

**Guidance Note No. 17
The Labelling of Meat
and Meat as an Ingredient
(Revision 1)**

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Food Safety Authority of Ireland
The Exchange, George's Dock
IFSC, Dublin 1
D01 P2V6

Tel: +353 1 817 1300
Email: info@fsai.ie
Website: www.fsai.ie

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I. INTRODUCTION

Labelling of meat within the European Union (EU) is regulated by a large number of legislative instruments. This guidance note provides an overview of the legislative requirements for the documentation and labelling of all meats (see Section A) and the labelling of meat when used as an ingredient (see Section B). It is intended to enable those involved in the manufacture, packaging and selling of meat and meat products to understand the labelling requirements.

I.1 Aim of document

The purpose of this guidance note is to:

- Provide guidance for industry regarding the documentation and labelling required for all meat
- Provide guidance for enforcement officers
- Provide guidance for calculating the meat content of a meat product

I.2 Scope

The guidance note applies to all meat and foodstuffs that contain meat as an ingredient marketed in Ireland.

I.3 Disclaimer

This document is intended to act as a guide to the legislation. It does not purport to be comprehensive or to be a legal interpretation, or to constitute legal or professional advice. Legislative changes can be expected in the future that will necessitate the update of this guidance note as appropriate.

2. EU LEGISLATION AND IRISH LAW

Table I lists the principal European and Irish labelling and traceability rules that apply to meat.

Table I. European and Irish meat labelling and traceability legislation

European legislation	National legislation
General principles of food law	
<p>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</p>	<p>For food businesses supervised by the Health Service Executive (HSE): European Communities (General Food Law) Regulations 2007 (S.I. No. 747 of 2007)</p> <p>For food businesses supervised by the Department of Agriculture, Food and the Marine; Local Authorities or the Sea-Fisheries Protection Authority: European Communities (Food and Feed Hygiene) Regulations 2009 (S.I. No. 432 of 2009 as amended)</p>
Hygiene rules	
<p>Regulation (EC) No. 853/2004 laying down specific hygiene rules for food of animal origin</p>	<p>European Communities (Food and Feed Hygiene) Regulations 2009 (S.I. No. 432 of 2009 as amended)</p>
Health/identification marking	
<p>Regulation (EC) No. 853/2004 laying down specific hygiene rules for food of animal origin</p> <p>Regulation (EC) No. 854/2004 laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption</p>	<p>European Communities (Food and Feed Hygiene) Regulations 2009 (S.I. No. 432 of 2009 as amended)</p>

European legislation	National legislation
Labelling (provision of food information to consumers, FIC)	
<p>Regulation (EU) No. 1169/2011 on the provision of food information to consumers, amending Regulations (EC) No. 1924/2006, and (EC) No. 1925/2006 of the European Parliament and of the Council, and repealing Commission Directive 87/250/EC, Council Directive 90/493/EEC, Commission Directive 1999/10/EC, Directive 2000/13/EC, of the European Parliament and of the Council, Commission Directives 2002/67/EC and 2008/5/EC and Commission Regulation (EC) No. 608/2004</p>	<p>Health (Provision of Food Allergen Information to Consumers in respect of Non-Prepacked Food) Regulations 2014 (S.I. 489 of 2014)</p> <p>European Union (Provision of Food Information to Consumers) Regulations 2014 (S.I. No. 556 of 2014)</p> <p>European Union (Origin Labelling of Meat) Regulations 2015 (S.I. No. 113 of 2015)</p>
Microbiological criteria	
<p>Commission Regulation (EC) No. 2073/2005 on the microbiological criteria of foodstuffs</p>	<p>For food businesses supervised by the HSE: European Union (Microbiological Criteria for Foodstuffs) Regulations 2012 (S.I. No. 474 of 2012 as amended)</p> <p>For food businesses supervised by the Department of Agriculture, Food and the Marine; Local Authorities or Sea-Fisheries Protection Authority: European Communities (Food and Feed Hygiene) Regulations 2009 (S.I. No. 432 of 2009 as amended)</p>
Meat as an ingredient	
<p>Regulation (EU) No. 1169/2011 on the provision of food information to consumers</p>	<p>European Union (Provision of Food Information to Consumers) Regulations 2014 (S.I. No. 556 of 2014 as amended).</p>

European legislation	National legislation
Minced meat labelling	
<p>Regulation (EU) No. 1169/2011 on the provision of food information to consumers</p> <p>Regulation (EC) No. 853/2004 of the European Parliament and of the Council laying down specific hygiene rules for food of animal origin</p> <p>Regulation (EC) 854/2004 of the European Parliament and of the Council laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption</p>	<p>European Union (Provision of Food Information to Consumers) Regulation 2014 (S.I. No. 556/2014)</p>
Specified risk material	
<p>Regulation (EC) No. 999/2001 laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies</p> <p>Regulation (EC) No. 1069/2009 laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No. 1774/2002 (Animal by-products Regulation)</p>	<p>European Union (Transmissible Spongiform Encephalopathies) Regulation 2015 (S.I. No. 532 of 2015)</p> <p>S.I. 432 of 2009 European Communities (Food and Feed Hygiene Regulations 2009 (as amended))</p>
Beef and beef products labelling	
<p>Regulation (EC) No. 1760/2000 establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products and repealing Council Regulation (EC) No. 820/97 as amended by Commission Regulation 275/2007</p> <p>Commission Regulation (EC) No. 1825/2000 laying down detailed rules for the application of Regulation (EC) No. 1760/2000 as regards the labelling of beef and beef products</p>	<p>European Communities (Labelling of Beef and Beef Products) Regulations 2000 (S.I. No. 435 of 2000) as amended</p> <p>Health (Country of Origin of Beef) Regulations 2006 (S.I. No. 307 of 2006)</p> <p>Health (Country of Origin of Beef) as amended</p>

European legislation	National legislation
Veal	
<p>Council Regulation (EC) No. 1234/2007 establishing a common organisation of agricultural markets and on specific provisions for certain agricultural products</p> <p>Regulation (EU) No. 1308/2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No. 992/72, (EEC) No. 234/79, (EC) No. 1037/2001 and (EC) No. 1234/2007</p>	<p>European Communities (Marketing of meat of bovine animals aged 12 months or less) Regulations 2008 (S.I. No. 245 of 2008)</p>
Poultrymeat labelling	
<p>Commission Regulation (EC) No. 543/2008 laying down detailed rules for the application of Council Regulation (EC) No. 1234/2007 as regards the marketing standards for poultrymeat (as amended)</p> <p>Regulation (EU) No. 1308/2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No. 922/72, (EEC) No. 234/79, (EC) No. 1037/2001 and (EC) No. 1234/2007</p>	<p>European Communities (Marketing Standards for Poultrymeat) Regulations 2010 (S.I. No. 328 of 2010)</p>
Gelatine	
<p>Commission Regulation (EU) 2016/355 amending Annex III to Regulation (EC) 853/2004 of the European Parliament and of the Council as regards the specific requirements for gelatine, collagen and highly refined products of animal origin intended for human consumption</p>	<p>European Communities (Food and Feed Hygiene) Regulations 2009 (S.I. No. 432 of 2009 as amended)</p>

European legislation	National Legislation
Gelatine	
<p>Commission Regulation (EC) No. 2074/2005 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</p>	<p>European Communities (Food and Feed Hygiene) Regulations 2009 (S.I. No. 432 of 2009 as amended)</p>
Collagen	
<p>Regulation (EC) No. 853/2004 laying down specific hygiene rules for food of animal origin as amended</p>	<p>European Communities (Food and Feed Hygiene) Regulations 2009 (S.I. No. 432 of 2009 as amended)</p>

European legislation	National Legislation
Country of origin	
<p>Commission Implementing Regulation (EU) No. 1337/2013 laying down rules for the application of Regulation (EU) No. 1169/2011 of the European Parliament and of the Council as regards the indication of the country of origin or place of provenance for fresh, chilled and frozen meat of swine, sheep, goats and poultry</p> <p>Regulation (EC) No. 1760/2000 of 17 July 2000 establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products and repealing Council Regulation (EC) No. 820/97</p> <p>Commission Regulation (EC) No. 1825/2000 laying down detailed rules for the application of Regulation (EC) No. 1760/2000 of the European Parliament and of the Council as regards the labelling of beef and beef products</p>	<p>S.I. No. 113 of 2015 – European Union (Origin Labelling of Meat) Regulations 2015.</p> <p>Health (Country of Origin of Beef) Regulations 2006 S.I. No. 307 of 2006 as amended</p> <p>S.I. No. 435 of 2000 – European Communities (Labelling of Beef and Beef Products) Regulations, 2000 as amended)</p>

SECTION A: LABELLING OF MEAT

3. LABELLING AND DOCUMENTATION RULES

3.1 General labelling

Regulation (EU) No. 1169/2011 on the provision of food information to consumers sets out the general principles, requirements and responsibilities governing food information and, in particular, food labelling.

The prime consideration for requiring mandatory food information is to enable consumers to identify and make appropriate use of a food and to make choices that suit their individual dietary needs. The provision of food information must pursue a high level of protection of consumer health and interests by providing a basis for final consumers to make informed choices and to make safe use of food, with particular regard to health, economic, environmental, social and ethical considerations.

Food information must be accurate, clear and easy to understand. It must not be misleading, particularly:

- As to the characteristics of the food and, in particular, as to its nature, identity, properties, composition, quantity, durability, country of origin or place of provenance, method of manufacture or production
- By attributing to the food, effects or properties which it does not possess
- By suggesting that the food possesses special characteristics when in fact all similar foodstuffs possess such characteristics, in particular by specifically emphasising the presence or absence of certain ingredients and/or nutrients
- By suggesting, by means of the appearance, the description or pictorial representations, the presence of a particular food or an ingredient while, in reality, a component naturally present or an ingredient normally used in that food has been substituted with a different component or different ingredient.

Where do the regulations apply?

Certain criteria must be adhered to regarding the labelling, presentation and advertising of foodstuffs. These criteria are outlined in Regulation (EU) No. 1169/2011 and apply to the labelling of all foods intended for the final consumer, including foods delivered to mass caterers and foods intended for supply to mass caterers (e.g. restaurants, hospitals, canteens etc.).

In the cases outlined in (a) and (b) below, mandatory labelling information (Articles 9 and 10, Regulation (EU) No. 1169/2011) must appear on the pre-packaging, on a label attached to the packaging or on the commercial documents accompanying the food (sent before delivery, or at the time of delivery):

- (a) Where prepacked food is intended for the final consumer, but marketed at a stage prior to sale to the final consumer and where the sale to mass caterers is not involved at that stage, e.g. food sold to or from wholesalers or via an intermediary
- (b) Where prepacked food is intended for supply to mass caterers for preparation, processing, splitting or cutting up (e.g. restaurants for preparation, processing, cutting etc.)

However, the name of the food, date of minimum durability, any special storage conditions or conditions of use, and the name and address of the food business operator responsible for the food information, must appear on the outer packaging. Label information must be easily visible, clearly legible and indelible. All the mandatory information must appear in the commercial documentation.

3.1.1 Mandatory information required for all prepacked foodstuffs

The following list details mandatory information that must appear on the packaging of the prepacked foodstuffs or on an attached label:

- (a) The name of the food¹
- (b) The list of ingredients
- (c) Any ingredient or processing aid listed in Annex II (Regulation (EU) No. 1169/2011) or derived from a substance or product listed in Annex II (Regulation (EU) No. 1169/2011) causing allergies or food intolerances used in the manufacture or preparation of a food and still present in the finished product, even in altered form
- (d) The quantity of certain ingredients or categories of ingredients
- (e) The net quantity of the food¹
- (f) The date of minimum durability (i.e. 'best-before' date) or 'use-by' date
- (g) Any special storage instructions and/or conditions of use
- (h) The name or business name and address of the food business operator, i.e. the food business operator responsible for the food information must be the operator in whose name or business name the food is marketed or, if that operator is not established in the EU, the importer in the EU market

- (i) The country of origin or place of provenance of the foodstuff where failure to indicate might mislead the consumer²
- (j) Instructions for use where it would be difficult to make appropriate use of the food in the absence of such instructions
- (k) With respect to beverages containing more than 1.2% by volume of alcohol, the actual alcoholic strength by volume¹
- (l) A nutrition declaration

All of the above, bar (k), will be applicable for prepacked meat products, meat preparations or products that contain meat as an ingredient. However, for fresh or frozen cuts of meat, many of the above indications are not required. Therefore, of the above indications the following are mandatory for prepacked fresh or frozen cuts of meat:

- (a) The name of the food¹
- (e) The net quantity of the food¹
- (f) The date of minimum durability (i.e. 'best-before' date) or 'use-by' date (if meat is frozen, then a 'frozen-on' date is also required).
- (g) Any special storage instructions and/or conditions of use
- (h) The name or business name and address of the food business operator, i.e. the food business operator responsible for the food information must be the operator in whose name or business name the food is marketed or, if that operator is not established in the EU, the importer in the EU market
- (i) The country of origin or place of provenance of the foodstuff is mandatory for certain meats (beef, swine, sheep, goats, poultry); for other species, an indication is mandatory where failure to indicate might mislead the consumer²
- (j) Instructions for use where it would be difficult to make appropriate use of the food in the absence of such instructions

Note: *nutrition information is not mandatory for unprocessed products that comprise a single ingredient or category of ingredients.*

¹ ***These details must appear in the same field of vision on the label.***

² ***Country of origin:*** With specific exceptions, including the labelling of beef, fresh, chilled or frozen meat of swine, sheep, goats and poultry, mandatory country of origin labelling is only required when its absence may mislead consumers. See Section 3.2.

3.1.2 Traceability

Food business operators must have in place and use an identification and registration system at each stage of production and distribution of the following: fresh chilled and frozen meat of swine, sheep, goats and poultry falling within the respective Combined Nomenclature (CN) codes (listed in Annex XI to Regulation (EU) No. 1169/2011), i.e.:

- CN0203: meat of swine – fresh, chilled or frozen
- CN0204: meat of sheep and goats – fresh, chilled or frozen
- Ex CN0207: meat of poultry of heading 0105 (*Gallus domesticus*, ducks, geese, turkeys and guinea fowl) – fresh, chilled or frozen

That system must be applied in such a way as to ensure:

- (a) A link between the meat and the animal or group of animals from which it has been obtained, at the slaughterhouse stage this link being the responsibility of the slaughterhouse and
- (b) The transmission of the information relating to the indications referred to in Article 5 (Labelling of meat, see 3.2.1), Article 6 (Derogation for meat from third countries, see Section 3.2.1.1) or Article 7 (Derogations for minced meat and trimmings, see Section 3.2.3) of Regulation (EU) No. 1337 of 2013, as appropriate, together with the meat, to the operators at the subsequent stages of production and distribution.

As regards the labelling of **beef and beef products**, the labelling system must ensure a link between, on the one hand, the identification of the carcass, quarter or pieces of meat and, on the other hand, the individual animal or, where this is sufficient to enable the accuracy of the information on the label to be checked, the group of animals concerned.

It must be ensured that outlets for sale to the final consumer have available at all times information on the slaughterhouses at which the animals were slaughtered and the plants at which the carcasses were cut up for the non-prepacked cut beef displayed for sale each day. This ensures that consumers who so request can be given that information verbally.

