

# Guide to Best Practices in Beekeeping

Version 3, 30 September 2020



This is a guide produced by the Finnish Beekeepers' Association (SML) with cooperation with Finnish Food Authority on best practices in honey production. Abiding by these practices is sufficient as an own-check description for a large proportion of Finland's beekeepers, whose honey production is on a small scale.

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## Application of the Guide to Best Practices in Beekeeping

Abiding by these practices is sufficient as an own-check description for a large proportion of Finland's beekeepers, whose honey production is on a small scale. This guide can be expanded for use as an own-check plan for food premises by adding to it the details applicable to the production process and premises in question.

A honey packing facility is always classified as food premises if it is used for packing honey produced by others as well as its own, if the packed honey is not returned to its original producers for sale.

Beekeepers may also produce food products other than honey. Products collected from hives include pollen, perga, royal jelly, propolis and drone larvae. Separate guidelines will be formulated for these products at a later date, but the good hive management practices described in this handbook apply equally to those hives as to honey-producing hives.

This guide is produced and maintained by the Finnish Beekeepers' Association. The coordinator in charge of the guide is Beekeeping Advisor Maritta Martikkala (maritta.martikkala@hunaja.net). Version 3. Helsinki, 30 September 2020. Guide to be updated when necessary.

#### **Contents:**

- 1. Beekeepers as Producers and Sellers of Food Products
- 2. Overview of Factors Affecting Honey Quality
- 3. Best Practices in Honey Production
- 4. What to Do in a Honey Recall Situation
- 5. Annual Notes Template
- 6. Statutory Requirements

#### 1. Beekeepers as Producers and Sellers of Food Products

This section describes the official notifications that beekeepers in Finland must make, and specifies whether the basis for the notification should be an own-check description or an own-check plan. For further information, please refer to the websites of the Finnish Beekeepers' Association and the <a href="Finnish Food">Finnish Food</a> Authority.

Beekeepers register their hive sites, including the start and end dates of animals being kept at each site, with the Animal Husbandry Register. The animal husbandry registration can be done by sending the forms (found in links below) to the local municipality's agricultural authority, or online at <a href="https://epr.ruokavirasto.fi">https://epr.ruokavirasto.fi</a>.

#### 1.1. Official notifications required from beekeepers

- Register your hive sites, including the start and end dates of animals being kept at each site, with the Animal Husbandry Register.
- Register your primary production facility with your municipality's food control authority: <u>www.ruokavirasto.fi/yritykset/elintarvikeala/elintarvikkeiden-alkutuotanto/alkutuotantopaikasta-ilmoittaminen/</u>
- All registration forms can be found (in Finnish) on the SML website under www.mehilaishoitajat.fi/mehilaishoitajille/mehilaishoitajan-velvollisuudet-/



#### 1.2. Bookkeeping requirements related to honey production

- Beekeepers must keep a list of their bee colonies for each hive site (Act on the Animal Identification System [238/2010], Section 21; Decree on the Identification of Certain Animal Species [1123/2011], Section 3), to be stored for three years.
- A record of the substances purchased as feed for the bees (sugar, pollen, pollen substitute)
  must be kept, indicating where they were purchased (Regulation [EC] No. 852/2004 on the
  Hygiene of Foodstuffs).
- Records must be kept of the purchases of queens and hives (Decree on Primary Production [1368/2011], Section 5), to be stored for one year.
- Records must be kept of any veterinary medicinal products and antiparasitic treatments given to hives, including details of the substances administered, the hives affected, the dates of administration and withdrawal periods (Regulation [EC] No. 852/2004 on the Hygiene of Foodstuffs).
- Records must be kept of the sale of honey (Decree on Primary Production [1368/2011],
   Section 5), to be stored for one year. NB. Take into account the length of the sale period of honey in calculating how long to store these records.
- There are no diseases associated with honey that would pose a risk for consumers, but in spite of this, beekeepers must keep records of any relevant checks carried out on animals or products by the authorities in accordance with Annex 1, Part A, section III 8 e of EC 852/2004, for at least three years.

