaining or maintaining muscle and preserving strength as you age?*

3. Strength vs. Size

Building muscle isn't just about aesthetics. It's about **function and fuel**. Strong is not bulky. And skinny is not always healthy.

Functional strength helps you move well, prevent injury, and stay active into later decades.

Hypertrophy refers to an increase in the size of muscle fibers—your body's adaptive response to resistance training. It's what happens when you challenge your muscles through moderate to heavy loads (typically 6–12 reps), creating micro-tears that your body repairs and rebuilds stronger.

There are two types of hypertrophy:

- **Myofibrillar hypertrophy**: increases strength and density
- **Sarcoplasmic hypertrophy**: expands energy storage and muscle volume

In simple terms: Hypertrophy is your body's way of making muscles bigger and better equipped for future stress. It's not just about size—it's essential for **metabolism, insulin sensitivity, and resilience as you age**.

You don't need to "bulk up"—you need to **train with purpose**, aligned to your goals.

4. How to Train by Goal

Strength training and **hypertrophy training** are both important, and they differ in approach:

Goal	Reps	Load	Rest	Focus
Strength	3–6	Heavy	Longer	Neurological + foundational
Hypertrophy	6–12	Moderate	Shorter	Muscle growth + metabolism
Endurance	12+	Light/moderate	Minimal	Consistency + burn

At ResetOne, we help members cycle through both styles to get the **best of all worlds**—longevity, function, and fuel.

5. Muscle & Metabolism: More Than Calories

Muscle is **metabolically active**—meaning it burns energy even when you're not moving. It's also crucial for **insulin sensitivity** and **hormonal balance**.

What slows metabolism?

- Loss of lean mass
- Hormonal decline (testosterone, estrogen, GH, DHEA)
- Chronic stress and poor recovery
- Undereating, especially protein

Muscle protects your metabolic engine; strength training is one of the best ways to keep it running well[4].

6. Hormones & TRT: What You Need to Know

Muscle and hormones are deeply connected. Without hormonal support, it becomes increasingly difficult to build or maintain lean mass, regulate fat distribution, or recover from training and life stressors. That's because hormones like **testosterone, growth hormone (GH), DHEA, estrogen**, and **thyroid hormones** directly influence:

- **Lean mass retention and muscle repair**
- **Fat storage and metabolic rate**
- **Motivation, drive, energy, and mood**
- **Recovery speed and resilience to stress**
- **Libido, cognitive function, and sleep quality**

As we age, levels of these hormones naturally decline. For many people, this creates a mismatch between their effort and their results. They're training hard, eating clean—and still feeling stuck.

That's where **Testosterone Replacement Therapy (TRT)** or broader **Hormone Optimization Therapy** can make a critical difference.

What is TRT?

TRT involves the **clinical restoration of testosterone to physiologic levels**, typically through transdermal creams, injections, or other delivery systems. While most often associated with men, **testosterone is also essential for women's muscle tone, energy, and libido**—just in smaller amounts.

When done correctly, TRT can:

- Support muscle growth and maintenance
- Improve fat loss and insulin sensitivity
- Enhance recovery, motivation, and performance
- Boost cognitive clarity and sexual health
- Reverse symptoms of hormonal burnout

Key differences at ResetOne:

- We prioritize **medical-grade prescriptions** and close monitoring
- Protocols are based on **goals, labs, and phase of life**
- We treat hormones as a **foundational tool—not a silver bullet**

7. Training & Hormones by Gender

For **men**, declining testosterone and GH can sap energy and slow muscle gain—especially if training intensity stays high while hormones dip.

For **women**, estrogen drop during perimenopause or menopause leads to:

- Muscle loss
- Fat redistribution
- Longer recovery times

As Dr. Alicia Robbins shared in our Perimenopause white paper, resistance training plus hormone support is a game-changer.

8. Nutrition: Fueling for Strength & Longevity

You can't build what you don't fuel.

Muscle gain and preservation require **intentional nutrition**—especially around your workouts.

Pre-Workout: Carbs + Protein

- **Carbs**: Sweet potatoes, fruit, oats, or white rice for clean energy
- **Protein**: 15–30g of complete protein (e.g., eggs, yogurt, whey)
- Time it ~60–90 minutes pre-workout to reduce cortisol and fuel intensity

Post-Workout: Protein + Hydration

- **Protein**: 25–40g high-quality protein within 1 hour of lifting
- **Electrolytes + water**: replenish fluids, aid cellular recovery

The Leucine Factor

Leucine is the amino acid that flips the switch on muscle protein synthesis. **You need ~2.5g of leucine per meal to trigger this response**[5]**.**

Animal vs. Plant Protein

- **Animal protein** = higher in leucine, more bioavailable, complete
- **Plant protein** = requires combining sources (e.g., rice + pea) to hit amino acid targets. You'll need ~30–40% more volume to match animal protein leucine content.

General Protein goal: 1.0–1.2g per pound of lean body mass, spaced across 3–4 meals daily.

