NUS researchers have developed fermented versions of coffee and tea that contain probiotics

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Fancy a cup of coffee or tea packed with live probiotics that could improve your gut health? Researchers from the National University of Singapore (NUS) have concocted the drinks using a fermentation process which produces healthy compounds that increase the amount of nutrients absorbed by the body, while retaining the health benefits associated with coffee and tea.

Two doctoral students from NUS’ Department of Food Science and Technology, Ms Wang Ruili and Ms Alcine Chan, created the probiotic tea and coffee respectively.

To create the tea, Ms Wang added nutrients into a tea infusion, followed by probiotics. The tea mixture was left to ferment for two days before it was ready for consumption.

Said Ms Wang: “The probiotic tea tastes like fruit tea with a little bit of acidity, and a similar mouth-feel to the original tea.”

Consumers can add sweeteners and milk or cream based on their preferences, she added.

Ms Chan, who created the probiotic coffee, added nutrients to brewed coffee, followed by probiotics. The coffee mixture was left to ferment for a day and placed in the refrigerator following fermentation before it was ready for drinking. Sugar and milk can be added before consumption.

Ms Chan, who concocted several prototypes of the probiotic coffee, said: “Some of them give better-balanced acidity, some give better mouth-feel, some have deeper smoky flavours, and some can retain the coffee flavour better after long-term storage.”

The coffee and tea can be stored chilled or at room temperature for more than 14 weeks without compromising their probiotic viability.

Each serving of the probiotic tea and coffee contains at least one billion units of live probiotics, which is the daily amount recommended by the International Scientific Association for Probiotics and Prebiotics.

The team are refining their recipes to enhance the taste and flavour of the two beverages. They have also filed a patent for the probiotic coffee and tea recipe, and plan to collaborate with industry partners to bring it to the market.

Unlike traditional probiotic carriers such as yogurt and cultured milk, coffee and tea are both plant-based and non-dairy drinks that are suitable for vegans, said Associate Professor Liu Shao Guan from the Department of Food Science and Technology at NUS’ Faculty of Science, who supervised the students.

It is also ideal for people who are lactose intolerant or have high cholesterol and allergies to dairy proteins.

Said Prof Liu: “Coffee and tea are two of the most popular drinks around the world, and are both plant-based infusions. As such, they act as a perfect vehicle for carrying and delivering probiotics to consumers.”

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