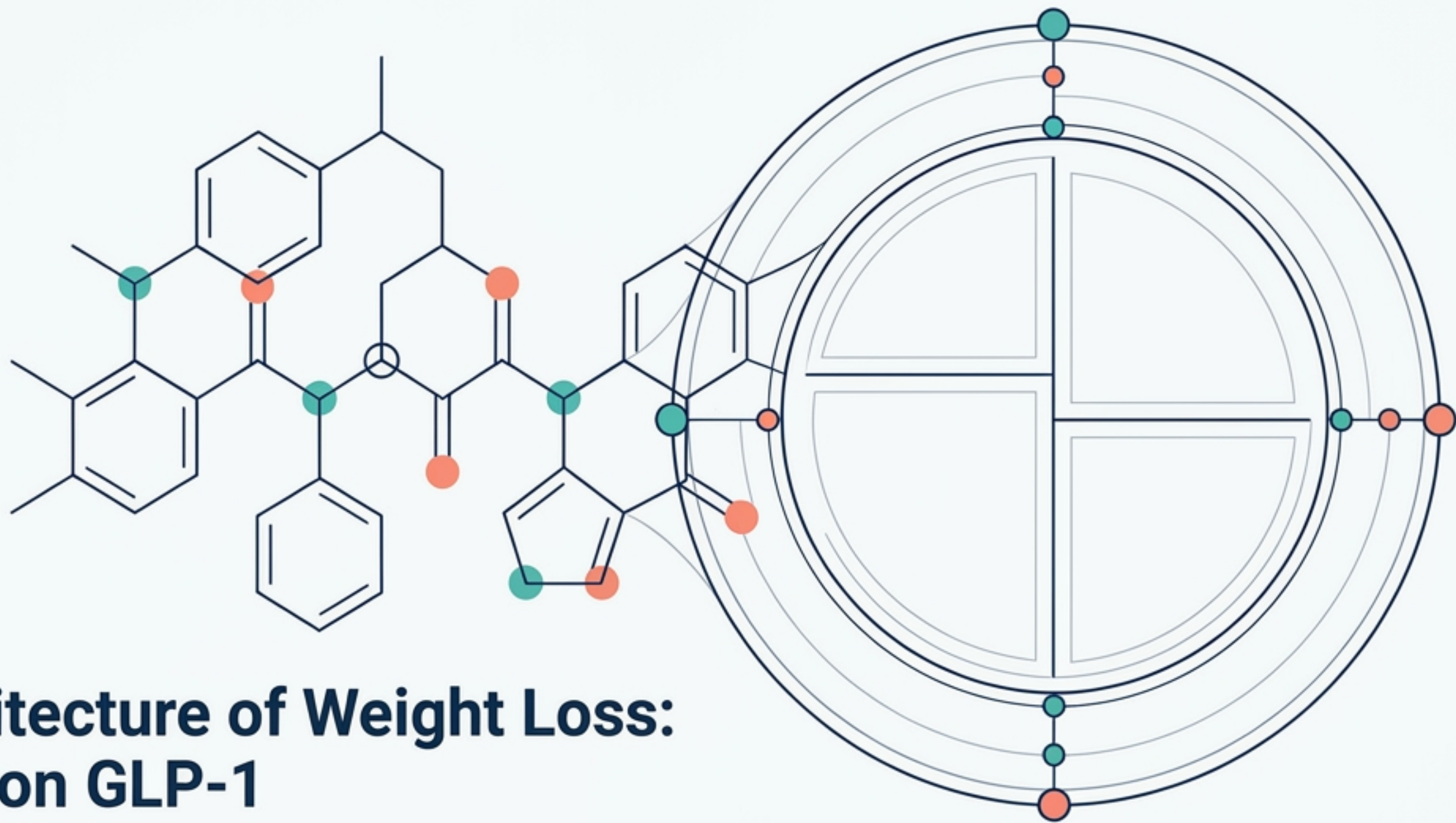


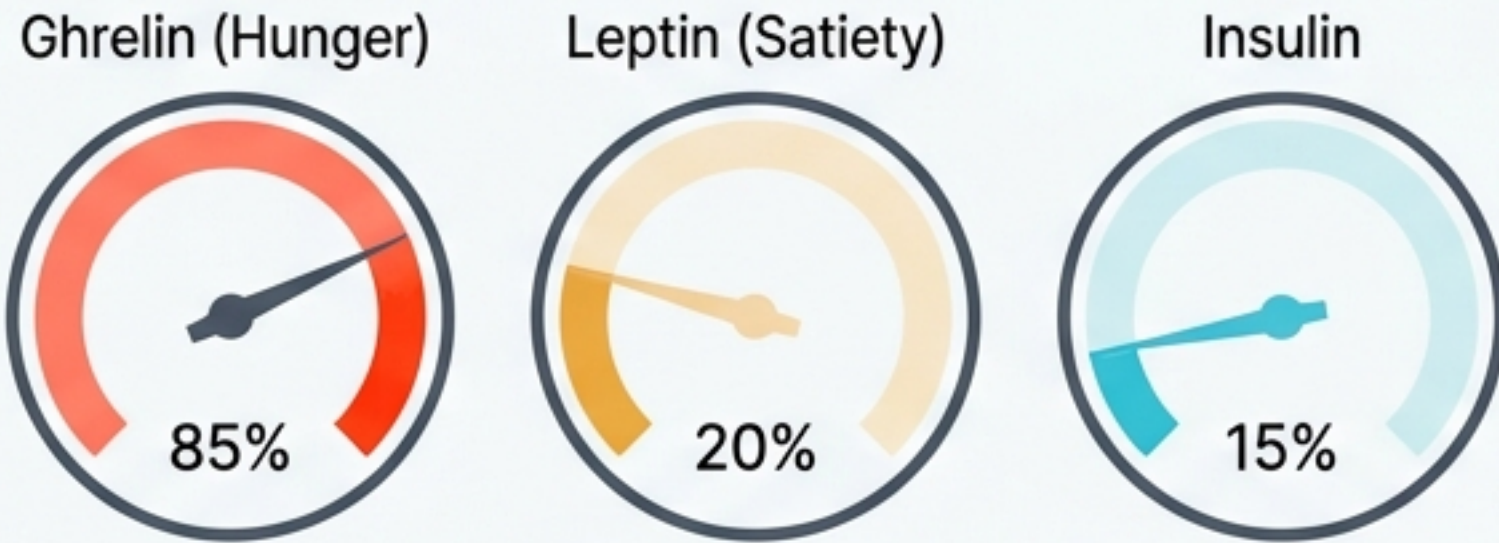


The Architecture of Weight Loss: Nutrition on GLP-1

Optimizing Plates, Portions, Protein, and Hydration
for Sustainable Body Recomposition.

GLP-1 medications rewrite the body's native satiety signals, necessitating a pivot from caloric restriction to lean mass preservation.

The Caloric Restriction Trap



Traditional diets trigger defense mechanisms. As glucose drops, insulin decreases, weakening satiety. Ghrelin aggressively upregulates hunger in the hypothalamus.

