

Food Control in Switzerland: An Overview

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Abstract: Switzerland is a confederation consisting of 26 states, the so-called ‘cantons’. In the field of food control, the Swiss federal state is in charge of issuing the regulations (Food law and associated texts), whereas enforcement is assigned to the cantons. The offices in charge of food control are the cantonal laboratories headed by a ‘Cantonal chemist’. These offices pursue three main goals: to protect consumer health, to protect the consumer against frauds and to ensure food handling under good hygiene conditions. To that purpose, the Cantonal chemist heads both a laboratory and a staff of inspectors, who are responsible for the control of food products (including meat and drinking water), the control of hygiene and production at factories, stores, restaurants, etc. as well as the control of common goods and household items such as toys, clothing, make-up, dishes, cookware, jewelry and so on. All laboratories and inspection bodies are accredited according to ISO norms EN 17’020 and EN 17’025. The offices headed by the cantonal chemists analyze annually about 110’000 samples on sale or from factories, whereas the inspection bodies perform roughly 45’000 inspections (without primary producers and occasional importers).

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Introduction

Food safety is an increasingly important public health issue. Governments all over the world are intensifying their efforts to improve food safety. These efforts are in response to an increasing number of food safety problems which occurred in the last decades, leading to rising consumer concerns (bovine spongiform encephalopathy (BSE), food contamination by dioxins or acrylamide, antibiotic residues in seafood, genetically modified organisms in food and feed, horse meat in mislabeled food products, but also food contact materials, toys and other utensils releasing dangerous components). Challenges which need to be addressed to help ensure food and common goods safety include the globalization of trade, urbanization, changes in lifestyles, international travel, environmental pollution, deliberate and natural contamination as well as man-made disasters. The food production chain has become more complex, providing greater opportunities for contamination and growth of pathogens.

Many outbreaks of food-borne diseases that were once contained within small communities may now take on global dimensions.

Food Regulations

The federal food law and the regulations based on it form the legal basis of food control in Switzerland. The central purpose of this law is to protect consumers against food and common goods that can be harmful to health. At the same time, the hygienic handling of food must be ensured, and consumers must be protected against food frauds. Swiss law is constantly adapting itself to European law, but as a third country, Switzerland has little influence on EU legislation. To protect and enable international trade, a substantial agreement is sought with the requirements of the harmonized EU regulations. Due to this so-called ‘autonomous alignment’, the vast majority of EU rules are implemented in Swiss federal legislation. In the area of foods of animal origin, since 2006 Swiss food law is equivalent to EU food hygiene legislation.

Self-control by the food producers (food safety management systems) is a major cornerstone of consumer protection. Beyond the comprehensive control of the food production, the obligation of self-control establishes legal responsibilities of food operators in relation to risks associated with their products. They have to implement good manufacturing practices and must ensure that the goods produced comply with the legal requirements. Official control does not release the operator from the duty of self-control.

Organization

According to the requirements of Swiss food law, the cantons must appoint a cantonal chemist, a cantonal veterinarian, and an appropriate number of inspectors. They also must set up analytical laboratories for food control. All these bodies must be accredited according to ISO standards EN 17’025 for testing laboratories and EN 17’020 for inspection bodies. The compliance with both norms is overseen by the Swiss Accreditation Service (SAS).

The division of tasks between the different cantonal enforcement authorities (cantonal laboratories, official veterinarians and official food chemists, agricultural offices, public health and environmental agencies) is organized independently by the cantons. The inspection of food producers and retailers is carried out by federally qualified food inspectors and food control officers, which amounts to roughly 200 full-time jobs. The training and the requirements needed to pursue these activities are governed by federal regulations. To maintain a harmonized enforcement, training courses are regularly organized by the Swiss Cantonal Chemists Association.

In the field of analytical controls, the cantonal laboratories must continuously optimize the specificity, selectivity and sensitivity of existing methods, and develop new laboratory assays to solve emerging problems. Such methods must be validated according to the EN 17’025 standard. Cantonal laboratories also regularly participate in interlaboratory comparisons, which are often carried out at international level.