#### 1.3. Scale of operations and own-check description or own-check plan

#### A) Beekeepers with small-scale honey production

- Sales of honey are only local (=all of Finland)
- Annual sales of honey are below 2,500 kg direct to consumers, and below 2,500 kg to local retailers

#### Beekeepers must:

- register their <u>primary production facility</u> with their local municipality's food control authority. If they sell directly to consumers, this must be indicated on the registration form. No other notifications of sales are needed.
- 2) keep records of their annual sale quantities.
- 3) keep records of the feeds (sugar, pollen, other supplementary feeds) and Varroa mite treatments given to hives (where the substances were purchased and how much was administered).
- 4) carry out the handling and packing of their honey on such premises and in such a manner that consumer quality is not adversely affected.

This is a low-risk, small-scale operation that is subject to many concessions in food legislation.

- No checks are required on the quality of water used for cooling and cleaning.
- No own-check description is required.

The critical aspects of operations and sales are animal welfare, food hygiene, information provision to consumers, transparency, confidentiality and customer service.

SML recommends that beekeepers in this category abide by the Guide to Best Practices in Beekeeping, although this is not compulsory.

#### B) Beekeepers with medium-scale honey production

- Annual sales of honey exceeding 2,500 kg direct to consumers or 2,500 kg via retailers,
   OR
- Any sale of honey to packing plants (even in small quantities)

#### Beekeepers must:

- 1) register their primary production facility with their local municipality's food control authority.
- 2) operate in accordance with this SML Guide to Best Practices or formulate a separate own-check description inasmuch as their operations differ from the Guide.
- 3) Beekeepers who sell over 2,500 kg of honey direct to consumers per year must make a food premises sale notification. The quantity is the total of sales directly from the primary production facility plus sales direct to consumers at markets and events.
- 4) keep records of their annual sale quantities.
- 5) keep records of the feeds (sugar, pollen, other supplementary feeds) and Varroa mite treatments given to hives (where the substances were purchased and how much was administered).
- 6) carry out the handling and packing of their honey on such premises and in such a manner that consumer quality is not adversely affected.
- 7) verify the quality of the water used at the premises with sample analysis reports or by belonging to a water supply system (provable e.g. by producing a bill). Water quality must be analysed every three years. The most recent water sample analysis report must be stored.

#### C) <u>Large-scale honey production</u>

- Beekeepers who also handle and sell honey produced by others
- Beekeepers who produce foodstuffs using honey
- The exception are keepers who produce over 2,500 kg per year but sell all of it to honey packing plants. Regardless of their production quantities, these keepers are classified as primary producers under group B, for whom an own-check description suffices.

#### Beekeepers must:

- 1) register their <u>primary production facility</u> with their local municipality's food control authority.
- 2) keep records of their annual sale quantities.
- 3) keep records of the feeds (sugar, pollen, other supplementary feeds) and Varroa mite treatments given to hives (where the substances were purchased and how much was administered).
- 4) submit a food premises notification to their local municipality's food control authority. The honey must be packed in the packing facility that they register as food premises (Decree on Food Premises 1368/2011, Annex 1, Chapter 2), and an own-check plan must be made for these premises. The honey extraction plant does not have to be registered as food premises. However, beekeepers who purchase frames from other beekeepers and extract, pack and sell other beekeepers' honey must submit a food premises notification on their honey extraction operations.
- 5) verify the quality of the water used at the premises with sample analysis reports or by belonging to a water supply system (provable e.g. by producing a bill). Water quality must be analysed every three years. The most recent water sample analysis report must be stored.

## D) Exports of honey to within and outside of the European Union

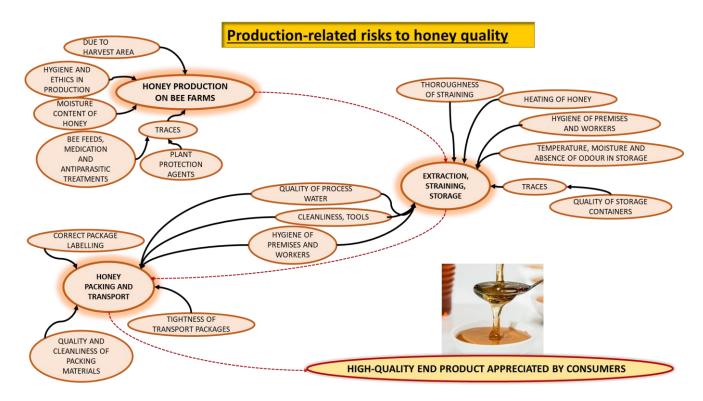
Exports of honey to another EU Member State constitute internal market trading. Only sales to countries outside of the European Union are classified as actual exports.



