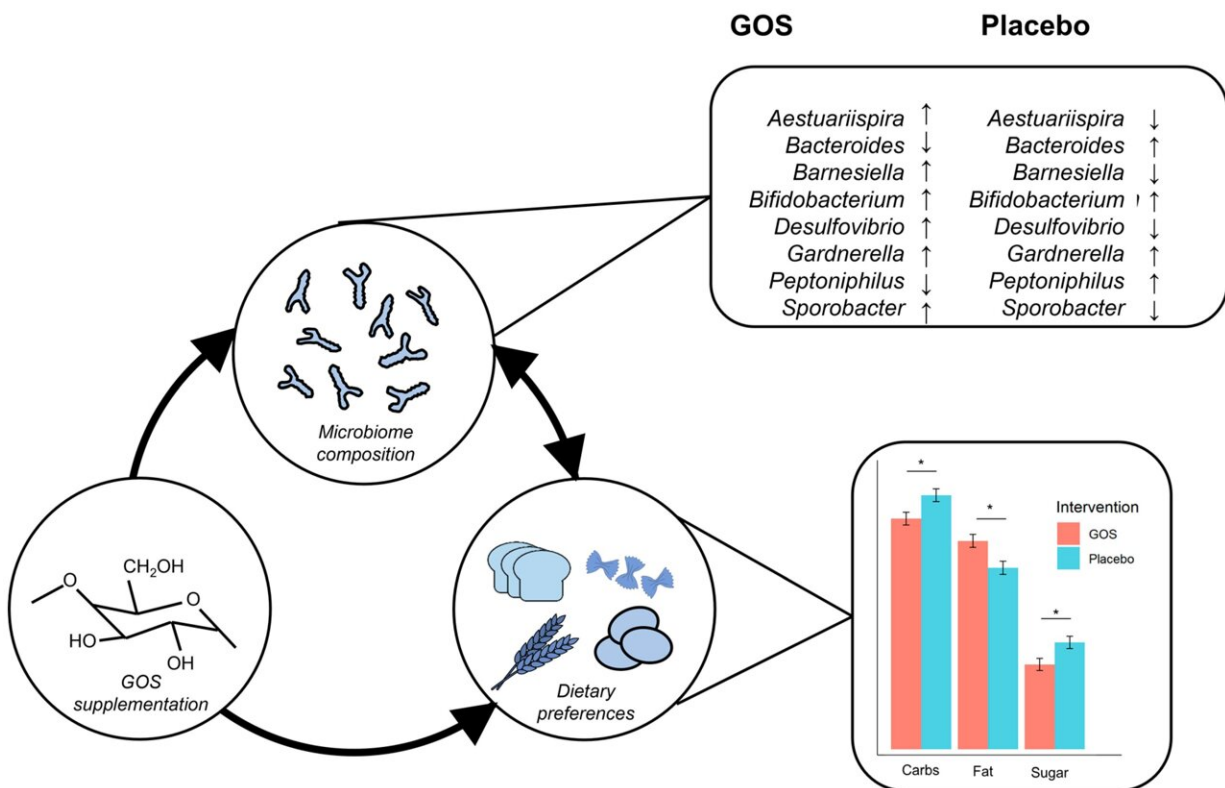


# Prebiotics supplements help women reduce sugar intake by four percent

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Graphical abstract. Credit: DOI: 10.3390/nu13124384

A new study from the University of Surrey has found that young women who took four weeks of prebiotic supplements made healthier food choices and consumed less sugar.

The prebiotics used in this study were galacto-oligosaccharides (GOS) which increase the amount of "friendly" gut bacteria.

In a paper published by the journal *Nutrients*, researchers from the University of Surrey set out to investigate whether prebiotic GOS can influence the food habits of 48 healthy [young women](#) between the ages of 18 and 25 years.

The [women](#) were divided into a group that took GOS supplements (Biotis™), and another group was given a placebo for 28 days. The women were asked to keep a food diary of their eating and drinking habits; the researchers also collected a stool sample for microbiome sequencing.

The research team found that participants who used the GOS supplements consumed 4.1% less sugar and 4.3% fewer calories from carbohydrates overall than women from the placebo group. Interestingly, the study also found that those who took the GOS supplements consumed around 4.2% more energy from fats.

After analyzing their results, the Surrey team found that the prebiotic supplements modified the composition of the gut microbiome, increasing levels of Bifidobacterium. The researchers found that these changes were associated with the women's nutritional intake over the four-week period.

Dr. Kathrin Cohen Kadosh, lead author of the study from the University of Surrey, said, "In this study, we looked at the effect of [prebiotic](#) intake on the wellbeing of young women. Stress and anxiety have long been blamed for 'comfort eating,' and there is growing evidence to support the influence of stress on unhealthy eating behaviors. This study, in conjunction with our previous research, suggests that boosting the growth of beneficial bacteria in the gut, such as Bifidobacterium with

prebiotics, improves better wellbeing by reducing anxiety and may help to make healthier food choices."

Dr. Nicola Johnstone, co-author of the study from the University of Surrey, adds: "So far, our research makes it clear that prebiotics such as galacto-oligosaccharides are effective in increasing the growth of gut bacteria, and this may have a [positive impact](#) on what we eat and how we feel. Now, more work needs to be done to confirm and help us understand the mechanisms that allow galacto-oligosaccharides to suppress our longing for sugary products."

**More information:** Nicola Johnstone et al, Nutrient Intake and Gut Microbial Genera Changes after a 4-Week Placebo Controlled Galacto-Oligosaccharides Intervention in Young Females, *Nutrients* (2021). [DOI: 10.3390/nu13124384](#)

Provided by University of Surrey

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