

# The Great Medical Divide

From Symptom Management  
to Root-Cause Healing

A Presentation by Dr. Richard Z. Cheng





# Two Worlds of Medicine



## Mechanistic, Pharma-Centric Model

- Focuses on suppressing symptoms with drugs.
- Views the body as a machine with broken parts.
- Relies on surrogate markers (LDL, HbA1c).
- Driven by “expert consensus” and rigid guidelines.
- Evidence is defined by Randomized Controlled Trials (RCTs).



## Integrative Orthomolecular Medicine (IOM)

- Seeks to identify and correct **root causes**.
- Views the body as a **self-healing biological system**.
- Focuses on restoring metabolic and cellular function.
- Driven by **biological reality** and **clinical outcomes**.
- Evidence is based on **mechanism, observation, and causality**.





# The Crisis of 'Expertise': When Models Replace Reality

Thomas Sowell warned of intellectuals detached from real-world consequences. Modern medicine exemplifies this danger. Top-down guidelines, driven by committee consensus, elevate credentials over clinical outcomes. The system chases surrogate markers—LDL, HbA1c—rather than patient well-being, and those who create the rules never suffer the failures.

The decades-long war on saturated fat and cholesterol, based on flawed data, led to a global surge in metabolic dysfunction. The experts paid no price. The patients did.



“Medical progress depends not on compliance, but on courage—on those who are willing to challenge the status quo for the sake of truth, clinical integrity, and public health.”



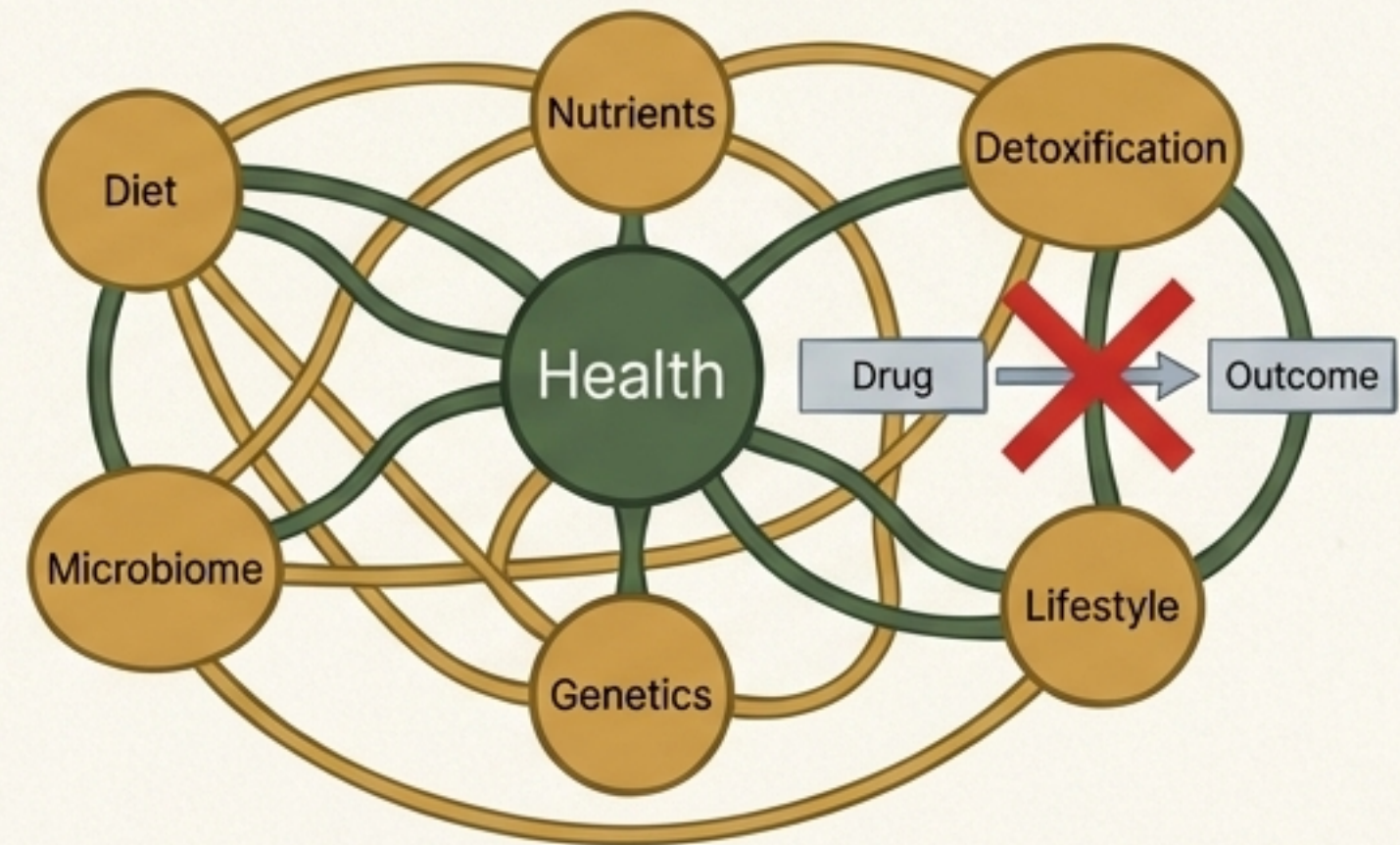
# The Foundational Flaw: Why the “Gold Standard” Fails Us

**Core Argument:** RCTs are worshipped as the pillar of “evidence-based medicine,” but they were designed to test single, patentable drug compounds. This pharmaceutical template systematically excludes interventions that can’t be blinded or isolated, like diet, nutrients, or detoxification.

