ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD

COMMISSION REGULATION ON MICROBIOLOGICAL CRITERIA FOR FOODSTUFFS: THE LABELLING OF MINCED MEAT, MEAT PREPARATIONS AND MEAT PRODUCTS

PURPOSE OF THIS PAPER

1. New EU legislation on the microbiological criteria for foodstuffs comes into force on 1st January 2006, as part of the package of new EU hygiene regulations. Among other things, the new microbiological criteria regulation will require certain meat products, minced meat and meat preparations to be clearly labelled at the point of sale indicating the need for thorough cooking prior to consumption. The purpose of this paper is to seek ACMSF views on what the most appropriate labelling messages for the consumer in this context might be. Although the regulation would not require *specific* messages or wording to be used, the Agency would encourage the use of messages recommended by ACMSF through industry guides currently being developed on the application of the new regulations.

BACKGROUND

- 2. The new EU microbiological criteria regulation will require food business operators to ensure that foodstuffs comply with relevant microbiological criteria. At each stage of food production, processing and distribution (including retail) operators will be required to take measures, as part of their HACCP based procedures and implementation of good hygiene practice, to ensure that food safety criteria applicable throughout the shelf-life of the products can be met under reasonably foreseeable conditions of distribution, storage and use. There are also certain process hygiene criteria that apply. The Agency is currently consulting on aspects of the implementation of the Regulation, and the relevant consultation papers are available on the Food Standards Agency website¹.
- 3. The food safety criteria include requirements to test various specified products for a range of micro-organisms and to test ready-to-eat foods for *Listeria monocytogenes*, although there are flexibilities on how the testing requirements should be applied in certain circumstances. One requirement of the regulation is that batches of minced meat, meat preparations and meat products must comply with criteria for *Salmonella*. These criteria involve testing five sample units, each of which must indicate the absence of the bacterium in 10g. If the minced meat, meat preparations and meat products comply with these criteria and are intended to be eaten cooked, they must be clearly labelled at the point of retail sale to

¹ Consultation on the proposed EU Microbiological Criteria for Foodstuffs Regulation 2005 and the associated partial UK regulatory impact assessment (RIA) is available from: <u>http://www.food.gov.uk/foodindustry/Consultations/ukwideconsults/microcriteria2005.</u>

indicate the need for thorough cooking prior to consumption. This is a new labelling requirement which is not in existing EU legislation.

- 4. Minced meat, meat preparations and meat products *made from poultry meat* will be subject to stricter criteria from 1st January 2010 whereby each of the five sample units will need to indicate absence of the bacterium in 25g rather than 10g. To reflect this, the requirement to label such products indicating the need for thorough cooking will no longer be required from that date.
- 5. There is also a transitional derogation which will apply until 1st January 2010, and consideration is being given to the UK making use of this. This would allow the marketing within the UK of minced meat, meat preparations and meat products intended to be eaten cooked when no more than *one* of the five sample units tests positive for *Salmonella*. It would thus be possible for such products to be marketed lawfully even though the bacterium were known to be present. Such meat would nevertheless still have to be labelled indicating that it should be thoroughly cooked prior to consumption.
- 6. A copy of the relevant part of the microbiological criteria regulation (Article 6), together with the definitions of meat products, minced meat and meat preparations are attached at *Annex 1*. The relevant food safety criteria from the Regulation are attached at *Annex 2*.

CURRENT LEGISLATIVE REQUIREMENTS REGARDING FOOD LABELLING

7. These new labelling requirements are in addition to those in Council Directive 2003/13/EC (the Food Labelling Directive), implemented in the UK by the Food Labelling Regulations 1996, as amended in England by the Food Labelling (Amendment) (England) Regulations 2003. These Regulations require instructions for use to be given if it would be difficult to make appropriate use of the food without them. Any such instructions should be sufficiently detailed to enable appropriate preparation or use to be made of the food. These Regulations will remain in force after 1st January 2006. Any labelling messages given in relation to minced meat, meat preparations and meat products must therefore also comply with these requirements, although they are unlikely to be in conflict.