The terms under which products are exported depend on the country of destination. For further information, please refer to the <u>Finnish Food Authority's website</u> or contact the embassy or food control authorities of the country of destination.

Honey sold by businesses that carry out exports must be packed in a packing plant registered as food premises, for which an own-check plan has been made (refer to section C).

## 2. Overview of Factors Affecting Honey Quality



## 3. Best Practices in Honey Production

## 3.1. Properties and consistency of honey

The Decree of the Ministry of Agriculture and Forestry on Honey (392/2015) carefully defines when products may be sold under the name of honey and what the consistency of a product sold as honey must be.

Honey is subdivided into two main categories based on its <u>origin</u>: blossom honey and honeydew (forest) honey. Blossom honey is derived mostly from blossom nectar. Forest honey derives mostly from honeydew excreted by plant-sucking insects such as aphids.

Honey is a supersaturated sugar solution containing glucose, fructose and sucrose, as well as many other sugars. The many other components of honey include organic acids, enzymes and solid particles originating at the time of collection. The colour of honey can vary from nearly transparent to dark brown. Its consistency can be runny, viscous or partly or wholly crystallised. The flavour and aroma vary, but they are always derived from plants.

When honey is sold in the raw or as a component of other food products in Finland, it may not contain any added ingredients, including food additives such as colourants. Nothing other than honey may be added to it. Honey must contain as few organic or inorganic substances that are not a part of its composition as possible. Nothing may be removed from honey, with the exception of solid impurities (honeycomb debris, etc.). The exception is "filtered honey", which is achieved by removing foreign inorganic or organic matter in such a way that it removes a significant proportion of pollen particles.

With the exception of baker's honey, honey may not contain any foreign flavours or aromas, nor may it be fermented or undergoing fermentation. The acidity of honey may not be artificially altered, nor may honey be heated such that its natural enzymes are destroyed or significantly reduced.

Honey is an acid solution with a pH of approximately 3.9 and a moisture content usually of 16.5–17.5%. Additionally, honey has a high osmotic value and antimicrobial properties. Due to these characteristics of honey, no bacteria are known to grow or multiply in honey, and honey is not an easily perishable foodstuff. Only yeasts may live and reproduce in honey if the moisture content is too high. Because honey is a hygroscopic solution, it has a tendency to bind moisture from the air. Therefore, the aforementioned Decree permits the moisture content of honey to be a maximum of 20%, or 23% for heather honey and baker's honey, at which point the risk of yeast-induced fermentation is still low.

The quality of honey is additionally affected by the temperature and duration of storage. The warmer the storage conditions, the faster quality weakens. Quality weakens particularly quickly if honey is heated beyond 40° C. The quality of honey weakens gradually even in cooler temperatures. The proper handling and storage of honey is possible to assess by determining the product's diastase activity and HMF content. According to Decree 392/2015, the diastase activity level of honey must be at least 8, and the HMF content may be a maximum of 40 mg/kg, with the exception of baker's honey. HMF forms in honey as a result of the breakdown of sugars.

Beekeepers using the *Hyvää Suomesta* (Produce of Finland) label are expected to operate according to the Guide to Best Practices in Beekeeping and to ensure that their honey has a moisture content below 19% and an HMF (hydroxymethylfurfural) content of 15 mg/kg or below.

Other quality risks for honey are traces of foreign matter, which may proceed from plant pesticides, medications given to bees, or the processing equipment or storage containers used for the honey. Honey quality may also be weakened by foreign aromas or flavours that it absorbs.

