

# Authenticity and Fraud

## Information to Retailers regarding Control of Quality and Safety in Organic Production Chains

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This leaflet provides a practical overview for retailers of what is done to secure the authenticity and integrity of organically produced foods, where improvements are possible and what the retailers can do to support efforts that meet their customers' demands. Other leaflets for retailers cover taste, freshness and nutrients or safety and contamination, and separate leaflets aim at consumers or at production of specific commodities.



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## The Organic HACCP Project leaflets

This is no. 3 of a series of 14 leaflets comprising information on how control of quality and safety can be further improved in organic supply chains across Europe. The Organic HACCP project has reviewed studies of consumer concerns and preferences in relation to organic production systems and collected information about typical production chains for 7 commodities in regions across Europe. For each of the criteria listed below, the information was analysed to identify Critical Control Points (CCPs), defined as the steps in supply chains where the qualities of the final product can be controlled most efficiently. CCPs were identified using methods developed for Hazard Analysis by Critical Control Points (HACCP), a standard procedure to prevent food safety risks. The new aspect is thus to improve how consumer concerns are addressed, through the use of the CCP concept for a wide range of criteria, not only safety.

## Overview of the Criteria Examined

This analysis regarded the following seven criteria:

1. Microbial toxins and abiotic contaminants
2. Potential pathogens
3. Natural plant toxicants
4. Freshness and taste
5. Nutrient content and food additives
6. Fraud
7. Social and ethical aspects.

The project analysed 29 organic supply chains in Europe for tomatoes, eggs, cabbage, wine, milk, apples and wheat bread. On the project's homepage ([www.organichaccp.org](http://www.organichaccp.org)) each chain and the relevant Critical Control Points are described in detail. The present leaflet describes the information and recommendations resulting from this analysis for authenticity, one of the Social and ethical aspects, and for Fraud. Two other leaflets for retailers are "Taste, Freshness & Nutrients", and "Safety & Contamination". Other leaflets address producers, consumers, etc.

### General issues relating to authenticity

Authenticity means that a product has been produced, transported and sold in ways that correspond with expectations associated with that product. Many consumers expect that organic products are supplied by small, local farms with a diversity of crops and animals. At the same time most consumers of organic products also find it important that the products are affordable compared with conventional products of a similar type, which often requires that production takes place in specialised large-scale operations. So it is often not possible to meet all expectations of all consumers at the same time. Most consumers are aware of this and are willing to accept either less than perfect background of the

products, or a high price or requirement for own work input for products that are closer to their ideal.

Due to this, requiring all organic production to meet the highest possible standards in all contexts will only benefit a minority, of the many consumers who appreciate the opportunity to support sustainable food production by buying certified organic food. In particular it would leave out less affluent groups and public procurement, a tendency that would in itself be at odds with the organic ideals. So while innovation for improvements should of course be encouraged, at present the most important issue to improve authenticity is to provide truthful information about the social and ethical context of each product, so each consumer can make an individual, informed choice.

In particular this means that the information provided with organic products, both pictures and text, must accurately indicate origin, production situation and production methods used. It is imperative for the organic movement that consumers can trust that suppliers do not gain unjustified competitive advantages by withholding or distorting information.

### General issues relating to fraud

The EC regulation 2092/91 on organic production is primarily a consumer protection regulation, defining what must be fulfilled in order to label a product as organic. These requirements include annual inspection of all farms and processing facilities by an inspector of an independent certification body, documentation of all purchases and sales relating to organic production, and specific procedures to prevent mixing with conventional material. Fraud occurs when a product is sold as organic even though it does not qualify for this label, whether this is due to intentional fraud or to error.

The costs of organic inspection procedures consume a substantial part of the producers' income. So any improved inspection procedures must reveal fraud more effectively without penalising the majority of honest producers by increased costs. One option could be to replace some of the existing routine inspections with unannounced visits by specialists in the relevant type of production. Another would be to require producers to carry out appropriate measures to prevent health or safety problems for crops or animals.

In any case, encouraging close and committing collaboration with other companies in the production chain will reduce the risk of fraud, since improved economic stability of each participant increases both the motivation for honesty and the chances that others would notice any unusual operations.

## Production of Animal Products (milk and eggs)

Milk and eggs require a highly organised chain that delivers products regularly every week and for safety reasons it is required that each product could be traced back to the farm. Testing of randomly collected samples for residues of antibiotics is common practice in many supply chains. Due to this, there is generally very good control with fraud.