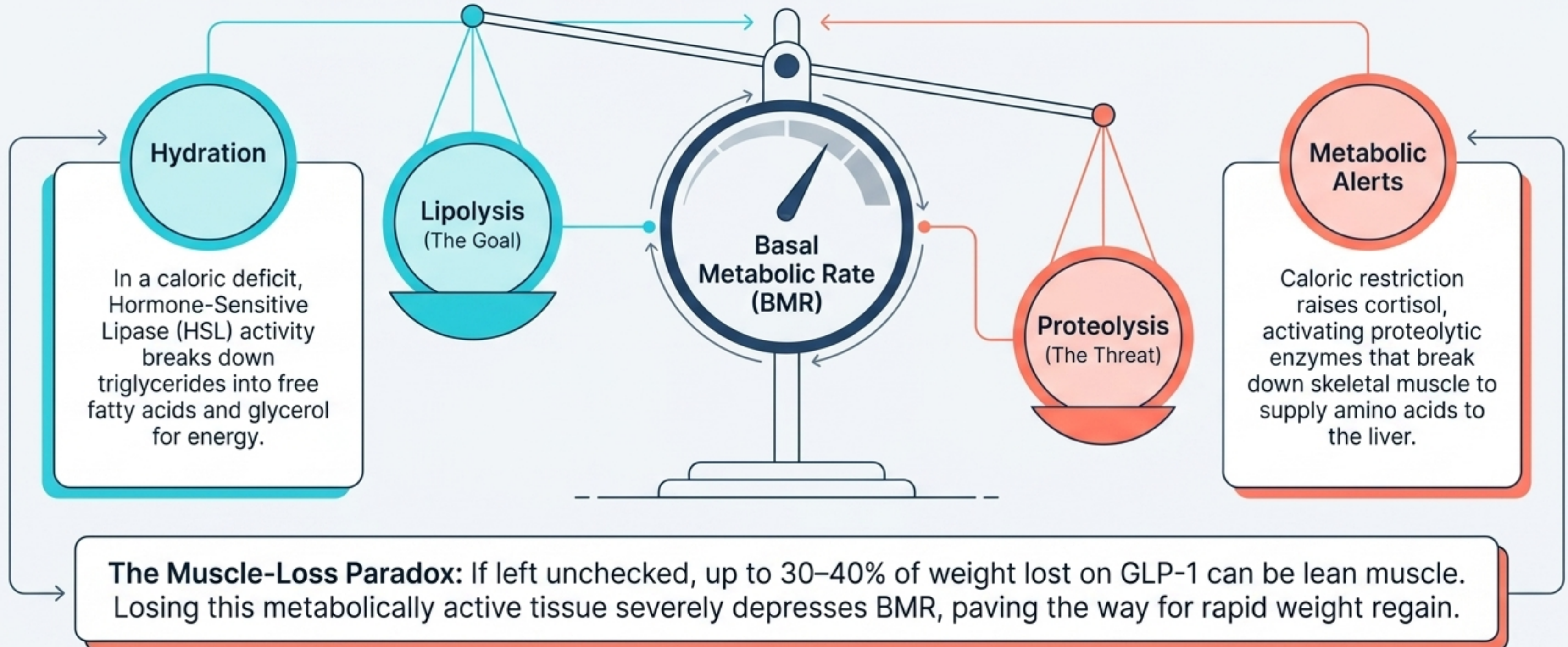
The GLP-1 Shift



Medications mimic natural satiety signals. They bind to receptors in intestinal L cells and the brain, drastically slowing gastric emptying and chronically suppressing orexigenic (hunger) neurons.

The New Imperative: Because the medication forces a state of profound caloric deficit without accompanying hunger, nutrition must shift from restricting intake to engineering preservation.

Without targeted nutritional intervention, rapid weight loss triggers adaptive thermogenesis and sacrifices metabolically active muscle tissue.



Sustainable body recomposition on GLP-1 relies on four interlocking nutritional pillars.



PILLAR 1: PROTEIN

The Structural Anchor

Overriding cortisol-induced muscle catabolism through targeted molecular synthesis.



PILLAR 2: PLATES

The Hormonal Blueprint

Managing insulin response and mitigating fat storage via the Carbohydrate-Insulin Model.



PILLAR 3: PORTIONS

The Energy Gauge

Recalibrating intake volume to align with delayed gastric emptying and altered satiety micro-cues.



PILLAR 4: HYDRATION

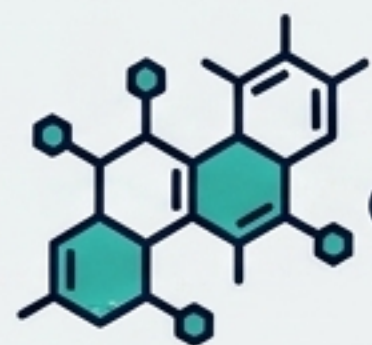
The Metabolic Catalyst

Driving thermogenesis, facilitating beta-oxidation, and clearing metabolic byproducts.

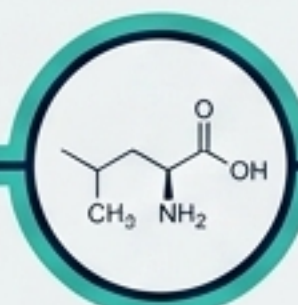
High-density protein intake is a biological requirement to trigger myofibrillar protein synthesis and override muscle catabolism.

The mTORC1 Trigger

Dietary protein—specifically the essential amino acid Leucine—is the primary activator of the mTOR (mechanistic target of rapamycin) pathway.



Dietary Protein Molecule



Leucine



mTORC1 Pathway

Cellular Preservation

Leucine directly activates mTORC1 at the cellular level, enhancing the translation and assembly of new muscle proteins even in a deep caloric deficit.

The GLP-1 Application

Because GLP-1 medications drastically reduce the total volume of food you can comfortably consume, the density of protein in every bite must exponentially increase. Low-volume, low-protein diets on GLP-1 guarantee severe lean mass degradation.

Clinical data dictates a precise protein dosing protocol of 1.6 to 2.4 grams per kilogram of body weight to preserve lean mass.

Body Weight	Daily Protein Target Range
60kg (132 lbs)	96g – 144g daily
75kg (165 lbs)	120g – 180g daily
90kg (198 lbs)	144g – 216g daily
105kg (231 lbs)	168g – 252g daily

Protocol: Protein Pacing



1 Massive Meal



4 Paced Meals

Achieving these targets in 1 or 2 meals causes GI distress on GLP-1. Intake must be distributed evenly across 3 to 4 eating windows (e.g., 30-40g per meal) to continuously stimulate muscle protein synthesis and prevent catabolic windows.