PREVIOUS ACMSF ADVICE

- 8. In its 'Report on verocytotoxin-producing *Escherichia coli*' (HMSO 1995) the ACMSF recommended that:
 - industry label raw minced beef and minced beef products with appropriate handling and cooking instructions, and
 - industry should ensure that the cooking instructions supplied with beefburgers should advise achieving an internal temperature of 70°C for two minutes (or equivalent), so that the burgers' juices run clear, and there are no pink bits inside.

The ACMSF also endorsed:

- CMO advice that burgers should be cooked until the juices run clear, and there are no pink bits inside, and
- the Government's advice to cook minced beef and minced beef products including beefburgers to a minimum internal temperature of 70°C for two minutes or equivalent.

OTHER FSA ADVICE TO CONSUMERS REGARDING THE COOKING OF MEAT

9. General advice on cooking meat to 70°C for two minutes is on the FSA website, including the FSA's *Eatwell* website, the *Clean-up* website (for caterers) and in various FSA publications. The main FSA publications offering advice on cooking meat are the leaflets *Beat the BBQ Bugs* issued in 2002 and *Guide to Food Hygiene*. Both leaflets include the advice to cook meat until it is piping hot in the middle, with no pinkness and that the juices should run clear. The FSA's standard advice to consumers who ask for information on cooking meat is attached *at Annex 3*.

SUMMARY AND ACMSF ACTION REQUIRED

- 10. The new EU microbiological criteria regulation will require producers of meat products, minced meat and meat preparations intended to be eaten cooked to label these indicating the need for thorough cooking prior to consumption. **ACMSF is asked to give a view as to what appropriate information should be included in this labelling**. In particular ACMSF is asked to consider the following questions:
 - > what wording / information should such labelling include?
 - would the wording / information be different for the products benefiting from the transitional derogation (paragraph 5) given that *Salmonella* is known to be present?
 - > are temperature / time requirements necessary and what should they be?
 - would symbols / pictures be sufficient to give the right messages? If used, should they be backed up by additional information?
- 11. There is an opportunity for ACMSF's advice to be reflected in industry guides currently being developed on the application of the new EU regulations.

Secretariat September 2005 Extract from draft Commission Regulation on Microbiological Criteria for Foodstuffs regarding the labelling requirements for minced meat, meat preparations and meat products intended to be eaten cooked

Article 6

Labelling requirements

- 1. When the requirements for *Salmonella* in minced meat, meat preparations and meat products intended to be eaten cooked of all species set down in Annex I are fulfilled, the batches of those products placed on the market must be clearly labelled by the manufacturer in order to inform the consumer of the need for thorough cooking prior to consumption.
- 2. As from 1 January 2010 labelling as referred to in paragraph 1 in respect of minced meat, meat preparations and meat products made from poultry meat will no longer be required.

Definitions of meat products, minced meat and meat preparations (from Annex I of Council Regulation 853/2004)

Meat product (Annex I, para 7.1): means 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. However, this would not include food containing both products of plant origin and processed products *(including processed meat)* of animal origin.

Minced meat (Annex I, para 1.13): means boned meat that has been minced into fragments and contains less than 1% salt.

Meat preparation (Annex I, para 1.15): means 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.

