

The Intestine as a Recycling Machine for Unwanted Compounds

Absurd Health Institute · Hypothesis and mechanistic perspective

Central hypothesis

The intestine is not merely an inlet. For compounds exported in bile or secreted into the gut, it can become part of a recycling loop. The original question is whether variation in microbial processing, transit time and intestinal binding significantly changes systemic residence time for selected substances.

The biological route

Enterohepatic recirculation occurs when a compound reaches the lumen through bile, is deconjugated or otherwise modified, and is reabsorbed. Bile acids demonstrate sophisticated host-microbe interaction through transporters and microbial enzymes. Some drugs and hormone conjugates also undergo recycling; their kinetics may respond to antibiotics, dysbiosis, altered transit or hepatic dysfunction.

An illustrative scenario

Two drugs may both enter bile, yet only one undergoes substantial intestinal reabsorption after microbial deconjugation. Treating both as equivalent “biliary toxins” would conceal their different chemistry. The question is not whether the intestinal recycling loop exists; it does. The question is whether a specified circulating burden changes enough through that loop to matter clinically for a particular compound.

Alternative explanations and limits

Not every toxin is secreted in bile, and some compounds that enter bile are poorly reabsorbed. Increased stool output does not prove accelerated elimination of a chemically unidentified agent. The general notion of “binding toxins” often overlooks substance-specific chemistry and pharmacology.

What would change the conclusion?

A robust model requires mass balance with labeled or analytically identified compounds, fecal and urinary elimination, and knowledge of intestinal transport. The hypothesis loses force if altered recycling has no appreciable effect on total systemic exposure or clinically relevant outcomes.

The distinctive prediction

Enterohepatic recycling should be demonstrated for a named compound through detectable biliary entry and intestinal reabsorption. A change in stool color, frequency or texture provides no substitute for that chemical evidence.

Clinical interpretation

This framework can inform interpretation of drug interactions and known bile-acid conditions; it does not establish an indication for routine binders or high-risk detox regimens.

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/>

Thaiss CA et al. Transkingdom control of microbiota diurnal oscillations promotes metabolic homeostasis. *Cell.* 2014.

<https://pubmed.ncbi.nlm.nih.gov/25417104/>

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