**The RCT Model**



**Biological Reality**



**Consequence:** As a result, nutritional and integrative medicine are dismissed as “unproven,” regardless of decades of clinical success or biochemical logic. The problem isn’t the nutrients; it’s the model. The absence of RCT proof becomes a self-fulfilling excuse to ignore nutrition—an elegant circular logic protecting pharmaceutical dominance.



# Case Study in Methodological Blindness: Why Vitamin D Trials "Fail"

Many "negative" Vitamin D RCTs fail not because the nutrient is ineffective, but because the design is mismatched to its biology. This isn't science; it's paralysis by methodology.

## **Doses Too Low**

Using 400-1,000 IU, insufficient to move clinical endpoints.

## **Fixed Dosing**

Ignoring individual differences in weight, genetics, and absorption.

## **No Cofactors**

Prohibiting essential co-nutrients like magnesium or Vitamin K.



## **Low "Sufficiency" Cutoffs**

Defining 20 ng/mL as "adequate," obscuring benefits at higher levels (40-50 ng/mL).

## **Failure to Measure Levels**

Not checking if supplementation actually raised blood levels, making results meaningless.

## **Short Duration**

Trials end before long-term protective effects can manifest.



# The Human Cost of Neglect: A Preventable Crisis

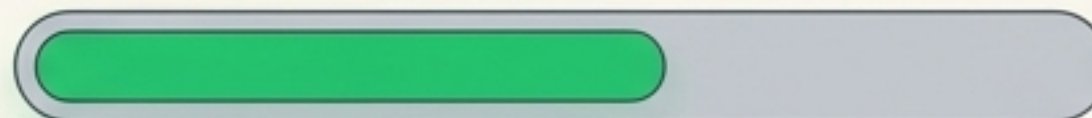
# 89%

of pregnant women in the U.S. have Vitamin D levels below the protective threshold of 40 ng/mL. 31% are clinically deficient.

The U.S. has the highest maternal mortality among developed nations. Yet modern prenatal care neglects one of the safest, most effective interventions: Vitamin D sufficiency.

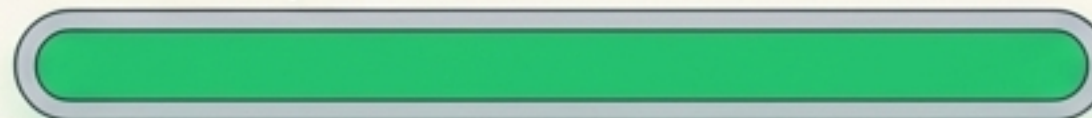
## Reduced Risk with Vitamin D Sufficiency ( $\geq 40$ ng/mL)

Preterm Birth



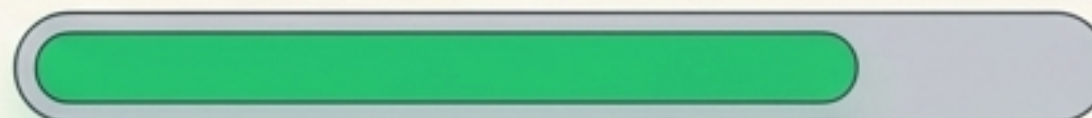
Risk reduced by up to 59%

Preeclampsia



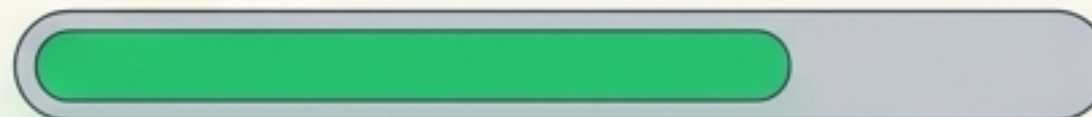
"Perfect protection" when levels are sufficient pre-conception.

Gestational Diabetes



Lowered rates.

C-Sections



Lowered rates.

*This is not just a clinical gap—it is a public health injustice.*



# A Deeper Question: From 'How' to 'Why'

The 2025 Nobel Prize honored the discovery of *how* regulatory T-cells (Tregs) maintain immune balance—a triumph of mechanistic medicine.

But Integrative Orthomolecular Medicine asks a more important question:

*Why does this elegant system fail so often in the first place?*

The answer isn't random mutation. It's predictable biochemical consequences of modern living—self-inflicted injuries to our cellular terrain.





# The Biological Battlefield: Mitochondria are the Master Switch

Mitochondria are not just “power plants.” They are the central integrators of health, performance, and aging. They determine how effectively we move, recover, and resist disease.

