

The Load-Clearance-Throughput Model of Chronic Illness

ABSURD HEALTH INSTITUTE | 15 OCTOBER 2026 | VII. Clearance, fasting and the meaning of symptoms

Abstract

This concept paper examines the load-clearance-throughput model of chronic illness. It develops an argument drawn from Terrain Medicine: Fasting Science, identifies the relevant biological or clinical mechanisms, and considers where that argument may fail. This is a narrative perspective, not a systematic review or an original clinical study.

The central problem

The source manuscript proposes that health depends partly on the balance among incoming exposure, internal production, storage, biotransformation and elimination. This general mass-balance logic is real in toxicology and physiology; the novel claim is that an analogous model could explain selected chronic multisystem syndromes. The critical step is chemical specificity. “Load” is not a single substance, and “clearance” is not one organ function that can be inferred from nonspecific symptoms.

Mechanisms and causal architecture

A substance may enter through food, inhalation, medication or endogenous production; distribute into plasma and tissues; undergo enzymatic metabolism; cycle through bile and intestine; leave through urine, feces or other routes. Exposure and clearance dynamics differ enormously across water-soluble metabolites, lipophilic pollutants, endogenous hormones, heavy metals and living pathogens. For lipophilic persistent pollutants, adipose partitioning and long half-lives can matter. For sodium or glucose, controlled homeostatic networks dominate. A mass-balance model becomes useful when each analyte, compartment and rate constant is defined rather than represented by an undifferentiated “toxin burden.”

A discriminating example

A persistent organic pollutant, a steroid metabolite, uric acid and a live parasite do not share a single clearance pathway. A useful load-and-throughput model must specify the actual substance and its compartments. 'Clearing the terrain' is evocative language, but without chemical specificity it can inadvertently imply that medically unrelated problems have the same underlying mechanism.

Competing explanations and limitations

The manuscript sometimes speaks as though accumulation dominates chronic disease generally. That stronger statement is not established. Genetic disease, malignancy, autoimmunity, structural injury, infection and degeneration can involve mechanisms not reducible to impaired elimination. Normal biochemical symptoms cannot be assigned to a hypothetical waste backlog, nor do color changes in stool quantify excreted toxins.

What evidence would change the interpretation?

For a real mechanistic example, define one compound, measure exposure, serum and urinary or fecal elimination where appropriate, and specify how altered kinetics would affect a clinically relevant endpoint. If no agent, compartment or measurable effect can be identified, the clearance hypothesis is too broad to distinguish from alternatives.

Implications for medical interpretation

The Institute can use the framework to ask better transport and toxicokinetic questions, not to promise that fasting or supplements will remove unspecified harmful substances from every patient's body.

Selected scientific reading

Longo & Mattson (2014), Fasting: molecular mechanisms and clinical applications, Cell Metabolism.
<https://doi.org/10.1016/j.cmet.2013.12.008>

Barabási, Gulbahce & Loscalzo (2011), Network medicine: a network-based approach to human disease, Nature Reviews Genetics.
<https://doi.org/10.1038/nrg2918>

Original source: Terrain Medicine: Fasting Science. All source books supplied by the author.

Conceptual research commentary. Not a peer-reviewed clinical study, original trial, systematic review, validated diagnostic instrument or treatment protocol. Consult qualified care for medical decisions.