Plate composition must prioritize hormonal regulation based on the Carbohydrate-Insulin Model, rejecting the flawed “all calories are equal” paradigm.

The End of Calories In, Calories Out

The traditional model ignores hormonal realities.

500 calories of high-glycemic carbohydrates spike insulin, driving lipogenesis (fat storage).

500 calories of complex whole foods slow digestion and maintain a flat insulin curve.

30% Lean Protein

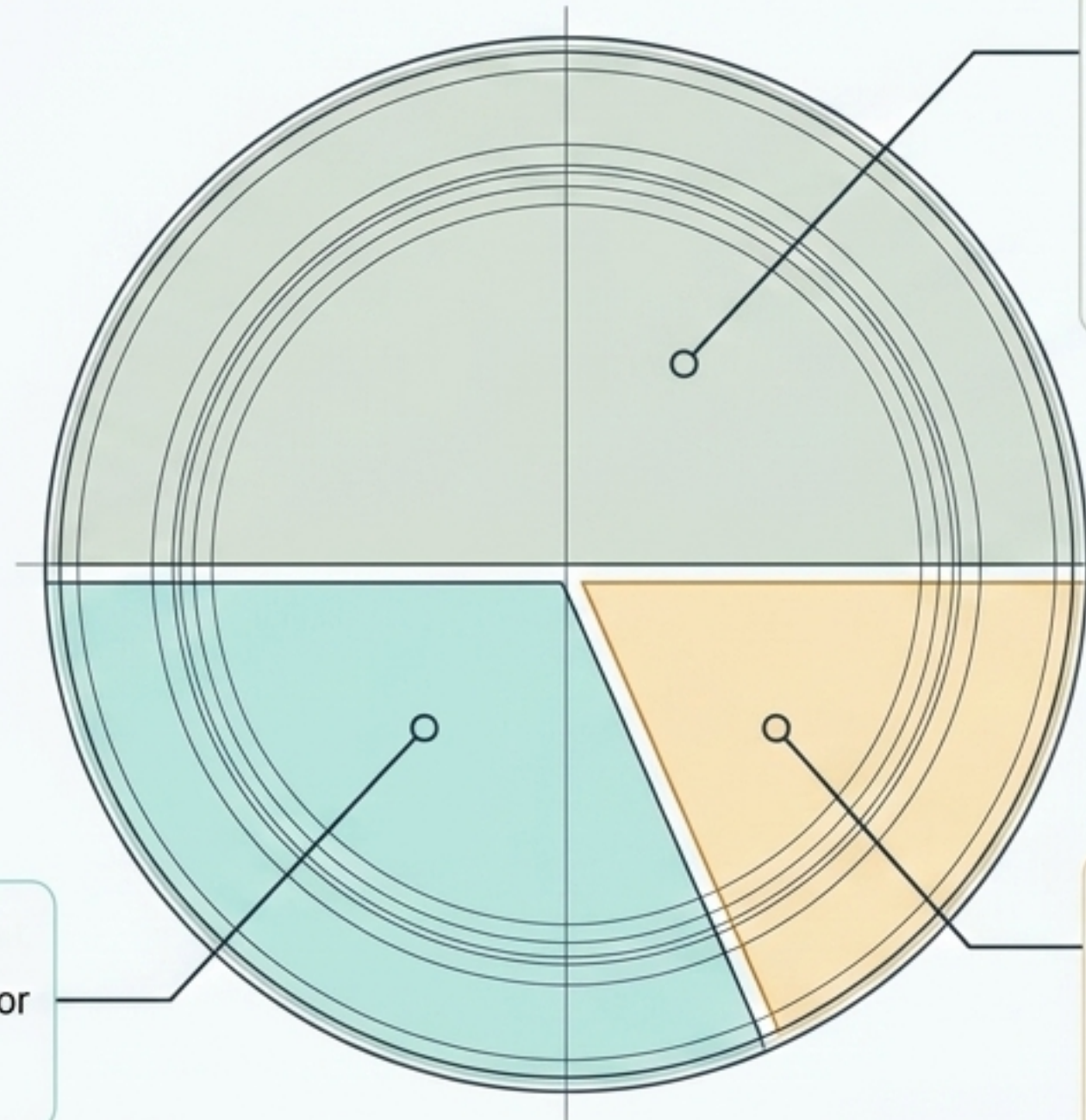
The structural anchor for mTOR activation and muscle preservation.

