

Ajinomoto Health & Nutrition partners with Shiru to develop sweet proteins

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The Protein Discovery Company

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Ajinomoto Health & Nutrition North America, Inc. and the protein discovery company Shiru are partnering to develop and commercialise sweet proteins in beverages and speciality products. This partnership combines unparalleled strengths from both entities to bring natural, functional ingredients to market: Shiru's powerful AI-driven discovery capabilities and AHN's deep expertise in fermentation.

The partnership is the first foray by the leader in amino acids, Ajinomoto Health & Nutrition, to test sweet proteins – long considered a holy grail application for the food industry.

Sweet proteins can replace sugar and other sweeteners in food and beverages without spiking blood sugar levels associated with diabetes, obesity, and cardiovascular disease globally. A handful of known sweet proteins from fruits and berries grow near the equator. These known sweet proteins show tremendous early promise and face challenges related to onset/lingering taste effects and stability. To overcome these challenges, Shiru will use Flourish, its AI-driven discovery platform, to uncover additional natural, food-safe proteins not previously known to be sweet.

Sweet proteins are a promising, potentially more sustainable alternative to HFCS and sugar production and are an appealing sugar replacement in food and beverage product development. Remarkably, sweet proteins can deliver up to 5,000 times more sweetness than sugar, offering the potential to replace 70-90 per cent of sweetness provided by sugar in food and beverage products.