

The Redistribution Trap

Absurd Health Institute · Hypothesis and mechanistic perspective

Central hypothesis

A substance can leave one compartment and become more concentrated in another without leaving the body. This paper challenges claims that mobilization is synonymous with detoxification. The theoretical question is when changes in adipose mass, protein binding, plasma volume or tissue perfusion alter exposure to bioactive compounds.

The biological route

Persistent lipophilic organic pollutants may accumulate in fat; weight loss can increase selected serum concentrations as tissue stores and distribution volumes change. Biliary and renal elimination, metabolism and tissue partitioning have separate kinetics. The compartment model therefore distinguishes release from storage, chemical conversion and verified excretion. A lower fat mass does not show that a toxic burden is harmless, and a higher blood concentration does not by itself prove clinical injury.

A deeper interrogation

Consider two patients who lose the same amount of fat mass. One has a measurable pre-existing body burden of a known persistent lipophilic compound; the other has negligible exposure. The second may experience no detectable chemical redistribution at all. Even for the first, several quantities must be distinguished: amount remaining in stored tissue, amount entering blood, concentration in circulating lipid fractions, metabolism to other species and total excretion. A rise in serum concentration does not answer how much of the original chemical has left the body. It can reflect release, a smaller distribution volume or changed lipid normalization. Nor does a rise prove symptoms are caused by that substance. The field would benefit from a simple accounting diagram with compartments and rates: input, exchange, transformation and verified exit. Different chemicals would demand different models, because water-soluble solutes, protein-bound drugs, calcium oxalate and persistent organic pollutants cannot be forced into the same “detox” equation. This paper's distinctive contribution is to resist both complacency and alarmism by insisting that biological clearance is a mass-balance question.

Alternative explanations and limits

Observed concentration increases may be partly mathematical consequences of changing lipid pools or specimen normalization. Exposures are chemically heterogeneous; one cannot extrapolate from chlorinated persistent pollutants to all metals, oxalate or ordinary dietary fats.

What would change the conclusion?

A valid analysis would measure absolute body burden when feasible, serum and tissue partitioning, excretion of identified compounds and clinically meaningful outcomes over time. If mass balance shows elimination outpaces release without adverse outcomes, the simple danger narrative loses

force.

The distinctive prediction

The decisive observation is net mass balance: does a mobilized compound actually leave the body, remain circulating or move into another store? Confusion among those outcomes is precisely what the redistribution hypothesis is meant to prevent.

Clinical interpretation

The clinical lesson is not to fear medically indicated weight loss, but to resist unjustified claims of cleansing and to distinguish chemical kinetics from symptoms that may have unrelated causes.

Selected scientific reading

Contextual background, not direct validation of the proposed hypothesis.

Jansen A et al. Increased levels of persistent organic pollutants in serum one year after a great weight loss in humans. Sci Total Environ. 2018.

<https://pubmed.ncbi.nlm.nih.gov/29890598/>

Editorial note: Original theoretical perspective, not an original clinical study, validated diagnosis, or treatment protocol.