Quality and safety aspects of organic and low-input food processing: Results of a Delphi survey from an expert consultation in 13 European countries

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Abstract

Organic food-processing standards generally prohibit the use of synthetic chemicals, many preservatives and other food additives that are widely used in the processing of conventional foods. However, there are frequent discussions about the underlying rationales, principles and criteria used to allow some processing methods and additives but other ones not. Consumers of low-input and organic food have specific expectations regarding quality characteristics of processed food. Organic processed products should therefore be sustainable and fulfil consumers’ expectations as much as possible. Our study reviewed current approaches and concepts in organic food processing, based on the results of a literature survey and a two-step Delphi expert survey focusing on the most important and currently discussed aspects regarding organic food processing. In the first round, 250 experts in 13 European countries were involved who were asked to respond to a standardized questionnaire. Hundred and twenty experts answered in the first round and they were approached in the second round. Of these, 83 experts answered in the second round. The results show that there is an important need for clear principles and related criteria for the evaluation of additives and processing methods. In the minds of consumers, additional principles are present when compared with the present rules. The gap between consumer expectations and the rules at the time of the survey (Regulation EEC 2092/91, IFOAM Basic Standards, Codex Alimentarius Guidelines) can cause problems. So it is important to build a solid link between regulations and consumer perceptions. The principle of carefulness/careful processing might be helpful for the communication between manufactures/retailers and consumers. Generally, other means instead of new governmental rules are recommended (e.g., a code of practice).

Keywords

- Organic food;
• Processing;
• Regulation;
• Standards;
• Organic processed products