

# Just 3 days of a 'juice fast' could be doing you more harm than good

Liquifying your oranges, celery, beets, and apples into a delicious drink is commonly seen as a refreshing way boost nutrient intake while 'cleansing' the body.

A new study now shows that even a few days of swapping all of our humble fruit and veg for a juiced version in what's known as a 'juice fast' could deprive us of the fiber we need to stay healthy.

Researchers from Northwestern University and the University of Illinois Urbana-Champaign recruited 14 volunteers and split them into three groups for three days.

One group stuck exclusively to juiced food items, one group just had plant-based food, and one group had juice and non-juice food items.

The juice-only participants presented significant changes in mouth bacteria, consistent with increased sugar intake. [Proteobacteria](#), linked to inflammation, was one of the groups of bacteria that rose in number.

The researchers looked at bacteria levels across the three diets. (Sardaro et al., *Nutrients*, 2025)

Changes in gut microbes were less pronounced than those in the mouth, though three days of juicing still made a difference: bacteria linked to increased inflammation and even [cognitive decline](#) made up a greater proportion of the microbiome.

"Most people think of juicing as a healthy cleanse, but this study offers a reality check," [says](#) Northwestern University integrative and culinary medicine physician Melinda Ring.

"Consuming large amounts of juice with little fiber may lead to microbiome imbalances that could have negative consequences, such as inflammation and reduced gut health."

It's worth noting the small sample size used in the study, and that the researchers found that the [bacteria mixes](#) went back to normal after a couple of weeks – suggesting no long-term impact from a few days of juicing.

However, the speed with which potentially dangerous bacteria increased and healthy bacteria decreased definitely justifies more research on this

topic. That should give us a better understanding of how these bacteria shifts might be harmful.

The researchers think the removal of fiber from the fruit and vegetables turned into juice could be key. Fiber typically balances out the sugar in these foods, and promotes [the spread of healthier bacteria](#) that [protect against inflammation](#).

"The nutritional composition of juice diets – specifically their sugar and carbohydrate levels – plays a key role in shaping microbial dynamics in both the gut and oral cavity and should be carefully considered," [says](#) food microbiologist Maria Luisa Savo Sardaro from Northwestern University.

Fruits and vegetables are an important part of a healthy diet, and most of us need to be [eating more of them](#). Juices can be one way of getting these foods into our diets.

However, the researchers want to see further studies that explore longer term impacts, especially in terms of oral health, with the mouth the first part of our bodies to see the beneficial or harmful effects of what we're eating and drinking.

"This highlights how quickly dietary choices can influence health-related bacterial populations," [says](#) Ring. "The oral microbiome appears to be a rapid barometer of dietary impact."

"If you love juicing, consider blending instead to keep the fiber intact, or pair juices with whole foods to balance the impact on your microbiome."