50% High-Fiber, Low-Glycemic Vegetables

Promotes stretch-receptor satiety and provides essential micronutrients without an insulin spike.

20% Healthy Fats & Complex Starches

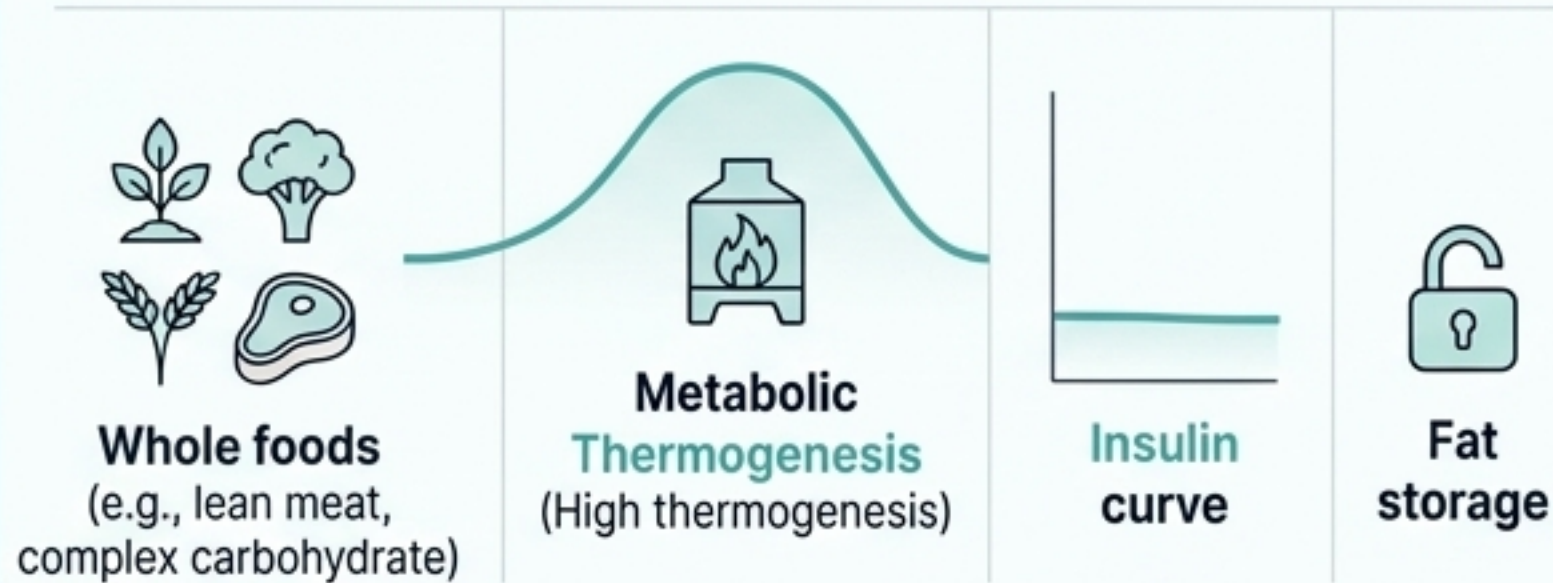
Yields sustained energy and lower total calorie absorption due to delayed gastric emptying.



Ultra-processed diets aggressively drive fat storage and metabolic dysfunction, even when total caloric intake remains identical.