## For the Young

- Peak Performance & Endurance
- Faster Recovery & Repair
- Metabolic Flexibility



## For Longevity

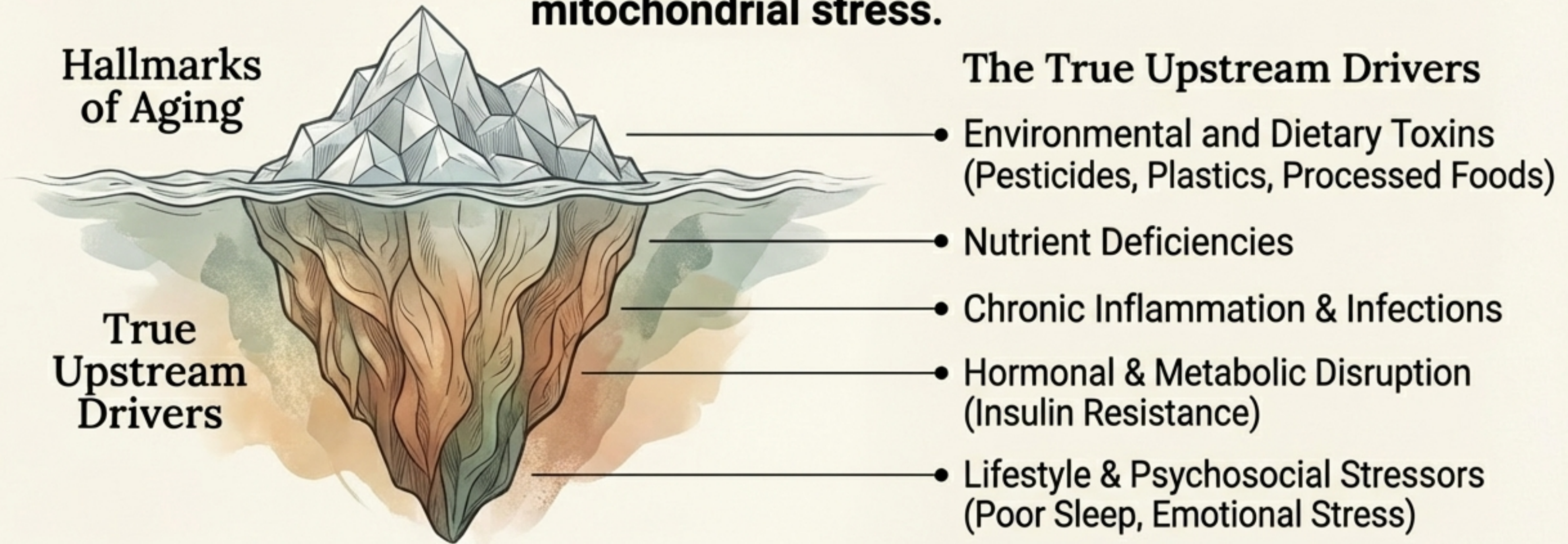
- Slowing the Aging Process
- Preserving Muscle & Preventing Sarcopenia
- Cardiovascular Protection
- Reducing Cancer & Dementia Risk

*For the young: peak performance. For the old: resilience and independence.  
For all: the key to energy and health.*



# Why Mitochondria Fail: Moving Upstream from Symptoms to Root Causes

The famous “Hallmarks of Aging” (genomic instability, telomere attrition, etc.) are **downstream** expressions, not true root causes. They are **symptoms** of deeper **mitochondrial stress**.

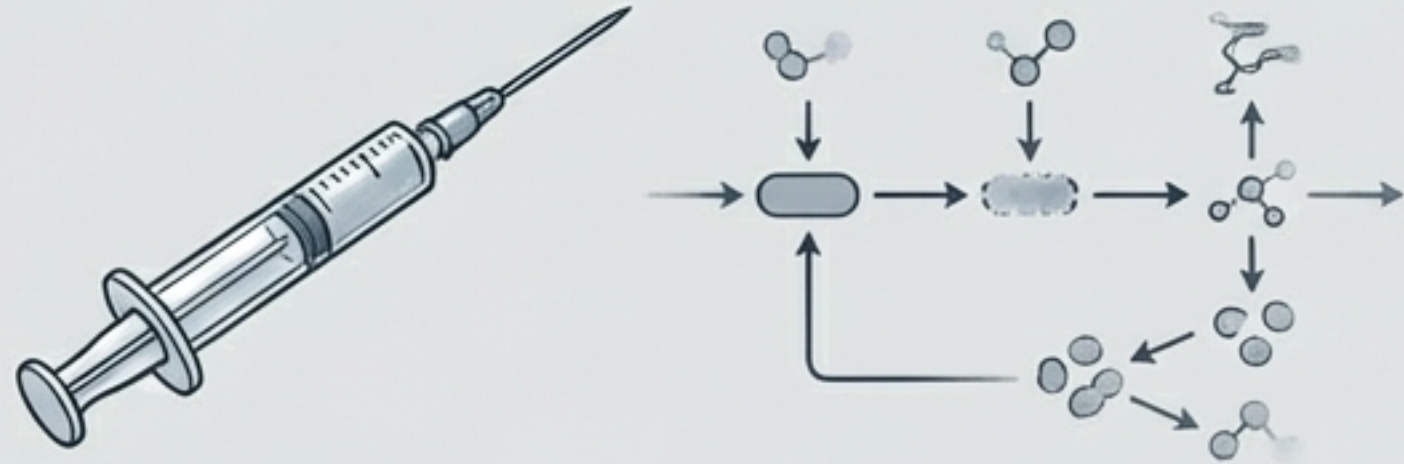


All these drivers converge on **mitochondrial dysfunction**, making **mitochondria the master hallmark** and central integrator of aging.