Almost all types of honey crystallise sooner or later. Crystallisation is caused by glucose, which separates from the supersaturated solution by crystallising. The glucose content and crystallisation time of honey are most affected by the type of plant from which the nectar for the honey was collected.

Low-quality (unevenly crystallised, unstrained, heated or fermented) honey may be sold as **baker's honey** or with the disclaimer "only for use as an ingredient in other foodstuffs and in cooking".

The Decree of the Ministry of Agriculture and Forestry on Honey (392/2015) can be found in Finnish on the <u>SML website</u>. (The Decree constitutes the implementation in Finland of Council Directive 2001/110/EC.)

## 3.2. Operations at bee farms and in facilities other than processing and storage facilities

#### a. General beekeeping practices

Beekeepers must care for their bees as livestock, ensuring that they are healthy and have sufficient space, food, water and shelter. In spring and autumn keepers must visit hives on at least a monthly basis, and between June and the end of August, at least fortnightly. Records of transfers of bee colonies must be kept



for each hive site. The use of pesticides on surrounding and/or neighbouring fields must be taken into account when selecting hive sites.

While caring for hives, keepers must lay frames on a clean surface rather than on the ground.

No repellents or odorizers may be used in beekeeping. The use of smokers should be minimised and the only fuel to be utilised in them is organic matter that burns cleanly, such as decayed wood, wood pellets, etc.

A record of the substances purchased as feed for the bees (sugar, pollen, pollen substitute) must be kept, indicating where they were purchased (Regulation [EC] No. 852/2004 on the Hygiene of Foodstuffs). Sugar syrup may only be administered for winter feeding and to hives whose food supplies are too low in spring. This prevents the incorporation of sugar into the honey. Honey is not removed for extraction from hives after winter feeding has begun in autumn.

#### b. Protecting hive sites from animal diseases

In accordance with Section 7 of the Animal Diseases Act (441/2013), the operator responsible for an establishment (in this case a hive site) is obliged to ensure that there are procedures in place for preventing the spread of animal diseases, which are adequate considering the activity of the establishment.

The first and foremost action to take for protection against bee diseases is that in purchasing new bee colonies, beekeepers only buy colonies that have been proven to be healthy.

Section 20 of the Animal Diseases Act stipulates that a beekeeper inform the municipal veterinarian if they suspect that a hive is infected with a serious animal disease or parasite that the law demands should be combated (American foulbrood, small hive beetle, *Tropilaelaps* mites), or with an emerging disease or parasite of a similar magnitude. The Animal Diseases Act (Section 19) also stipulates that the beekeeper take primary action to prevent the spreading of a suspected infection within the hive site and to other hive sites or bee farms.

The transfer of bee colonies that are infected with American foulbrood or carry spores of the bacteria that cause it (*Paenibacillus larvae larvae*) to new sites or other colonies causes a risk for the spreading of animal diseases to previously healthy animals. This also applies to honey, brood combs and comb frames that contain brooding or winter feed, or from which honey has been extracted. Bee colonies that rob food supplies from other colonies or from storage, abandoned hives, etc. are also significantly exposed to the spreading of disease. Diseased and weakened colonies and equipment must be blocked off, or the possibility of being robbed must otherwise be prevented.

For further information (in Finnish) on actions to prevent American foulbrood and other bee diseases and their treatment, please refer to the <u>SML website</u>.

## c. Varroa mite prevention and medicating bees

Beekeepers must regularly monitor the health of their bees and the quantities of parasites. Problems must be addressed immediately.

Only officially approved veterinary medications may be used on livestock in Finland. Records must be kept of any medications and antiparasitic treatments administered to hives. Regulation (EC) No. 852/2004 on the Hygiene of Foodstuffs (852/2004, Annex 1, Part A, section III 8 b) stipulates that records detail the substances administered, the hives affected, the dates of administration and withdrawal periods. For antiparasitic treatments using pesticides, records must detail the hives treated, the substances used, the quantities and dates, and the purchase places of the substances.



A Decree from the Ministry of Agriculture and Forestry (21/14) details the requirements for records kept of treatments using medications approved in Finland. Records must be stored for five years after the final administration, regardless of whether the animals survive or not.