3.1.3 Additional labelling requirements (meat)

1. Foods whose durability has been extended by packaging in certain gases must be labelled 'packaged in a protective atmosphere'.
2. Frozen meats and frozen meat preparations must be labelled with the date of freezing. If the product has been frozen more than once, the date must be that of first freezing.
3. The date of freezing or the date of first freezing where the product has been frozen more than once must be indicated as follows:
 - (a) It must be preceded by the words 'frozen on ...';
 - (b) The words referred to in point (a) must be accompanied by:
 - the date itself, or,
 - a reference to where the date is given on the labelling,
 - (c) The date must consist of the day, the month and the year, in that order and in uncoded form.
4. Poultrymeat which has been frozen or quick-frozen must be sold in that state, or used in preparations marketed as frozen or quick-frozen, or used in meat products. Regulation (EU) No. 1308/2013 specifies that poultrymeat and poultrymeat preparations may only be marketed in one of the following conditions:
 - Fresh
 - Frozen
 - Quick-frozen
5. Meat products and meat preparations which give the impression that they are made of a whole piece of meat but which actually consist of different pieces combined together by means of other ingredients, including food additives and food enzymes, or by other means, must bear the following indication: **'formed meat'**.

3.2 Country of origin labelling

3.2.1 Country of origin (meat of swine, sheep, goats and poultry)

Commission Implementing Regulation (EU) 1337/2013 lays down rules for the application of Regulation (EU) No. 1169/2011 as regards the indication of the country of origin or place of provenance for fresh, chilled and frozen meat of swine, sheep, goats and poultry.

Regulation (EU) No. 1337/2013 requires that food business operators have a traceability system in place at all stages of production and distribution of the meat, from slaughter to packaging, to ensure a link between the labelled meat and the animal or group of animals from which that meat has been obtained.

This legislation specifies that the indication '**Origin:** (name of Member State or third country)' can only be used on the meat of swine, sheep, goats and poultry if the food business operator proves to the satisfaction of the competent authority that the meat referred to has been obtained from animals born, reared and slaughtered in one single Member State or third country.

If the meat does not originate in one single Member State, then the indications required are:

- 'Reared in: (name of the Member State or third country)'
- 'Slaughtered in: (name of the Member State or third country)', and
- The batch code identifying the meat supplied to the consumer or mass caterer.

Reared in

(a) The Member State or third country in which the rearing took place indicated as 'Reared in': (name of Member State or third country)', in accordance with the following criteria: (see Table 3):

(i) Swine:

- Where the animal is slaughtered at older than six months, the Member State or third country in which the last rearing period of at least four months took place.
- Where the animal is slaughtered at younger than six months and with a live weight of at least 80 kilograms, the Member State or third country in which the rearing period after the animal has reached 30 kilograms took place.
- Where the animal is slaughtered at younger than six months and with a live weight of less than 80 kilograms, the Member State or third country in which the whole rearing period took place.

(ii) Sheep and goats:

- The Member State or third country in which the last rearing period of at least six months took place or, where the animal is slaughtered at younger than six months, the Member State or third country in which the whole rearing took place.

(iii) Poultry:

- The Member State or third country in which the last rearing period of at least one month took place or, where the animal is slaughtered at younger than one month, the Member State or third country in which the whole rearing period after the animal was placed for fattening took place.

Where the rearing period referred to in (i) – (iii) is not attained in any of the Member States or third countries where the animal was reared, the indication referred to in (i) – (iii) may be replaced by:

- ‘Reared in: several Member States of the EU’ or
- Where the meat or the animals have been imported into the EU, by ‘Reared in: several EU and non-EU countries’ or ‘Reared in: (list of the Member States or third countries where the animal was reared)’.

However, where the rearing period referred to in (i) – (iii) is not attained in any of the Member States or third countries where the animal was reared, the indication referred to in (i) – (iii) may be replaced by ‘Reared in: (list of the Member States or third countries where the animal was reared)’.

Where several pieces of meat, of the same or of different species, correspond to different labelling indications in accordance with country of origin labelling (meat of swine, sheep, goats and poultry) and are presented in the same pack to the consumer or mass caterer, the label must indicate:

- The list of the relevant Member States or third countries, in accordance with the requirements set out in the Regulation for each species
- The batch code identifying the meat supplied to the consumer or mass caterer

3.2.1.1 Derogation for meat from third countries

By way of derogation from 3.2.1 (a) above, for which the information required in point (a) is not available, must contain the indication 'Reared in: non-EU' and 'Slaughtered in: (Name of the third country where the animal was slaughtered)'.

3.2.2 Country of origin derogations for minced meat and trimmings (swine, sheep, goats and poultry – Regulation 1337/2013)

The following derogations may be applied:

- (a) 'Origin EU', where meat or trimmings are produced exclusively from meat obtained from animals born, reared and slaughtered in different Member States;
- (b) 'Reared and slaughtered in EU', where minced meat or trimmings are produced exclusively from meat obtained from animals reared and slaughtered in different Member States;
- (c) 'Reared and slaughtered in: non-EU', where minced meat or trimmings are produced exclusively from meat imported into the EU;
- (d) 'Reared in: non-EU' and 'Slaughtered in: EU' where minced meat or trimmings are produced exclusively from meat obtained from animals imported into the EU as animals for slaughter and slaughtered in one or different Member States;
- (e) 'Reared and slaughtered in: EU and non-EU' where minced meat or trimmings are produced from:
 - (i) Meat obtained from animals reared and slaughtered in one or different Member States and from meat imported into the EU; or
 - (ii) Meat obtained from animals imported into the EU and slaughtered in one or different Member States.

3.2.3 Beef labelling system

The Beef Labelling Regulations (Regulation (EC) No. 1760/2000) apply to fresh beef, frozen beef and minced beef. Labelling information must be applied to or attached to individual pieces of meat or to their packaging material. Where beef is not wrapped, some information is required to be provided in a **written and visible form** to the consumer at point of sale.

These regulations do not apply to meat preparations, meat products and offal. Table 2 illustrates examples of the types of beef to which the beef labelling regulations apply and do not apply.

Table 2. Examples of the types of beef to which the Beef Labelling Regulations apply and do not apply

Do apply	Do NOT apply
Fresh cuts of beef	Beef sausages
Frozen beef	Beef pieces with added ingredients
Minced beef	Stir-fry beef
99% beef burgers (i.e. which have up to 1% salt)	Beef burgers with ingredients
100% beef burgers	Cooked or processed beef
	Offal

The Beef Labelling Regulations require a mandatory traceability system for all EU bovine animals from farm to slaughterhouse, and a mandatory system of traceability and origin labelling for beef, from slaughterhouse to end consumer.

The Regulations apply to all fresh or frozen beef, either carcasses, de-boned meat, cut meat or minced meat, which is marketed in the EU.

The Regulations require operators to label beef with specific information at all stages of marketing, up to and including the point of sale to the consumer.

What information is required?

Under the beef labelling system, all operators and organisations marketing beef must include (a), (b), (c) and (d), as detailed below, on the label for prepacked beef, or in written and visible form to the consumer at the point of sale (beef sold unpackaged – e.g. at a butcher’s counter).

- (a) Reference/traceability code or batch number**, which must ensure a link between the meat and the animal or group of animals concerned.
- (b) Approval number of the slaughterhouse** at which the animal or group of animals was slaughtered and the **Member State or third country** in which the slaughterhouse is established, e.g. ‘Slaughtered in Ireland 123’
- (c) Approval number of the cutting hall** that performed the cutting operation on the carcase/carcases and the **Member State or third country** in which the hall is established, e.g. ‘Cutting in Ireland 456’.

(d) Origin of the beef. (See Table 4).

(i) If the beef is derived from animals born, reared and slaughtered in the same Member State/third country, the name of the Member State/third country is sufficient, e.g. 'Origin, Ireland'.

(ii) If the beef is derived from animals born, reared and slaughtered in different Member States/third countries, the label must show the Member State/third country of birth, all Member States/third countries where fattening took place and the Member State/third country where slaughter took place, e.g. 'Born in France', 'Reared in France', 'Slaughtered in Ireland'.

See Appendix 3 for sample white board and an 'in-tray' label and Appendix 4 for labelling requirements for beef in a retail outlet.

3.2.3.1 Obligation to keep and maintain records

Operators and organisations are required to prepare and keep up to date a written plan detailing the procedures used to ensure that the information indicated on their labels on beef and beef products are accurate. A copy of the plan must be retained for inspection by an authorised officer appointed under S.I. No. 435 of 2000 (as amended). Operators and organisations must retain, for a period of at least two years, all documents or systems records relating to beef labelling.

These documents must be presented for inspection to an authorised officer when requested to do so.

3.2.4 Derogations from the beef labelling system

I. Minced beef:

Minced beef labels must contain the following labelling information:

- A traceability number/reference code, which links the meat to the animal or animals it came from.
- The words '**Prepared in** (name of Member State/third country)'. The Member State or third country is the country where the mincing took place.
- The words '**Slaughtered in** (name of Member State/third Country)'. The Member State or third country is where the animals that produced the beef were born and reared, if they are different from the Member State of preparation.
- The word 'Origin' followed by the Member State/third Country when the animal was born, reared and slaughtered in the same country, e.g. Origin: Ireland where the State or States involved is/are not the State of preparation.
- If the beef is derived from animals from different countries, the label must indicate:
 - o Country of birth
 - o Country (or countries) of fattening/rearing
 - o Country of slaughter

Minced beef labels may also contain one or more of the indications listed below:

- The approval number of the slaughterhouse at which the animal/animals were slaughtered and the Member States/third country in which the slaughterhouse is established, e.g. 'Slaughtered in Ireland 123'.
- The approval number of the cutting hall and the name of the Member States/third country in which the cutting hall is established, e.g. 'Cutting in Ireland 123'
- The date of mincing
- Member State or third country of birth
- All Member States or third countries where fattening took place
- Voluntary information

When the beef is not wrapped, the relevant information must be provided in written form such as will be visible to the consumer at the point of sale.

2. Beef trimmings:

By way of derogation from Regulation (EC) 1760/2000, Article 13(2)(b) (i.e. indicate slaughterhouse approval number) and (c) (i.e. indicate cutting plant approval number) and 5(a)(i) (i.e. Member State or third country of birth) and (ii) (i.e. all Member States or third countries where fattening took place), operators and organisations must indicate on the labels of trimmings:

- (a) The country of slaughter of the animals from which the trimmings came. The indication must read: 'Slaughtered in (name of the Member State or third country of slaughter)';
- (b) The country in which the trimmings were produced and the approval number of the plant at which they were produced. The indication must read: 'Produced in (name of the Member State or third country of production and approval number of the plant)';
- (c) The countries in which the animals constituting the group were born and reared. The indication must read: 'Born and reared in (names of the countries in which the animals were born and reared)'.

By way of derogation from (a) and (c) above, where the animals in the group were born, reared and slaughtered in the same country, operators must be authorised to use the indication 'Country of origin:' followed by the name of the Member State or third country in which the animals were born, reared and slaughtered.

3. Pre-packed cut beef: (animals slaughtered in one or more slaughterhouses, and/or cutting of the meat in one or more cutting plants)

By way of derogation from Article 13(2)(b) (i.e. indicate slaughterhouse approval number) and (c) (i.e. indicate cutting plant approval number) of Regulation (EC) No. 1760/2000.

¹The country of rearing will be the country where the animal spent the longest period of time. If an animal spent less than 30 days in a country, it is not required to state this country on the label (see Table 4).

For those operators who make use of the derogation on further cutting of meat, using meat of animals slaughtered at a maximum of three different slaughterhouses and from carcasses cut up at a maximum of three different cutting plants. Such operators are required to list the following information, as well as that listed in Article 13(5)(a) (i.e. country/countries where the animal was born, reared and slaughtered):

- (a) the country of slaughter of the animals, followed by the approval number of the slaughterhouse or, where appropriate, the two or three slaughterhouses at which the animals constituting the group were slaughtered. The indication must read: 'Animals in the group slaughtered in (name of the Member State or third country of slaughter) (approval number(s) of the slaughterhouse or the two or three slaughterhouses concerned)'.
- (b) the country in which the carcasses were cut up, followed by the approval number of the cutting plant or, where appropriate, the two or three cutting plants at which the carcasses were cut up. The indication must read: 'Cutting of meat in batch in: (name of the Member State or third country in which meat was cut up) (approval number(s) of the plant or the two or three plants concerned)'.

4. Non-prepacked cut beef: (meat of animals born and/or reared and/or slaughtered in different countries)

- (i) The compulsory labelling system must ensure a link between, on the one hand, the identification of the carcase, quarter or pieces of meat and, on the other hand, the individual animal or, where this is sufficient to enable the accuracy of the labelling information to be checked, the group of animals concerned. The size of this group of animals must be defined:
 - (a) during the cutting of carcasses or quarters, by the number of carcasses or quarters cut together and constituting one batch for the cutting plant concerned;
 - (b) during further cutting or mincing, by the number of carcasses or quarters whose meat constitutes one batch for the cutting or mincing plant concerned

The size of the group may not, in any case, exceed the production of one day.

When constituting the batches mentioned above,

- (c) All carcasses or quarters in a batch cut together must be of animals born in the same country, reared in the same country or countries and slaughtered in the same country and at the same slaughterhouse.
- (d) All carcasses from which meat in a batch undergoes further cutting must comply with point (c) above and must have been cut up at the same cutting plant.

By way of derogation from the requirement regarding the same slaughterhouse and the same cutting plant laid down in (d) above, during the production of cut meat, operators must be authorised to constitute batches from meat of animals slaughtered at a maximum of three different slaughterhouses and from carcasses cut up at a maximum of three different cutting plants.

- (ii) By way of derogation from Article 13(2)(b) (i.e. indicate slaughterhouse approval number) and (c) (i.e. indicate cutting plant approval number) of Regulation (EC) No.1760/2000, all non-prepackaged cut meats displayed for sale must indicate at the point of sale to the final consumer the name of the country in which the animals from which the meat came were born, reared and slaughtered, followed by the name of the country in which the carcasses were cut up.

Meat of animals born and/or reared and/or slaughtered in different countries must be clearly separated when displayed for sale.

Information must be displayed in the sale outlet near such meats so as to allow the final consumer to distinguish easily between meat from different origins.

Operators who display non-prepacked cut meats together for sale each day must record, with the date, the approval numbers of the slaughterhouses in which the animals were slaughtered and of the cutting plants in which the carcasses were cut up. They must provide that information to consumers who so request.

- (iii) By way of derogation from the second subparagraph of Regulation 1825/2000, Article 4(1) (i.e. 3.2.4.4.1 above) 'Size and composition of a group', and providing that the requirements laid down in paragraph 2 of that Article are met, in the case of non-prepacked cut beef and/or veal displayed for sale to the final consumer, the size of the group **may** exceed one day's production.

5. Beef from third countries

Beef imported into the EU for which not all of the information referred to above is available must be labelled with the wording: 'Origin: non-EU' and 'Slaughtered in: (name of third country)'.

For meat derived from animals imported live into the EU where there is no information regarding the place of birth and/or the place of rearing, the label must state: 'Live import into the EU' or 'Live import from (name of third country)'.

6. Animals from Member States and third countries

Beef derived from animals that have been reared for 30 days or less in (a) the country of birth or (b) the country of slaughter is not required to have this country on the label, provided that the animal has been reared for a period longer than 30 days in another country. This means that the country where the animal spent the longest period of time is what appears on the label.

3.2.5 Country of origin labelling – catering establishments, preparing beef and supplying directly to the final consumer

The Health (Country of Origin of Beef) Regulations 2006 (S.I. No. 307 of 2006 as amended) require caterers to provide country of origin information for beef sold on their premises to their customers.