# Rebuilding the System from the Ground Up

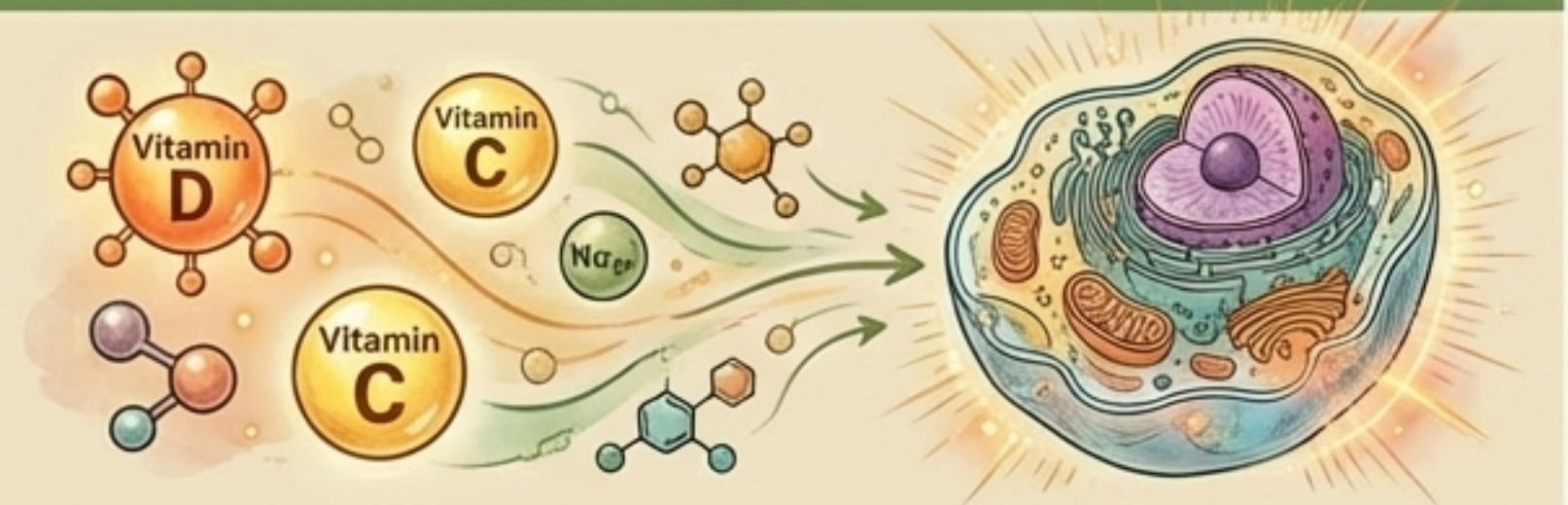
## Mechanistic Approach



**Goal:** Find a drug to manipulate the Treg pathway.

**Problem:** Ignores *why* the pathway broke. Leads to expensive drugs with side effects.

## IOM Approach



**Goal:** Restore the biochemical terrain so the body can regulate itself.

**Solution:** Provide the raw materials the immune system needs to function.

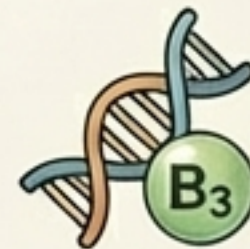
## Biochemical First Aid for Immune Tolerance



**Vitamin D3:**  
Turns on the FOXP3  
"Treg" gene.



**Vitamin C:**  
Stabilizes the  
FOXP3 gene.



**Niacin (B3) &  
Butyrate:** Signal for  
immune tolerance.



**Low-Carb Diet:**  
Reduces inflammation  
that suppresses Tregs.

Where conventional medicine seeks new Treg drugs, **Orthomolecular Medicine rebuilds the body's ability to make Tregs naturally.**



# The Power of Metabolic Reset: Fueling for Resilience

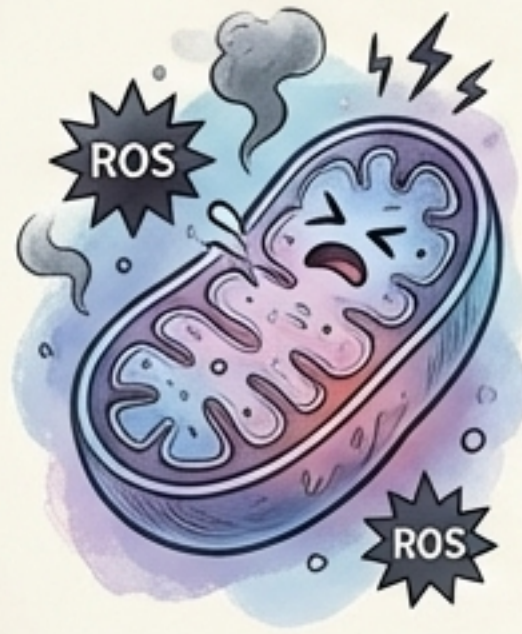
Modern chronic disease is driven by mitochondrial overload from constant carbohydrate consumption. Restoring health requires flipping the metabolic switch from sugar-burning to fat-burning.

## Low-Carb / Ketogenic Diets



Restricting carbohydrates lowers insulin and oxidative stress. Ketones serve as a clean, efficient fuel, generating fewer reactive oxygen species than glucose and enhancing mitochondrial biogenesis.

## Sugar Burner



## Fat Burner



## Intermittent Fasting



Periods of fasting activate cellular cleanup (autophagy) and mitochondrial renewal, reduce inflammation, and improve metabolic flexibility.

“People often ask me what my secret is. Half-jokingly, I reply: I’m a meat eater, while you are grass eaters (carbs).”



