

COMMISSION IMPLEMENTING DECISION (EU) 2022/1205**of 12 July 2022****authorising grading methods for the classification of pig carcasses in Denmark and repealing Decision 2009/12/EC***(notified under document C(2022) 4784)***(Only the Danish text is authentic)**

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 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 ⁽¹⁾, and in particular Article 20, first paragraph, point (p), thereof,

Whereas:

- (1) Article 10 of Regulation (EU) No 1308/2013 provides that Union scales for the classification of pig carcasses are to apply in accordance with point B of Annex IV to that Regulation. Section B.IV, point 1, of Annex IV to that Regulation provides that, for the classification of pig carcasses, the lean-meat content is to be assessed by means of grading methods authorised by the Commission, that only statistically proven assessment methods based on the physical measurement of one or more anatomical parts of the pig carcass are to be authorised and that grading methods are to be authorised subject to compliance with a maximum tolerance for statistical error in assessment. That tolerance is defined in Part A, point 1, subparagraph 2, of Annex V to Commission Delegated Regulation (EU) 2017/1182 ⁽²⁾.
- (2) Commission Decision 2009/12/EC ⁽³⁾ authorises the use of seven methods for grading pig carcasses in Denmark.
- (3) Unless explicitly authorised by Commission Implementing Decision, modifications of the grading methods or apparatuses thereof should not be allowed.
- (4) Denmark has requested the Commission to withdraw the authorisation of the methods 'Klassificeringscenter (KC)', 'Uni-Fat-O-Meater (Unifom)', 'Fully automatic ultrasonic equipment (AutoFOM 1)' and 'Updated fully automatic ultrasonic equipment (AutoFOM DK)'.
Denmark has also requested the Commission to authorise two new methods: 'Fully automatic ultrasonic equipment (AutoFOM IV)' and 'Manual method (ZP)'. For that purpose, Denmark has presented a detailed description of the dissection trial, indicating the principles on which these new methods are based, the results of its dissection trial and the equations used for assessing the percentage of lean meat in the protocol provided for in Article 11(3) of Delegated Regulation (EU) 2017/1182.
- (6) Denmark has also requested the Commission to authorise updated formulas for three methods ('Fat-O-Meater/Manuel Klassificering (FOM/MK)', 'Fat-O-Meater II (FOM II)' and 'Automatic ultrasound instrument (AutoFOM III)' already authorised by Decision 2009/12/EC for grading pig carcasses on its territory.

⁽¹⁾ OJ L 347, 20.12.2013, p. 671.

⁽²⁾ Commission Delegated Regulation (EU) 2017/1182 of 20 April 2017 supplementing Regulation (EU) No 1308/2013 of the European Parliament and of the Council as regards the Union scales for the classification of beef, pig and sheep carcasses and as regards the reporting of market prices of certain categories of carcasses and live animals (OJ L 171, 4.7.2017, p. 74).

⁽³⁾ Commission Decision 2009/12/EC of 19 December 2008 authorising methods for grading pig carcasses in Denmark (OJ L 6, 10.1.2009, p. 83).

- (7) Examination of that request has revealed that the conditions and minimum requirements for authorising the two new grading methods and updating equations for the other three as laid down in Part A of Annex V to Delegated Regulation (EU) 2017/1182 are fulfilled. These grading methods and formulas should therefore be authorised in Denmark.
- (8) For reasons of clarity and legal certainty Decision 2009/12/EC should therefore be repealed.
- (9) The measures provided for in this Decision are in accordance with the opinion of the Committee for the Common Organisation of the Agricultural Markets,

HAS ADOPTED THIS DECISION:

Article 1

The use of the following grading methods is authorised for the classification of pig carcasses pursuant to Section B.IV, point 1, of Annex IV to Regulation (EU) No 1308/2013 in Denmark:

- (a) the 'Automatic ultrasound instrument (AutoFOM III)' apparatus and the assessment methods related thereto, details of which are set out in Part I of the Annex to this Decision;
- (b) the 'Fully automatic ultrasonic equipment (AutoFOM IV)' apparatus and the assessment methods related thereto, details of which are set out in Part II of the Annex to this Decision;
- (c) the 'Fat-O-Meater/Manuel Klassificering (FOM/MK)' apparatus and the assessment methods related thereto, details of which are set out in Part III of the Annex to this Decision;
- (d) the 'Fat-O-Meater II (FOM II)' apparatus and the assessment methods related thereto, details of which are set out in Part IV of the Annex to this Decision;
- (e) the 'Manual method (ZP)' with a ruler and the assessment methods related thereto, details of which are set out in Part V of the Annex to this Decision.

