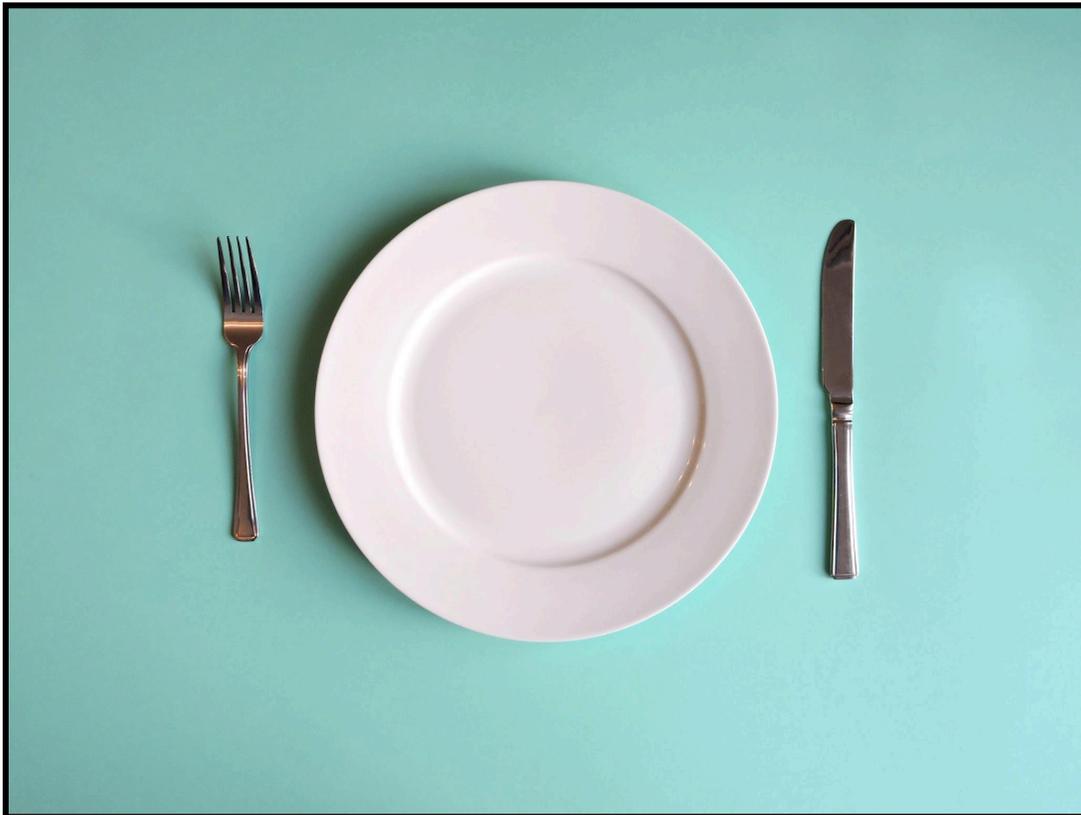




# Wait, so how does fasting “detoxify” us?

**A brief overview of the role that fasting, autophagy, apoptosis, and ketosis can play in our health**



Fasting has gained popularity as a health practice, with some claiming it helps “detoxify” the body. While the term “detox” is often misused in health trends, there’s a lot of scientific research supporting fasting’s role in promoting cellular and metabolic processes that contribute to cleansing and renewal.

At the core of fasting’s detoxifying effects is autophagy, a natural cellular process that translates to “self-eating” in Greek. Autophagy is a mechanism where cells degrade and recycle damaged components, such as misfolded

proteins, dysfunctional organelles, and pathogens. When the body is in a fasted state, energy resources become limited, prompting cells to conserve energy by breaking down and reusing these damaged parts. This not only clears cellular waste but also supports the production of new, functional cellular components. Autophagy plays a crucial role in preventing neurodegenerative diseases, reducing inflammation, and enhancing overall cellular function.

Apoptosis, another significant process influenced by fasting, refers to programmed cell death. Unlike autophagy, which focuses on repair, apoptosis removes cells that are beyond repair or no longer serve a useful function. This controlled cell death ensures the elimination of potentially harmful or precancerous cells, making room for healthier replacements. Fasting has been shown to stimulate apoptosis in unhealthy cells, particularly in the context of cancer prevention and treatment research.

Beyond autophagy and apoptosis, fasting also impacts the body's metabolic pathways. During a fast, the body shifts from using glucose for energy to burning fat stores, producing ketones as an alternative energy source. This metabolic switch not only supports energy efficiency but also reduces oxidative stress and inflammation—key contributors to aging and chronic diseases.

It's important to note that fasting's detoxifying effects don't involve the literal removal of toxins in the way some detox products claim. Instead, fasting optimizes the body's natural processes for maintaining cellular and systemic health. However, fasting should be approached with care.

**If you would like to learn more about the benefits of fasting, join us for Dr. Don's Fasting 201 Class on January 27th, 2025. We'll see you there!**