# Proof Point: Reversing Type 2 Diabetes Without Randomization

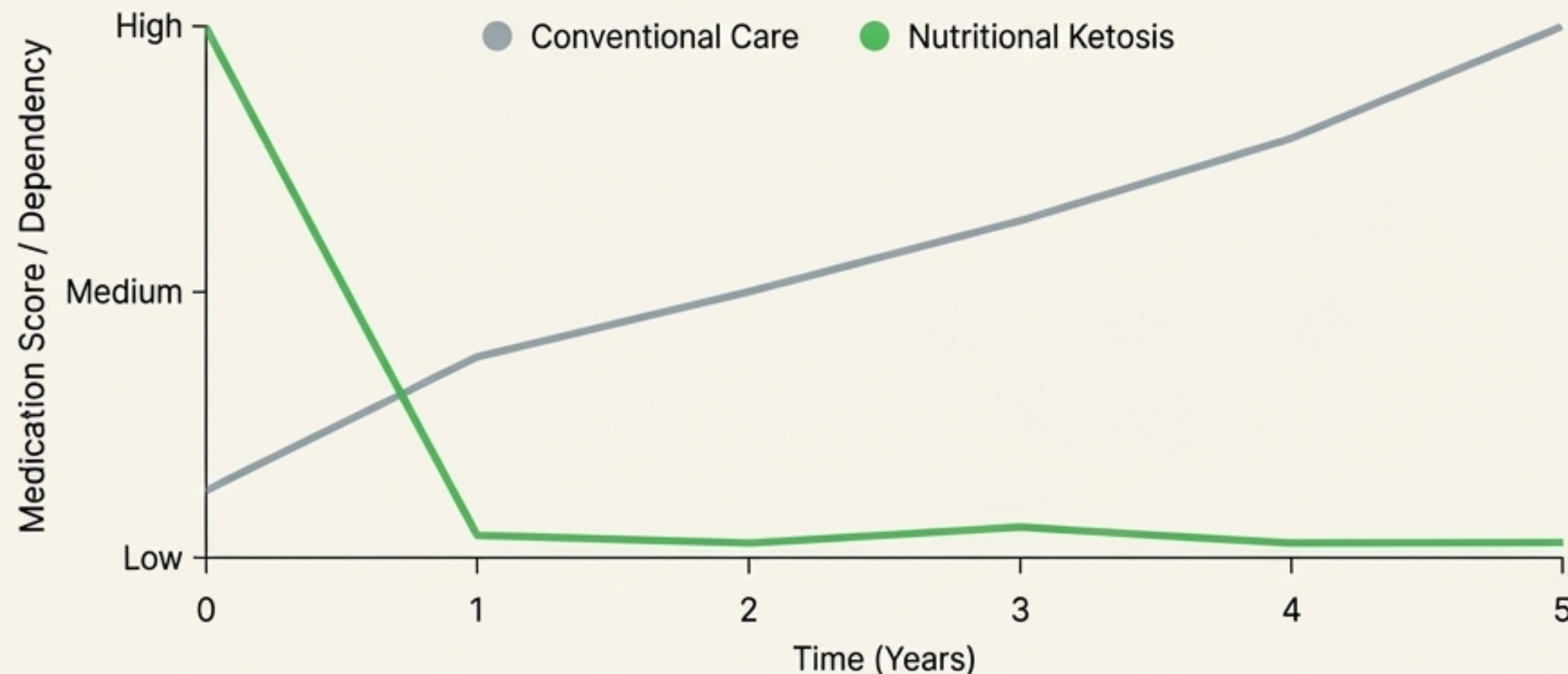
## The Conventional Failure

Mainstream medicine treats Type 2 Diabetes as a "glucose management problem," using drugs to lower blood sugar while the underlying insulin resistance worsens.

## The IOM Success

In reality, it is a reversible metabolic condition. By restricting carbohydrates, we address the root cause directly.

Medication Use Over Time (5-Year Data)