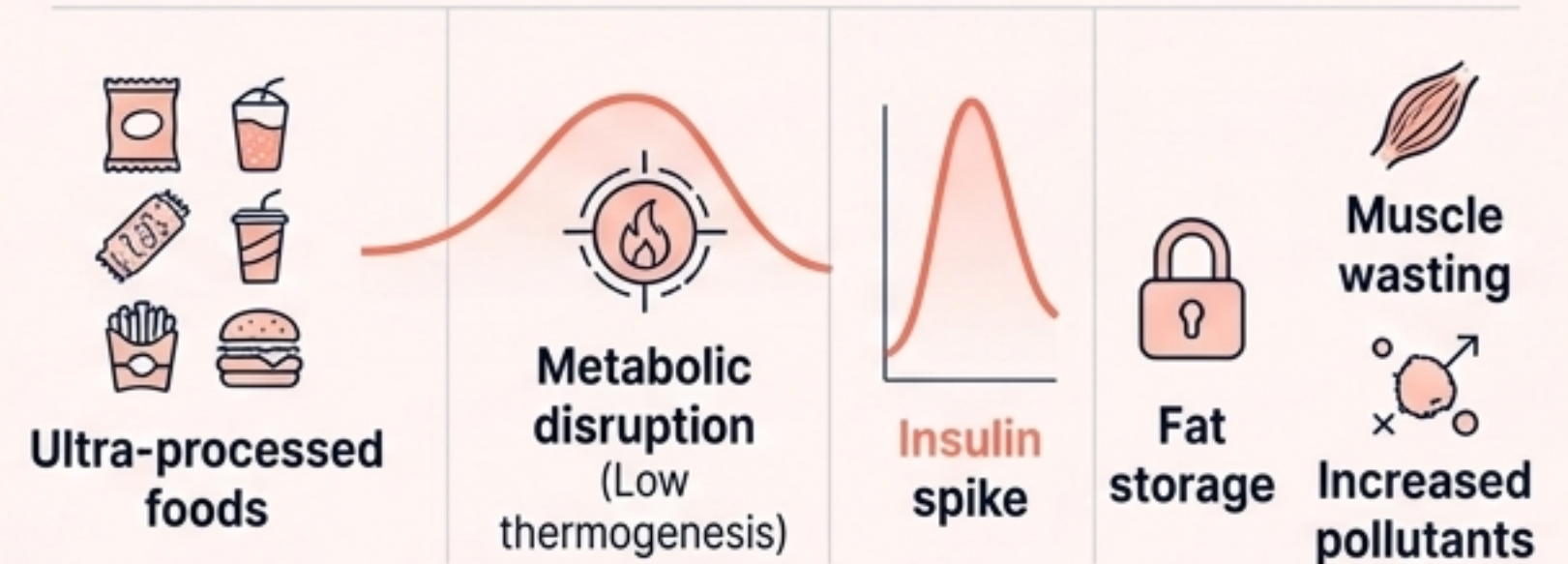
Whole Foods (The Standard)

High fiber content requires metabolic energy to digest (dietary thermogenesis). Blunts glucose spikes, keeping insulin low and allowing the body to access stored fat for fuel.



Ultra-Processed Penalty (The Danger)

Clinical data reveals UPFs directly **lower testosterone** and **elevate systemic pollutants**. With strictly limited stomach capacity on **GLP-1**, wasting space on UPFs accelerates muscle loss and stalls fat oxidation.



The Regulatory Flaw: Standard food labels allow a 20% margin of error, but in practice, caloric discrepancies can reach 60%. Counting calories on processed foods is mathematically flawed.

Radically delayed gastric emptying requires abandoning external completion cues and recalibrating to internal micro-cues of satiety.



The Gastric Reality

GLP-1 medications keep food in the stomach significantly longer. Eating traditional portions, or eating at traditional speeds, will frequently result in severe gastrointestinal distress, nausea, and reflux.

The 80% Rule

Shift behavior away from "cleaning the plate." Eating must cease the moment physical hunger subsides, roughly at 80% capacity, before the feeling of fullness registers.



