

# Acceptance Of Flavoured Yoghurt With Different Concentrations Of Added Sugar

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## Background

As a high consumption of sugar is related to teeth damages and chronic diseases, a reduction of sucrose intake is recommended. In an initial survey Swiss people over the age of 50 stated that flavoured yoghurts sold on the market are too sweet. In order to investigate which concentration of added sugar is favoured and if there are differences in consumer's preferences based on age, a consumer test was organized.

## Objective

The aim of the study was to clarify the favoured sugar concentration in yoghurts and possibilities of sugar reduction.

## Methods and Material

Strawberry and coffee yoghurt containing 5%, 7% and 10% of added sugar<sup>1</sup> (10% is the usual concentration), were tested during two trade fairs. The yoghurt samples were evaluated according to the following criteria: overall liking, sweetness and flavour adequacy. Consumers of all age groups rated their degree of liking on a 9-point hedonic scale.

The evaluations of sweetness and flavour adequacy were measured on a 9-point just-about-right scale (JAR). For the JAR questions, the frequency distribution of the scores was calculated.

According to the General Linear Model results, the age of the consumer influenced the overall liking and the sweetness evaluation of the coffee yoghurt but not of the strawberry yoghurt. The overall liking scores given by the elderly (>60 years) were significantly higher than those given by younger people.

<sup>1</sup> Represent sucrose from fruit mass and added sugar, without lactose



## Conclusion

These results suggest that consumers would accept a flavoured yoghurt with 7% of added sugar instead of 10% but not one with only 5% sugar.

## Results

For both flavours, the highest rating for overall liking was achieved for the yoghurt containing 10% of added sugar. However, yoghurts containing 7% sugar were accepted (Tab. 1).

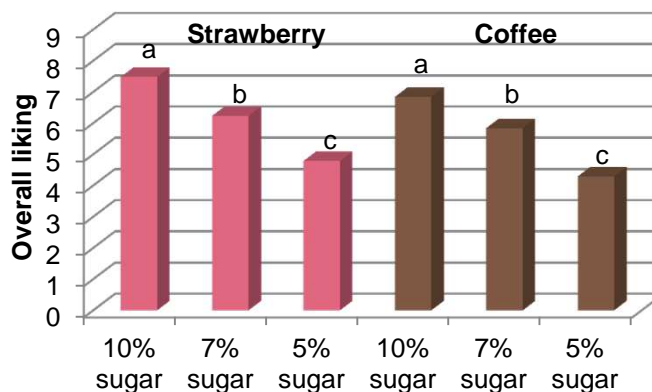


Table 1: Overall liking of yoghurt with different sugar concentrations (10%, 7%, 5%)<sup>1</sup>

Significant differences ( $p < 0.05$ ) are marked with different letters above the columns.

On the JAR, the majority of consumers rated the concentration of both, 10% and 7% of added sugar as "just about right" for sweetness and flavour intensity. However, the yoghurt containing 10% of added sugar was more often described as too sweet compared to the yoghurt containing 7% of sugar, for both flavours (Tab. 2). On the other side, the sweetness and flavour intensity for the yoghurt containing 5% of sugar was judged as too low.

Table 2: Distribution of responses regarding sweetness for each concentration of sugar