Medicating bees with antimicrobial substances such as antibiotics is not in accordance with good beekeeping practice.

Antiparasitic treatments with anything other than natural acids (formic acid and oxalic acid) and thymol are not in accordance with good beekeeping practice.

The use of other substances (selective pesticides) creates a significant risk of traces being left in the honey and wax. Therefore, the Finnish Beekeepers' Association demands that they be avoided. The use of any illegal medicinal substances is prohibited.

Varroa mite prevention is done using substances that are naturally found in honey: formic acid, thymol and oxalic acid. These three substances are approved for use on bees (Finnish Medicines Agency List of Veterinary Medicinal Products and Medicinal Substances Used in Food-Producing Animals Under Certain Conditions); they may not, however, be used during the harvest period such that their content in the honey would change, and thymol may not be used at all in spring.

Medications and pesticides must be stored properly closed and labelled, separate from honey processing and storage facilities.

### d. Harvesting and honey quality

In extracting honey, it must be ensured that the moisture content is sufficiently low (below 19%), to prevent fermentation. This should be verified using either a hygrometer or the shake test, in which combs with uncapped honey are shaken vigorously face down to see whether any honey drips out. If it does, it is still too wet for extracting. In this case, the honey should be left in the hives for the bees to dry. Of the frames going to the centrifuge for extraction, at least two thirds must be capped to ensure the honey is dry enough.

The reports on any analysis and checks conducted on the bees and products must be stored. These include, for example, the results of honey quality analyses conducted by SML annually on around one hundred Finnish honey samples.

## 3.3. Honey processing facilities (extraction/packing/storage)

#### a. Suitable premises

Honey must be processed in facilities that are easy to clean and that do not jeopardise the quality of the honey due to dust, smells, moisture, insects or other pests.

Honey processing facilities must possess:

- sufficient room for working, storage and maintenance
- adequate ventilation, temperature and lighting for the operations
- sufficient washing bays for hands, containers and utensils
- appropriate cleaning equipment and detergents, with their own storage spaces
- water that fulfils the requirements set by the Ministry of Social Affairs and Health for household water used in small establishments



The structures, surface coatings, materials and furnishings must be suited for coming into contact with foods. They must also be suited for purpose, easy to clean and possible to disinfect if necessary.

#### b. Cleanliness of premises and water quality

Facilities must be cleaned thoroughly when starting, and whenever necessary during operations. If necessary (see section 1.3, Scale of operations), the water used for operations must be submitted for analysis at an approved testing laboratory at least every three years, unless there are other accounts of the hygiene level of the water (such as analyses of the municipal water supply). The most recent water analysis report must be stored. Additionally, water analyses must be carried out if a new water source, such as a new well, is taken into use, and the results must be stored permanently.

According to the Decree on Primary Production, for primary production premises, the water analysis does not need to be a complete household water analysis; only analyses of *Escherichia coli*, intestinal enterococci, smell and colour are required unless there are grounds to suspect other issues. The analyses must be ordered from an approved laboratory.

#### c. Condition and maintenance of equipment

All machinery, equipment, tools and containers must be suitable for coming into contact with foods and be otherwise suited for purpose, easy to clean and possible to disinfect if necessary. The cleanliness of all machinery, equipment, tools and containers must be subjected to a sensory check before operations begin.

Due to its acidity, honey will easily corrode ordinary iron and other metals. Therefore, any metal containers where honey comes into direct contact with the metal surface must be made of stainless steel. Containers must on no account contain tin-plated or grouted joints or rust, because they will give off foreign matter into the honey.

Centrifuges and other equipment that come into contact with honey may only be lubricated with grease approved for food use (e.g. purified petroleum jelly or cooking oil) or beeswax.

#### d. Pests

The presence of pests (rodents, etc.) is systematically monitored and appropriate pest-control actions must be started if any are detected. In honey processing and storage facilities, pest control may only be carried out using traps.

The Finnish Food Authority has a pest control guide with more information.

## e. Waste management

Waste generated on the premises must be appropriately collected and taken, in the first instance, to appropriate recycling facilities or, if recycling is not possible, disposed of via public waste management.