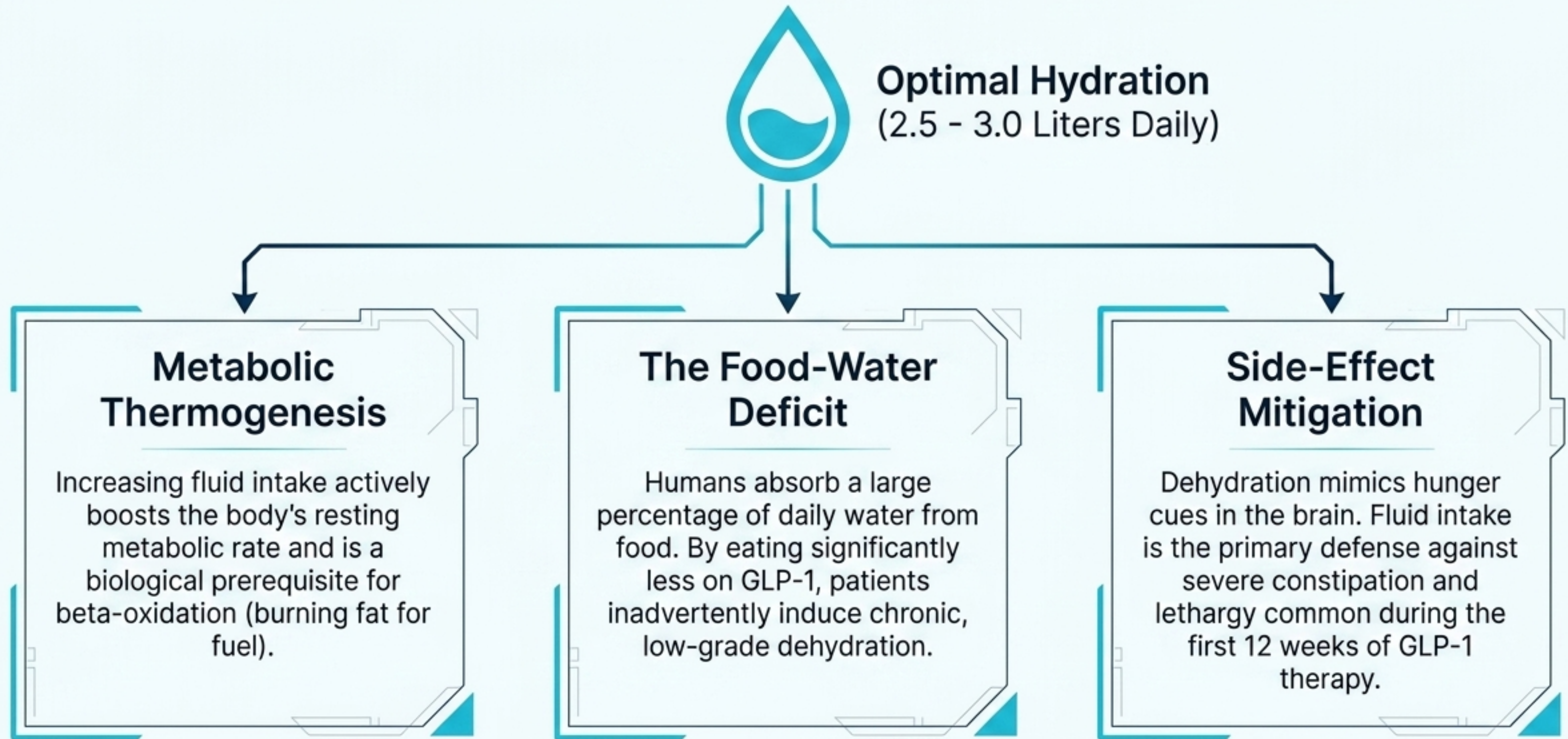
Fist & Palm

Bypass obsessive macro-tracking with physical heuristics:

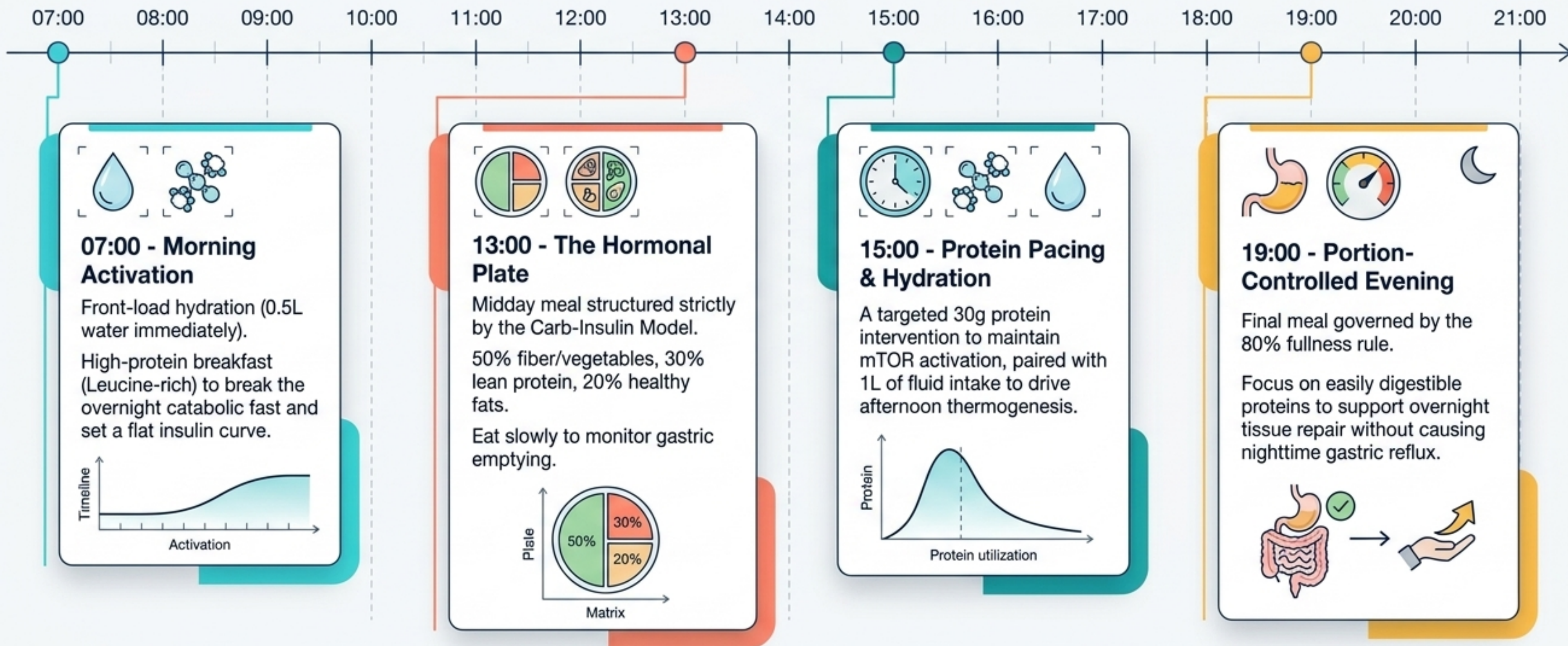
1 Palm = Minimum protein requirement per meal.