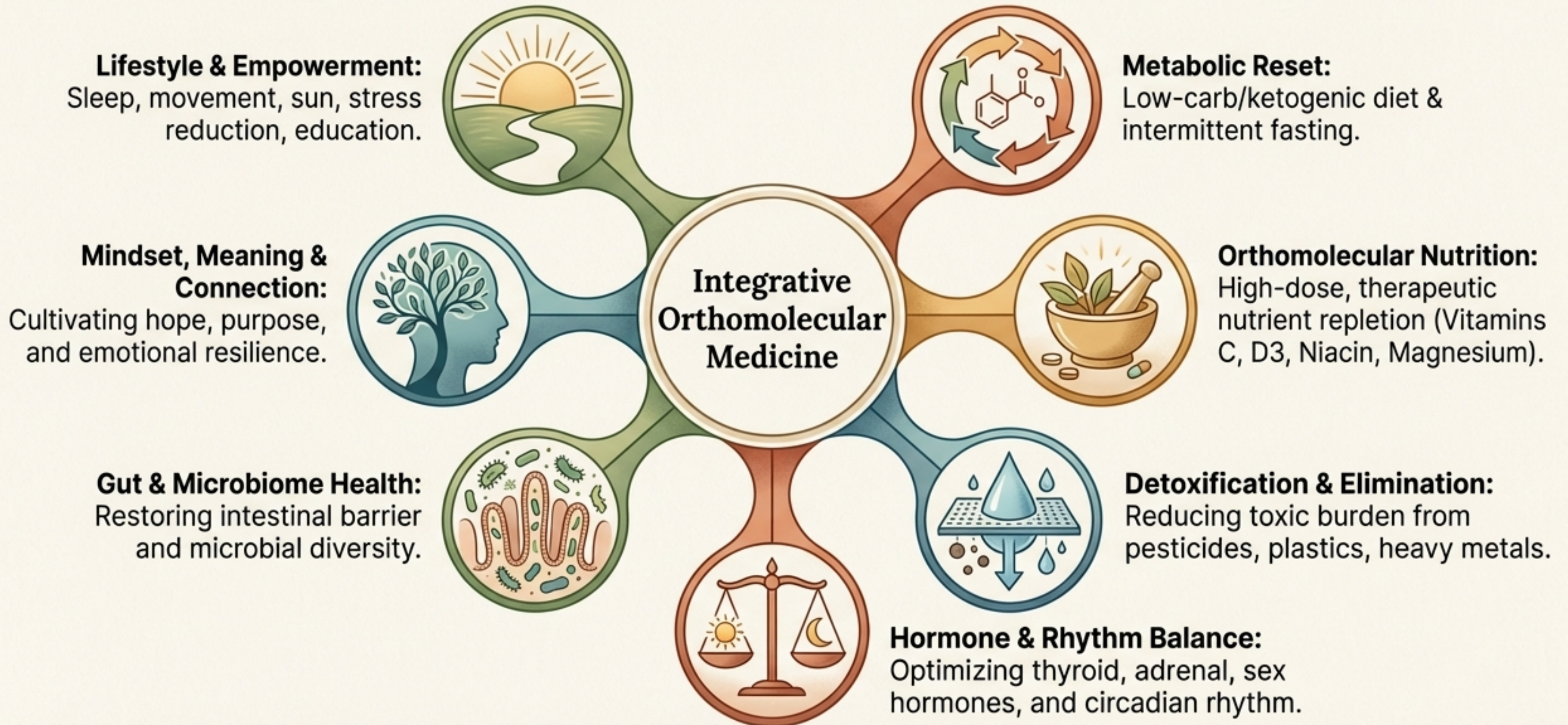
## Real-World Evidence

Data from clinical practices like Virta Health show that a **well-formulated ketogenic diet leads to sustained diabetes reversal—medication discontinuation and HbA1c below the diabetic range—in over 50% of patients at 2 and even 5 years. This magnitude of success is rarely seen in drug trials.**



# The Seven Pillars of Healing: A Foundational Strategy for Health

Healing requires the right conditions. These seven pillars represent the new foundation of care for **lasting health and recovery**. They are not alternative medicine. They are foundational medicine.





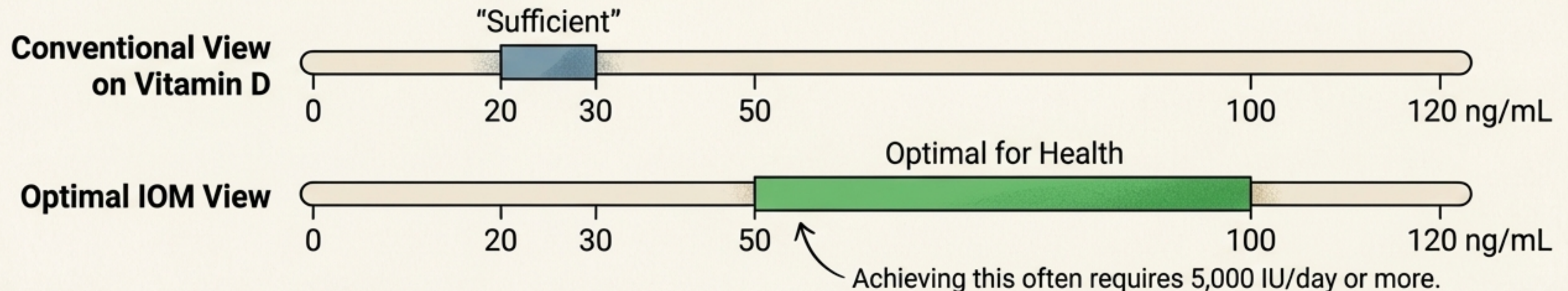
# A New Standard: From 'Normal' to Optimal

"I have practiced intermittent fasting and low-carb eating for nearly two decades. I can still vigorously compete in badminton with players 30 years younger than me. Many younger players run out of energy while I'm still going strong. This is the power of mitochondrial health."

- Dr. Richard Z. Cheng

## Challenging the Reference Range

Our goal should not be to simply stay within "normal" lab ranges, which often represent the average of a sick population. True health requires aiming for the *optimal* physiological range.





# Two Worlds of Medicine: The Great Medical Divide

## The Conventional Model (Pharma-Centric)



### Focuses on Suppressing Symptoms

Uses pharmaceuticals to manage indicators like LDL cholesterol, rather than addressing underlying causes.