## 3.4. Honey extraction and packing for storage

Honey extraction may only be carried out when suitably attired in clean clothing. Hands must be washed before starting, after toilet visits and other breaks, and whenever necessary during the work.

All equipment and containers used for honey processing and storage must be washed and dried before starting and whenever necessary during the operations.



Honey may not be heated to temperatures exceeding 75° C at any point during processing, or to temperatures exceeding 50° C for over one hour, nor may it be stored at temperatures exceeding 35° C or in a heating chamber for over 24 hours.

If the temperature of honey is raised beyond 30° C, the temperature must be monitored, and the honey must be cooled down to storage temperature as quickly as possible.

SML recommends that honey should never be heated beyond +40° C at any point.

Brood comb is never centrifuged.

Storage containers must be marked with the extraction date down to the nearest year (at least).

#### 3.5. Packing honey into consumer packaging or for industrial kitchens

Honey should be left to clarify for two to three days after centrifuging and straining, which allows for wax debris to rise to the surface for removal. Honey may also be caused to crystallise according to the desired crystal model. The best way to maintain the quality of honey is to pack it immediately after clarification and possible crystallisation, such that it is not necessary to re-liquefy for packing.

If honey is liquefied for packing, it must at no point be heated beyond 50° C for over an hour.

SML recommends that honey should never be heated beyond +40° C at any point.

When packing honey, both the honey and the packaging materials must be subjected to a sensory cleanliness check. Packaging materials must be stored in dust-free, dry and odourless premises.

## 3.6. Package labelling

All honey retail packaging (for consumers and industrial kitchens) must include at least the following labels:

- Name of foodstuff
- Name and address of producer (the name and address of the packer is also good to include if the packing is done by someone other than the producer)
- Country/countries of origin
- Minimum shelf life (best before date)
- Food batch number (e.g. packing date)
- Quantity of contents
- Warning label ("12+ months")

The origin marking must indicate one or more country of origin, where the product was harvested. If the honey was harvested in Finland, an example of the marking is "Country of origin: Finland".

If the honey is from more than one EU member state or from a third country, the marking may be replaced with one of the following:

- "Blend of EU honey"
- "Blend of non-EU honey"
- "Blend of EU and non-EU honey"

The best before date of honey is two years from the packing date. A date-specific marking (e.g. "Best before 29.7.2019") also functions as the required food batch number. The expiry date marking may also be



accurate to the nearest year ("Best before end 2019") or the nearest month ("Best before end July 2019"), in which case the honey needs a separate batch number.

Honey is a product with no additives and therefore the package labelling does not need to include a nutritional value table. Nutritional values do not have to be reported for single-ingredient products.

When a foodstuff is packed ready for sale in or other delivery to a bilingual municipality in Finland, the labelling must be done in at least the Finnish and Swedish languages.

If packed honey is sold in or otherwise delivered to a monolingual municipality in Finland, the compulsory labelling must be in at least the language of the municipality in question.

When packed or unpacked honey is sold by distance selling (e.g. on the Internet), the compulsory information must be made available before the purchase decision is made. The exception to this are the variable details, such as the batch number and best before date for packed honey, which must be made available at the time of delivery. If honey is sold unpacked, the following information must be provided: name of the foodstuff, country of origin, and instructions for use and storage, which refers to the warning label "12+ months".

Besides the compulsory information, the package may include instructions for use and storage, among other details. Food information must be clear, accurate and easy to understand. Packaging may not include misleading labels such as "additive-free", because honey may not contain additives under any circumstances.

No health or nutrition claims may be included on honey packaging, because none has been approved for honey.

More detailed information on package labelling can be found (in Finnish) on the SML website.

#### 3.7. Ensuring the conformity and safety of contact materials

Operators must ensure at the purchase stage that all materials and equipment that come into contact with foodstuffs fulfil the applicable requirements. When buying materials and equipment direct from a manufacturer or importer, documentation proving their conformity must be requested.