The Regulations relate to caterers who are food business operators providing prepared beef directly to the final consumer. This includes:

- Hotels
- Restaurants
- Public houses providing food
- Sandwich bars
- Canteens
- Healthcare establishments
- Catering service providers
- Takeaway food service outlets

The caterer must provide the country/countries of origin information to the customer in at least one of the following ways:

- On the menu presented to the customer
- As a clearly visible sign/board in the window/door/outside of the premises
- As a clearly visible sign/board inside the establishment

The information must be in clear and legible type. In the case of print, the lettering used must be of no less than 12-point font size. Advertisements referring to beef sold in the establishment must also provide information on the country of origin.

The information provided must include the country (or countries if there is more than one) in which the animal was born, reared (fattened) and slaughtered.

For example:

- If the beef is from animals born, reared and slaughtered in the same country, the name of the country is sufficient: e.g. *'All steak in our restaurant is of Irish origin.'*
- If the beef is from animals born, reared and slaughtered in different countries, the information must specify the different countries involved: e.g. *'The minced beef in this establishment is from animals born in France, reared in France and slaughtered in Ireland.'*

Where beef from more than one source is supplied to the establishment, the origin information for all beef must be provided, e.g. if a caterer is supplied with beef from two countries (where the animal(s) concerned were each born, reared and slaughtered in the same country) the information could be given as: *'The origin of the beef steak, minced beef and beef in pies in this establishment is Ireland and France.'*

However, where the caterer is supplied with beef from more than one source and there are different countries of birth, rearing and slaughter, all the information for each must be provided, e.g. *'Beef served in this establishment is from two sources. Country of origin of roast beef: Ireland, and origin of steak: born in Belgium, reared in France, slaughtered in France.'*

Where the beef is from more than one source, the Regulations do not stipulate that the origin information must be specific to each item on the menu, but it is recommended good practice that where the information is specified on the menu, it should be provided beside each dish.

The Regulations require that traceability information validating the country of origin information must be retained for at least two years. This information must be available to environmental health officers (EHOs) on request.

Table 3. Showing how to identify the country of rearing that must appear on the labelling of meat of swine, sheep, goats and poultry
(Regulation (EU) No. 1337/2013)

Swine	Sheep and goats	Poultry
<p>Slaughtered at over six months: the country where the last rearing period of at least four months took place.</p>	<p>Slaughtered at over six months: the country where the last rearing period of at least six months took place.</p>	<p>Slaughtered at over one month: the country where the last rearing period of at least one month took place.</p>
<p>Slaughtered at under six months, with live weight of at least 80 kg: the country where the animal was reared since it weighed 30 kg.</p>	<p>Slaughtered at under six months: the country where the whole rearing period took place.</p>	<p>Slaughtered at under one month: the country where the whole rearing period after the animal was placed for fattening took place.</p>
<p>Slaughtered at under six months, with live weight below 80 kg: the country where the whole rearing period took place.</p>	<p>N/A</p>	<p>N/A</p>

Table 4. Showing how to identify the country of rearing that must appear on the labelling of beef (Regulation (EC) 1760/2000 and Regulation (EC) 1825/2000)

Beef
<p>With respect to country of rearing, operators and organisations must indicate on the labels (i) Member State (MS) or third country of birth (ii) all MSs or third countries where fattening took place (iii) MS or third country where slaughter took place.</p>
<p>However, where the beef is derived from animals born, reared and slaughtered: (i) in the same MS, the indication may be given as Origin: (name of MS) (ii) in the same third country, the indication may be given as Origin: (name of third country).</p>
<p>With respect to animals which have been</p> <ul style="list-style-type: none">• reared for 30 days or less in the Member State or third country of birth <p>or</p> <ul style="list-style-type: none">• reared in the Member State or third country where slaughter took place the indication of those Member States or third countries, as a MS or third country where rearing took place, is not required, provided that those animals were reared in another MS or third country for a period longer than 30 days.
<p>With respect to meat derived from animals imported live into the EU, where information concerning the place of birth and/or the place of rearing, other than the last place of rearing, is not available the indication of the place of birth and/or place of rearing must be replaced by: the indication ‘*(Live import into the EC)’ or ‘*(Live import from [name of third country])’.</p>

3.3 Health and identification marking (all species)

Food business operators must not place on the market a product of animal origin handled in an establishment subject to approval in accordance with Article 4(2) of Regulation (EC) No. 853/2004 unless it has either:

- (a) a health mark applied in accordance with Regulation (EC) No. 854/2004, or
- (b) when that Regulation does not provide for the application of a health mark, an identification mark applied in accordance with Annex II, Section I, Regulation (EC) No. 853/2004.

3.3.1 Health marking

Health marks are applied to carcasses, sides and quarters of domestic ungulates, farmed game mammals other than lagomorphs, and large wild game which have passed ante-mortem and post-mortem inspection. The application and control of the health mark is the responsibility of the official veterinarian.

Food business operators must not remove a health mark applied in accordance with Regulation (EC) No. 854/2004 from meat unless they cut or process it or work upon it in another manner.

The requirements for health marks are set out in Annex I, Section I, Chapter III, Regulation (EC) No. 854/2004. The health mark must be an oval mark at least 6.5 cm wide by 4.5 cm high, bearing the following information in perfectly legible characters:

- The country in which the establishment is located. This may be written in full in capital letters or shown as a two-letter code in accordance with the relevant ISO standard (see Table 5)
- The approval number of the slaughterhouse, and
- When applied in a slaughterhouse within the EU, the mark must include the abbreviation CE, EC, EF, EG, EK, EO, EY, ES, EÜ, EK, EB EZ or WE. (Irish establishments would generally use EC).

Letters must be at least 0.8 cm high and figures at least 1 cm high. The dimensions and characters of the mark may be reduced for health marking of lamb, kids and piglets.

The colours used for health marking must be authorised in accordance with EU rules on the use of colouring substances in foodstuffs.

The health mark may also include an indication of the official veterinarian who carried out the health inspection of the meat.

Meat from unskinned wild game cannot bear a health mark unless, after skinning in a game handling establishment, it has undergone post-mortem inspection and has been declared fit for human consumption. This chapter is to apply without prejudice to animal health rules on health marking.

Example of a health mark:

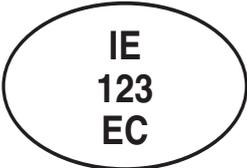


Table 5. A list of the code and the corresponding Member State which must appear on a health and identification marking

Code	Member State	Code	Member State
AT	Austria	IE	Ireland
BE	Belgium	IT	Italy
BG	Bulgaria	LT	Lithuania
CY	Cyprus	LU	Luxembourg
CZ	Czech Republic	LV	Latvia
DK	Denmark	MT	Malta
DE	Germany	NL	Netherlands
EE	Estonia	PL	Poland
ES	Spain	PT	Portugal
FI	Finland	RO	Romania
FR	France	SI	Slovenia
GR	Greece	SK	Slovakia
HU	Hungary	SE	Sweden
HR	Croatia	UK	United Kingdom

3.3.2 Identification marking

Food business operators may apply an identification mark to a product of animal origin only if the product has been manufactured in accordance with Regulation (EC) No. 853/2004 in registered and approved establishments (meeting the requirements of Article 4, Regulation (EC) No. 853/2004).

The application of the identification mark is the responsibility of the food business operator. The identification mark must be applied before the product leaves the establishment of production. If a product's packaging and/or wrapping is removed, or it is further processed in another establishment, a new mark must be applied to the product. In such cases, the new mark must indicate the approval number of the establishment where the operations take place.

The identification mark must:

- Be legible, indelible, and the characters must be easily decipherable
- Be clearly displayed for the competent authorities
- Indicate the name of the country in which the establishment is located, which may be written out in full or shown as a two-letter code in accordance with the relevant ISO standard (see Table 5)
- Indicate the approval number of the establishment. When the identification mark is applied in an establishment located within the EU, the mark must be oval in shape and include the abbreviation CE, EC, EF, EG, EK, EO, EY, ES, EÜ, EK, EB, EZ or WE. Irish establishments would generally use EC.

If an establishment manufactures both food to which this Regulation applies and food to which it does not, the food business operator may apply the same identification mark to both types of food.

Method of identification marking

The mark may, depending on the presentation of different products of animal origin, be applied directly to the product, the wrapping or the packaging, or be printed on a label affixed to the product, the wrapping or the packaging. The mark may also be an irremovable tag made of a resistant material.

The identification mark must be applied before the product leaves the establishment. However, when a product's packaging and/or wrapping is removed, or it is further processed in another establishment, a new mark must be applied to the product. In such cases, the new mark must indicate the approval number of the establishment where these operations take place.

In the case of packaging containing cut meat or offal, the mark must be applied to a label fixed to the packaging, or printed on the packaging, in such a way that it is destroyed when the packaging is opened. This is not necessary, however, if the process of opening destroys the packaging. When wrapping provides the same protection as packaging, the label may be affixed to the wrapping.

For products of animal origin that are placed in transport containers or large packages and that are intended for further handling, processing, wrapping or packaging in another establishment, the mark may be applied to the external surface of the container or packaging. When products of animal origin are placed in a package destined for direct supply to the final consumer, it is sufficient to apply the mark to the exterior of that package only. When the mark is applied directly to products of animal origin, the colours used must be authorised in accordance with EU rules on the use of colouring substances in foodstuffs when applying a health mark to fresh meat. See Regulation 1333/2008, Annex II.

3.4 Specific labelling

3.4.1 Minced meat (all species)

Regulation (EC) No. 853/2004 regulating the production and placing on the market of minced meat and meat preparations was implemented by European Communities (Food and Feed Hygiene) Regulations 2009 (S.I. No. 432 of 2009 as amended). Minced meat must meet the criteria in Regulation (EC) 853/2004, Section V, Chapter III, 1 and 2 to be classified as minced meat.

Minced meat, meat preparations and meat products (except for minced meat, meat preparations and meat products made from poultrymeat) supplied in packages intended for supply to the final consumer must be clearly labelled by the manufacturer so as to inform the consumer of the **need for thorough cooking prior to consumption**.

Specific requirements concerning the designation of 'minced meat' are described in Part B, Annex VI of Regulation (EU) No. 1169/2011 and are presented in Table 6 below.

Table 6. Composition criteria checked on the basis of a daily average

	Fat content	Collagen/meat protein ratio⁽¹⁾
Lean minced meat	≤7%	≤12%
Minced pure beef	≤20%	≤15%
Minced meat containing pig meat	≤30%	≤18%
Minced meat of other species	≤25%	≤15%

⁽¹⁾ The collagen/meat protein ratio expressed as the percentage of collagen in meat protein. The collagen content means the hydroxyproline content multiplied by a factor of 8.

In addition to the requirements laid down in Chapter IV of Section V of Annex III to Regulation (EC) No. 853/2004, the following expressions must appear on the labelling:

- 'percentage of fat content under...'
- 'collagen/meat protein ratio under...'

3.4.2 Meat preparations and mechanically separated meat (MSM)

All types of products covered by the definition of ‘mechanically separated meat’, as defined in Annex I of Regulation (EC) No. 853/2004, must be labelled as such with the name(s) of the animal species from which they come (Annex VII, Part B of Regulation (EU) No. 1169/2011).

Minced meat, meat preparations and meat products (except for minced meat, meat preparations and meat products made from poultrymeat) supplied in packages intended for supply to the final consumer must be clearly labelled by the manufacturer so as to inform the consumer of the **need for thorough cooking prior to consumption**.

3.4.3 Meat products and meat preparations with added water

In the case of meat products and meat preparations which have the appearance of a cut, joint, slice, portion or carcass of meat, the name of the food must include an indication of the presence of added water if the added water makes up more than 5% of the weight of the finished product.

Processed meat cuts which contain less than 5% added water and where the anatomical structure of the meat is clearly recognisable to the consumer are also exempt, e.g. ‘chicken breast in breadcrumbs’. However, meat cuts used as ingredients in composite meat products which are processed and no longer are recognisable to the consumer are not exempt and must adhere to the definition of meat and meat content limits.

3.4.4 Veal labelling

Regulation (EC) No. 1308/2013 lays down the conditions for the marketing of the meat of bovine animals aged less than 12 months, and the sales descriptions that must be used. It is applicable to carcasses, meat on the bone or boned, and offal, whether or not cut, intended for human consumption, obtained from bovine animals aged 12 months or less, presented fresh, frozen or deep-frozen, whether or not wrapped or packed.

On slaughter, these animals must be classified as either:

- **Category V:** bovine animals aged eight months or less. *Category identification letter: V*
- **Category Z:** bovine animals aged more than eight months but not more than 12 months. *Category identification letter: Z*

This classification must be carried out on the basis of the information contained in the passport accompanying the bovine animals or, failing this, on the basis of the data contained in the computerised database, Animal Identification and Movement System (AIMS).

Sales descriptions

Meat of bovine animals aged 12 months or less can only be marketed in EU Member States under the sales description(s) laid down for each Member State. In the case of Ireland, the following sales descriptions must be used:

- **Category V:** 'veal'
- **Category Z:** 'rosé veal'

These sales descriptions may be supplemented by an indication of the name or designation of the pieces of meat or offal concerned. The term 'veal', must not be used in a sales description or be indicated on the labelling of the meat of bovine animals aged more than 12 months.

Compulsory label information

At each stage of production and marketing, operators must label the meat of bovine animals aged 12 months or less with the age of the animals on slaughter and the relevant sales description:

- For animals aged eight months or less:
 - Age on slaughter: up to eight months. Sales description: Veal
- For animals aged more than eight months but not more than 12 months:
 - Age on slaughter: from eight to 12 months. Sales description: Rosé Veal.

By way of derogation, operators may use the category identification letter (i.e. 'Category V' or 'Category Z') instead of age at each stage of production and marketing, except on release to the final consumer.

Supplementary label information

Operators wishing to supplement the compulsory information must do so in accordance with Regulation (EU) No. 1169/2011.

Recording information

At each stage of production and marketing of veal, operators must record the following information:

- (a) An identification number and the date of birth of the animals, slaughterhouse level only
- (b) A reference number making it possible to establish a link between, on the one hand, the identification of the animals from which the meat originates and, on the other hand, the sales description, the age on slaughter and the category identification letter given on the meat label
- (c) The date of arrival and departure of the animals and meat in the establishment, to ensure that a correlation between arrivals and departures is established.

Table 7. Summary of requirements for beef cuts labelling at retail level

● = indicate on board/tray etc. ● = indicate on label + = may be indicated

	NON-PREPACKED		PREPACKED		Minced beef
	Animals from same Member State/ country	Animals from different Member States/ countries	Animals from same Member State/ country	Animals from different Member States/ countries	
Reference/traceability code or batch number	●	●	●	●	●
Approval number of slaughterhouse	●	●	●	●	+
Member State/third country of the slaughterhouse	●	●	●	●	+
Approval number of the cutting hall	●	●	●	●	+
Member State/third country of the cutting hall	●	●	●	●	+
'Origin: name of country'	●		●		●
'Born in... name of Member State/ third country'		●		●	
'Reared in... name of Member State/third country'		●		●	
'Slaughtered in... name of Member State/third country'		●		●	●
'Prepared in... name of country'					●
Date on which meat was prepared					+
Protein/collagen ratio and fat content					●
(if frozen) 'Frozen on ...'			●	●	●

3.5. Specified risk material labelling regulations for bovine

Specified risk material (SRM) refers to a group of tissues and organs of animals which have been shown to have the potential to transmit diseases such as BSE (Bovine Spongiform Encephalopathy). Regulation (EC) No. 999/2001 (as amended) lays down rules for the prevention, control and eradication of transmissible spongiform encephalopathies (TSEs) in animals. It applies to the production and placing on the market of live animals and products of animal origin and in certain specific cases to exports of live animals and products of animal origin.

