

German Fraunhofer Institute Partners to Develop Sustainable Sweet Proteins

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Fraunhofer IME, in collaboration with metaX Institut für Diätetik GmbH and Candidum GmbH, is embarking on a groundbreaking research project, NovelSweets, to develop novel sweet-tasting proteins as a sustainable alternative to traditional sugar.

The project aims to leverage biotechnology to produce sweet proteins, which are naturally occurring substances found in certain plants. These proteins bind to the tongue's receptors, triggering a sweet taste sensation without the negative health implications associated with excessive sugar consumption.

By focusing on the production of brazzein-based proteins, the researchers aim to create a more sustainable and cost-effective solution for reducing sugar content in food and beverages. Precision fermentation techniques will be employed to optimize the production process and enhance the sensory properties of these sweet proteins.

The NovelSweets project aligns with the goals of the German Federal Ministry of Food and Agriculture (BMEL) to promote healthier food options and reduce the prevalence of diet-related health issues. By developing innovative and sustainable solutions, the project contributes to a healthier future for consumers.

As the global demand for healthier and more sustainable food products continues to grow, the development of sweet proteins represents a significant step forward