



Increasing the validity of affective sensory tests in consideration of different consumption habits

S. Glassl¹, G. Haack², A. Scharf¹

¹University of Applied Sciences Nordhausen, Germany

²Unternehmensgruppe Theo Müller GmbH & Co. KG, Germany

Introduction

The way of consumption deviates more or less from consumers on several products. It is to determine how this circumstance can be taken into consideration on affective product testing. On the one hand the subject can be forced by instructions to do testing in a certain way. In this case negative consequences may result from testing regarding the external validity. On the other hand, if the subject can decide how to do testing, the internal validity will be affected. In order to analyze this problem, the disturbance variable "consumption habit" has been monitored.

Affective consumer test

In a sensory laboratory 106 subjects tasted 2 different two-component-yoghurts using a semi-monadic experimental design. Afterwards, their overall acceptance and each sensory dimension were saved. During testing the individual consumption habit of each subject was recorded via webcam.



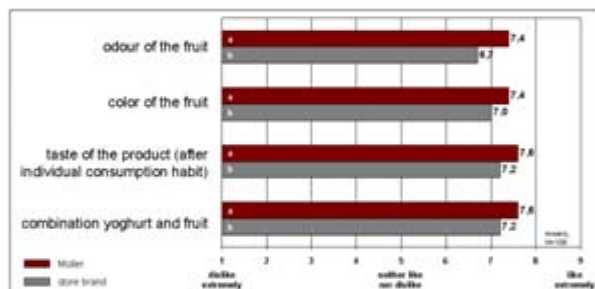
Main objectives

The purpose of a cooperation project between Theo Müller company group and the University of Applied Sciences Nordhausen was the examination of this problem. Therefore the influence of consumption habits, of the components "yoghurt" and "fruit preparation" from a two-component-yoghurt concerning the sensory acceptance, has been analysed.

Key findings

With regard to particular sensory dimensions, significant differences in acceptance had been ascertained between both test objects.

- ➔ Qualitative and quantitative preliminary study to evaluate different possible consumption habits and expected benefits
- ➔ Sensory acceptance test with regard to individual ways of consumption



Test design

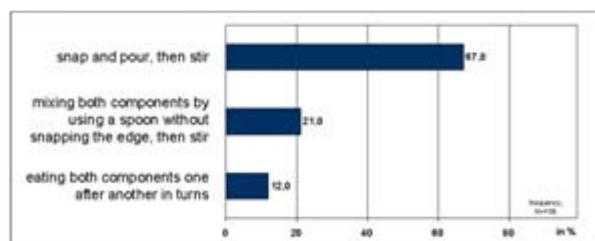
Analysis of consumption habits and expected benefits

As a first step the consumers were asked to give the most favoured sort of these yoghurts. For that reason we decided for strawberry in the following acceptance test.

The qualitative preliminary study revealed the existence of quite a lot of different ways of consumption. Only one group of consumers snapped - as shown in commercials - and poured the edge containing the fruit preparation into the yoghurt then stirred. Other consumers mixed both components by using a spoon without snapping the edge, and yet others eating both components one after another.

The given statements for choosing such two-component yoghurts were always concerned to the individual mixture ratio of fruit and yoghurt.

Consumers with comparable consumption habits were grouped together for analysis. The figure shows three main categories after analysing all videos.



Products

When selecting the test products it was considered to have the most common ones, i.e.

- ➔ Müller - Joghurt mit der Ecke®
- ➔ Lidl - store brand



Despite extreme differences in ways of consumption, no significant influence of consumption to acceptance data could be verified. In order to this study the null hypothesis could not be condemned, which should not be transferred to other types of products.

If there is more than one way of consumption of a certain product, this issue should be taken into consideration for planning sensory tests. A possible way is to record the way of consumption during the test situation and afterwards grouping the consumers together on similar consumption habits for data analysis.