

# FOOD CHAIN INFORMATION

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## SUMMARY

*Food chain information (FCI) introduces the official veterinarian whose task is to check and analyse the relevant information from the records of the provenance of animals intended for slaughter and to take into account the documented results of this check and analysis when carrying out ante and post mortem inspection. When carrying out inspection tasks, the official veterinarian should take into account the official certificates accompanying animals, and any declarations made by veterinarians carrying out controls at the level of primary production, including official veterinarians and approved veterinarians. The same applies to cases when food business operators in the food chain take additional measures to guarantee food safety by implementing integrated systems, private control systems, independent third party certification or by other means, and when these measures are documented.*

**Key words:** food chain information, commission regulations

## CONTENT OF FOOD CHAIN INFORMATION (FCI)

FCI is an important component of the 'farm to fork' approach to food safety and as well as contributing to food safety it can also be used to improve both animal health and welfare. The information may be provided through electronic data exchange or in the form of a standardised declaration signed by the producer and to cover:

(a) the status of the holding of provenance or the regional animal health status (not necessary if the operator is already aware of this information i.e. through a standing arrangement or a quality assurance scheme and/or if the producer declares that there is no relevant information to report).

(b) the animals' health status (not necessary if the operator is already aware of this information i.e. through a standing arrangement or a quality assurance scheme and/or if the producer declares that there is no relevant information to report).

(c) veterinary medicinal products or other treat-

ments administered to the animals within a relevant period and with a withdrawal period greater than zero, together with their dates of administration and withdrawal periods.

(d) the occurrence of diseases that may affect the safety of meat.

(e) the results, if they are relevant to the protection of public health, of any analysis carried out on samples taken from the animals or other samples taken to diagnose diseases that may affect the safety of meat, including samples taken in the framework of the monitoring and control of zoonoses and residues.

(f) relevant reports about previous *ante-* and *post-mortem* inspections of animals from the same holding of provenance including, in particular, reports from the official veterinarian (not necessary if the operator is already aware of this information i.e. through a standing arrangement or a quality assurance scheme and/or if the producer declares that there is no relevant information to report).

(g) production data, when this might indicate the presence of disease (not necessary if the producer declares that there is no relevant information to report).

(h) the name and address of the private veterinarian normally attending the holding of provenance (not necessary if the operator is already aware of this information i.e. through a standing arrangement or a quality assurance scheme).

(853/2004, Annex II, Section III, Paragraphs 3, 4)

## PURPOSE OF FCI

Purpose of FCI is to inform the Food Business Operator (FBO) about relevant food safety information contained in the records kept in the farm (853/2004, Annex II, Section III, Paragraphs 2, 3; 852/2004, Annex I, Part A, III, Paragraphs 7,8), deci-

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sions relating the acceptance of animals for human consumption (853/2004, Annex II, Section III, Paragraph 5) and to inform the Official Veterinarian (OV) about inspection requirements (854/2004, Annex I, Section II, Chapter I, Paragraph 2).

FCI is needed for every animal for human consumption, with the exception of hunted wild game (853/2004, Annex II, Section III). It is the responsibility of the FBO to ensure that he/she has requested, received, checked and acted upon FCI. The FBO must then make it available to the OV without delay, no less than 24 hours before arrival of the animal or lot. (853/2004, Annex II, Section III, Paragraph 5). Where *ante* and *post-mortem* inspections reveal problems which arose during primary production (on the farm), the OV must send a report back to the (854/2004, Annex I, Section II, Chapter 1, Paragraph 2):

- a) FBO responsible for the holding of provenance (i.e. farmer),
- b) private veterinarian of the holding of provenance,
- c) competent authority where appropriate.

### RECEIVING AND CONTROL OF FCI

FCI receipt by Official Veterinarian (OV) is subject to transitional arrangements the OV should receive the FCI report from the FBO 24 hours in advance of arrival of animals unless they are (853/2004, Annex II, Section III, Paragraph 7, a-d):

- a) domestic solipeds,
- b) pigs, poultry or farmed game which have undergone *ante-mortem* inspection at the holding and a vet has signed the certificate stated that they have been examined and found to be healthy,
- c) animals that have undergone emergency slaughter,
- d) animals from markets.

The FBO should have notified the OV of any information that gives rise to health concerns before ante mortem inspection takes place (853/2004, Annex II, Section III, Paragraph 5). The OV is to check and analyse relevant information from the FCI report and to take account of these results when carrying out AM, PM inspection (854/2004, Annex I, Section I, Chapter II, A, Paragraph 1).

