



Using dietary fibre and lime flavour in Stevia rebaudiana sweetened fruit beverages was the aim of a new study published by the team of Dr Line Mielby from the Food Metabolomics and Sensory Science, Department of Food Science, Aarhus University, Aarslev, Denmark.

The beverage industry has long revolved around sugar reduction as a response to heightened calorie and health awareness. More recently dietary fibre has also garnered attention to meet the consumer's demands for low calorie and yet more satiating food and beverages. From a health perspective the sweetener Stevia rebaudiana and the fibre β -glucan seem like very good solutions, as stevia is the only natural non-nutritive sweetener and β -glucans have been related to various health benefits besides increasing satiety.

However, both also have distinctive perceptual effects on the sensory characteristics of the products they are added to. To gain knowledge on the sensory characteristics of fruit based beverages sweetened with S. rebaudiana and added β -glucans and lime flavour, and how consumers respond to the products, sensory descriptive analysis and a consumer study were conducted.

The sensory characteristics of the fruit drinks were affected by stevia and the addition of β -glucans. However, the addition of lime flavour was able to mask the side effect of the aftertaste caused by S. rebaudiana. Further, by adding lime flavour to the fruit beverages, the side effects of increased fibre concentration "Unfresh odour" and "Metallic odour" could also be counteracted to such an extent that the β -glucans containing fruit beverages were evaluated just as favourably in terms of liking, wanting and sensory satisfying as the fruit beverages not containing β -glucans.

The association of stevia, lime and β -glucan could be a new opportunity for beverages with fruits, so for the beverages industry.

Reference: [1] Changes in sensory characteristics and their relation with consumers' liking,

wanting and sensory satisfaction: Using dietary fibre and lime flavour in Stevia rebaudiana sweetened fruit beverages

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