Definition of specified risk material

The following tissues must be designated as specified risk material if they come from animals whose origin is in a Member State or third country or of one of their regions with a controlled or undetermined BSE risk:

Bovine animals:

- The skull excluding the mandible and including the brain and eyes, and the spinal cord of animals over 12 months of age
- The vertebral column excluding the vertebrae of the tail, the spinous and transverse processes of the cervical, thoracic and lumbar vertebrae and the median sacral crest and wings of the sacrum, but including the dorsal root ganglia of animals over 30 months of age
- The tonsils, the last four metres of the small intestine, the caecum and the mesentery of animals of all ages.

Regulation (EC) No. 999/2001 requires that specified risk material is removed and disposed of in a manner which avoids any risk to human or animal health. SRM is to be removed and disposed of in accordance with Annex V of Regulation (EC) No. 999/2001 (as amended) and Article 12 of Regulation (EC) No. 1069/2009.

Identification, storage and documentation of SRM

The vertebral column of bovine animals over 30 months of age must be removed as SRM and must not be present in cuts of meat for supply to consumers. Specifically, the vertebral body (the short thick part of the 'T'), including the first inch of the transverse process (the long tapering part of the 'T'), must be removed from cuts supplied to the consumer, when derived from animals over 30 months of age. It is therefore not permitted to sell a cut containing the traditional 'T' of bone from animals over 30 months of age. It is permitted to cut meat for human consumption from this area in animals over 30 months of age, but it must not contain these SRM bones.

Both European and national legislation requires that retail outlets which handle, remove and store SRM be specifically authorised. In terms of labelling and documentation, retail butchers must have a system in place whereby any SRM vertebral column can be clearly identified. See below for details of the requirements relating to labelling and documentation. A control system must be put in place for the removal of the vertebral column as specified in point 3.5 above. That control system must include at least the following:

RED STRIPE: At intake, all sides or wholesale cuts of beef containing vertebral column must have a label which would enable judgement of whether or not they are over 30 months of age and thus containing SRM. Since 1 July 2017, **beef carcass labels on animals over 30 months of age must have a red stripe.**

BLUE STRIPE: Prior to 30 June 2017, a blue stripe was used to identify carcasses under 30 months of age where removal of vertebral column was not required. This has now been replaced by the red stripe as set out above. However, food business operators can continue to use the blue stripe on carcasses under 30 months of age for their own purposes.

DOCUMENTATION: At intake, a document must accompany the meat, indicating whether any vertebral column in beef sides or wholesale cuts is SRM or not. For example, an invoice might read 'Sides of beef from animals under 30 months of age', 'Sides of beef from animals over 30 months of age' or 'Sides of beef with vertebral column which is not SRM' or 'Sides of beef with vertebral column which must be removed as SRM'. This documentation must be kept for a period of one year.

Where applicable, specific information on the number of bovine carcasses or wholesale cuts of carcasses, from which the removal of the vertebral column is required, must be added on the commercial document relating to consignments of meat. Where applicable, that specific information must be added to the Common Veterinary Entry Document (CVED) referred to in Article 2(1) of Commission Regulation (EC) No. 136/2004 in the case of imports. Butcher shops must keep, for at least one year, the commercial documents referred to here.

Further detailed information on handling SRM at retail level can be found on the Food Safety Authority of Ireland (FSAI) website at the following link: fsai.ie/faq/srm_authorisation.html

3.6 Poultrymeat labelling

See Section 3.2 Country of origin labelling (meat of swine, sheep, goats and poultry).

Annex VII, Part V of Regulation (EU) No. 1308/2008 applies in relation to the marketing within the EU by way of business or trade, of certain types and presentations of poultrymeat, and poultrymeat or poultry offal preparations and products of the following species:

- Domestic fowl (*Gallus domesticus*)
- Ducks
- Geese
- Turkeys
- Guinea fowl

These species are defined in Commission Regulation (EC) No. 543/2008.

Such poultrymeat cannot be marketed within the EU by way of business or trade unless it satisfies the marketing standards for poultrymeat. Regulation 1308/2008 requires that poultrymeat is marketed in one of the following conditions:

- Fresh
- Frozen
- Quick-frozen

Poultrymeat which has been frozen or quick-frozen must be sold in that state or be used in preparations marketed as frozen or quick-frozen, or in meat products, i.e. only poultrymeat which has not been stiffened at any time by the cooling process prior to being kept at a temperature not below $-2\text{ }^{\circ}\text{C}$ and not higher than $+4\text{ }^{\circ}\text{C}$ can be marketed as 'fresh poultrymeat'.

Regulation 1308/2008 does not currently apply to:

- Poultrymeat preparations, e.g. chicken nuggets, chicken burgers, chicken sausages
- Delayed eviscerated poultry as referred to in Regulation (EC) No. 853/2004, e.g. New York Dressed (NYD) Poultry. (NYD poultry is not eviscerated immediately after slaughter and is sold in carcase form to the retailer or consumer.)
- The direct supply of small quantities of poultrymeat in accordance with Article 1(3) (d) of Regulation (EC) No. 853/2004 by a producer with an annual production of under 10,000 birds
- Poultrymeat for export from the EU.

Poultrymeat marketed in the EU must be graded for quality and weight, and marketed, packed, labelled, transported and presented for sale in accordance with the requirements of the Regulation 1308/2008.

3.6.1 Prepacked poultrymeat

In addition to complying with the requirements of Regulation (EU) No. 1169/2011, the labelling, presentation and advertising of poultrymeat intended for the final consumer must also comply with requirements as set out in Commission Regulation (EC) No. 543/2008.

In the case of prepacked poultrymeat, the following must also appear on the pre-packaging or on an attached label:

- The 'use-by' date (fresh poultrymeat). This indication must be followed by a description of the storage conditions that must be observed.
- The class (i.e. Class A or B)
- Total price and the price per weight unit at retail stage (fresh poultrymeat)
- The condition in which the poultry is marketed (i.e. fresh, frozen, quick-frozen) and the recommended storage temperature
- Registered number of the slaughterhouse or cutting plant in accordance with Article 4 of Commission Regulation (EC) No. 853/2004, except in the case of cutting and boning at the place of sale as provided for in Article 4(2)(d) of that Regulation
- An indication of the country of origin in accordance with Regulation (EU) No. 1337/2013 (see Section 3.2).

By way of derogation from Article 3(5) (i.e. poultrymeat class) and paragraphs 2 to 5 of Article 5 (indicate 'use-by' date, for fresh prepacked poultrymeat; indicate class, total price and price per weight unit, indicate condition fresh, frozen or quick-frozen) of Commission Regulation (EC) No. 543/2008, it is not necessary to classify poultrymeat or to indicate the additional particulars referred to in those Articles in the case of deliveries to cutting or processing establishments.

Article 11 under Regulation (EC) No. 543/2008 allows for the use of certain terms on the labelling of poultrymeat if the relevant conditions (specified in Annex V of the same Regulation) are fulfilled. These terms are:

- ‘Fed with ___ % of___’
- ‘Extensive indoor’ (‘Barn reared’)
- ‘Free range’
- ‘Traditional free range’
- ‘Free range – total freedom’

These terms may be supplemented by indications referring to the particular characteristics of the respective types of farming. Where claims concerning types of farming (e.g. free range) are made on poultry labels, it is necessary that the producer and processor of the poultry be registered for this purpose with the Department of Agriculture, Food and the Marine (DAFM).

3.6.2 Loose/non-prepacked poultrymeat

The following information must be provided for poultrymeat sold loose/without packaging or packed on the premises from which they are sold:

- The class (i.e. Class A or B)
- The price per weight unit at the retail stage
- The condition in which the poultrymeat is marketed (i.e. fresh, frozen or quick-frozen)
- The registered number of the slaughterhouse or cutting plant
- In the case of poultrymeat imported from third countries (i.e. from outside the EU), an indication of the country of origin
- The ‘use-by’ date in accordance with Article 24 of Regulation (EU) No. 1169/2011. This indication must be followed by a description of the storage conditions which must be observed.

3.6.3 Water content of poultrymeat

Commission Regulation (EC) 543/2008 requires slaughterhouses to comply with specific requirements with respect to water content of frozen and quick-frozen chickens, and certain fresh and frozen chicken and turkey cuts.

The legislation lays down limits for the technically unavoidable water content, which may arise during the processing of the poultrymeat, and for total water absorbed during the chilling process. If the water content does not comply with the legislation, the competent authority may allow the batch to be marketed on condition that both the individual and bulk packaging of the carcasses concerned are marked by the slaughterhouse, under the supervision of the competent authority, with a tape or label stating 'Water content exceeds EC limit' in red capital letters.

This wording must be visible, clearly legible and indelible. The letters must be at least 1 cm high on the individual packaging and 2 cm high on bulk packaging.

Treatment of poultrymeat to promote water retention

Poultrymeat treated specifically to promote water retention must not be placed on the market as fresh meat but as meat preparations, or used for the production of processed products.

4. TRACEABILITY

Regulation (EC) No. 178/2002 lays down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety. Article 18 of this Regulation requires the following:

- Food and feed business operators must be able to identify any person from whom they have been supplied with a food, a feed, a food-producing animal, or any substance intended to be or expected to be incorporated into a food or feed. To this end, such operators must have in place, systems and procedures which allow for this information to be made available to the competent authorities on demand.
- Food and feed business operators must have in place systems and procedures to identify the other businesses to which their products have been supplied. This information must be made available to the competent authorities on demand.

The various meat Regulations closely link traceability and labelling in regard to the origin of the product. The intention of the legislator was clearly to provide the consumer with all the information about the origin and locations where processing steps have taken place. Traceability for the marketing of meat can be done on a paper-based system or electronic system.

The traceability system developed by a food business must be documented and the documentation must include the following information:

- Scope of the traceability system
- Optimal batch size
- Traceability information needed
- Requirements for record keeping and retrieval
- Procedures for review and testing of the traceability system

Food business operators must ensure that the following information concerning consignments of food of animal origin is made available to the food business operator to whom the food is supplied and, upon request, to the competent authority:

- (a) An accurate description of the food
- (b) The volume or quantity of the food
- (c) The name and address of the food business operator from which the food has been dispatched
- (d) The name and address of the consignor (owner), if different from the food business operator from which the food has been dispatched
- (e) The name and address of the food business operator to whom the food is dispatched
- (f) The name and address of the consignee (owner), if different from the food business operator to whom the food is dispatched
- (g) A reference identifying the lot, batch or consignment, as appropriate
- (h) The date of dispatch. (Regulation (EU) 931/2011)

Additional information can be found in the FSAI's *Guidance Note No. 10 (Revision 3) Product Recall and Traceability*.

APPENDIX I. LOCATION OF HEALTH MARKS ON CARCASES

Regulation (EC) 854/2004 (S.I. No. 432/2009 as amended) details the manner in which the health mark is to be applied to meat and where on the meat the health mark is to be applied.

Health marking must take place on the external surface of the carcass, by stamping the mark in ink or hot branding. Each piece of carcasses which are cut into half carcasses or quarters, or when half carcasses are cut into three pieces, must bear a health mark.

As outlined in Section 3.1.1, the health mark must be oval, must indicate the name of the country in which the establishment is located, the approval number of the slaughterhouse and an EU designation mark.

APPENDIX 2. EXAMPLE OF APPLICATION OF ID MARK ON WRAPPING AND PACKAGING

If a manufacturer makes sausages² for a wholesaler/rewrapping centre which subsequently wraps the sausages:

- (a) The ID mark of the manufacturer making the sausages appears on the wrapping at the manufacturing stage
- (b) The ID mark of the rewrapping centre appears on the wrapping at the rewrapping centre.

The rewrapping centre must keep a register, clearly demonstrating that product bearing the ID mark (a) was rewrapped and now bears the ID mark (b).

The final retail product can only have one ID mark. It is only where repackaging takes place that there may be two ID marks involved, one on the wrapping and a different one on the packaging.

It is acceptable for an establishment to put the name and address of the business which they supply on the product. However, only a plant that has been granted an ID mark may apply that ID mark. No other plant may do so.

Wrapping: means the placing of a foodstuff in a wrapper or container in direct contact with the foodstuff concerned, and the wrapper or container itself.

Packaging: means the placing of one or more wrapped foodstuffs in a second container, and the latter container itself.

² This example applies to fresh meat, minced meat/meat preparations and meat products.

APPENDIX 3. SAMPLE WHITE BOARD AND ‘IN-TRAY’ LABELS

Table 8. Sample board at a ‘serve-over’ beef counter

	Batch	Slaughtered in	Cut in	Origin	Voluntary information
Sirloin steak	12345	Ireland: 901	Ireland: 902	Ireland	Aged for 21 days
Minced beef	23456	Ireland: 903	Ireland: 904	Ireland	
Minced beef	34567	Ireland	Prepared in Ireland		(Using derogation)
Rib roast	45678	905	905	Ireland	Bord Bia Quality Assured
Fillet steak	26732	Ireland: 906	Ireland: 907	Ireland	
Fillet steak	98765	Brazil: 1010	Brazil: 1010	Brazil	

Table 9. Sample ‘in-tray’ label at a ‘serve-over’ butcher counter

Product	Fillet steak
Batch	34567
Slaughtered in Ireland	123
Cut in Ireland	123
Origin	Ireland

APPENDIX 4. LABELLING REQUIREMENTS FOR BEEF IN A RETAIL OUTLET

The tables below describe the information to be included on the label in the following instances:

a. Where the beef is bought in prepacks by the butcher and:

- (i) Sold in the prepack (see Table 10)
- (ii) The butcher opens the packaging and the beef is sold loose (see Table 11)
- (iii) The butcher opens the packaging and repacks the beef for direct sale to the consumer from the butcher shop premises (see Table 12).

b. Where the meat is bought in loose/wholesale cuts (see Table 13)

Table 10. Information required for beef bought in prepacks by the butcher and sold in the prepack

Information to be included on the label	Regulations
Batch number/traceability code Approval number and Member State of the slaughterhouse Approval number and Member State of the cutting hall Origin of the beef	Beef Labelling Regulations
Name of the food* Net quantity* Date of minimum durability, i.e. 'best-before' date or 'use-by' date* If meat is frozen, 'frozen on' date Any special storage conditions or conditions of use Name or business name and address of the food business operator, i.e. the food business operator responsible for the food information is the operator under whose name or business name the food is marketed or, if that operator is not established in the EU, the importer in the EU market. Instructions for use, where necessary	Provision of Food Information to Consumers Regulation
The ID mark	Hygiene Regulations

* This information must appear on the label 'in the same field of vision'. The intention is that all the information can easily be seen at the same time under normal purchasing conditions.

Table 11. Information to be provided to the consumer when beef is bought in prepacks by the butcher and sold loose

Information which must be displayed in written and visible form to the consumer at the point of sale, e.g. on a sign nearby and or on a label alongside the loose meat for sale	Regulations
Batch number/traceability code Approval number/traceability code Approval number and Member State of the slaughterhouse Approval number and Member State of the cutting hall Origin of the beef	Beef Labelling Regulations

Table 12. Information to be provided to the consumer when beef is bought in prepacks by the butcher and repacked for direct sale to the consumer from the butcher shop premises

Information to be included on the label	Regulations
Batch number/traceability code Approval number/traceability code Approval number and Member State of the slaughterhouse Approval number and Member State of the cutting hall Origin of the beef	Beef Labelling Regulations

Table 13. Information required when beef is bought in loose/wholesale cuts
 (Fresh meat, carcasses, half carcasses or half carcasses cut into no more than three wholesale cuts, and quarters intended to be placed on the market for human consumption)

Information to be included on labels or documentation accompanying meat	Regulations
Batch number/traceability code Approval number and Member State of the slaughterhouse Approval number and Member State of the cutting hall Origin of the beef	Beef Labelling Regulations
ID mark	Meat Hygiene Regulations

SECTION B: LABELLING OF MEAT AS AN INGREDIENT

5. LABELLING PROVISIONS

5.1 General provisions

Meat used as an ingredient in foods

The meat labelling requirements apply exclusively to the labelling of foods which contain meat as an ingredient, such as in ready meals, for example. The requirements do not apply to meat sold without further processing, such as meat cuts (e.g. sirloin steak) and anatomical parts (e.g. chicken wings).

