Will Drinking Red Wine Give You a Healthier Microbiome?

By Angela Dowden — September 9, 2019

Oooh I do love to hear how a penchant for red wine might do a person (me) good! So a study suggesting that our microbiome (the assemblage of bacteria in the gut that can impact on health) might be improved by a spot of merlot was always going to get my attention. And shouty headlines like “Red Wine is Good for Gut Health, Study Finds!” (Fox News) and “Red Wine Helps Drinkers Avoid Obesity and Gives Them ‘Healthier Guts’, says Study” (dailymail.com) are worth a second look.

Previous studies have suggested that red wine could affect our gut bacteria, so this latest one by a team at King’s College, London was designed to look more in-depth at the potential relationship. It compared food and drink questionnaire responses with gut bacteria diversity in 916 female twins, and then checked the results against two other studies of similar size in the US (the American Gut project) and in Belgium (the Flemish Gut Project).

The results found that drinking red wine (even if other alcoholic beverages were also consumed) was linked with an increase in gut bacteria diversity in all three countries. The researchers also found that twins who drank more red wine than their co-twin also had more diverse gut bacteria, essentially ruling out other possible genetic or family biases.

People who were culturally similar to red wine drinkers, but who quaffed white wine, beer or spirits instead, didn’t show the same increased bacterial diversity, which is considered the sign of a healthy microbiome.
Twins who drank red wine also had lower levels of obesity and “bad” cholesterol, which the researchers surmise could be partly because of the associated changes in gut bacteria.

So should you switch to red if it’s not already your tipple of choice?

If you enjoy a glass of pinot noir or cabernet as much as the next drink then sure, why not? But while the use of a twin cohort will have removed many confounders and strengthened the results, this study still only reports an association and not a causation.

Moreover, if the study results hold true, they infer that as little as one glass of red wine a week can increase the diversity of good bacteria. This seems like an implausibly (and disappointingly!) small amount to have such an effect: on balance of probabilities, it’s likely that a combination of factors is at play.

Ultimately, as the authors themselves point out, sorting out any causal effects would require a randomized trial, which probably will never occur. The researchers also seem fairly convinced that the benefits of red wine on the microbiome, if they exist, are likely to be from the polyphenols in red wine rather than alcohol or other components.

That means that any polyphenol sources, including brightly colored fruits (especially berries), vegetables, nuts and seeds are likely to be good for your gut microbiome.

Eating lots of fruit and veg isn’t quite as fun as necking a bottle of red, but you can always do both.