



TARGET PORK QUALITY

Opportunities for improving the quality of pork



On-farm

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1. Select genotypes to deliver market requirements. Restricting the number of genotypes improves consistency. Select for meat quality traits as tools become available.
2. Ad-lib feeding from 30 kg to slaughter.
3. Following diet specification:
 - a. Fishmeal should be excluded from finishing rations
 - b. Fatty acids - max 1.6% by weight of linoleic acid (C18:2) in finishing ration
 - c. Max 2.0% by weight of polyunsaturated fatty acids in finishing ration
 - d. Vitamin E - min 100 iu/kg
 - e. Include specific components to reduce the risk of boar taint (skatole) where appropriate
4. Incorporate additional n-3 fatty acids within the above constraints for a healthier human diet where appropriate.
5. Maintain pig cleanliness to reduce risk of boar taint through building layout and ventilation.
6. Minimise age at slaughter (at the target carcass weight) through optimising growth rate.



Transport to abattoir

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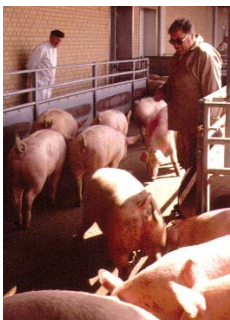
1. Aim for an 8-12 hour interval between last feed and slaughter (avoid exceeding 18 hours).
2. Ensure haulier knows precise number to be transported before the vehicle is dispatched to the farm.
3. Avoid ramps at loading.
4. Aim to maintain pigs in stable social groups.
5. Minimise transit time to the abattoir.
6. Avoid use of goads.
7. Consider use of toys during transport.



Abattoir lairage

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1. Avoid ramps at unloading.
2. Unload pigs promptly.
3. Aim to maintain pigs in their social groups in lairage and up to stunning.
4. Use water sprinklers in lairage in hot weather.
5. Provide race to stunner which encourages pigs to move forward without goading.
6. Consider use of toys during lairage.



Slaughterline

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1. For loin quality apply one of the following combinations:
 - a. Apply an effective high voltage electrical stimulation (HVES) system at 20 minutes after stunning, if carcasses can be chilled rapidly, with a minimum 4 days maturation.
 - b. Extend maturation time (see below).
2. For leg quality aitch bone hang sides within an hour of stunning. Hold in this way for at least 12 hours and mature the meat for 4 days¹.

¹ Note that it has been shown that hip suspension is effective in improving leg quality following the use of HVES as well as in unstimulated carcasses.

continued



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Opportunities for improving the quality of pork

Chillroom

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1. Prevent any muscle temperature falling below 10°C for the first 3 hours after stunning unless HVES has been applied.
2. Overloading chillers should be avoided.
3. Maintain storage temperature through the chain from carcasses to prepared cuts at 0°C to +4°C (but ensure temperature is kept below 3°C for maturation in vacuum packs).

Carcase / cut selection

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1. Exclude carcasses/cuts with bruises, blemishes and extraneous matter (eg bone dust/visceral contents).
2. Ensure a minimum P2 fat depth of 8mm. There is no upper limit but it is expected that any excess fat will be trimmed before retail sale.
3. Ensure good visual appeal, eg avoid meat which is PSE, DFD or has blood splash.



This leaflet provides a summary of BPEX recommendations for improving the quality of pork. It is based on the earlier MLC Blueprint recommendations (launched in 1992 and revised in 1996) and updated based on the results of the latest research and development work and the published scientific literature.



Maturation time

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For optimum tenderness aim for the following intervals from slaughter to retail.

| | |
|-----------------------------------|---------|
| Legs | 4 days |
| Loins bone-in | 7 days |
| Loins bone-out | 12 days |
| Loins from HVES treated carcasses | 4 days |

Cooking time

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Aim for 70-80°C in the centre of grilled and roasted cuts. Higher temperatures in this range gives more flavoursome pork, but tends to make it drier and less tender.



Benefits of using these guidelines

- Improved tenderness
- Less drip
- Better colour
- Greater juiciness
- Better flavour
- Opportunities for improving nutritional quality