5.2 Ingredient categories

The labelling rules add the designation ‘...meat’ in addition to the name of the species from which it comes (such as ‘bovine meat’) to the list of categories of ingredients which can be declared in the list of ingredients by their category name (see Appendix 5). For labelling in English, this designation, i.e. ‘(animal species) meat’, can be replaced by the generic name of the ingredient, for example ‘beef’ or ‘beef meat’. Where the generic name of the ingredient is declared (e.g. chicken, pork, lamb), rather than the species (e.g. poultry, porcine, ovine), the term ‘meat’ may be omitted (see Section 5.5).

5.3 Definition of meat

Meat defined in Regulation (EC) 1169/2011 is the skeletal muscles (including diaphragm and masseter muscles but not including the muscles of the carpus, tarsus and tail) of mammalian and bird species recognised as fit for human consumption.

Offal which is not included in this definition must be declared separately in the list of ingredients. The total fat and connective tissue content of the ‘meat’ must not exceed the limits set out in Table 14. Maximum limits have been set for the fat and connective tissue content of meat for each animal species.

In other words, ‘meat’ used as an ingredient is the muscles attached to the bones of the skeleton of an animal, including the diaphragm (often referred to as the skirt) and the jaw/cheek muscles of mammals and birds which are suitable for eating. The heart, tongue, the muscles of the head (excluding the jaw/cheek muscles) and the muscles below the wrist, ankle and tail are excluded from the definition of meat.

Table 14. Maximum limits for fat and connective tissue for meats

Species	Fat (%)	Connective tissue ² (%)
Mammals ¹	25	25
Porcines	30	25
Birds and rabbits	15	10

(1) Other than rabbits and porcines

(2) In order to determine the connective tissue content of muscle meat, the ratio of the collagen content to protein content is calculated.

For example, pork meat can have a maximum fat content of 30% and a maximum connective tissue content of 25%, whereas beef meat can have a maximum fat and connective tissue content of 25% each. The maximum limits on fat and connective tissue apply to each species separately. Therefore, the ‘meat’ content of each species must be calculated separately, taking into account the limits for that species. However, the total ‘meat’ content of all the species can be declared together in the list of ingredients. These limits also apply to all foods with comminuted meat as an ingredient (see Section 5.8).

Where these limits for the meat content are exceeded, the excess fat and/or connective tissue content must be declared separately in the list of ingredients under their own name.

For example, the list of ingredients for a pork and beef sausage could be given by the following where the definition of meat and meat content limits apply to each species separately:

Ingredients:

Meat 37% (pork, beef)... pork fat... pork rind... antioxidants (E330, E301)... beef fat... beef connective tissue

or

Ingredients:

Pork (25%), beef (12%)... pork fat ... pork rind ... antioxidants (E330, E301)... beef fat... beef connective tissue

5.4 Declaration of excess fat and connective tissue

The excess fat and connective tissue declared separately in the ingredients list to the muscle meat portion must be accompanied by the species name. For example, 'pork connective tissue', or a more specific name where one exists, may be used instead, such as 'pork rind'. However, where a more specific name is declared in the list of ingredients, the consumer must understand what is meant by the term and must not be misled in any way.

For example, the ingredients of a 'beef burger' could read:

Ingredients:

Beef (37%) ... antioxidants (E330)... **beef fat**... spices... hydrolysed vegetable proteins... **beef connective tissue**... preservative (E250)

Like all other ingredients, any excess fat and connective tissue must be declared in the list of ingredients in descending order of weight as recorded at the mixing bowl stage.

Excess fat and connective tissue are required to be labelled **but not required to be quantified** in the list of ingredients (provided that specific reference has not been made to these ingredients on the product labelling).

5.4.1 Standardisation of fat and connective tissue

In order to determine the 'meat' content of ingredients in a uniform manner due to the large variability in animal fat content across the Member States, maximum limits have been established for the fat and connective tissue content of meat for each animal species as outlined previously.

There is no distinction therefore whether fat has come from the skeleton muscle or has been added afterwards to the recipe, provided that it is below the maximum limit set for fat and provided that the fat is from the same species. The same situation applies for connective tissue. The rationale is that at mixing bowl level, a meat manufacturer may add separate fat and connective tissue (e.g. as back fat and dried rind, respectively) obtained from the same species, possibly from another source, because the meat cuts used are often too lean to make up the recipe. These added cuttings obtained from the same species must fall under the definition of meat, provided that it was within the limits set down.

For example, for a food with beef as an ingredient, fat from another source but from the same species could be used to make up the recipe, provided that the fat content is below the maximum limit set down. Any excess fat (or connective tissue) would have to be declared separately in the list of ingredients (i.e. 'beef fat').

5.5 Animal species

The name of the animal species from which the meat came must accompany the term 'meat' in the list of ingredients, e.g. bovine meat or poultry meat, provided that the meat content complies with the definition above. However, for the purposes of labelling in English, the name of the animal species can be replaced by the generic name of the ingredient for the animal species concerned, such as 'chicken meat' or 'chicken'. Where the generic name of the ingredient is used, e.g. 'beef', the term 'meat' may be omitted.

5.6 Exclusions from the definition of meat

Meat cuts and anatomical parts

The definition of meat applies only to the labelling of foods which contain meat as an ingredient. The definition does not apply to raw meat and cuts of meat which are not ingredients of composite food with meat as an ingredient.

Some meat ingredients may use mixtures of meat from different sources and origins as well as mixtures of meat cuts and anatomical parts.

Beef (30%)... Beef flank (10%)... Preservative: E220

Comminuted ingredients may declare the specific anatomical part of the animal instead of the designation '...meat' in the list of ingredients. However, the definition of meat and the meat content limits apply and must be adhered to.

In short, how the meat is described in the list of ingredients will indicate whether or not the definition of meat applies (except for comminuted ingredients). For example, in the list of ingredients for a food containing chicken, such as a 'chicken hot pot' which declares 'chicken meat' in the list of ingredients, the definition of meat applies and therefore the limit of fat and connective tissue must be adhered to.

If, however, the list of ingredients declares the specific anatomical cut of the meat, for example 'chicken breast', the definition of meat does not apply and the 'chicken breast' portion will not contribute towards the quantity of 'chicken meat' declared. However, the chicken breast will itself have to be quantified in the list of ingredients under the quantitative ingredient declaration (QUID) rules, as the food is called 'chicken hot pot'.

For example, in the case of the latter, the list of ingredients of the ‘chicken hot pot’ could read:

Ingredients:

Chicken breast (20%)... chicken (10%)... chicken fat... chicken connective tissue... preservative (E250)

However, it should be noted that foods containing meat as an ingredient claiming to be ‘chicken breast fillets’ but containing added water and other ingredients, are not ‘chicken breast fillets’ but ‘meat preparations’. As such, these meat preparations are not considered as anatomical cuts of meat and the definition of meat applies.

Meat-related ingredients

Meat-related ingredients which are derived from meat protein, fat and connective tissue and which have undergone a treatment such as purification (e.g. gelatine, collagen fibre, refined fat), hydrolysis (e.g. protein hydrolysates), extraction (e.g. meat extracts, bouillons) are also excluded from the definition of meat. These ingredients must be declared separately in the list of ingredients under their own name, in addition to the species from which they were derived. Beef gelatine is one such example. Regulation (EC) No. 853/2004 details the labelling requirements for gelatine and collagen. Wrapping and packaging containing gelatine or collagen must bear the words ‘gelatine fit for human consumption’ and must indicate the date of minimum durability. Wrapping and packaging containing collagen must bear the words ‘collagen fit for human consumption’ and indicate the date of preparation.

Unrefined fats which are components of the meat either raw or after cooking are generally considered to fall under the definition of meat, where the raw meat is **QUIDED** or where the meat which is subsequently cooked is **QUIDED** as a raw meat equivalent. If, however, the **QUID** is on a ‘cooked meat’ basis, the now refined fat does not fall under the definition of meat but is considered as a separate ingredient and must be declared separately in the list of ingredients, e.g. as ‘pork fat’.

Mechanically separated meat

Mechanically separated meat (MSM) is defined under Regulation (EC) No. 853/2004 as the product obtained by removing meat from flesh-bearing bones after boning or from poultry carcasses, using mechanical means, resulting in the loss or modification of the muscle fibre structure. MSM does not fall under the definition of 'meat' and cannot be included in the calculation of the meat content.

Mechanically separated meat for all animal species must be declared in the list of ingredients under its own specific name, in addition to the name of the animal species, e.g. 'mechanically separated chicken meat'.

Processed meat

The definition of meat and the meat content limits do not apply to meat cuts and anatomical parts which are simply processed and in which the anatomical structure of the meat can be recognised by the consumer.

5.7 Quantitative ingredient declaration (QUID)

The quantitative ingredient declaration (QUID) shows the percentage of an ingredient or category of ingredients in a food. It applies to all foods and beverages with more than one ingredient, including food with meat as an ingredient.

The percentage quantity must be in or next to the name of the food or be in the list of ingredients next to the name of the ingredient. Food with meat as an ingredient such as in prepacked foods will require a QUID in certain circumstances.

For example, the list of ingredients of a 'Beef Bolognese sauce' could read:

Ingredients:

Beef (20%), water, tomato, tomato puree, onion, carrot, **celery**, modified starch, salt, sugar, garlic, oregano, pepper, basil

When is a QUID required?

It is necessary to state the quantity as a percentage on the label of a meat as an ingredient where the ingredient is:

- Included in the name of the food (such as pork sausages, in which case the pork must be quantified)
- Usually associated with the name of the food (such as shepherd's pie, where the lamb or beef must be quantified)
- Emphasised on the label in words, pictures or graphics (such as 'with chicken', in which case the chicken must be quantified).

Calculation and expression of a QUID

The quantity of an ingredient is calculated on the basis of the recipe at the moment the ingredients are added, i.e. the same method as is used for determining the order in the list of ingredients – at the mixing bowl stage. Therefore, the quantity declaration for a meat ingredient is based on the weight of the ingoing 'meat' ingredient divided by the total weight of all the ingoing ingredients (except the weight of any added water or volatile ingredients lost in processing). The weight of the ingoing 'meat' ingredient will depend on the definition of meat and the meat content limits for fat and connective tissue.

QUIDs should relate to the nature of the ingredients added at the mixing bowl stage, i.e. as identified in the list of ingredients. Therefore, some ingredients will be required to be quantified in the raw state, as their names give no indication of processing and thus imply that the basic food, such as 'chicken' or 'beef', has been used. Other ingredients identified by names that indicate they have been somehow processed, such as 'cooked chicken', should also be quantified as having been used.

A 'raw equivalent' declaration or other similar wording may be provided in addition to the quantitative declarations of processed ingredients, as this would help consumers compare similar foods which have used ingredients in different forms. For example, 'cooked beef' added at the mixing bowl stage to the raw ingredients of a beef pie could declare in the list of ingredients.

Ingredients:

Cooked beef (20%)... water... salt... preservative (E250)

or

Ingredients:

Cooked beef (20%), (raw beef equivalent 25%)... water... salt... preservative (E250)

The quantities indicated on labelling designate the average quantity of the ingredient. Average quantity means the quantity of ingredient obtained by complying with the recipe and good manufacturing practice, allowing for the producer's normal manufacturing variations.

QUID, cuts and anatomical parts

Although meat cuts and anatomical parts of animals sold without processing do not fall under the definition of 'meat ingredient', where they are sold prepacked the general labelling rules will apply, including the QUID requirement in certain circumstances.

For example, prepacked 'chicken breasts' with added ingredients for sale to consumers will have to declare the compulsory labelling requirements as detailed in Section 3.1. The labelling will include the percentage of chicken either near the name of the food or in the list of ingredients beside 'chicken breast', as there is more than one ingredient and the ingredient 'chicken' appears in the name of the food. The QUID for this cut or anatomical part relates only to the specific cut and cannot include any additional meat from other parts of the animal or non-adherent tissue.

QUID and meat cuts with bone

Where meat cuts customarily include a bone and are sold without further processing, like other raw meat cuts and anatomical parts, the definition of meat and the meat content limits, such as a 'lamb chop', do not apply. However, the general labelling provisions and the QUID requirement may apply if there is more than one ingredient. In such circumstances, the QUID for 'lamb' should include the weight of the bone, since consumers will understand what is meant by the cut and that a bone is included because of the name.

QUID and foods with cooked meat as an ingredient

The percentage quantity of a meat ingredient is calculated on the basis of its weight and physical state (e.g. raw) as added at the mixing bowl stage. 'Raw meat equivalent' declarations or similar declarations may be provided in addition to the quantitative declarations for a processed meat ingredient.

For foods with meat as an ingredient where all the ingredients are raw but which are subsequently cooked by the manufacturer, there may be a possible loss of moisture during the cooking process, which may result in a cooked meat product weighing less than the sum of the uncooked ingredients. Therefore, for a food with meat as an ingredient which is subsequently cooked, the quantity declaration for the meat ingredient may be based on the weight of the ingoing meat ingredient as a percentage of the weight of the final product. However, this can result in the quantity of an ingoing meat ingredient being greater than the weight of the finished product, and the QUID would be greater than 100%. As this could be confusing to the consumer, it is recommended that in addition to the QUID, the weight of ingredient used to prepare 100 g of the finished product should be indicated.

For example, for a cooked ham product: 'Pork (110%, made with X g pork per 100 g)'

5.8 Foods with comminuted meat as an ingredient

The maximum limits on fat and connective tissue, and thus the definition of meat, applies to foods with comminuted meat as an ingredient, such as sausages and burgers, even in cases where the specific anatomical cut has been declared in the list of ingredients instead of the designation '... meat'. In these foods, the anatomical structure is not recognisable by the consumer and therefore the maximum limits on fat and connective tissue, and thus the definition of meat, apply. Foods with comminuted meat as an ingredient are not defined but are considered to be foods with meat as an ingredient where the meat portion has been broken down or ground into small particles, such as meat which has been minced or shredded. Meat which is sliced or diced is not considered to be comminuted.

For example, the list of ingredients and the meat content definition of a 'turkey and pork sausage' could read as follows where the definition of meat applies:

Ingredients:

Turkey (42%)... water... pork (13%)... pork fat... pork rind... spices

5.9 Compound ingredients

A compound ingredient is an ingredient which is itself made up of several other ingredients, such as a pork sausage in a tin of 'sausage and beans in tomato sauce'. A compound ingredient can be included in the list of ingredients under its own specific name, provided that it is followed immediately by a list of its ingredients (see Example 1 below). Alternatively, the ingredients of the compound ingredient may be shown on the list of ingredients without making reference to the name of the compound ingredient (see Example 2 below).

Example 1

Ingredients:

Haricot beans (45%), tomatoes (25%), sausage (18%) (contains: **pork** (60%), **pork fat**, water, **wheat** flour, pea starch, spices), sugar, spirit vinegar, salt

Example 2

Ingredients:

Haricot beans (45%), tomatoes (25%), **pork** (11%), sugar, spirit vinegar, **pork fat**, water, **wheat** flour, pea starch, salt, spices

Note: *Ingredients are in descending order of weight.*

5.10 Calculation of meat content

The FSAI recognises the following validated methods for the calculation of the meat content:

- **The method outlined in the Clitravi guidance document, as recommended by the European Commission, using typical compositional values or using analytical results**
- **The method outlined in the Food Standards Agency (FSA) UK guidance document, using typical compositional values or using analytical results**

Other calculation methods yielding the same results as the calculation methods above may also be used, but must be validated, and the evidence of this validation must be documented and held for inspection if requested by an authorised officer.