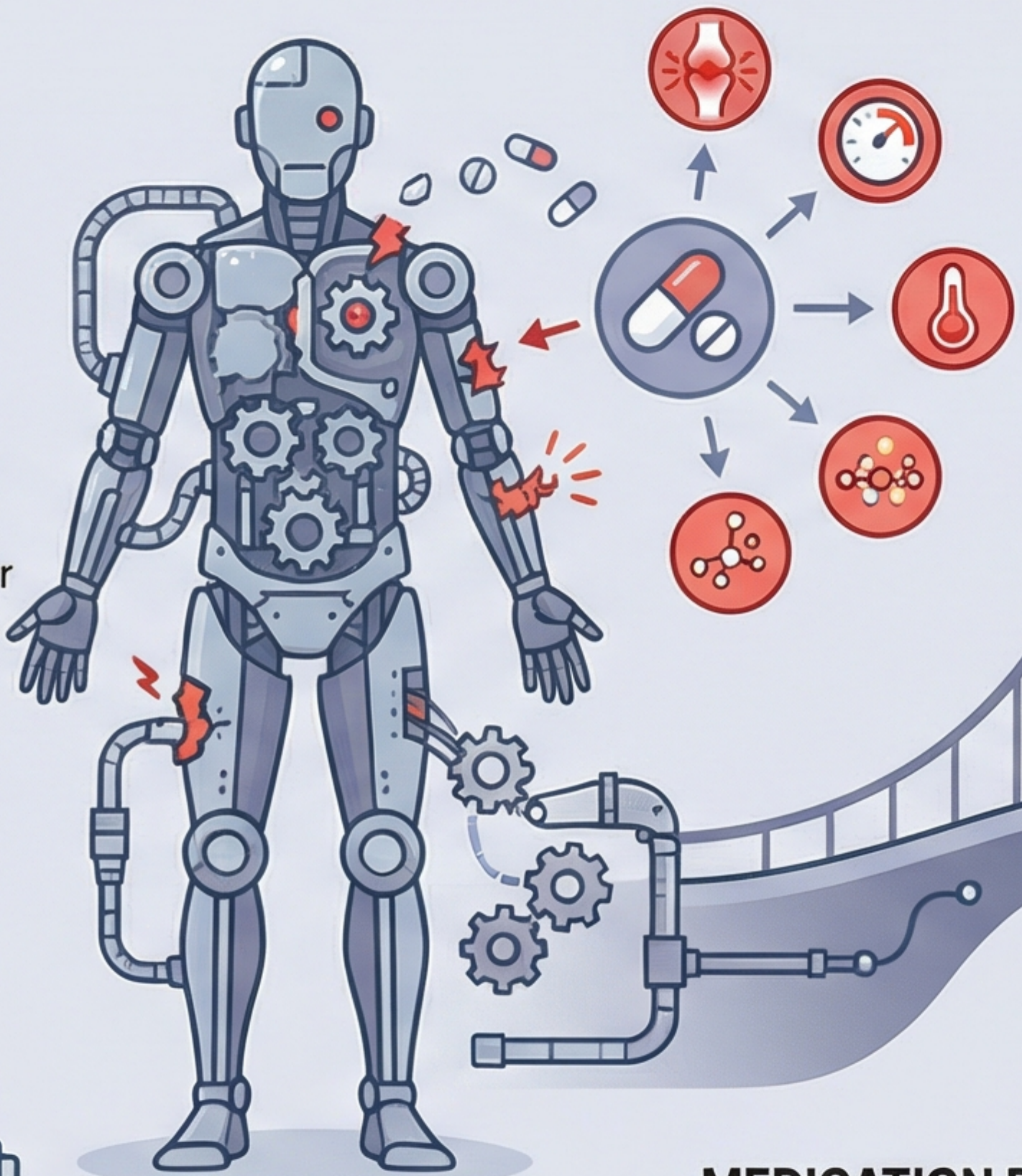
### Views the Body as a Machine

Treats individual “broken parts” in isolation, ignoring the body’s interconnected systems.

