Pork Eating Quality

Assessment Material

AUSTRALIAN Pork

MINTRAC

WELCOME

This assessment has been created to make sure students are competent in reading pH and understand the reasons it is important to eating quality. The assessment materials should be completed alongside or after reading the training manual. Please submit the completed assessment to mintrac@mintrac.com.au to receive your certificate or please visit the MINTRAC website to complete this assessment online where you will automatically receive your certificate.

The manual gives readers an overview of what pH is and the significance of it in determining the final eating quality of pork. You will learn what quality indicators are used to measure meat quality and the factors that can impact it.

Question 1

The ultimate pH is achieved when?

- ☐ A. The temperature has stabilised
- ☐ B. The animal is dead
- ☐ C. 48 hours after slaughter
- ☐ D. The pH has stopped falling

Question 2

What is the ideal ultimate pH for pork?

- ☐ A. The ultimate pH should be over pH 6.00 when the carcase is between 12 and 35°C
- ☐ B. The ultimate pH should be 5.60 – 5.80
- ☐ C. The ultimate pH should be under 5.40
- ☐ D. None of the above

Question 3

DFD occurs when:

- ☐ A. The pH decline is slow and the temperature decline is relatively fast
- ☐ B. The pH decline is very rapid and the temperature decline is relatively slow
- ☐ C. The pH decline is very rapid and the temperature decline is relatively fast
- ☐ D. The pH decline is very slow and the temperature decline is relatively slow

Question 4

Pale and/or Soft Exudative pork occurs when:

- ☐ A. Temperatures falls rapidly 12°C, the pH is above 6.00 and there is still energy in the muscle
- ☐ B. Temperature is above 35°C and the pH is above 6.00
- ☐ C. Temperature is below 12°C and the pH is above 6.00
- ☐ D. pH falls rapidly while the carcase temperatures is over 30°C

Question 5

If pH remains high while the temperature remains high then there will be:

- ☐ A. Increase in toughness
- ☐ B. Decreased toughness
- ☐ C. Improved eating quality
- ☐ D. No change to meat quality

Question 6

What can influence pH declines?

- ☐ A. Glycogen levels in the live animal
- ☐ B. Stress levels in the pigs
- ☐ C. Temperature of the processing chain
- ☐ D. All of the above

Question 7

What is the optimal range of pH for meat with good eating quality?

- ☐ A. 5.60 - 5.80
- ☐ B. 5.20 - 5.60
- ☐ C. 4.50 - 6.90
- ☐ D. 5.90 - 6.40

Question 8

Research has found pH is influenced by:

- ☐ A. Temperature
- ☐ B. Supply Chain
- ☐ C. Genetics
- ☐ D. Pres-slaughter stress
- ☐ E. All of the Above

Question 9

pH is a measure of alkalinity and acidity of a substance.

- ☐ A. True
- ☐ B. False

Question 10

What is a satisfactory pH range in pork meat?

- ☐ A. pH 5.50 - 5.90
- ☐ B. pH 4.50 - 5.10
- ☐ C. pH 5.90 - 6.80

Question 11

What data needs to be collected for pH/temperature declines?

- ☐ A. Initial pH on entry to the chiller at approximately 45 minutes
- ☐ B. pH and temperature at 12-24 hours
- ☐ C. pH and temperatures at least at two mid points
- ☐ D. All of the above

Question 12

Before starting a pH decline measurement what should be done to the pH meter and equipment?

- ☐ A. pH and temperature calibration
- ☐ B. Sharpen knives
- ☐ C. Check pigs in lairage
- ☐ D. Check the chillers

Question 13

What does calibration of a pH sensor involve?

- ☐ A. Use of a pressure gauge
- ☐ B. Boiling water
- ☐ C. Buffer solution
- ☐ D. Barometer

Question 14

What is the typical site for pH measurement on a pig carcase?

- ☐ A. In the loin between the 5th and 7th rib
- ☐ B. In the loin between the 5th and 4th rib
- ☐ C. In the loin between the 10th and 11th rib
- ☐ D. In the loin between the 6th and 5th rib

Question 15

The pH probe should be inserted into the tenderloin:

- ☐ A. True
- ☐ B. False

Question 16

The initial pH is likely to be tested 5 hours after slaughter?

- ☐ A. True
- ☐ B. False

Question 17

The pH reading 12 – 24 hours after slaughter is likely to be?

- ☐ A. 5.00 - 5.20
- ☐ B. 5.20 - 6.00
- ☐ C. 5.00 - 5.40
- ☐ D. 5.5 - 5.90

Please submit answers to mintrac@mintrac.com.au to receive the correct answers.

BLANK PAGE


AUSTRALIAN
Pork


MINTRAC