## **BOOK OF ABSTRACTS**

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## YEAST EXTRACT IN ORGANIC FOOD AND ITS AUTHENTICITY **ACCORDING TO ORGANIC PRODUCERS**

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Yeast extract is used as an ingredient in organic food primarily to improve flavour. This application is being increasingly critically viewed in the media and by consumers as it is assumed to have similar effects to those discussed for synthetic flavour enhancers. Furthermore, some people involved in the organic food industry see yeast extract as an ingredient that does not align with the principle of authenticity. Even the revised EU organic regulation highlights yeast extract as it demands using certified organic yeast extract for organic products.

In this research project scientifically based evidence both for and against the use of yeast extract in organic food was sought in literature. A survey of organic food producers identified the operational practice and relevance of using yeast extract (questionnaire in written form, n=35, response rate = 63%, 3 deep interviews with experts). Sensible alternatives for organic food processing were to be identified by both the literature and producer survey. The results from scientific studies do not allow a decisive scientific statement, however the studies about monosodium glutamate point to controversial issues. Analyses of consumer information websites show the high interest of consumers in the use of yeast extract as ingredient in both organic and conventional products and its purported nutritional-physiological effects. Misunderstandings concerning the terms 'glutamate' and 'yeast extract' and the critical discussion of using yeast extract as flavour enhancer point to the consumers' uncertainty. They ask for more information and expect transparent labelling. A dichotomy is evident in that consumers want organic food to taste "natural", but also enjoy the umami-taste.

Amongst organic processors the controversial discussion is reflected by the diverse answers. 59% of the companies surveyed use conventional yeast extract, though 82% exclusively produce organic products. More than half of the companies receive critical consumer requests concerning yeast extract. The sensory profile of a product is the most important reason given for its use. For 59% of the companies surveyed the use of alternatives is not considered necessary, some do not know any alternatives, others name celery or the combination of certain spices. Some producers already use organic yeast extract or change the recipe to avoid it completely, but this necessitates high development costs. On current data it is not possible to give a decisive statement either for or against the use of yeast extract in organic food. However, a transparent communication towards the consumer is fundamental, especially the clear differentiation of the terms used. Most producers of organic products are aware of these consumer interests and the revised regulatory framework, but their reactions differ widely. The research project identified numerous approaches for further research.

Keywords: yeast extract, organic products, flavour enhancer, glutamate

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