



Metabolism 101: Foundations for Wellness

An introductory overview of metabolism and its impact on health

What is Metabolism?

Metabolism is the process by which your body converts the food you eat into energy that your cells can use.

It has two main phases:

1. Catabolism, where your body breaks down molecules to release energy
2. Anabolism, where your body uses that energy to build new molecules and tissues.

Metabolism is not just about weight management; it's a fundamental process that powers all of your body's functions, from brain activity to muscle movement.



Key Concepts of Metabolic Health

Glucose & Insulin

Understand the role of glucose and insulin in regulating energy metabolism and maintaining healthy blood sugar levels.

Mitochondrial Function

Mitochondria are the powerhouses responsible for generating cellular energy (ATP).

Metabolic Flexibility

The ability of the body to efficiently switch between using carbohydrates and fats as primary fuel sources based on availability and energy demands.

Muscle as a Metabolic Engine

Muscle tissue has a vital role in driving overall metabolic rate and enhancing energy expenditure.

Why Metabolic Health Matters



Energy, mood, and focus

Optimal metabolic health supports consistent energy levels, improved mood, and enhanced cognitive function.



Hormone regulation

Metabolic health influences the balance and production of key hormones like insulin, thyroid, and sex hormones.



Blood sugar management

Metabolic health is closely tied to the body's ability to regulate blood sugar levels, preventing spikes and crashes.



Long-term disease prevention

Optimizing metabolic health can help reduce the risk of chronic conditions like type 2 diabetes, heart disease, and certain cancers.

By understanding the far-reaching impact of metabolic health, individuals can make informed choices to support their overall well-being and resilience.

Root Cause Approach

HealthSpan focuses on addressing the root causes of health issues, rather than just treating the symptoms.

It emphasizes a systems-thinking perspective, recognizing the interconnectedness of various bodily systems and how imbalances in one area can impact overall health.





The Five Pillars of Metabolic Wellness

- **Nutrition**

Prioritize protein, focus on whole, anti-inflammatory foods, and minimize blood sugar spikes.

- **Movement**

Incorporate Zone 2 cardio (brisk walking, light biking), strength training, and aim for 7,500-10,000 daily steps.

- **Sleep**

Aim for 7-8 hours of quality sleep per night, as sleep loss can worsen insulin resistance and hunger regulation.

- **Stress Management**

Practice stress-reducing activities like breathwork, meditation, spending time in nature, or engaging in creative expression to address chronic stress and its impact on metabolism.

- **Gut Health**

Support nutrient absorption, detoxification, and inflammation control by emphasizing fiber, fermented foods, and liver support.

Labs that help track Metabolic Health

Test	Purpose
Fasting Insulin	Assess insulin resistance
Fasting Glucose	Evaluate blood sugar regulation
HbA1c	Measure average blood sugar over 2-3 months
HOMA-IR	Calculate insulin resistance
ApoB	Predict cardiovascular disease risk
Triglycerides	Assess lipid profile and metabolic health
hs-CRP	Measure inflammation

Additional Tools for Metabolism Tracking



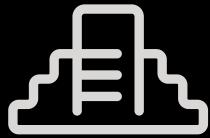
Continuous Glucose Monitoring (CGM)

Real-time tracking of blood glucose levels to understand blood sugar patterns and metabolic responses



Body Composition Analysis

Measure body fat percentage, muscle mass, and other metrics to assess metabolic health



Step Tracking

Use a fitness tracker or smartwatch to monitor daily movement and activity levels



Meal and Symptom Journaling

Log food intake, energy levels, and any related symptoms to identify patterns and optimize diet

By utilizing a variety of tools and technologies, you can gain valuable insights into your metabolic health and make informed decisions to support your overall well-being.

Daily Habits that Make a Difference

- **Walk more**

Incorporate more walking into your daily routine, whether it's taking a brisk 10-minute walk during your lunch break or going for a longer stroll in the evenings.

- **Strength train**

Engage in regular strength training exercises to build and maintain muscle mass, which is a key driver of metabolic rate.

- **Focus on protein**

Ensure you're consuming an adequate amount of high-quality protein throughout the day to support muscle health and metabolic function.

- **Prioritize sleep**

Aim for 7-9 hours of quality sleep each night, as sleep is crucial for regulating hormones and supporting overall metabolic processes.

- **Manage stress regularly**

Incorporate stress-reducing activities, such as meditation, deep breathing, or gentle yoga, to help mitigate the negative impact of stress on your metabolism.

Takeaways



Metabolic health is essential for overall well-being

Optimal metabolism supports energy, mood, hormones, and long-term disease prevention



Daily choices have a profound impact

Small, sustainable changes in nutrition, movement, sleep, stress, and gut health can make a big difference



Incremental progress leads to lasting change

Consistent, gradual improvements in metabolic function compound over time for significant impact

By prioritizing metabolic health through simple, practical strategies, you can take charge of your energy, resilience, and long-term well-being.



Questions & Comments

Thank you for your attention and participation!

