

# How to Detox Bad Science from Your Holidays



By Lila Abassi — November 15, 2017



Pressed juices [1]

With the holiday season fast approaching, inevitably we will succumb to reckless dietary choices because, what the hey, we have been good the rest of the year, right? Once the new year hits, we will be made to suffer the guilt and the shame for our collective weaknesses. The vulnerability that results from self-hate makes us perfect prey for snake oil salesmen.

Thankfully, the American Chemical Society Reactions group teamed up with Public Broadcasting Service (PBS) Digital Studios as part of a [video](#) [2] series called The Great Courses Plus - to smarten us up so we don't fall for gimmicks.

They produced a video that explains the science behind our body's ability to detoxify itself using our liver and kidneys - the two principal organs responsible from eliminating waste products from our blood supply. I highly encourage watching this video because it demonstrates how our body's already function to maintain a toxin-free environment.

*Fad diets such as "juicing" to "detox" promise to purge us of our excessive yuletide regaling.*

## **What exactly does it mean to detox?**

That's the problem, there is [no scientific definition](#) [3] of toxin, detox or cleanse, the claim is instead that a non-evidence based juicing method, a cleanse, will somehow eliminate harmful "toxins" from our bodies. For example, some claim that by only drinking expensive cold-pressed juices for roughly a week, our bodies will somehow become less toxic and more energized, all while inducing weight loss. Only that last part is true. It does not require a Medical Degree (fine, you want me to say 'it is not rocket science' so I will) to understand that if you don't eat then you will lose weight.

But what are these toxins that the detox gurus are trying to cleanse us of? They can't tell us. Even a review of 15 commercial detox products found that none of them actually named the toxins they were removing or provided any evidence to support their claims.

Yes, our body *is* detoxing, but the chemicals it is excreting are natural and the process doesn't require fancy juice. When the cells of our body are busy serving their purpose, they [convert energy](#) [4] from sugar, fat and protein. That produces waste products, which our bodies also handle naturally. Our lungs are responsible for breathing off the carbon dioxide waste left over as we bring in oxygen to "oxidize" our food and create energy. Lungs also help maintain our body's pH. Our liver plays a critical role in metabolism and removal of accrued waste products such as ammonia. Our kidneys filter urea and salts from the bloodstream and excrete these waste products in the form of urine and also play a pivotal role in maintaining pH.

So juice cleanses are not biologically helpful much less necessary. Yet it is worse than that, the physical process of making these juices actually makes them nutritionally pointless.

The way these juices are prepared is by applying thousands of pounds of pressure to crush the juice out of fruits and vegetables - so there is no pulp. For whatever reason, this process is considered "[extra raw](#) [5]" or "extra fresh" by people who believe in them. They suggest being extra raw due to cold-pressing means these juices are more readily absorbed by our bodies, because there is no need to digest the fiber from the pulp. It's complete wrong.

As our nutrition expert, Dr. Ruth Kava, put it, "That makes absolutely no sense. Most of the nutritional value would be in the pulp itself."

Dr. Kava also made the point that "the liquid portion extracted from the fruits and vegetables would contain only a minimal concentration of water-soluble vitamins."

In other words, they are doing nothing but costing you six dollars.

As it has always been, the best way to handle the after-effects of binging during the holiday season is equipping ourselves with self-control before we eat and drink too much.

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#### Links

[1]

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[2] <https://www.youtube.com/watch?v=zv0chkuT7cQ&feature=youtu.be>

[3] <https://lifehacker.com/what-happens-in-your-body-during-a-cleanser-detox-1669540259>

[4] <https://sciencing.com/organs-rid-wastes-produced-cells-6785572.html>

[5] <https://www.vox.com/2015/10/28/9626756/fruit-juice-cold-press-eat-fruit-vegetables>