When the accompanying records, documentation or other information shows that: animals come from a holding or an area subject to a movement prohibition or other restriction for reasons of animal or public health, rules on the use of veterinary medicinal products have not been complied and any other condition which might adversely affect human or animal health is present, animals must be killed separately and declared unfit for human consumption, taking precautions to safeguard animal and public health where appropriate (854/2004, Annex I, Section II, Chapter II, Paragraph 4).

If relevant FCI is not available within 24 hours of an animal arriving at the slaughterhouse, all meat from the animal is to be declared unfit for human consumption. If the animal(s) have not yet been slaughtered, they must be killed separately from other animals and declared unfit and disposed off appropriately (854/2004, Annex I, Section II, Chapter II, Paragraphs 2,3).

The OV should notify the competent authority when the information provided with FCI from a particular holding are not true (for example: serious conditions are found post mortem that are not recorded on FCI on multiple occasions, even after the private veterinarian has been informed). The competent authority must take action against the FBO (i.e. farmer) and any other person involved. This action may consist of extra controls. The farmer, and any other person involved are to bear the costs of such extra controls (854/2004, Annex I, Section II, Chapter II, Paragraph 5).

### VERIFICATION OF FBO RESPONSIBILITIES

FBO is responsible for cleanliness of animals and he is presenting animals that have such hide, skin or fleece conditions which do not present unacceptable risk of contamination of the meat (853/2004, Annex II, Section II, Paragraph 2; 854/2004, Annex I, Section II, Chapter III, Paragraph 3).

FBO alerts the OV to animal identification, if the animals are not properly identified (853/2004, Annex II, Section II, Paragraph 2; 854/2004, Annex I, Section II, Chapter III, Paragraph 1), health conditions if the animals are suspected of having a disease or condition that affects human or animal health

(853/2004, Annex II, Section II, Paragraph 2; (854/2004, Article 4, Paragraph 7), animals that come from areas under disease restrictions (853/2004, Annex II, Section II, Paragraph 2; 854/2004, Annex I, Section II, Chapter III, Paragraph 1), animals are in satisfactory welfare state on arrival (853/2004, Annex II, Section II, Paragraph 2; 854/2004, Annex I, Section I, Chapter II, C). Isolation facilities must be used for sick or suspect animals (853/2004, Annex III, Section I, Chapter II, Paragraph 1b).

The FBO must comply with relevant Community and national rules on animal welfare (transport, slaughter) and immediately takes necessary corrective measure to prevent recurrence of any non-compliance (853/2004, Annex III, Section I, Chapter I, Paragraph 1; 853/2004, Annex III, Section II, Chapter II, Paragraph 1,c; 854/2004, Annex I, Section I, Chapter II, C). Animals should not spend any more time in the lairage than is absolutely necessary (853/2004, Annex III, Section I, Chapter IV, Paragraph 1).

Dead on arrival: The FBO only accepts animals that are alive into the slaughter premises, with the exception of (853/2004, Annex III, Section I, Chapter VI; 853/2004, Annex III, Section II, Chapter IV, Paragraph 2b):

- a) animals that have undergone emergency slaughter outside the slaughterhouse (Domestic ungulates)
- b) animals including farmed game slaughtered at the place of production
- c) wild game
- d) delayed eviscerated poultry, geese and ducks raised for the production of "foie gras"

### COMMISSION REGULATION (EC) NO 2074/2005

laying down implementing measures for certain products under Regulation (EC) No 853/2004 and for the organisation of official controls under Regulation (EC) No 854/2004

The competent authority at the place of dispatch shall inform the dispatching food business operator of the minimum elements of food chain information to be supplied to the slaughterhouse in accordance with Section III of Annex II to Regulation (EC) No 853/2004.

The competent authority at the place of slaughter shall verify that:

- (a) the food chain information is consistently and effectively communicated between the food business operator who raised or kept the animals before dispatch and the slaughterhouse operator;
- (b) the food chain information is valid and reliable;
- (c) feedback of relevant information to the holding, if applicable, is provided.

Where animals are dispatched for slaughter to another Member State, the competent authorities at the place of dispatch and the place of slaughter shall cooperate to ensure that the information provided by the dispatching food business operator is easily accessible to the slaughterhouse operator receiving it.

The competent authority is responsible for communicating the relevant inspection results in cases where the animals are raised on a holding in another Member State and must use a version of the model document laid down in the Appendix in both the language of the dispatching country and the language of the recipient country.