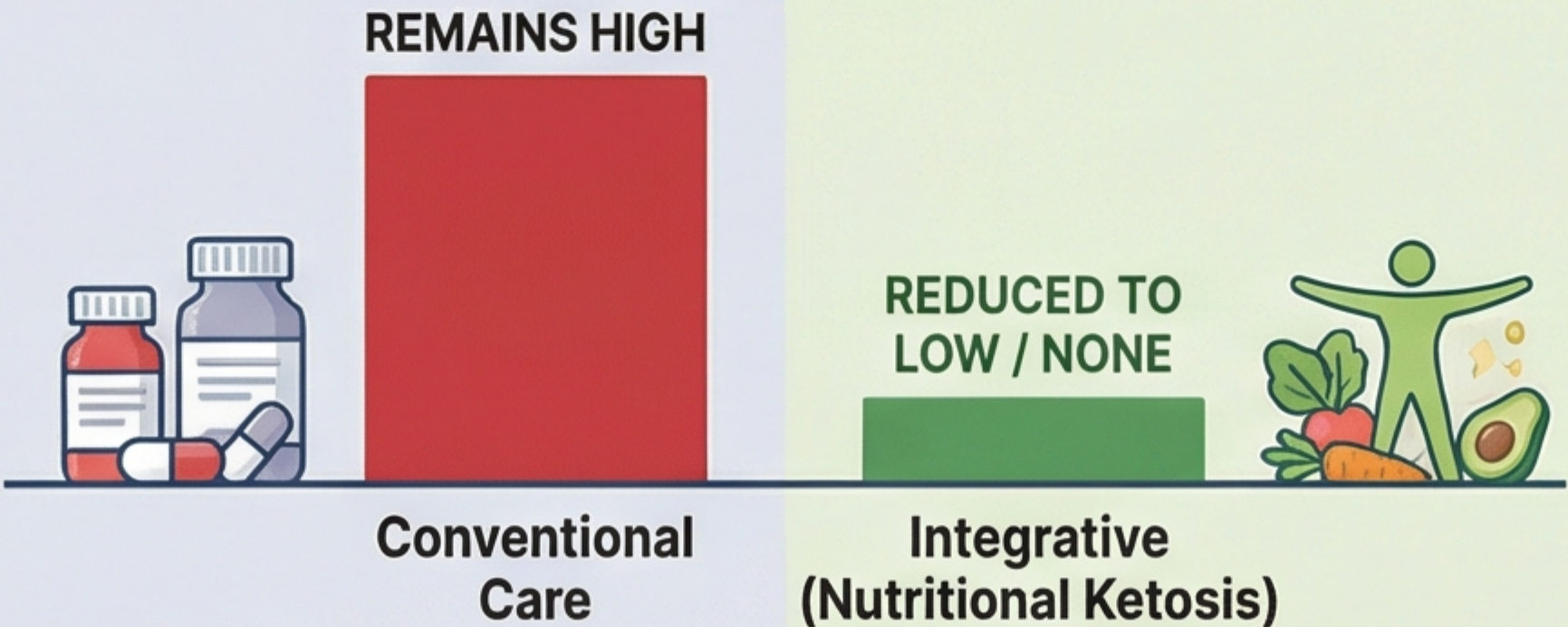


### Relies on a Flawed “Gold Standard”

Defines evidence by Randomized Controlled Trials (RCTs), which are designed for drugs and exclude holistic interventions.



## MEDICATION DEPENDENCY FOR TYPE 2 DIABETES (AT 5 YEARS)



## The Integrative Model (Root-Cause Focused)

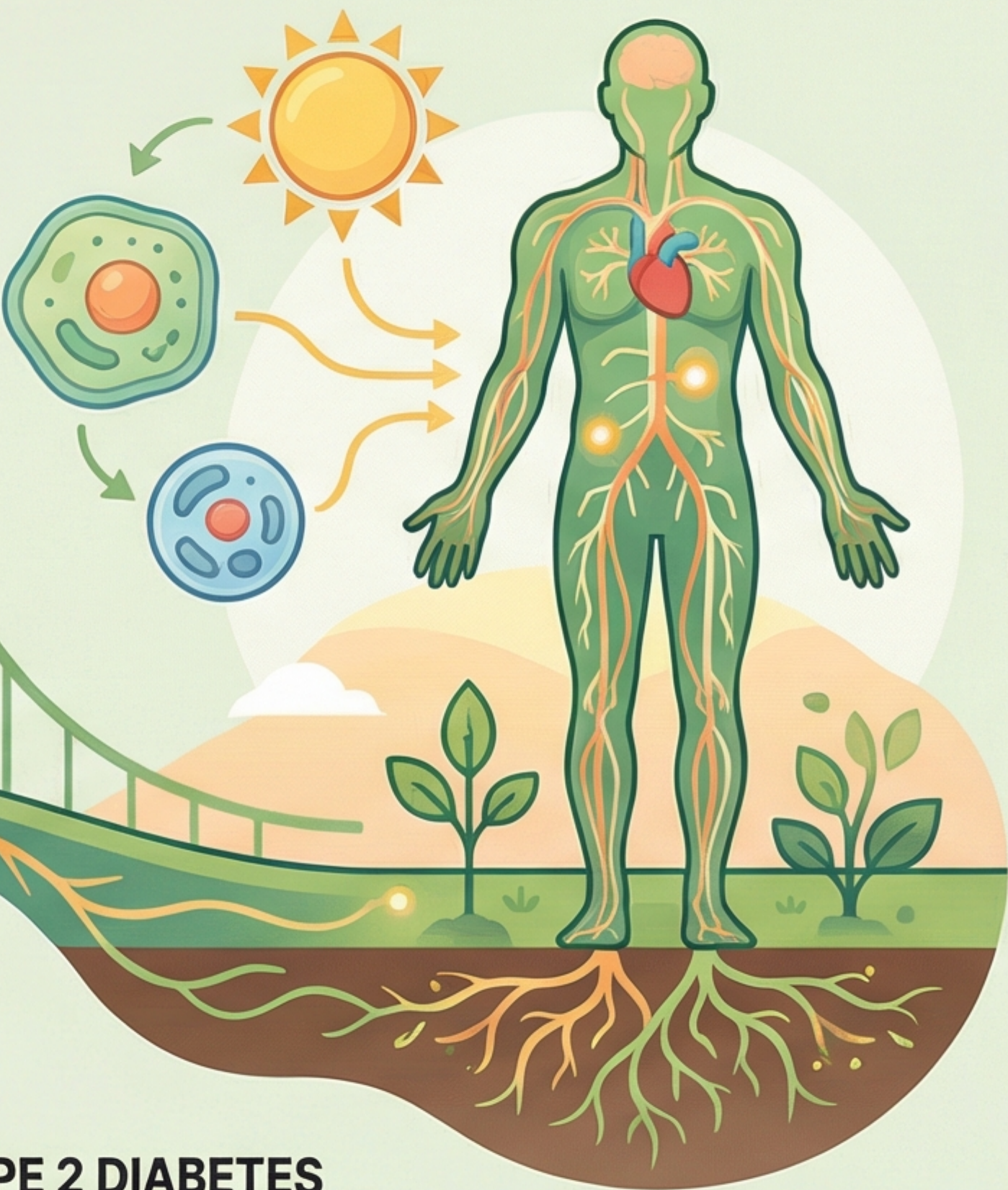


### Seeks to Correct Root Causes

Identifies true upstream drivers of disease, such as nutrient deficiencies and metabolic disruption.

### Views the Body as a Self-Healing System

Provides the raw materials (e.g., Vitamin D, low-carb diet) the body needs to regulate itself.



### Achieves Verifiable Health Reversal

Can reverse chronic conditions like Type 2 diabetes by addressing the metabolic root cause.