Article 2

Modifications of the authorised grading methods or apparatuses thereof referred to in Article 1 shall not be allowed unless explicitly authorised by Commission Implementing Decision.

Article 3

Decision 2009/12/EC is repealed.

Article 4

This Decision is addressed to the Kingdom of Denmark.

Done at Brussels, 12 July 2022.

For the Commission
Janusz WOJCIECHOWSKI
Member of the Commission

ANNEX

GRADING METHODS FOR THE CLASSIFICATION OF PIG CARCASSES IN DENMARK

PART I

Automatic ultrasound instrument (AutoFOM III)

1. The rules provided for in this part shall apply when the classification of pig carcasses is carried out by means of the apparatus 'Automatic ultrasound instrument (AutoFOM III)'.
2. The apparatus shall be equipped with sixteen 2 MHz ultrasonic transducers (Frontmatec), with an operating distance between transducers of 25 mm. The ultrasonic data shall comprise measurements of back fat thickness, muscle thickness and related parameters. The results of the measurements are converted into estimates of the percentage of lean meat by the apparatus.
3. The lean meat content of a carcass shall be calculated according to the following formulas:

(a) for female and castrated pigs:

$$Y = 72,37797649 + (R2P1 \times -0,35013939) + (R2P4 \times 0,20785366) + (R2P5 \times -0,44928653) + (R2P8 \times -0,38095230) + (R2P9 \times -0,46950184) + (R2P10 \times -0,69871531) + (R2P15 \times -0,14912761) + (R4P3 \times 0,06461598) + (R4P6 \times -0,05431414);$$

(b) for entire male pigs:

$$Y = 78,75696993 + (R2P1 \times -0,79436326) + (R2P4 \times -0,38023008) + (R2P5 \times -0,78847225) + (R2P8 \times -0,30711330) + (R2P9 \times -0,83062854) + (R2P10 \times -0,49646032) + (R2P15 \times 0,17342717) + (R4P3 \times -0,08364211) + (R4P6 \times -0,10359715)$$

where:

- Y = the estimated percentage of lean meat in a carcass;
- R2P1 = average skin thickness (in mm);
- R2P4 = back fat thickness without skin (in mm) measured at the longitudinal Minimum Fat Thickness position in the loin closest to the bottom of the array ('MFT2'), 70 mm from the spine center;
- R2P5 = skin thickness (in mm) measured at the longitudinal MFT2, 70 mm from the spine center;
- R2P8 = back fat thickness without skin (in mm) measured in the MFT2;
- R2P9 = skin thickness (in mm) measured in the MFT2;
- R2P10 = minimum fat thickness without skin (in mm) in the Minimum Fat Thickness position in the entire carcass ('MFT1');
- R2P15 = average fat thickness with skin (in mm) of the two loin muscles measured at the longitudinal MFT1 70 mm from the spine center;
- R4P3 = fat layer 1 thickness (in mm) measured at the longitudinal MFT2, 70 mm from the spine center;
- R4P6 = fat layer 1 thickness (in mm) in the MFT2.

4. This formula shall be valid for carcasses weighing between 50 and 120 kilograms.

PART II

Fully automatic ultrasonic equipment (AutoFOM IV)

1. The rules provided for in this part shall apply when the classification of pig carcasses is carried out by means of the apparatus 'Fully automatic ultrasonic equipment (AutoFOM IV)'.

2. The apparatus shall be equipped with 25 wide band ultrasonic transducers (Frontmatec), with an operating distance between transducers of 16,5 mm. The ultrasonic data shall comprise measurements of back fat thickness, muscle thickness and related parameters. The results of the measurements are converted into estimates of the percentage of lean meat by the apparatus.
3. The lean meat content of a carcass shall be calculated according to the following formulas:

(a) for female and castrated pigs:

$$Y = 69,84677591 + (R2P1 \times -0,26533522) + (R2P4 \times 0,02198992) + (R2P5 \times -0,21983787) + (R2P8 \times -0,33652390) + (R2P9 \times -0,24649355) + (R2P10 \times -0,58982872) + (R2P15 \times -0,05016562) + (R4P3 \times 0,10929868) + (R4P6 \times -0,03863696);$$