Meat manufacturers wishing to calculate the meat content of their foods with meat as an ingredient should follow the calculation methodology in either of the guidance notes referenced above. The Clitravi guidance document is available from the FSAI website: <https://www.fsai.ie/>. The FSA UK guidance document is available from the FSA UK website: <https://www.food.gov.uk/> Chapter 2, which follows, outlines a flow diagram and worked example to calculate the meat content based on the Clitravi method.

The levels of fat, meat protein and hydroxyproline/collagen present in meat ingredients may be determined by analysis of representative samples of ingredients from the mixing bowl. Following this analysis, the percentage of fat, meat protein and collagen in a specific part or mixture can be determined using ISO methods or equivalent.

6. CALCULATION OF MEAT CONTENT

6.1 Introduction

The flow diagram (see Section 6.3) outlines the method to calculate the meat content of a food with meat as an ingredient as per the Clitravi methodology and corresponds to the worked example in Section 6.4.

In order to calculate the meat content of a food with meat as an ingredient, the percentage of fat, connective tissue and meat protein content for each species must be determined either by analysis or from typical compositional values (Appendix 5).

The levels of fat, meat protein and hydroxyproline/collagen present in meat ingredients may be determined by analysis of representative samples of ingredients from the mixing bowl. Following this analysis, the percentage of fat, meat protein and collagen in a specific part or mixture can be determined using ISO methods or equivalent.

Collagen is the analytical parameter by which the connective tissue content is assessed. In order to determine the connective tissue content, the ratio of the collagen content to protein content is analysed. When the collagen content is determined it needs to be converted to connective tissue.

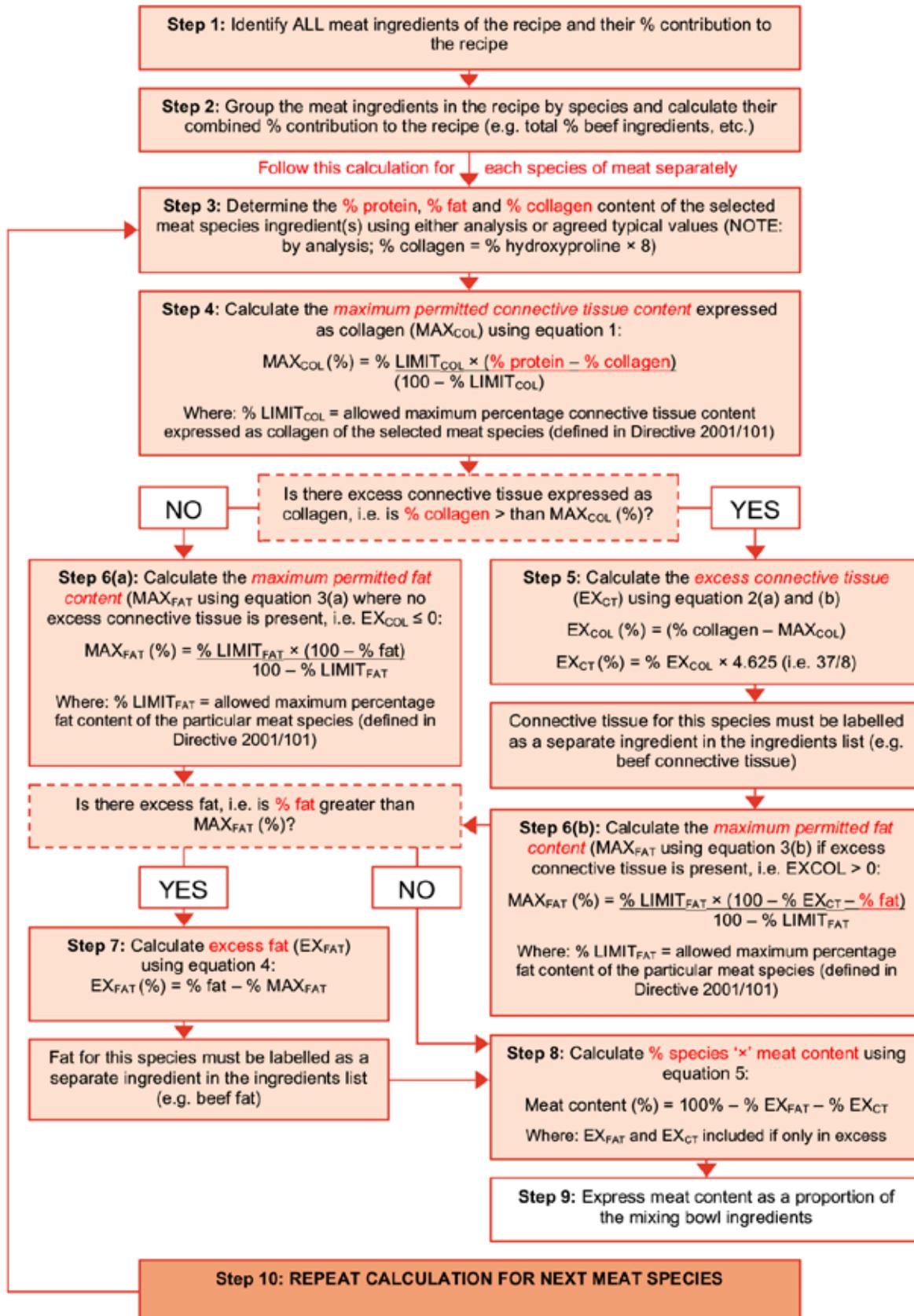
Conversion factor: connective tissue content = collagen \times 37/8 (i.e. 4.625)

The ratio 37/8 represents the conversion from collagen to connective tissue (*Source: Campden and Chorleywood – Guideline 22 ‘Meat and meat products: the calculation of meat content, added water and connective tissue from analytical data’*).

6.2 Terminology

% LIMIT_{FAT}	The limit for the fat content is the percentage of fat permitted in a 'meat' mixture for a particular species as defined in Regulation (EC) No. 1169/2011. For example, the % LIMIT _{FAT} for pork is the legal limit of fat allowed in the pork 'meat' mixture, i.e. 30%.
% LIMIT_{COL}	The limit for the connective tissue content, expressed as collagen, is the percentage of connective tissue permitted in a 'meat' mixture for a particular species as defined in Regulation (EC) No. 1169/2011. For example, the % LIMIT _{COL} for pork is the legal limit of connective tissue allowed in the pork 'meat' mixture, i.e. 25%.
MAX_{FAT}	The maximum fat content is the amount of fat tolerated in a 'meat' mixture for a particular species in order for the mixture to be defined as 'meat' in the list of ingredients. It is expressed as a proportion of the 'meat' components only.
MAX_{COL}	The maximum connective tissue content, expressed as collagen, is the amount of connective tissue tolerated in a meat mixture for a particular species in order for the mixture to be defined as 'meat' in the list of ingredients. It is expressed as collagen as a proportion of the 'meat' mixture components only.
% EX_{COL}	Excess collagen
% EX_{CT}	Corresponding excess connective tissue
% EX_{FAT}	Excess fat
MEAT	Meat content covered by the definition of meat

6.3 Flow diagram for the calculation of meat content



6.4 Worked example: meat content calculation – pork liver sausage

Step 1:

Determine the product composition at the level of mixing bowl and identify all meat ingredients and their percentage contribution to the recipe.

(a) Recipe at mixing bowl

Kg	Ingredient	%
43.8	Pork neck, 85VL including rind	12
29.2	Pork loin, 85VL including rind	8
127.7	Pork back fat	35
7.3	Nitrite salt	2
36.4	Pork liver	10
7.3	Pork meat extract	2
10.9	Pork rind less trimmable fat	3
7.3	Pork gelatine	2
54.7	Beef cuts	15
10.9	Beef fat	3
10.9	Chicken liver	3
7.3	Herbs, spices, additives, hydrolysed vegetable protein	2
7.3	Sodium caseinate	2
3.7	Pork casing	1
364.7	Total	100

(b) Identify the different meat cuts

Pork neck, 85VL including rind	= meat		12%
Pork loin, 85VL including rind	= meat		8%
Pork back fat	= meat*		35%
Nitrite salt		= not meat	
Pork liver		= not meat	
Pork meat extract		= not meat	
Pork rind less trimmable fat	= meat		3%
Pork gelatine		= not meat	
Beef cuts	= meat		15%
Beef fat	= meat		3%
Chicken liver		= not meat	
Herbs, spices, additives, hydrolysed vegetable protein		= not meat	
Sodium caseinate		= not meat	
Pork casing		= not meat	

(*include added fat)

Step 2:

Group meat cuts in the recipe by species, and calculate their combined percentage contribution to the recipe.

Pork neck, 85VL including rind	12%
Pork loin, 85VL including rind	8%
Pork back fat	35%
Pork rind less trimmable fat	3%
Pork 'meat' mixture	58%

Beef cuts	15%
Beef fat	3%
Beef 'meat' mixture	18%

Step 3:

Determine percentage protein, percentage fat and percentage collagen content for each species.

The collagen, fat and protein content must be determined using analytical methods or by reference to generally accepted compositional tables. If using generally accepted compositional data, the typical values for protein, fat and collagen in meat cuts compositional tables provided for in the FSA UK guidance note may be used. The typical values provided in the FSA UK guidance note are also outlined in Appendix 6 of this guidance note.

Care must be taken to **exclude** the following from the calculation/analysis:

- All non-meat cuts (e.g. pork liver)
- All non-meat nitrogen/protein sources (e.g. pork stock, caseinates, hydrolysed vegetable protein)
- All non-meat collagen (e.g. pork gelatine, pork casing)
- All non-meat fat (e.g. refined fats, pork stock)

WORKED EXAMPLE:

Determination of total percentage protein for each species

PORK

The pork ingredients can be listed as follows, with their corresponding percentage protein. The percentage protein for this example is determined from the reference compositional table in Appendix 6.

Meat cut	% present		% protein	
Pork neck 85VL including rind	12%	A	17.4%	a
Pork loin 85VL including rind	8%	B	18.9%	b
Pork back fat	35%	C	5.1%	c
Pork rind less trimmable fat	3%	D	34.5%	d

Values in the table above have been denoted a letter for the purposes of the following formula. The formula below can be modified to include more or less ingredients, i.e. $(E \times e) + (F \times f)$ etc.

$$\text{Total percentage protein} = (A \times a) + (B \times b) + (C \times c) + (D \times d) \text{ etc.}$$

$$\begin{aligned} \text{Total percentage protein} &= \frac{(12 \times 17.4) + (8 \times 18.9) + (35 \times 5.1) + (3 \times 34.5)}{100} \\ &= \frac{208.8 + 151.2 + 178.5 + 103.5}{100} \\ &= 6.42\% \text{ protein in the pork 'meat' mixture} \end{aligned}$$

BEEF

The same calculation can be used to calculate the total percentage protein in the beef 'meat' mixture.

Meat cut	% present		% protein	
Beef brisket lean	15%	A	16.3%	a
Beef fat	3%	B	7.3%	b

$$\text{Total percentage protein} = \frac{(15 \times 16.3) + (3 \times 7.3)}{100}$$

$$= \frac{244.5 + 21.9}{100}$$

$$= \frac{266.4}{100}$$

$$= 2.66\%$$

= 2.66% protein in the beef 'meat' mixture

Determination of total percentage fat for each species

PORK

The pork ingredients can be listed as follows, with their corresponding percentage fat. The percentage fat for our example is determined from the reference compositional table in Appendix 6.

Meat cut	% present		% fat	
Pork neck 85VL including rind	12%	A	21.1%	a
Pork loin 85VL including rind	8%	B	22.5%	b
Pork back fat	35%	C	78.6%	c
Pork rind less trimmable fat	3%	D	10.0%	d

Values in the table above have been denoted a letter for the purposes of the following formula. The formula below can be modified to include more or less ingredients, i.e. $(E \times e) + (F \times f)$ etc.

$$\text{Total percentage fat} = (A \times a) + (B \times b) + (C \times c) + (D \times d) \text{ etc.}$$

$$\text{Total percentage fat} = \frac{(12 \times 21.1) + (8 \times 22.5) + (35 \times 78.6) + (3 \times 10)}{100}$$

$$= \frac{253.2 + 180 + 2,751 + 30}{100}$$

$$= \frac{3,214.2}{100}$$

$$= 32.14\%$$

= 32.14% fat in the pork 'meat' mixture

BEEF

The same calculation can be used to calculate the total percentage fat in the beef 'meat' mixture.

Meat cut	% present		% fat	
Beef brisket lean	15%	A	27.6%	a
Beef fat	3%	B	74.8%	b

$$\text{Total percentage fat} = \frac{(15 \times 27.6) + (3 \times 74.8)}{100}$$

100

$$= \frac{414 + 224.4}{100}$$

100

$$= 6.38\% \text{ fat in the beef 'meat' mixture}$$

Determination of total percentage collagen for each species

PORK

The pork ingredients can be listed as follows, with their corresponding percentage collagen. The percentage collagen for our example is determined from the reference compositional table in Appendix 6.

Meat cut	% present		% collagen	
Pork neck 85VL including rind	12%	A	3.12%	a
Pork loin 85VL including rind	8%	B	3.76%	b
Pork back fat	35%	C	3.68%	c
Pork rind less trimmable fat	3%	D	22.4%	d

Values in the table above have been denoted a letter for the purposes of the following formula. The formula below can be modified to include more or less ingredients, i.e. $(E \times e) + (F \times f)$ etc.

$$\text{Total percentage fat} = (A \times a) + (B \times b) + (C \times c) + (D \times d) \text{ etc.}$$

$$\text{Total percentage collagen} = \frac{(12 \times 3.12) + (8 \times 3.76) + (35 \times 3.68) + (3 \times 22.4)}{100}$$

100

$$= \frac{37.44 + 30.08 + 128.8 + 67.2}{100}$$

100

$$= 2.64\% \text{ collagen in the pork 'meat' mixture}$$

BEEF

The same calculation can be carried out to calculate the total percentage collagen in the beef 'meat' mixture.

Meat cut	% present		% collagen	
Beef brisket lean	15%	A	2.56%	a
Beef fat	3%	B	5.76%	b

$$\text{Total percentage collagen} = \frac{(15 \times 2.56) + (3 \times 5.76)}{100}$$

$$= \frac{38.4 + 17.28}{100}$$

$$= \mathbf{0.56\% \text{ collagen in the beef 'meat' mixture}}$$

We now have the following values determined for our pork and beef 'meat' mix example:

Pork 'meat' mixture	Beef 'meat' mixture
Total percentage protein = 6.42%	Total percentage protein = 2.66%
Total percentage fat = 32.14%	Total percentage fat = 6.38%
Total percentage collagen = 2.64%	Total percentage collagen = 0.56%

These figures can be used to:

- Calculate the maximum permitted connective tissue
- Calculate excess collagen, if any
- Calculate excess connective tissue, if any
- Calculate the maximum permitted fat
- Calculate excess fat, if any
- Calculate the meat content per species
- Express meat content as a proportion of the mixing bowl ingredients per species

However, one other set value is also required. Regulation (EU) No. 1169/2011 sets out maximum fat and connective tissue content for ingredients designated by the term 'meat'. This Regulation indicates:

Maximum limits of fat in pork is 30%.

Maximum limits of connective tissue in pork is 25%.

Maximum limits of fat in beef is 25%.

Maximum limits of connective tissue in beef is 25%.