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Enforcement

The enforcement of food law along the entire food chain is shared by the cantonal chemist and the cantonal veterinarian, each in his own field of competence. The official food law enforcement bodies perform inspections and collect samples. These samples are tested using modern methods for their composition and additives, the presence of foreign ingredients or contaminants, the microbiological quality and compliance with the labeling. When necessary, corrective measures are imposed and in severe cases the offenders are reported to the judicial authorities.

Deviations from regulatory requirements lead to litigation notifications. Complaints can be issued for food, additives, utensils, hygienic conditions, premises, facilities or vehicles, manufacturing processes, animals, plants, minerals or agricultural soils. The enforcement authorities have to decide whether the products in question shall be used with or without conditions, or must be disposed of at the expense of the responsible producer.

If a tolerance value is exceeded without any health threat, the goods can be utilized under the approval of the enforcement bodies. If conditions are repeatedly violated, the authorities may also order the removal or confiscation of the goods.

If a limit value is exceeded, a health risk to consumers cannot be excluded and enforcement bodies have therefore to take the necessary measures to protect public health. In these cases, goods are confiscated or withdrawn from the market.

Enforcement Harmonization

A high degree of enforcement harmonization is pursued by the Swiss Cantonal Chemists Association. For over one hundred years, its members have developed, through joint arrangements, tools for assessments, inspections, or analytical and technical problems solutions. Informal discussions with representatives of the food industry, with consumers associations and federal agencies are also part of

the duties of the Swiss Cantonal Chemists Association, in order to solve common problems. The analytical laboratories are faced with the challenge of developing new state-of-the-art methods to solve existing and newly discovered problems.

Official food law enforcement bodies monitor the legally prescribed self-control on one hand through on-site inspections, and on the other hand by analyses of food and commodities sampled at the producers or on the market. Both the inspections and laboratory tests are risk-based random checks.

The Swiss model with decentralized execution and proximity to the production sites is very efficient, especially if immediate measures must be initiated and monitored. It is crucial that – in each canton – inspection bodies, analytical laboratories and legal expertise can be found in a single institution. This guarantees that emerging problems are addressed with the necessary priority. Due to scarce resources, Swiss law enforcement agencies are required to deal with the existing and future problems by strategic and technical cooperation, which can be facilitated due to the flexibility in the federal system.

Performance

The number of samples analyzed in the official laboratories has been reduced during the last 20 years, a fact which is mainly due to the strong decrease of investigations performed on milk and drinking water. Many of these analyses are now being carried out by the producers or retailers as part of their self-control. The capacity freed up is used in the cantonal laboratories to study new parameters or substances which require a high analytical effort. The official laboratories analyze annually about 110'000 samples that are on sale or taken from factories, whereas the inspection bodies perform roughly 45'000 inspections (without primary producers and occasional importers). The average complaint ratio of around 12% for the samples analyzed does not reflect general food safety in Switzerland: the vast majority of complaints are due to incorrect labeling or to lack of hygiene in production and/

or storage. As the official laboratories perform risk-based and goal-oriented analytical campaigns, these rejection rates cannot be compared with values obtained in other countries by monitoring programs.

Perspectives

Again and again, the cantonal laboratories have to deal with national and international food scandals. Recent examples include hormones in meat, acrylamide in starch-containing products, radioactive contamination of food and feed due to the Chernobyl or Fukushima disasters, antifreeze or toxic preservatives in wine, *Listeria* in cheese, dioxins in guar gum, carcinogenic amines in cooking utensils, melamine in milk powder or undeclared horse meat in meat products. Such problems require immediate coordinated action, the development of relevant methods of analysis and the timely implementation of control actions on the market. Due to pressure from the public and the media as well as political expectations, quick and reliable solutions are needed, which is only possible thanks to the hard work of highly competent staff and an extensive coordination among the Swiss official laboratories.

The cantonal food law enforcement authorities enjoy high confidence in the public. The credibility of the authority is important when consumers are unsettled by alarming headlines in the media, and they must be able to rely on independent and competent information. The food business managers can also count on the cantonal chemists, who take their concerns seriously and are known for their professionally competent and rapid actions.

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