- The supplier of the material or equipment is responsible for providing documentation (Declaration of Conformity or Food Grade Certificate) proving its compliance with Regulation (EC) No. 1935/2004 on materials and articles intended to come into contact with food. Additionally, plastic materials must comply with Commission Regulation (EU) No. 10/2011 on plastic materials and articles intended to come into contact with food, and ceramic materials with the Decree of the Ministry of Trade and Industry on Ceramic Materials (165/2006).
- The Finnish Food Authority recommends that documentation be updated at least every three years.
- For containers and other such equipment, it is generally sufficient that they have a food safe marking, such as the wine glass and fork symbol, the words "food safe" or another label indicating their suitability for food use. Such markings are not required of articles that are clearly intended for food use, such as spoons and forks.
- When purchases are made from a wholesaler, further information on food contact may be requested for example by email, without the actual documents being supplied to the primary producer. When buying from a wholesaler, it may also be acceptable for the food safety of materials and articles to be indicated solely in the product's sale name.



#### 3.8. Storage and transport of honey

Honey must be stored in airtight, lidded containers, in a dry place. Long-term storage is best done in outdoor temperatures in an uninsulated, well-ventilated storage facility whose temperature does not rise above shade temperatures in sunny weather. Suitably stored, honey will remain in sellable condition for several years.

When honey is transported, the cleanliness of transport equipment and premises must be ensured. Consumer packages must be transported in enclosed boxes.

#### 4. What to Do in a Recall Situation

Should a beekeeper consider or suspect that a product that they have produced or distributed does not conform to food safety requirements ("Food shall be deemed to be unsafe if it is considered to be injurious to health or unfit for human consumption", 178/2002/EC, Article 14), or that its package labelling, for instance the name of the foodstuff, is materially misleading (e.g. the product is not real honey), they must immediately initiate procedures for removing the product in question from the market.

The responsibilities of the operator in a recall are as follows:

- a) Removing the food from the market (recall).
- b) Informing control authorities (local municipality and Finnish Food Authority) of the recall.
- c) Informing consumers of the fault in the product and the reason for the recall, as well as of the recall method (e.g. being returned to the point of sale).

Food industry operators are responsible for returning, fixing or destroying foods recalled from the market.

These instructions do not apply to recalls made for reasons other than food safety or misleading the consumer (e.g. a colour fault).

A product recall plan, including the functions listed above, must form a part of a company's own-check plan.

5. Annual Notes Template									
Beekeeper's name									
•									
Year	Productive hives	Harvest	kg						

- Fill in this table annually. The table and other notes must be stored for two years.
- Any sections graded as "passable" must be addressed before the following harvest season. Sections graded as "poor" must be addressed immediately.

	Good	Adequate	Passable	Poor
Maximum moisture content of packed honey (if measured)	less than 17.5%	17.5–18%	18–19%	over 19%
,	will not ferment	very low risk	fermentation	fermentation
			will start after	will start
			a year	within one
				year
Water sample analysed every three years (if own	yes			no
well or other water source is used)				
Date:				
Sensory check of water quality	no foreign	barely	clearly	strong smell,
Date:	smells, colours	perceptible	perceptible	colour or taste
	or tastes	smell, colour	smell, colour	
		or taste	or taste	
Does packaging include the <b>compulsory</b> labels?	yes			no
(Honey, quantity and origin of contents, name and				
address of operator, "12+ months". Best before				
date. Batch number if necessary.) For bilingual				
municipalities, the compulsory markings must be				
in Finnish and Swedish. Corresponding details				
must be provided in both languages even in				
distance selling.				
Are <b>voluntary</b> labels, such as claims, in compliance with the law?	yes			no
Packaging materials: Is there evidence of the	yes			no
materials' suitability for honey packaging? (E.g. a				
Declaration of Conformity can be produced.)				
Notes on feeds and Varroa mite treatments	purchase place	quantity	check "all hives"	or give hive
		used per	identifier	
		hive		
Sugar for winter feeding			all hives	
Sugar for spring feeding			all hives	
Pollen or other supplementary feed: what and			all hives	
when?				
Formic acid			all hives	
Thymol			all hives	
Oxalic acid			all hives	
Other substance: what?			all hives	

<u>Compulsory attachments:</u> Water quality analysis reports from at least every three years, if honey processing facility uses water from its own well or other own water source.