We can now proceed to the calculation using Steps 4–9.

Step 4:

Calculate the maximum permitted connective tissue content, expressed as collagen (MAX_{COL}) using the following equation:

$$\% \text{MAX}_{\text{COL}} = \frac{\% \text{LIMIT}_{\text{COL}} \times (\% \text{protein} - \% \text{collagen})}{(100 - \% \text{LIMIT}_{\text{COL}})}$$

Where $\% \text{LIMIT}_{\text{COL}}$ = the maximum percentage of connective tissue content expressed as collagen of the selected meat species as defined in Regulation (EU) No. 1169/2011.

Step 5:

(a) Calculate excess collagen (EX_{COL}).

$$\% \text{EX}_{\text{COL}} = \% \text{collagen} - \% \text{MAX}_{\text{COL}}$$

If the percentage excess collagen (EX_{COL}) is less than or equal to (\leq) 0%, there is no need for Step 5(b), as there is simply no excess.

If the percentage excess collagen is greater than ($>$) 0%, then Step 5(b) does apply. Since collagen is an analytical parameter by which connective tissue is assessed, the percentage excess collagen must be converted into percentage excess connective tissue ($\% \text{EX}_{\text{CT}}$). This is done using a conversion factor of 4.625, as per the equation below (Step 5(b)).

(b) Calculate excess connective tissue (EX_{CT})

$$\% EX_{CT} = \% EX_{COL} \times 4.625$$

WORKED EXAMPLE:

Calculate the maximum permitted connective tissue ($\% MAX_{COL}$), excess collagen ($\% EX_{COL}$) and excess connective tissue ($\% EX_{CT}$) for each species.

PORK

Protein = 6.42%

Fat = 32.14%

Collagen = 2.64%

Maximum limit of fat in pork ($\% LIMIT_{FAT}$) = 30%

Maximum limit of connective tissue in pork ($\% LIMIT_{CT}$) = 25%

$$\% MAX_{COL} = \frac{25 \times (6.42 - 2.64)}{(100 - 25)}$$

$$= \frac{25 \times 3.78}{75}$$

$$= 1.26\%$$

$$\% EX_{COL} = 2.64\% - 1.26\%$$

$$= 1.38\%$$

$$\% EX_{CT} = 1.38\% \times 4.625$$

$$= 6.38\%$$

There is **6.38%** excess connective tissue that cannot be considered as 'pork meat' in the list of ingredients, but must be declared as 'pork connective tissue' on the label.

BEEF

Protein = 2.66%

Fat = 6.38%

Collagen = 0.56%

Maximum limit of fat (% LIMIT_{FAT}) in beef = 25%

Maximum limit of connective tissue in beef (% LIMIT_{CT}) = 25%

$$\% \text{ MAX}_{\text{COL}} = \frac{25 \times (2.66 - 0.56)}{(100 - 25)}$$

$$= \frac{25 \times 2.1}{75}$$

$$= 0.7\%$$

$$\% \text{ EX}_{\text{COL}} = 0.56\% - 0.7\%$$

$$= -0.14\%$$

In this example, % EX_{COL} is <0%. Therefore, there is **no need for Step 3** (% excess connective tissue), as there is **no** excess collagen and therefore **no** excess connective tissue.

Step 6:

Calculate the maximum permitted fat content (% MAX_{FAT}) which is expressed as a proportion of the 'meat' components.

In order to do this, excess connective tissue (i.e. collagen) must first be **excluded** from the calculation, as it is not considered 'meat'.

For this reason, there are two separate **formulae A and B**:

(A) If there is **no excess** collagen ($\leq 0\%$) recorded in Step 5, the following formula applies:

$$\% \text{MAX}_{\text{FAT}} = \frac{\% \text{LIMIT}_{\text{FAT}} \times (100 - \% \text{fat})}{(100 - \% \text{LIMIT}_{\text{FAT}})}$$

(B) If there is **excess** collagen ($> 0\%$) recorded in Step 5, the following formula applies:

$$\% \text{MAX}_{\text{FAT}} = \frac{\% \text{LIMIT}_{\text{FAT}} \times (100 - \% \text{EX}_{\text{COL}} - \% \text{fat})}{(100 - \% \text{LIMIT}_{\text{FAT}})}$$

If percentage **fat** (calculated in Step 3) is:

- greater ($>$) than the calculated $\% \text{MAX}_{\text{FAT}}$, Step 7 applies
- less than ($<$) than the calculated $\% \text{MAX}_{\text{FAT}}$, Step 7 does **not** apply

Step 7:

Calculate excess fat ($\% \text{EX}_{\text{FAT}}$) content.

Excess fat must be calculated and declared separately in the list of ingredients.

$$\% \text{EX}_{\text{FAT}} = \% \text{fat} - \% \text{MAX}_{\text{FAT}}$$

WORKED EXAMPLE:

Calculate the maximum permitted fat content (MAX_{FAT}) for each species. This is expressed as a proportion of the 'meat' components.

PORK

For the pork 'meat' mixture, there is an excess of collagen. Therefore, formula B of Step 6 applies.

Pork 'meat' mixture

Protein = 6.42%

Fat = 32.14%

Collagen = 2.64%

Maximum limits of fat (MAX_{FAT}) in pork is 30%

Maximum limits of connective tissue (MAX_{CT}) in pork is 25%

Allowed collagen content ($\% \text{MAX}_{\text{COL}}$) = 1.26%

Excess collagen (EX_{COL}) = 1.38%

Excess connective tissue (EX_{CT}) = 6.38%

$$\begin{aligned}\% \text{MAX}_{\text{FAT}} &= \frac{30 \times (100 - 1.38 - 32.14)}{(100 - 30)} \\ &= \frac{30 \times 66.48}{70} \\ &= \frac{1994.4}{70} \\ &= \mathbf{28.49\%}\end{aligned}$$

The fat content of the pork 'meat' mixture is 32.14%, which is greater than the percentage maximum amount of permitted fat of 28.49%. Therefore, there is excess fat, and Step 7 applies:

$$\begin{aligned}\% \text{EX}_{\text{FAT}} &= 32.14\% - 28.49\% \\ &= 3.65\%\end{aligned}$$

Therefore, there is **3.65% excess fat** that cannot be considered as 'pork meat' in the list of ingredients, but must be declared as 'pork fat' on the label.

BEEF

For the beef 'meat' mixture, there is no excess of collagen. Therefore, formula A of Step 6 applies.

Beef 'meat' mixture

Protein = 2.66%

Fat = 6.38%

Collagen = 0.56%

Maximum limits of fat (LIMIT_{FAT}) in beef is 25%

Maximum limits of connective tissue (LIMIT_{CT}) in beef is 25%

Allowed collagen content = 0.7%

Excess collagen (EX_{COL}) = 0%

Excess connective tissue (EX_{CT}) = 0%

$$\begin{aligned}\% \text{ MAXFAT} &= \frac{25 \times (100 - 6.38)}{(100 - 25)} \\ &= \frac{25 \times 93.62}{75} \\ &= \mathbf{31.2\%}\end{aligned}$$

The fat content of the beef 'meat' mixture is 6.38%, which is less than the percentage **maximum amount of permitted fat** of **31.2%**. Therefore, there will be **no** excess fat and Step 7 does **not** apply.

Step 8:

Calculate the meat content per species.

$$\% \text{ meat content} = 100\% - \% \text{ EX}_{\text{FAT}} - \% \text{ EX}_{\text{CT}}$$

In order to calculate the 'meat' content of the meat mixture per species, excess fat and excess connective tissue must be subtracted from the meat mixture as a whole. Meat can then be expressed as a proportion of the mixing bowl of ingredients, as per Step 9.

Step 9:

Express meat content as a proportion of the mixing bowl ingredients per species.

$$\% \text{ total 'meat' in recipe} = \frac{\% \text{ 'meat' per species in mixing bowl} \times \text{meat content}}{100}$$

WORKED EXAMPLE:

Calculate the 'meat' content per species.

PORK

Pork 'meat' mixture

Protein = 6.42%

Fat = 32.14%

Collagen = 2.64%

Maximum limits of fat in pork = 30%

Maximum limits of connective tissue in pork = 25%

Allowed collagen content = 1.26%

Excess collagen = 1.38%

Excess connective tissue = 6.38%

Maximum amount of permitted fat = 28.49%

Excess fat = 3.65%

$$\begin{aligned} \text{Pork 'meat' content} &= 100\% - 3.65\% - 1.38\% \\ &= \mathbf{94.97\%} \end{aligned}$$

The pork 'meat' content as covered by the definition is 94.97%, but the other ingredients in the recipe must also be taken into account and the *meat content must be expressed as a proportion of the mixing bowl of ingredients*. The total pork 'meat' in recipe was calculated as 58%, of which 94.97% is meat. Therefore:

$$\begin{aligned} \text{Final pork 'meat' content} &= \frac{58 \times 94.97\%}{100} \\ \text{(as a proportion of mixing bowl} & \\ \text{ingredients)} & \\ &= \mathbf{55.08\%} \end{aligned}$$

Labelling

When all elements of Regulation (EU) No. 1169/2011 have been applied, the list of ingredients for pork liver sausage could read as follows:

Ingredients:

Meat 73% (pork, beef);¹ pork liver 10%; pork fat; chicken liver; pork connective tissue; pork stock; pork gelatine; herbs; salt; milk proteins; antioxidants (E330, E301); spices, emulsifiers (E471, E72c); hydrolysed vegetable proteins; stabilisers (E450, E452); pork casing; preservative (E250)

Note¹: The percentage pork meat and beef meat could be declared separately in the list of ingredients, i.e. pork 55%, beef 18%.

APPENDIX 5. LIST OF CATEGORIES OF INGREDIENTS WHICH MAY BE DESIGNATED BY THE NAME OF THE CATEGORY RATHER THAN THE SPECIFIC NAME (REGULATION (EU) NO. 1169/2011)

Definition			Designation	
<p>17. Skeletal muscle⁽²⁾ of mammalian and bird species recognised as fit for human consumption with naturally included or adherent tissue, where the total fat and connective tissue content does not exceed the values indicated below and where the meat constitutes an ingredient of another food.</p> <p>Maximum fat and connective tissue contents for ingredients designated by the term ‘...meat’</p>			<p>‘...meat’ and the name(s)⁽³⁾ of the animal species from which it comes</p>	
	Species	Fat content		Collagen/meat protein ratio ⁽¹⁾
	– Mammals (other than rabbits and porcines) and mixtures of species, with mammals predominating	25%		25%
	– Porcines	30%		25%
	– Birds and rabbits	15%		10%
<p>⁽¹⁾ The collagen/meat protein ratio is expressed as the percentage of collagen in meat protein. The collagen content means the hydroxyproline content multiplied by a factor of 8.</p> <p>If these maximum limits are exceeded, but all other criteria for the definition of ‘meat’ are satisfied, the ‘...meat’ content must be adjusted downwards accordingly, and the list of ingredients must mention, in addition to the term ‘...meat,’ the presence of fat and/or connective tissue. The products covered by the definition of ‘mechanically separated meat’ are excluded from this definition.</p>				
18.	All types of products covered by the definition of ‘mechanically separated meat’.		‘mechanically separated meat’ and the name(s) ⁽³⁾ of the animal species from which it comes	

⁽¹⁾ Council Regulation (EC) No. 1234/2007 of 22 October 2007 establishing a common organisation of agricultural markets and on specific provisions for certain agricultural products.

⁽²⁾ The diaphragm and the masseters are part of the skeletal muscles, while the heart, tongue, the muscles of the head (other than the masseters), the muscles of the carpus, the tarsus and the tail are excluded.

⁽³⁾ For labelling in English, this designation may be replaced by the generic name of the ingredient for the animal species concerned.

APPENDIX 6. TYPICAL PERCENTAGE VALUES FOR PROTEIN, COLLAGEN AND FAT IN MEAT CUTS*

Pork				
	Protein %	Collagen %	Connective tissue %	Fat %
Lean – top quality 100VL	19.0	1.00	5.3	8.9
Lean containing a small amount of visible fat and connective tissue 95VL	18.0	1.40	7.8	13.8
Lean containing no major gristles 90VL	16.5	2.00	12.1	19.3
Sow lean 80VL	18.0	2.30	12.8	26.4
Lean trimmings (incl. hock) 80VL	17.0	3.40	20.0	27.4
Lean with fat 50VL	11.5	1.90	16.5	53.6
More fat than lean 40VL	6.5	1.10	16.9	61.8
Coarse fatty tissue containing a little lean	5.0	1.50	1.50	76.5
Pork Neck Lean	18.6	1.92	10.3	11.5
Pork Neck 85VL	16.6	2.24	13.5	22.2
Pork Neck 85VL including Rind	17.4	3.12	17.9	21.1
Pork Hand Joint Lean	19.4	2.08	10.7	8.8
Pork Hand 90VL	17.9	2.64	14.8	16.8
Pork Hand 90VL including Rind	18.9	3.84	20.3	16.0
Pork Loin Lean	20.9	1.68	8.0	8.4
Pork Loin 85VL	17.4	2.08	12.0	23.9
Pork Loin 85VL including Rind	18.9	3.76	19.9	22.5
Pork Belly Lean	19.8	1.84	9.3	9.9
Pork Belly 80VL	16.4	2.48	15.1	25.5
Pork Belly 80 VL including Rind	17.8	4.16	23.4	23.8
Pork Leg Lean	20.7	1.6	7.7	5.0
Pork Leg 95VL	18.8	2.00	10.6	13.8
Pork Leg 95VL including Rind	19.4	2.96	15.2	14.0
Pork 95VL Desinewed	17.3	0.55	3.2	12.0
Back Fat	5.1	3.68	71.8	78.6
Flare Fat	3.0	1.80	60.0	82.6
Semi-lean rind on	16.0	3.20	20.0	48.6

Pork				
	Protein %	Collagen %	Connective tissue %	Fat %
Rind with fat uncooked (35% fat)	22.0	14.20	64.5	35.0
Rind less trimmable fat uncooked (10% fat)	34.5	22.40	64.9	10.0
Rind with fat cooked (derived from A12)	17.0	11.00	64.7	–
Gristle	22.0	14.20	64.5	–
Masseter Muscle	20.0	3.90	19.5	–
Diaphragm	15.0	10.60	70.7	–
Rehydrated Drinde 95VL	22.0	14.20	64.5	–

Beef				
	Protein %	Collagen %	Connective tissue %	Fat %
Lean – top quality 100VL	21.0	1.50	7.1	8.7
Lean containing a small amount of visible fat and connective tissue 95VL	20.0	3.00	15.0	12.6
Lean with a moderate amount of visible fat and connective tissue 85VL	17.0	3.40	20.0	22.3
Lean with some fat 75VL	16.0	4.80	30.0	30.6
More fat than lean 30VL	10.0	3.00	30.0	72.5
Beef Brisket Lean	16.3	2.56	15.7	27.6
Beef Brisket 75VL	15.2	2.88	19.0	32.4
Beef Jacob's Ladder Lean	18.6	2.40	12.9	18.4
Beef Jacob's Ladder 85VL	17.8	2.48	14.0	22.1
Beef Fore Rib Lean	18.3	2.16	11.8	20.9
Beef Fore Rib 80VL	17.1	2.24	13.1	25.9
Beef Chuck Lean	19.4	2.48	12.8	13.1
Beef Chuck 95VL	18.9	2.64	14.0	15.8
Beef Thin Flank Lean	18.4	2.32	12.6	21.1

