



Marketing of tastier and healthier Fruits and Vegetables – an integrated approach

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Background

Life span of people is increasing, while their health span is not. Despite many efforts, most people still eat less fruits and vegetables than recommended for a healthy condition. One of the challenges is to develop new healthy products which meet consumer needs. Therefore a continuous iterative relation between the product, the consumer, and the production is needed (Linnemann et al., 2006; Sijtsema et al., 2002). The aim of this 4-year project is to increase the consumption of healthy products by the combination of production and marketing of tastier fruits and vegetables.

Methods

- Iteratively integration of technical expertise with insights about consumer perceptions and food choice behavior.
- Mapping of various **segments of consumers** (survey n=1200).
- Development of **sensory preference maps**, and technical innovations in production and supply chain.
- Integration between these research areas to adequately serve the consumer target groups with tasty and healthy products.
- Development of **instrumental models** for flavour prediction in fruits, for different consumer segments. Combining consumer surveys with sensory research.
- New **cultivation protocols** for tastier and healthier products.
- Provision of guidelines for a smarter communication with the various target groups.
- An integrated approach of technical research, sensory, and consumer research.



Figure 1. Visualisation of a consumer segment, based on the intake and interest in food and cooking, health related motives, new products, flavour preference, and preference for specific product characteristics.

Impact

Public Private Partnership

The project is a pre-competitive PPP between private partners, research institutes, and the Dutch government. The private partners represent the whole vegetable chain: breeders, growers and retail. The outcome of the project can be used directly in their own competitive breeding, cultivation and marketing activities.

The methods and results of the consumer surveys, sensory research and of the technical research are discussed with the partners during the project in interactive workshops. This feed back of the outcome ensures the specific impact for the individual partners.



Outlook

- Identification of consumer segments, based on consumption level of fruits and vegetables, taste preferences and health-related motives, to determine product attribute preferences for fruits and vegetables is in progress.
- Development of specific technical tools to produce fruits and vegetables for these consumer segments is scheduled in 2014, like instrumental models for flavour prediction for different consumer segments.
- We are looking for partners to share our approach and develop models for other crops or other regions.

References

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- Sijtsema, S., Linnemann, A., Van Gaasbeek, T., Dagevos, H., & Jongen, W. (2002). Variables influencing food perception reviewed for consumer-oriented product development. *Critical Reviews in Food Science and Nutrition* **42** (6): 565-581.

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