#### Model document

##### 1. Identification details

- 1.1. holding of provenance (e.g. owner or manager): name/number, full address, telephone number
- 1.2. identification numbers (attach separate list): total number of animals (by species), identification problems (if any)
- 1.3. herd/flock/cage identification (if applicable)
- 1.4. animal species
- 1.5. reference number of health certificate

##### 2. *Ante-mortem* findings

- 2.1. welfare: number of animals affected, type/class/age, observations (e.g. tail-biting)
- 2.2. animals were delivered dirty
- 2.3. clinical findings (disease): number of animals affected, type/class/age, observations, date of inspection
- 2.4. laboratory results

##### 3. *Post-mortem* findings

- 3.1. (macroscopic) findings: number of animals affected, type/class/age, organ or site of animal(s) affected, date of slaughter
- 3.2. disease (codes can be used): number of ani-

mals affected, type/class/age, organ or site of the animal(s) affected, partially or totally condemned carcase (give reason), date of slaughter

- 3.3. laboratory results
- 3.4. other results (e.g. parasites, foreign objects, etc.)
- 3.5. welfare findings (e.g. broken legs)
4. Additional information
5. Contact details
  - 5.1. slaughterhouse (approval number): name, full address, telephone number
  - 5.2. electronic address if available
6. Official veterinarian (print name), signature and stamp
7. Date
8. Number of pages attached to this form:

### **COMMISSION REGULATION (EC) NO 2076/2005**

laying down transitional arrangements for the implementation of Regulations (EC) No 853/2004, (EC) No 854/2004 and (EC) No 882/2004

The entry into application on January 1 2006 of Regulations (EC) No 852/2004 of the European Parliament and of the Council (4), (EC) No 853/2004, (EC) No 854/2004 and (EC) No 882/2004 will entail considerable changes to the rules and procedures to be followed by food operators and the competent authorities of the Member States. The application of some of these measures with immediate effect from January 1 2006 would present practical difficulties in some cases. A period should therefore be envisaged in order to permit a smooth transition to the full implementation of the new rules and procedures. For the purposes of this Regulation, a transitional period of four years ending on December 31 2009 (hereinafter referred to as the transitional period) is established.

The provision of food chain information is a new requirement on food business operators. A transitional period should be introduced for the full implementation of food chain information requirements. In particular, a smooth flow of information from the farm to the slaughterhouse should be facilitated by a transitional arrangement relaxing the requirement to supply the information 24 hours in advance of the animals' arrival at the slaughterhouse. Section

III of Annex II to Regulation (EC) No 853/2004, the Member States shall progressively implement these requirements in various sectors in addition to the poultry sector where they shall apply immediately, so that the porcine sector in that Member State is covered by the implementation of food chain information requirements by the end of the second year of transition, and the equine and veal calf sectors by the end of the third year. Member States applying that transitional arrangement shall report to the Commission on its implementation at the end of each year. By way of derogation from the requirements laid down in point 2 of Section III of Annex II to Regulation (EC) No 853/ 2004 concerning the provision of food chain information to slaughterhouse operators no less than 24 hours in advance, the competent authority may permit such information to be sent to the slaughterhouse operator with animals of all species to which it relates and in all circumstances where this does not jeopardise the objectives of Regulation (EC) No 853/2004. However, any item of food chain information, knowledge of which may result in serious disruption of the slaughterhouse activity, shall be made available to the slaughterhouse operator in good time before the animals arrive at the slaughterhouse.

### **TRAINING OF SLAUGHTERHOUSE STAFF ASSISTING WITH OFFICIAL CONTROLS**

By way of derogation from Article 5(6)(a)(i) to Regulation (EC) No 854/2004 and Chapter III(A)(a) of Section III of Annex I to that Regulation, slaughterhouse staff authorised by the competent authority to carry out specific tasks of official auxiliaries shall be trained in the same way as official auxiliaries only with regard to the specific tasks they are authorised to perform and shall not be required to have passed the same examination as official auxiliaries.

The competent authority shall ensure that such training is satisfactory before authorising slaughterhouse staff to take over tasks of official auxiliaries. It shall check that the additional training and organisation necessary for slaughterhouse staff to qualify through the examination procedure that apply to official auxiliaries are in place as soon as possible and at the latest by the end of the transitional period.

