Broccoli and Carrot Preparation Practices by Dutch Households

R. Bongoni, L.P.A. Steenbekkers, R. Verkerk, M. Dekker

Product Design and Quality Management Chair, Agrotechnology and Food Sciences Group, Wageningen University, Wageningen, The Netherlands

Introduction: Sensory preferences like taste, texture, colour determine domestic preparation practices, later reported to significantly influence health and sensory attributes of prepared vegetables. In order to advice consumers on preparation conditions for vegetables so as to obtain high health benefits from prepared vegetables, consumer sensory preferences should be considered.

Objective: This research aims for information on actual domestic preparation of vegetables among consumers and their sensory preferences.

Methodology: Two online self-reported questionnaires on preparation of broccoli and carrots were developed and administered on the main meal preparer of Dutch households (broccoli questionnaire: n=590, carrot questionnaire: n=423). Correspondence Analysis was performed to characterise households or cooking methods (e.g., boiling, steaming) with variables describing domestic preparation practices.

Results: Consumer domestic preparation practices of broccoli and carrots were comparable, irrespective of vegetable morphology. Texture and colour were the most important criteria to decide the doneness of these vegetables. Variables: size of the vegetable, doneness criteria, cooking time, amount of water used, salt addition characterised the specific cooking method for both broccoli and carrots. Variables: gender, household composition, education level of the participant could not characterise domestic preparation.

Discussion and Conclusion: Information on actual domestic preparation practices can be used to analyse the consequent influences and thus optimise quality of vegetables after domestic preparation. When communicating advices on optimal domestic preparation of vegetables which reach higher concentration of health related components and sensory preferences of consumers, consumers who apply a specific cooking method should be targeted, irrespective of gender, household composition and education level.