### 6. Statutory Requirements

This Guide to Best Practices in Beekeeping is based on laws and regulations, as well as on the industry's views on good practices. The legislation affecting honey production for food use in Finland are listed below. The basic food hygiene requirements are derived from European Union regulations, which are supplemented by national legislation. The other instructions provided in the Guide to Best Practices are based on the industry's views on good practices in production risk control.

Regulation (EC) No. 178/2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety Regulates the responsibility of operators, the traceability of foodstuffs and market recalls.

#### Regulation (EC) No. 852/2004 on the Hygiene of Foodstuffs

Regulates the basic requirements concerning food hygiene. Annex I contains the requirements for primary production.

#### Finnish Food Act, 23/2006

National regulation implementing requirements concerning the food industry, on the basis of which other national regulations in Finland have been formulated.

#### Decree of the Finnish Government on Food Control, 420/2011

Section 2 of this decree regulates the content of the primary production registration form, as well as other obligations related to registering.

Decree of the Finnish Government on Certain Functions Posing a Low Food Safety Risk, 1258/2011 Determines the limits for small-scale honey production, which is subject to regulatory concessions.

## Decree of the Finnish Ministry of Agriculture and Forestry on Food Hygiene in Primary Production, 1368/2011, Annex 1, Chapter 2

The water used in honey processing must fulfil the requirements set for household water in small establishments by the Ministry of Social Affairs and Health (Decree 401/2011).

A record of the substances purchased as bee feed (sugar, pollen, pollen substitute) must be kept, indicating where they were purchased. (The feed recording requirement is based on section III 8a ["The nature and origin of feed fed to the animals"] of Annex I to Regulation (EC) No. 852/2004 on the Hygiene of Foodstuffs.) Records of any medical or antiparasitic treatments administered to hives must be kept in accordance with section III 8 b of Annex I to Regulation (EC) No. 852/2004 on the Hygiene of Foodstuffs.

### Decree of the Finnish Ministry of Agriculture and Forestry on Honey, 392/2015

Regulates the consistency of honey and specific package labels (name, origins and warning label). http://www.finlex.fi/fi/laki/alkup/2015/20150392

#### Regulation (EU) No. 1169/2011 on the provision of food information to consumers, 1169/2011

Other package labelling requirements for honey: name and address of operator, best before date, quantity of contents. If the nutritional content of honey is indicated, this must be done in accordance with the regulation.

http://eur-lex.europa.eu/legal-content/FI/TXT/PDF/?uri=CELEX:02011R1169-20140219&gid=1468557129373&from=FI

## Decree of the Finnish Ministry of Agriculture and forestry on the Provision of Food Information to Consumers, 834/2014

Language and batch number requirements. <a href="http://www.finlex.fi/fi/laki/alkup/2014/20140834">http://www.finlex.fi/fi/laki/alkup/2014/20140834</a>

Food contact material regulations (e.g. EC Regulations 1935/2004 and 10/2011; Decree of the Finnish Ministry of Trade and Industry 165/2006)



The materials used for packaging honey must be suitable for food use.

### Finnish Act on the Animal Identification System, 238/2010

## Decree of the Finnish Ministry of Agriculture and Forestry on the Identification of Certain Animal Species, 1123/2011

Beekeepers must register with the Animal Husbandry Register and their local municipality's agricultural authority.

### Finnish Animal Diseases Act, 441/2013

Operators responsible for primary production premises must formulate written descriptions of disease control at their hive sites.

## Decree of the Finnish Ministry of Agriculture and Forestry on Animal Diseases to Be Combated, and their Classification, 843/2013

According to the Animal Diseases Act, beekeepers must report to the municipal veterinarian if they have grounds to suspect any serious animal disease or parasite that the law demands should be combated, or an emerging disease or parasite of comparable magnitude.

## Decree of the Finnish Ministry of Agriculture and Forestry on Records of Treatments Administered to Livestock, 21/2014

The decree describes the national requirements for medical treatment records.