## PROŠIRENI SAŽETAK PODACI O PREHRAMBENOM LANCU

Podaci o prehrambenom lancu (engl. Food Chain Information, FCI) omogućuju ovlaštenom veterinaru provjeru i analizu relevantnih podataka o životinjama namijenjenih klanju iz evidencija s farmi, te daju odgovarajuće smjernice u trenutku pregleda životinja prije klanja te pregleda mesa i organa nakon klanja. Pri obavljanju inspekcijskih pregleda, službeni veterinar mora uzeti u obzir službenu dokumentaciju koja prati životinju te sve podatke o veterinarskim pregledima i nalazima tijekom primarne proizvodnje. Podaci o prehrambenom lancu važan su čimbenik u konceptu "od farme do stola" za sigurnost hrane kao i za poboljšanje zdravlja i dobrobiti životinja. Podaci moraju obuhvatiti slijedeće:

(d) status gospodarstva podrijetla ili status regije u pogledu zdravlja životinja

(e) zdravstveno stanje životinja

(f) veterinarske lijekove davane životinjama ili druga liječenja kojima su životinje bile podvrgnute tijekom određenog razdoblja i čija je karenција veća od nule, zajedno s datumima davanja tih lijekova odnosno liječenja te karencijama

(g) pojave bolesti koje mogu utjecati na zdravstvenu ispravnost mesa

(h) rezultate, ako su bitni za zaštitu javnog zdravlja, svih analiza obavljenih na uzorcima uzetih od životinja ili drugim uzorcima uzetih u svrhu dijagnosticiranja bolesti koje mogu utjecati na zdravstvenu ispravnost mesa, uključujući uzorke uzete u okviru sustavnog praćenja i kontrole zoonoza i rezidua

(i) izvješća o ranijim pregledima prije i poslije klanja obavljenih na životinjama s istog gospodarstva uključujući posebice izvješća službenog veterinarara

(g) podatke o proizvodnji, ako bi mogli ukazivati na prisutnost bolesti

(h) ime i adresu privatnog veterinarara koji obično vodi brigu o životinjama na gospodarstvu podrijetla

Svrha podataka o prehrambenom lancu je upoznati subjekte u poslovanju hranom s relevantnim informacijama za sigurnost hrane dostupnih iz evidencija s farmi, odlukama o prihvaćanju životinja namijenjenih proizvodnji hrane, te obavijestiti ovlaštenog veterinarara o zahtjevima inspekcijakog nadzora. Za sve životinje, osim slobodno živuće divljači, koje su poslone ili se namjeravaju poslati u klaonicu, subjekti u poslovanju hranom moraju tražiti, primiti i provjeriti podatke o prehrambenom lancu. Istu dokumentaciju mora predati ovlaštenom veterinaru najkasnije 24 sata prije dospijea životinja u klaonicu. Podaci o prehrambenom lancu, ako to dopusti službeno tijelo, mogu dospjeti u klaonicu i zajedno sa životinjama na koju

se odnose ako se radi o:

e) domaćim kopitarima

f) svinjama, peradi ili divljači iz uzgoja koja su pregledana na gospodarstvu podrijetla ako ih prati svjedodžba koju je potpisao veterinar kojom se dokazuje da su životinje pregledane i da su zdrave

g) životinjama koje su prisilno zaklane

h) životinjama koje se ne dopremaju izravno s gospodarstva podrijetla (s tržišta)

Ukoliko podaci o prehrambenom lancu dostavljeni s pojedinog gospodarstva nisu istiniti, ovlašteni veterinar mora o tome obavijestiti nadležno tijelo. Poduzimaju se dodatne mjere prema farmeru i drugim uključenim osobama, u vidu dodatnih kontrola koje idu na trošak tih osoba.

Subjekti u poslovanju s hranom koji vode klaonice moraju osigurati da su prispjele životinje pravilno označene, popraćene podacima o prehrambenom lancu, da ne dolaze sa zaraženog područja, da su pri dolasku u klaonicu u zadovoljavajućem stanju što se tiče dobrobiti, da su čiste, da su zdrave - koliko to subjekt može procijeniti. Pri primjećivanju bilo kakvih nepravilnosti subjekt koji vodi klaonicu mora o tome obavijestiti službenog veterinarara.

Navedena pravila izvadak su iz važeće europske legislaive u području higijene hrane, posebno postupaka pri klanju životinja – Uredbe kojom se uređuju posebna pravila higijene hrane životinjskog podrijetla 853/2004, Uredbe kojom se uređuju pravila službenih kontrola proizvoda životinjskog podrijetla namijenjenih prehrani ljudi 854/2004, Uredbe o higijeni prehrambenih proizvoda 882/2004. Pravila koja moraju zadovoljiti subjekti u proizvodnji hranom važeći su za zemlje članice, a prijelazni period u kojem će se provoditi prilagodbe određen je do 31. 12. 2009. godine.