Approximate Leucine by Protein Source

Food / Supplement	Serving Size	Approx. Leucine (g)
Whey Protein Isolate	1 scoop (25g protein)	2.5–3.0 g
Chicken Breast	3 oz (cooked)	2.5–2.7 g
Beef (Ground or Steak)	3 oz (cooked)	2.3–2.5 g
Eggs	3 large	1.2 g
Egg Whites	5 large	1.2 g
Greek Yogurt (Nonfat, Plain)	1 cup	1.4–1.6 g
Cottage Cheese (Low Fat)	1 cup	2.2–2.5 g
Salmon	3 oz (cooked)	2.1–2.3 g
Tempeh	1 cup (cooked)	~1.3 g
Tofu (Firm)	½ block (~150g)	~1.1 g
Lentils (Cooked)	1 cup	~1.3 g
Quinoa (Cooked)	1 cup	~0.4 g
Brown Rice (Cooked)	1 cup	~0.3 g
Pea Protein (Supplement)	1 scoop (20–25g protein)	1.6–2.0 g

9. Peptides: Precision Tools for Muscle & Recovery

Peptides are **short chains of amino acids** that act like precision messengers, telling your body to build muscle, repair tissue, burn fat, or optimize recovery.

They work best when combined with:

- **Resistance training**
- **High-quality sleep**
- **Protein-forward nutrition**

Top Peptides We Use:

- **Tesamorelin** – Targets visceral fat and boosts GH
- **CJC-1295/Ipamorelin** – Enhances deep recovery and lean mass
- **5-Amino-1MQ** – Elevates metabolic rate and muscle output
- **BPC-157 / Pentadeca Arginate** – Speeds tissue repair and reduces inflammation
- **SLU-PP-332** – Exercise mimetic that improves mitochondrial efficiency
- **SS-31 (Elamipretide)** – Mitochondrial protection + endurance support

Dosing & Cycling

Some peptides are **cycled** (8–12 weeks), others may be **used long-term** under supervision. All are **clinically prescribed and monitored** by ResetOne physicians.

GLP-1s & Muscle: What You Need to Know

GLP-1 agonists (like Ozempic, Wegovy, Mounjaro, Retatrutide) are powerful peptides for weight loss—but without a muscle-preserving strategy, you'll lose **lean mass along with fat**.

To prevent that:

- Weight train 3–4x/week
- Eat 100–130g+ protein daily
- Use peptides like **CJC-1295** or **5-Amino-1MQ**
- Prioritize **sleep and hydration**

Even newer GLP-1s like **retatrutide**, which may preserve more lean mass, still require **strength training and protein** to work synergistically for longevity.

10. Recovery: The Hidden Key to Growth

Muscle is built **between** workouts. Recovery is when growth, repair, and hormonal recalibration happen.

True Recovery Includes:

- **Deep, quality sleep** (7–9 hrs, especially slow-wave + REM)
- **Magnesium** (glycinate or threonate preferred)
- **Cold/heat therapy** (contrast, sauna, cold plunge)
- **Red light therapy** (mitochondrial health)
- **Breathwork** (to shift out of fight-or-flight)

Myth	Fact
Soreness = a good workout	Soreness is inflammation—not necessarily a sign of effective adaptation.
No pain, no gain.	Pain is a red flag, not a progress signal.
You don't need to recover if you're eating and supplementing right.	Nutrition helps, but recovery is a separate, essential input.
You have to earn rest.	Rest is what makes training effective.

11. The ResetOne Muscle Medicine Approach

At ResetOne, we view muscle as a central target for intervention—not an end goal. It's one component of a data-driven, longevity-focused approach that includes:

- Structured resistance training aligned to your biomarkers and goals
- Precision nutrition designed to support muscle protein synthesis and metabolic stability
- Hormone optimization to preserve lean mass and support recovery
- Targeted peptide therapy to enhance tissue repair, strength, and mitochondrial health
- Recovery protocols grounded in circadian science and nervous system regulation

This is not a general fitness program—it's a clinically guided strategy to build and preserve the tissue most essential to long-term health. Muscle is the lever. We give you the system.

Turn Muscle into Longevity

Muscle is a necessity. It's the *single most important tissue* when it comes to extending your **healthspan**—the years you can live independently, energetically, and fully engaged in life.

With the right tools, support, and strategy, anyone can build muscle, restore their metabolism, and feel stronger at any age. But the earlier you intervene, the more dramatic your results. Muscle tissue has remarkable regenerative capacity when given the right inputs and environment.

At ResetOne, we combine **science, diagnostics, and personalized care** to help you turn this phase of life into your strongest one yet.

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Dr. Eric Fete is a board-certified physician specializing in regenerative, hormone, and longevity medicine with over 20 years of experience helping people optimize strength, performance, and healthspan. Known as "The Muscle Doc" for his deep expertise in muscle metabolism, testosterone therapy, and peptide optimization, Dr. Fete blends cutting-edge science with deeply personalized care.

Dr. Fete is a founding physician and advisor at ResetOne, where he leads our approach to men's health and muscle medicine for men and women.

References

1. Janssen, I., Heymsfield, S. B., & Ross, R. (2002). Low relative skeletal muscle mass (sarcopenia) in older persons is associated with functional impairment and physical disability. *Journal of the American Geriatrics Society*, 50(5), 889–896.
2. Srikanthan, P., & Karlamangla, A. S. (2014). Muscle mass index as a predictor of longevity in older adults. *The American Journal of Medicine*, 127(6), 547–553.
3. Pedersen, B. K., & Febbraio, M. A. (2008). Muscle as an endocrine organ: Focus on muscle-derived interleukin-6. *Physiological Reviews*, 88(4), 1379–1406.
4. Hunter, G. R., McCarthy, J. P., & Bamman, M. M. (2004). Effects of resistance training on older adults. *Sports Medicine*, 34(5), 329–348.
5. Norton, L. E., & Layman, D. K. (2006). Leucine regulates translation initiation of protein synthesis in skeletal muscle after exercise. *The Journal of Nutrition*, 136(2), 533S–537S.

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Join the ResetOne waitlist and be the first to access personalized hormone optimization and our full suite of longevity tools.

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