However, in relation to authenticity, often the information about the identity of the producer is provided on the sales container only as a code and therefore unavailable to consumers. It is also important if feed is supplemented with (up to 10 %) conventional feedstuffs, if milk is homogenised, and how the animals are kept, in particular the access to outdoor areas and their quality (grass, size, shelter).

### **Plant Production (apples, tomatoes and cabbage)**

For European plant products it is relatively easy to cross-check production area with production volume, but pesticide residues can drift onto the crop from conventional fields in case of carelessness or accidents. However, there are efficient methods to detect residues of many pesticides including copper, and testing of randomly collected samples is common practice in many supply chains. Due to this, there is generally very good control with fraud. Products are often packed directly at the producer, so it is common, but not universal, to provide information about the origin.

In relation to authenticity it is also important if organic pesticides are used, in particular copper, as well as some storage methods whereby fruit is picked unripe. Due to this and to quality concerns many consumers see labelling with harvest date as proof of commitment to good quality.

### **Processing (wine and wheat bread), Packaging, Storage and Transport (all commodities)**

Processing and other activities can take place in parallel operations, where the same machinery is used for organic and conventional products. This helps to keep costs down, but the risk of mixing with conventional material or introduction of non-organic additives, by accident, carelessness or intention, is higher than at the farms or in dedicated organic operations.

In relation to authenticity, the values of different processing and packaging methods in terms of quality, cost and image are still being debated. For both bread and wine many categories are available, from handcrafting on farms to production in large factories using automated technology, providing a wide range of choices for the consumer.

### **Recommendations to retailers**

- Preferentially source products from short chains (few trading steps) with dedicated organic farms, storage and processing facilities and good supply chain management, try to avoid products of anonymous origin.
- Show confidence in your trusted suppliers by establishing fair, lasting and mutually committing relations.

- Give preference to products certified by schemes that cover also the conventional business in parallel operations, using inspectors skilled in accountancy software.
- Ensure that the quality control includes random testing for residues of pesticides and other banned substances, by your own company or another organisation you trust.
- Organic farmers struggle to produce high quality products for ever lower prices. When products are sourced where they are cheapest, the risk for fraud often increases. Decide what is best for your consumers and your image.
- When possible make information available for your customers about your suppliers, to show that all involved in the chain will take responsibility for the product. A website can link to pictures of the farms and factories, explain about fair trade arrangements and how the product has been handled and provide a contact point for feedback such as criticism, praise or suggestions for improvements.

### **Continuation in the QLIF project**

The work of Organic HACCP identified several areas in which more research is needed to improve the control of quality and safety of organic products. In 2004 the project QualityLowInputFood (QLIF, [www.qlif.org](http://www.qlif.org)) was started to broaden and deepen the understanding of quality of organic food. QLIF is an Integrated Project in the European Commission's 6<sup>th</sup> Framework Programme with 31 participants in 15 countries. QLIF is a 5-year project aiming to provide research and development on quality, safety and efficiency of organic and other low-input farming methods in Europe. The following topics relevant for authenticity and fraud will be investigated in QLIF:

- Studies of relations between different aspects of food quality, consumer perceptions and buying behaviour (Consumer expectations and attitudes, 2004-2007).
- Development of a "Code of practice" for the evaluation of processing strategies (Processing strategies, 2004-2006).
- Development of HACCP procedures for control of quality and safety in organic supply chains and training courses for advisors (Transport, trading and retailing, 2006-2008).

### Editorial Notes

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### Bibliographical Information

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A PDF version can be downloaded free of charge from the project internet site at [www.organichaccp.org](http://www.organichaccp.org) or from [www.orgprints.org/view/projects/eu-organic-haccp.html](http://www.orgprints.org/view/projects/eu-organic-haccp.html)

Printed versions can be ordered from the FiBL Shop at [www.shop.fibl.org](http://www.shop.fibl.org).

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### About Organic HACCP

The main objectives of this Concerted Action are to assess current procedures for production management and control in organic production chains, with particular reference to the characteristics valued by consumers, and from this to formulate and disseminate recommendations for improvements.

The 2-year project started in February 2003. The results of the project, including a database of Critical Control Points in the analysed chains, are available on the project website [www.organichaccp.org](http://www.organichaccp.org).

### The Project Partners

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