(b) for entire male pigs:

$$Y = 74,44553377 + (R2P1 \times -0,38670790) + (R2P4 \times -0,30489132) + (R2P5 \times -0,59474907) + (R2P8 \times -0,08150558) + (R2P9 \times -0,60928997) + (R2P10 \times -0,33877660) + (R2P15 \times -0,44580592) + (R4P3 \times 0,18532086) + (R4P6 \times 0,12614701)$$

where:

- Y = the estimated percentage of lean meat in a carcass;
- R2P1 = average skin thickness (in mm);
- R2P4 = back fat thickness without skin (in mm) measured at the longitudinal MFT2, 70 mm from the spine center;
- R2P5 = skin thickness (in mm) measured at the longitudinal MFT2, 70 mm from the spine center;
- R2P8 = back fat thickness without skin (in mm) measured in the MFT2;
- R2P9 = skin thickness (in mm) measured in the MFT2;
- R2P10 = minimum fat thickness without skin (in mm) in the MFT1;
- R2P15 = average fat thickness with skin (in mm) of the two loin muscles measured at the longitudinal MFT1 70 mm from the spine center;
- R4P3 = fat layer 1 thickness (in mm) measured at the longitudinal MFT2, 70 mm from the spine center;
- R4P6 = fat layer 1 thickness (in mm) in the MFT2.

4. This formula shall be valid for carcasses weighing between 50 and 120 kilograms.

PART III

Fat-O-Meater/Manuel Klassificering (FOM/MK)

1. The rules provided for in this Part shall apply when the classification of pig carcasses is carried out by means of the apparatus 'Fat-O-Meater/Manuel Klassificering (FOM/MK)'.
2. The apparatus is a manual probe type of equipment and it shall be equipped with a probe of six mm diameter containing a photodetector and having an operation distance of between 1 and 94 mm.
3. The lean meat content of carcasses shall be calculated according to the following formula:

$$Y = 69,3882 + (S_1 \times -0,5673) + (S_2 \times -0,3282) + (S_3 \times 0,0397)$$

where:

- Y = the estimated percentage of lean meat in the carcass;
- S₁ = the thickness of backfat (including rind) in mm, measured at 8 cm off the midline of the carcass between the third and fourth last lumbar vertebrae;

- S_2 = the thickness of backfat (including rind) in mm, measured at 6 cm off the midline of the carcass between the third and fourth last ribs;
- S_3 = the thickness of muscle in mm, measured at the same time and in the same place as S_2 .

4. This formula shall be valid for carcasses weighing between 50 and 120 kg.

PART IV

Fat-O-Meater II (FOM II)

1. The rules provided for in this Part shall apply when the classification of pig carcasses is carried out by means of the apparatus 'Fat-o-Meater II (FOM II)'.
2. The apparatus is a Fat-O-Meater type of equipment and it shall be equipped with a probe of six mm diameter containing a photodetector (Siemens of the type SFH 960 – BP 103 or similar) and having an operating depth up to 125 mm. All legally relevant acquisition and analysis are contained within the FOM II pistol.
3. The lean meat content of carcasses shall be calculated according to the following formula:

$$Y = 69,2265 + (S_1 \times -0,5564) + (S_2 \times -0,3550) + (S_3 \times 0,0408)$$

where:

- Y = the estimated percentage of lean meat in the carcass;
- S_1 = the thickness of backfat (including rind) in mm, measured at 8 cm off the midline of the carcass between the third and fourth last lumbar vertebrae;
- S_2 = the thickness of backfat (including rind) in mm, measured perpendicularly to the back of the carcass at 6 cm of the split line, between the third and fourth last ribs;
- S_3 = the thickness of the longissimus dorsi muscle in mm, measured at the same time and in the same place as S_2 .

4. This formula shall be valid for carcasses weighing between 50 and 120 kg.

PART V

Manual method (ZP)

1. The rules provided for in this Part shall apply when the classification of pig carcasses is carried out by use of the 'Manual method (ZP)' measuring by ruler.
2. This method may be implemented using a ruler, with the grading determined on the basis of the prediction equation. It is based on the manual measurement on the midline of the split carcass of the thickness of the fat and of the thickness of the muscle.
3. The lean meat content of carcasses shall be calculated according to the following formula:

$$Y = 60,3129 + (G \times -0,4788) + (M \times 0,0671)$$

where:

- Y = the estimated percentage of lean meat in the carcass;
- G = fat thickness defined as the short measurement of fat plus skin thicknesses over the muscle gluteus medius;
- M = muscle depth defined as the minimum distance from the vertebral channel to the cranial end of the muscle gluteus medius.

4. This formula shall be valid for carcasses weighing between 50 and 120 kg.
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