

## Synthetic bionics: E. coli pills could boost body's ability to absorb ammonia in the gut

Synlogic of Cambridge, Massachusetts, the company behind the unusual study, is testing what it calls “[synthetic biotics](#),” or bacteria engineered to carry out specialized jobs in a person's stomach.

Inside the pills are E. coli engineered to sop up ammonia inside the gut of people who can't get rid of it fast enough. The study signals how genetic engineers are hoping to [harness the microbiome](#), as the trillions of microscopic organisms that dwell within you are known.

The drug is designed to help people suffering from disorders of the “urea cycle.” That's the metabolic flywheel inside your liver that gets rid of excess nitrogen. For people whose urea cycles are faulty, excess nitrogen turns into ammonia, just like what's under your kitchen sink, and just as hazardous.

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The drug represents a concrete application of synthetic biology, which is the idea of engineering an organism's metabolism to produce fuel, drugs, perfumes, or other chemicals. [...] The U.S. Food and Drug Administration, which considers such drugs to be “live biological products,” this summer fast-tracked Synlogic's application to try it on people. Gutierrez-Ramos says Synlogic will know if it's safe by December and hopes to start up studies in actual patients next year.

**The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Gulp. These Volunteers Are Swallowing E. Coli Pills to Help Medicine](#)**