1 Fist = Maximum complex carbohydrate volume per meal.

Aggressive hydration acts as the metabolic catalyst for fat oxidation while actively mitigating the medication's primary side effects.



The Daily GLP-1 Blueprint: Integrating the four pillars into a unified architectural protocol.



GLP-1 provides the biological environment for weight loss, but long-term maintenance requires permanent structural behaviors.

Data from the National Weight Control Registry

Command Center

✓ Consistent Eating Patterns

Maintaining the same schedule and plate architecture regardless of weekends or holidays.

✓ Morning Anchorage

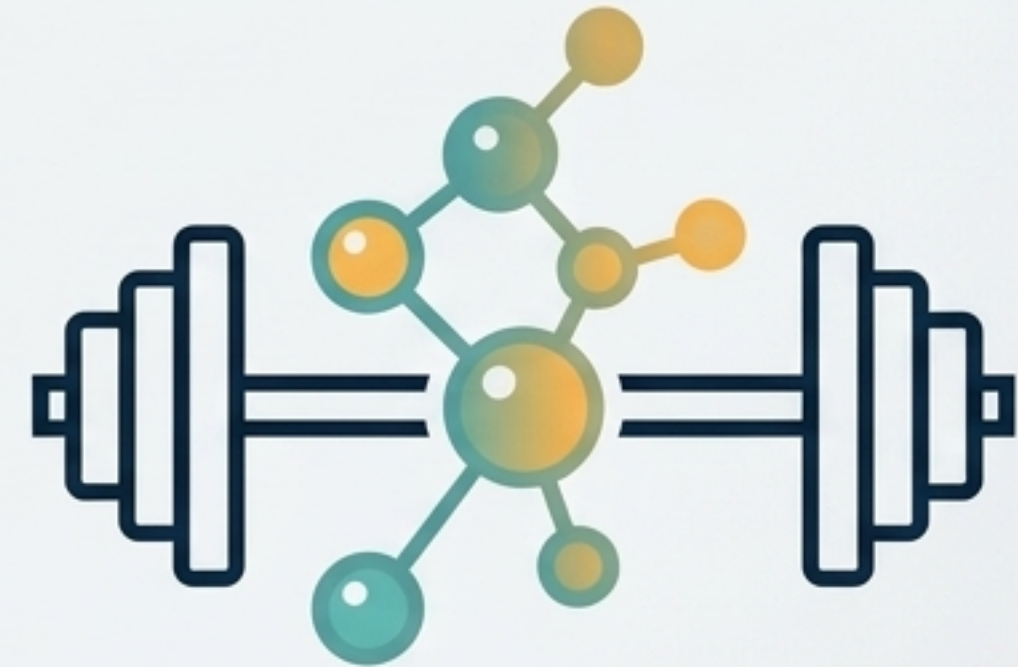
Consistently eating a protein-dense breakfast to manage the daily insulin curve.

✓ Self-Monitoring

Frequent, objective data collection to catch minor regains before they compound.

✓ Resistance Training

Mechanical tension plus 1.6-2.4 g/kg of protein ensures maintained weight is metabolically active muscle.



Optimizing Plates, Portions, Protein, and Hydration builds the permanent architecture for a healthier body composition, raising the Basal Metabolic Rate and preventing weight regain.