

Consuming grapes modulates the human microbiome with potential benefits for health

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The results of a human study published in *Scientific Reports* investigated the potential of grapes to modulate the human microbiome and thus influence health. The paper was included in a special human microbiome

collection in the journal.

The gut microbiome consists of more than 3 million genes and billions upon billions of microorganisms understood by science and [health professionals](#) to impact the overall health and well-being of humans. This new eight-week human study analyzed the microbiome composition as well as urinary and plasma metabolites. Changes were seen in the amounts of bacteria detected and in enzyme levels and biological pathways. Analysis of a subgroup of subjects showed unique patterns of microbe distribution.

During the grape consumption phase of the study subjects ate 2 1/4 cups of grapes per day.

According to Dr. John Pezzuto, lead author of the study and professor and dean at Western New England University College of Pharmacy and Health Sciences, the gut microbiome communicates with all of our organs. "We call this the gut-organ axis. Our study showed that grapes actively impact the gut microbiome causing shifts in the intricate interactive networks and thus subtly changing the [gut microbiome](#) and the resulting chemicals it produces.

"Over the years, we have learned that consumption of grapes has the potential to mediate an amazing cadre of [health benefits](#). Data suggest health improvements in heart, colon, brain, skin, and more. We now know that grapes can change the chemicals in the microbiome. As these chemicals have access to all of our body organs it is logical to conclude that this leads to some of the health benefits that have now been established."

More information: Asim Dave et al, Influence of grape consumption on the human microbiome, *Scientific Reports* (2023). [DOI: 10.1038/s41598-023-34813-5](#)

Provided by California Table Grape Commission

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