Uspostavljanje sustava podataka o prehrambenom lancu novi je zahtjev za subjekte u proizvodnji hrane. Primjerice, njime će biti omogućena dostupnost podataka o životinjama namijenjenih klanju 24 sata prije njihova dospijea u klaonicu.

## REFERENCES

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\*\*\*COMMISSION REGULATION (EC) No 2074/2005 of 5 December 2005 laying down implementing measures for certain products under Regulation (EC) No 853/2004 of the European Parliament and of the Council and for the organisation of official controls under Regulation (EC) No 854/2004 of the European Parliament and of the Council and Regulation (EC) No 882/2004

of the European Parliament and of the Council, derogating from Regulation (EC) No 852/2004 of the European Parliament and of the Council and amending Regulations (EC) No 853/2004 and (EC) No 854/2004

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2004 and (EC) No 882/2004 of the European Parliament and of the Council and amending Regulations (EC) No 853/2004 and (EC) No 854/2004

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# OCJENA SVJEŽINE MORSKE RIBE

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## SAŽETAK

Riba je, iako biološki veoma vrijedna namirnica, lako pokvarljiva i podložna mnogim onečišćenjima. Različiti kemijski, biokemijski i mikrobiološki procesi neposredno nakon ulova uvjetuju promjene koje dovode u pitanje njezinu svježinu, održivost i kakvoću, a time i zdravstvenu ispravnost. Tijekom rukovanja ribom od ulova do prerade ubrzan je rast mikroorganizama što se očituje gubitkom svojstava svježe ribe. Kakvoća ribe je, prije svega, gospodarska kategorija propisana temeljem vrste, pecature (kategorizacija), senzornih svojstava, te načina obrade (evisceracija i dr.).

**Ključne riječi:** svježina, morska riba

## UVOD

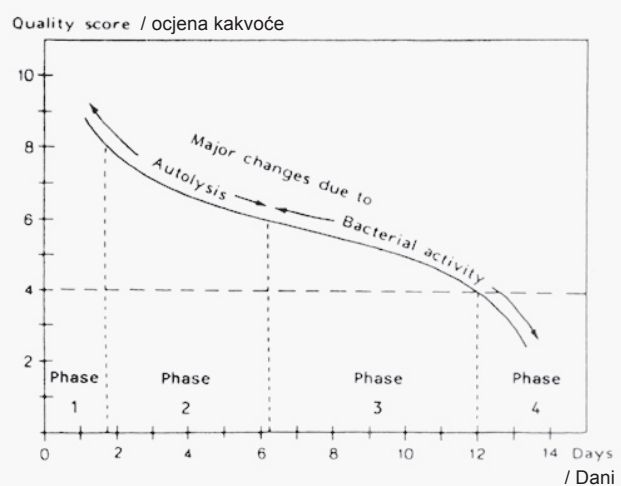
Riba se stavlja u promet prema porijeklu, vrsti i pecaturi. Pecatura morske ribe označava broj riba u 1 kg ili masu ribe izraženu u kg. Prema vrsti, morska riba se stavlja na tržište kao sitna plava riba, krupna plava riba, bijela riba, landovina i miješana morska riba. Prema odredbama Pravilnika o kvaliteti riba, rakova, školjkaša, morskih ježeva, žaba, kornjača, puževa i njihovih proizvoda morskom ribom se smatraju i glavonošci (NN broj 52/91). Miješanom morskom ribom smatra se mješavina sitne plave ribe, bijele ribe, landovine, glavonožaca i sitnih rakova koji u pogledu pecature ne udovoljavaju uvjetima propisanim spomenutim pravilnikom.

## KAKVOĆA MORSKE RIBE

Za kakvoću ribe posebno su značajni svježina i održivost (trajnost) ribe u pohrani i prometu. Šoša (1989) navodi kako se razgradnja ribe može se podijeliti u 4 faze. U 1. fazi riba je svježija, slatkastog, ugodnog okusa, ponekad blago metalnog. U nekih vrsta riba (bakalar, iverak) slatkasti okus je najizraženiji 2-3 dana nakon ulova. U sljedećoj fazi gubi se karakteristični miris i okus ribe, pa je meso neutralnog mirisa i okusa, bez većih odstupanja. Tekstura

▼ **Slika 1.** Promjena kakvoće bakalara pohranjenog (0°C) na ledu (Huss, 1976; cit. Huss, 1995)

▼ **Figure 1.** Changes in the eating quality of iced (0°C) cod (Huss, 1976; cit. Huss, 1995)



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