Snack without regrets: Enzymatic in-situ fortification to simultaneously meet the consumers’ taste expectations and health consciousness

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Abstract

Evolution has blessed us with a sense of taste allowing the joyful consumption of culinary delights, where especially sweet-tasting food products with high sugar content – indicating “no toxicity” -- catch our attraction. However, the resulting widely spread overconsumption of sugar has turned indulgence into serious health concerns for the human population: more and more people are impaired by health issues such as overweight, diabetes and cardiovascular diseases. Consequently, consumer advisors as well as politicians demand a significant reduction of sugar in processed foods and c-LEcta as leading biotechnology company dedicated to the development of enzyme cascades and cell-free biosynthesis approaches this issue with innovative ideas: We have created proven concepts for the enzymatic in-situ conversion of critical sugars like fructose, glucose and saccharose into more valuable saccharides while – most importantly – maintaining taste and texture. By such treatment, foodstuff with added benefits including less sugar, lower calorie count and reduced glycemic index can be produced. The methods are especially applicable for raw materials with a naturally high content of sugar like fruit juices and thereby are not only an alternative to high intensity sweeteners but offer a solution for a so far hardly addressable technical challenge.

Biography:

Dr. Martina Bluhm studied biochemistry at the University of Tübingen prior to earning her PhD at the University of Leipzig. Her research was dedicated to the field of antimicrobial peptides and other proteinaceous biomaterials. Inspired by the opportunities in Industrial Biotechnology she joined c-LEcta in 2016 as Business Development Manager.

Speaker Publications:

1. N-Terminal Ile-Orn- and Trp-Orn-Motif Repeats Enhance Membrane Interaction and Increase the Antimicrobial Activity of Apidaecins against Pseudomonas aeruginosa.

2. Publication date May 10, 2016 publication descriptionFrontiers in Cell Developmental Biology N-Terminal Ile-Orn- and Trp-Orn-Motif Repeats Enhance Membrane Interaction and Increase the Antimicrobial Activity of Apidaecins against Pseudomonas aeruginosa

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