Food safety criteria

Food category	Micro- organisms/	Sampling- plan ¹		Limits ²		Analytical reference	Stage where the criterion applies
	their toxins, metabolites	n	с	m	М	method	
Minced meat and meat preparations made from poultry meat intended to be eaten cooked	Salmonella	5	0	From 1.1.2006 Absence in 10 g From 1.1.2010 Absence in 25 g		EN/ISO 6579	Products placed on the market during their shelf-life
Minced meat and meat preparations made from other species than poultry intended to be eaten cooked	Salmonella	5	0	Absence in 10 g		EN/ISO 6579	Products placed on the market during their shelf-life
Meat products made from poultry meat intended to be eaten cooked	Salmonella	5	0	Absence From 1	e in 10 g .1.2010	EN/ISO 6579	Products placed on the market during their shelf-life
	Minced meat and meat preparations made from poultry meat intended to be eaten cooked Minced meat and meat preparations made from other species than poultry intended to be eaten cooked Meat products made from poultry	organisms/ their toxins, metabolitesMinced meat and meat preparations made from poultry meat intended to be eaten cookedSalmonellaMinced meat and meat preparations made from other species than poultry intended to be eaten cookedSalmonellaMeat products made from poultrySalmonella	organisms/ their toxins, metabolitesplateMinced meat and meat preparations made from poultry meat intended to be eaten cookedSalmonella5Minced meat and meat preparations made from other species than poultry intended to be eaten cookedSalmonella5Minced meat and meat preparations made from other species than poultry intended to be eaten cookedSalmonella5Meat products made from poultrySalmonella5	organisms/ their toxins, metabolitesplan1Image: constraint of the sector of t	organisms/ their toxins, metabolitesplan1Minced meat and meat preparations made from poultry meat intended to be eaten cookedSalmonella50From 1 AbsenceMinced meat and meat preparations made from other species than poultry intended to be eaten cookedSalmonella50From 1 AbsenceMinced meat and meat preparations made from other species than poultry intended to be eaten cookedSalmonella50AbsenceMeat products made from poultry meat intended to be eaten cookedSalmonella50From 1 AbsenceMeat products made from poultry 	organisms/ their toxins, metabolitesplan1Image: strain organisms/ metabolitesncmMMinced meat and meat preparations made from poultry meat intended to be eaten cookedSalmonella50From 1.1.2006 Absence in 10 gMinced meat and meat preparations made from other species than poultry intended to be eaten cookedSalmonella50From 1.1.2010 Absence in 25 gMinced meat and meat preparations made from other species than poultry intended to be eaten cookedSalmonella50Absence in 10 gMeat products made from poultrySalmonella50From 1.1.2006 Absence in 10 g	organisms/ their toxins, metabolites $plan^{1}$ $referencemethod^3$ Minced meat and meat preparations made from poultry meat intended to be eaten cookedSalmonella50From 1.1.2006 Absence in 10 gEN/ISO 6579Minced meat and meat preparations made from other species than poultry intended to be eaten cookedSalmonella50From 1.1.2010 Absence in 25 gEN/ISO 6579Minced meat and meat preparations made from other species than poultry intended to be eaten cookedSalmonella50Absence in 10 gEN/ISO 6579Meat products made from poultry meat intended to be eaten cookedSalmonella50From 1.1.2006 Absence in 10 gEN/ISO 6579Meat products made from poultry meat intended to be eaten cookedSalmonella50From 1.1.2006 Absence in 10 gEN/ISO 6579

n = number of units comprising the sample; c = number of sample units giving values over m or between m and M.

² For points 1.1-1.24 m=M

³ The most recent edition of the standard shall be used.

⁷ This criterion applies to products before they have left the immediate control of the producing food business operator, when he is not able to demonstrate, to the satisfaction of the competent authority, that the product will not exceed the limit of 100 cfu/g throughout the shelf-life.

Interpretation of the test results

The limits given refer to each sample unit tested, excluding live bivalve molluscs and live echinoderms, tunicates and gastropods in relation to testing *E. coli*, where the limit refers to a pooled sample.

The test results demonstrate the microbiological quality of the batch tested¹.

Salmonella in different food categories:

- satisfactory, if all the values observed indicate the absence of the bacterium,
- unsatisfactory, if the presence of the bacterium is detected in any of the sample units.
- 1 The test results can be used also for demonstrating the effectiveness of the HACCP or good hygiene procedure of the process.

FSA's standard advice given to consumers who ask for information on cooking meat

Meat may become contaminated with bacteria during slaughter and processing. For meat products such as steaks, cutlets and joints, any contamination is generally on the outside of the product. Proper cooking destroys this type of contamination, with the meat cooked to preference.

However, for minced products such as hamburgers and sausages (due to the way in which they are made) and for poultry, bacteria can be found throughout the product. It is essential that these types of products are properly handled before, during and after cooking and that they are cooked thoroughly to ensure that the bacteria are destroyed.

These products should be heated to 70°C and held at that temperature for two minutes or an equivalent time/temperature combination such as 65°C for ten minutes or 75°C for thirty seconds. Always ensure that it is served piping hot in the middle with no pinkness remaining and that any juices run clear.