Beef				
	Protein %	Collagen %	Connective tissue %	Fat %
Beef Jacob's Ladder 85VL	17.8	2.48	14.0	22.1
Beef Fore Rib Lean	18.3	2.16	11.8	20.9
Beef Fore Rib 80VL	17.1	2.24	13.1	25.9
Beef Chuck Lean	19.4	2.48	12.8	13.1
Beef Chuck 95VL	18.9	2.64	14.0	15.8
Beef Thin Flank Lean	18.4	2.32	12.6	21.1
Beef Thin Flank 80VL	16.6	2.64	15.9	28.8
Beef Shin and Leg Lean	21.8	3.92	18.0	6.2
Beef Shin and Leg	21.4	4.72	22.0	9.9
Beef Clod and Sticking Lean	19.2	2.96	15.4	14.7
Beef Clod and Sticking 90VL	18.5	3.20	17.3	18.2
Beef Topside Lean	21.8	1.60	7.4	6.3
Beef Topside 95VL	20.6	1.84	8.9	11.6
Beef Loin Rump and Fillet Lean	19.6	2.00	10.2	14.8
Beef Loin Rump and Fillet 85VL	18.0	2.16	12.0	22.2
Beef Thick Flank and Silverside Lean	20.6	2.48	12.1	9.6
Beef Thick Flank and Silverside 95VL	19.9	2.72	13.7	13.2
Beef Side Lean	19.4	2.48	12.8	14.9
Beef Side 90VL	18.4	2.72	14.8	19.7
Beef Pistola Lean	20.4	2.24	11.0	11.4
Beef Pistola 90VL	19.3	2.48	12.9	16.8
Beef Fore Quarter Lean	18.6	2.64	14.2	17.9
Beef Fore Quarter 85VL	17.6	2.80	15.9	22.3
Fat	7.3	5.76	79.4	74.8

Poultry				
	Protein %	Collagen %	Connective tissue %	Fat %
Skinless Chicken Breast	23.7	0.62	2.6	2.1
Skinless Chicken Leg	19.9	1.84	9.3	5.2
Skinless Chicken Thigh	19.7	1.12	5.7	7.1
Skinless Mixed Chicken Meat	19.4	1.68	8.6	7.7
Chicken Breast with Skin	22.1	1.20	5.4	6.7
Chicken Leg with Skin	18.8	2.40	12.8	10.1
Chicken Thigh with Skin	17.2	1.84	10.7	12.9
Mixed Chicken Meat with Skin	16.1	3.44	21.4	23.2
Chicken Ground Desinewed (Fronts)	17.1	0.69	4.0	15.6
Chicken Fat	3.0	2.00	66.7	–
Chicken Skin	11.8	5.68	48.3	44.2
Skinless Turkey Breast	23.9	0.64	2.7	2.0
Skinless Turkey Leg	19.6	1.44	7.4	6.0
Skinless Turkey Thigh	19.8	1.12	5.7	5.7
Skinless Mixed Turkey Meat	22.1	1.60	7.2	6.5
Turkey Breast with Skin	23.0	1.04	4.5	5.4
Turkey Leg with Skin	18.9	1.92	10.1	9.7
Turkey Thigh with Skin	19.1	1.68	8.8	10.3
Mixed Turkey Meat with Skin	18.4	2.88	15.6	17.9
Turkey Skin	12.3	6.56	53.6	49.4
Skinless Chicken Breast	23.7	0.62	2.6	2.1

Lamb and mutton				
	Protein %	Collagen %	Connective tissue %	Fat %
Lean Lamb of the Leg and Chump	19.4	1.68	8.7	10.1
Lean Lamb of the Loin and Best End Neck	18.4	1.76	9.5	18.0
Lean Lamb of the Scrag Shoulder Middle Neck and Breast	17.1	1.92	11.2	21.3
90VL Leg and Chump	17.9	1.92	10.7	17.8
80VL Loin and Best End Neck	16.0	1.84	11.5	29.8
80VL Scrag Shoulder Middle Neck and Breast	15.9	2.00	12.6	27.4
Lean Fore-quarter Mutton	16.7	2.00	12.0	23.1
Lean Hind-quarter Mutton	19.3	1.76	9.1	11.6
80VL Fore-quarter Mutton	15.4	2.08	13.5	29.1
90VL Hind-quarter Mutton	17.7	1.92	10.9	19.6

* The typical values for collagen, protein and fat outlined above are sourced from the FSA UK Guidelines on the Labelling and Declaration of Meat Content in Meat Products (September 2002) and are based on either published values derived from the Analytical Methods Committee of the Royal Society of Chemistry papers or on long-term accepted values. The table of typical values identifies various meat cuts with reference to their visual lean (VL) content.

7. GLOSSARY

Approval and registration: under Regulation (EC) No. 853/2004, food business operators are permitted to place products of animal origin manufactured in the EU on the market only if they have been prepared and handled exclusively in establishments that:

- (a) meet the relevant requirements of Regulation (EC) No. 852/2004, those of Annexes II and III of Regulation (EC) 853/2004, and other requirements of food law

and

- (b) that the competent authority has registered or, where required in accordance with paragraph 2 of Regulation (EC) 853/2004, approved.

Approval number: under Regulation (EC) No. 854/2004, the competent authority must give each approved establishment, including those with conditional approval, an approval number, to which codes may be added to indicate the types of products of animal origin manufactured.

Food business: a food business (Regulation (EC) No. 178/2002) is defined as any undertaking, whether for profit or not and whether public or private, carrying out any of the activities related to any stage of production, processing and distribution of food.

Food business operator: a food business operator (Regulation (EC) No. 178/2002) is defined as the natural or legal persons responsible for ensuring that the requirements of food law are met within the food business under their control.

Labelling: under Regulation (EU) No. 1169/2011, labelling means any words, particulars, trademarks, brand name, pictorial matter or symbol relating to a food and placed on any packaging, document, notice, label, ring or collar accompanying or referring to such food.

Prepacked food: under Regulation (EU) No. 1169/2011, prepacked food is defined as any single item for presentation as such to the final consumer and to mass caterers, consisting of a food and the packaging into which it was put before being offered for sale, whether such packaging encloses the food completely or only partially, but in any event in such a way that the contents cannot be altered without opening or changing the packaging. 'Prepacked food' **does not cover** foods packed on the sale premises at the consumer's request or prepacked for direct sale.

Products of animal origin: under Regulation (EC) No. 853/2004, 'products of animal origin' refer to foods of animal origin, including honey and blood; live bivalve molluscs, live echinoderms, live tunicates and live marine gastropods intended for human consumption; and other animals destined to be prepared with a view to being supplied live to the final consumer.

Traceability: under Regulation (EC) No. 178/2002, traceability is defined as the ability to trace and follow a food, a feed, a food-producing animal or substance intended to be or expected to be incorporated into a food or feed through all stages of production, processing and distribution.

DEFINITIONS RELATING TO MEAT

(All from Regulation (EC) No. 853/2004 unless otherwise stated)

Carcase is defined as the body of an animal after slaughter and dressing.

Collagen is the protein-based product derived from animal bones, hides, skins and tendons manufactured in accordance with the relevant requirements of this Regulation.

Cut meat (Regulation (EC) 1760/2000) is defined as meat which has been cut into small cubes, slices or other individual portions that do not require further cutting by an operator before being bought by the final consumer and that can be directly used by that consumer. This definition does not cover minced meat and trimmings.

Domestic ungulates are domestic bovine (including *Bubalus* and Bison species), porcine, ovine and caprine animals, and domestic solipeds.

Gelatine is the natural, soluble protein (gelling or non-gelling) obtained by the partial hydrolysis of collagen produced from bones, hides and skins, tendons and sinews of animals.

Farmed game are farmed ratites and farmed land mammals other than domestic ungulates.

Formed meat (Regulation (EU) No. 1169/2011) is defined as the meat products, meat preparations and fishery products which may give the impression that they are made of a whole piece of meat (or fish), but actually consist of different pieces combined together by other ingredients, including food additives and food enzymes or by other means. Such meat must be indicated by the term 'formed meat' (or fish).

Fresh meat is defined as meat that has not undergone any preserving process other than chilling, freezing or quick-freezing, including meat that is vacuum-wrapped or wrapped in a controlled atmosphere.

Lagomorphs are rabbits, hares and rodents.

Meat (Regulation (EC) No. 853/2004) means the edible parts of domestic ungulates, poultry, lagomorphs, wild game, farmed game, small wild game and large wild game, and includes blood.

Meat (as an ingredient in a composite product: Regulation (EC) 1169/2011) means meat and the name(s)⁽³⁾ of the animal species from which it comes: skeletal muscles⁽²⁾ of mammalian and bird species recognised as fit for human consumption, with naturally included or adherent tissue where the total fat and connective tissue content does not exceed the values indicated below and where the meat constitutes an ingredient of another food.

Maximum fat and connective tissue contents for ingredients designated by the term ‘... meat’

Species	Fat content	Collagen/meat protein ratio ⁽¹⁾
Mammals (other than rabbits and porcines) and mixtures of species with mammals predominating	25%	25%
Porcines	30%	25%
Birds and rabbits	15%	10%

⁽¹⁾ The collagen/meat protein ratio is expressed as the percentage of collagen in meat protein. The collagen content means the hydroxyproline content multiplied by a factor of 8.

If these maximum limits are exceeded, but all the criteria for the definition of ‘meat’ are satisfied, the ‘... meat’ content must be adjusted downwards accordingly and the list of ingredients must mention, in addition to the term ‘... meat’, the presence of fat and/or connective tissue.

The products covered by the definition of ‘mechanically separated meat’ are excluded from this definition.

⁽¹⁾ Council Directive (EC) No. 1324/2007 of 22 October 2007 establishing a common organisation of agricultural markets and on specific provisions for certain agricultural products (Single CMO Regulation) (OJ L 299, 16.11.2007, p.1).

⁽²⁾ The diaphragm and masseters are part of the skeletal muscles while the heart, tongue and muscles of the head (other than the masseters), the muscles of the carpus, the tarsus and the tail are excluded.

⁽³⁾ For labelling in English, this designation may be replaced by the generic name of the ingredient for the animal species concerned.

Mechanically separated meat (MSM) means the product obtained by removing meat from flesh-bearing bones after boning or from poultry carcasses, using mechanical means, resulting in the loss or modification of the muscle fibre structure. The designation on the label will be 'mechanically separated meat' and the name(s)⁽³⁾ of the animal species from which it comes.

Meat preparations are defined as fresh meat, including meat that has been reduced to fragments, which has had foodstuffs, seasonings or additives added to it or which has undergone processes insufficient to modify the internal muscle fibre structure of the meat and thus to eliminate the characteristics of fresh meat.

Meat products are defined as processed products resulting from the processing of meat or from the further processing of such processed products, so that the cut surface shows that the product no longer has the characteristics of fresh meat.

Minced meat is defined as boned meat that has been minced into fragments and contains less than 1% salt.

Offal is defined as fresh meat other than that of the carcass, including viscera and blood.

Poultry are farmed birds, including birds that are not considered as domestic, but which are farmed as domestic animals, with the exception of ratites (e.g. ostrich, emu).

Viscera is defined as the organs of the thoracic, abdominal and pelvic cavities, as well as the trachea and oesophagus and, in birds, the crop.

Wild game are wild ungulates and lagomorphs, as well as other land mammals that are hunted for human consumption and are considered to be wild game under the applicable law in the Member State concerned. They include mammals living in enclosed territory under conditions of freedom similar to those of wild game, as well as wild birds that are hunted for human consumption.

Small wild game are wild game birds and lagomorphs living freely in the wild.

Large wild game are wild land mammals living freely in the wild that do not fall within the definition of small wild game.

DEFINITIONS RELATING TO BEEF

(all from Regulation (EC) No. 1825/2000 unless otherwise stated)

Batch is defined as meat, on the bone or boned, for example, carcasses, quarters or boned pieces of meat, cut up, minced or packed together under practically identical conditions.

Final consumer is defined as the ultimate consumer of cut meat who does not use it as part of a food business operation or activity.

Prepared beef (Regulation (EC) No. 1760/2000 and S.I. 307/2006 as amended) is defined as beef within the meaning assigned to it by Regulation (EC) No. 1760/2000 which has been cooked or otherwise prepared for human consumption in the caterer's establishment, and beef within the meaning which has been bought in cooked.

Prepacked cut meat is defined as the individual pack offered unaltered to the final consumer or to an establishment engaged solely in retail sales, made up of cut meat and the packaging in which it was packed before being offered for sale, whether the packaging covers it fully or partially, but such that the content cannot be altered without opening or changing the packaging.

Non-prepacked cut meat is defined as cut meat displayed for sale non-prepacked in outlets for sale to the final consumer and all pieces of meat displayed for sale non-prepacked in outlets for sale to the final consumer, intended to be cut at the request of the final consumer.

Minced meat is defined as any meat that has been minced into fragments or passed through a spiral-screw mincer, and that falls within one of the CN codes referred to in Article 12 of Regulation (EC) No. 1760/2000 (i.e. CN codes 0201, 0202, 0206 10 95 and 0206 29 91) and contains less than 1% salt.

Retail is defined as the handling and/or processing of meat and its storage at the point of sale or delivery to the final consumer, including caterers, company canteens, institutional catering, restaurants and other similar food service operations, shops, supermarket distribution centres and wholesale outlets.

Trimnings are defined as small pieces of meat recognised as fit for human consumption produced exclusively during trimming operations during the boning of carcasses and/or the cutting up of meat.

DEFINITIONS RELATING TO POULTRYMEAT

(all from Regulation (EC) No. 1308/2013)

Poultrymeat is defined as poultrymeat suitable for human consumption, which has not undergone any treatment other than cold treatment. Poultrymeat and poultrymeat preparations must be marketed in one of the following conditions: (i) fresh poultrymeat, (ii) frozen poultrymeat or (iii) quick-frozen poultrymeat.

- (i) **Fresh poultrymeat** is defined as poultrymeat which has not been stiffened at any time by the cooling process prior to being kept at a temperature not below $-2\text{ }^{\circ}\text{C}$ and not higher than $+4\text{ }^{\circ}\text{C}$. However, Member States may lay down slightly different temperature requirements for the minimum length of time necessary for the cutting and handling of fresh poultrymeat performed in retail shops or in premises adjacent to sales points, where the cutting and handling are performed solely for the purpose of supplying the consumer directly on the spot.
- (ii) **Frozen poultrymeat** is defined as poultrymeat which must be frozen as soon as possible within the constraints of normal slaughtering procedures and kept at a temperature no higher than $-12\text{ }^{\circ}\text{C}$ at any time.
- (iii) **Quick-frozen poultrymeat** is defined as poultrymeat which is to be kept at a temperature no higher than $-18\text{ }^{\circ}\text{C}$ at any time within the tolerances as provided for in Council Directive 89/108/EEC of 21 December 1988 on the approximation of the laws of the Member States relating to quick-frozen foodstuffs for human consumption.

Poultrymeat preparation is defined as poultrymeat, including poultrymeat that has been reduced to fragments, which has had foodstuffs, seasonings or additives added to it, or which has undergone processes insufficient to modify the internal muscle fibre structure of the meat.

Fresh poultrymeat preparation is defined as a poultrymeat preparation for which fresh poultrymeat has been used. However, Member States may lay down slightly different temperature requirements to be applied for the minimum length of time necessary and only to the extent necessary to facilitate the cutting and handling performed in the factory during the production of fresh poultrymeat preparations.

Poultrymeat product is defined as the products resulting from the processing of poultrymeat or from the further processing of such processed products, so that the cut surface shows that the product no longer has the characteristics of fresh poultrymeat.



Food Safety Authority of Ireland
The Exchange, George's Dock, IFSC,
Dublin 1, D01 P2V6

Tel: +353 1 817 1300

Email: info@fsai.ie

Website: www.fsai.ie

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