

What does CT scanning cost?

In 2009 SAC offers CT scanning services at two locations:

- Edinburgh (permanent site) = £50 / lamb
- Sutton Bonnington, Nottingham (mobile site) = £75 / lamb

Levy body subsidy is available worth:

- EBLEX & HCC = £50 / lamb
- QMS = £25 / lamb

Subsidy is subject to the following conditions:

- Lambs are male and have been subject to on-farm ultrasonic scanning at an acceptable age
- At least five ram lambs must be sent per participating farm
- Lambs must have been reared under similar conditions
- Lambs must have an individual identification that can be readily linked to information on the Signet database and be analysed by Signet

What do I do next?

- Lambs can be booked in for scanning by phoning the CT Unit • tel: 0131 535 3250 or email: ctunit@sac.ac.uk
- Let your ultrasound scanning technician know that you wish to CT scan, so that an appropriate date can be set for ultrasound scanning
- Talk to your Breed Society or Sire Reference Scheme to see if it is possible to share transport with other breeders when taking lambs to Edinburgh

More information

- SAC CT Unit • tel: 0131 535 3250 or email: ctunit@sac.ac.uk
- Signet • tel: 01908 844 195 or email: signet@ahdb.org.uk

Computed Tomography



Pedigree Pointers

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Signet



What is Computed Tomography (CT)?

Computed Tomography (CT) provides a welfare friendly way of assessing the total muscle, fat and bone yield in a live sheep using whole body X-ray image analysis. This near perfect predictor of carcass composition can also be used to measure the muscling in different parts of the carcass, such as the gigot.



CT scanning is a great tool to identify superior genetics within terminal sire flocks and can assist in the marketing of recorded rams.

The economics of using CT

It will never be economically or logistically possible to scan all potential breeding animals. In the UK a two-tier approach is used to identify candidates for CT scanning.

All lambs are assessed using ultrasound scanning to measure muscle depth across the loin and backfat. The best of these lambs can then be sent to the CT scanner. To obtain meaningful comparisons at least five ram lambs should be sent per flock.

Subsidy is available from each of the devolved bodies, EBLEX, HCC and QMS to support the use of CT scanning and enhance its availability to pedigree breeders.

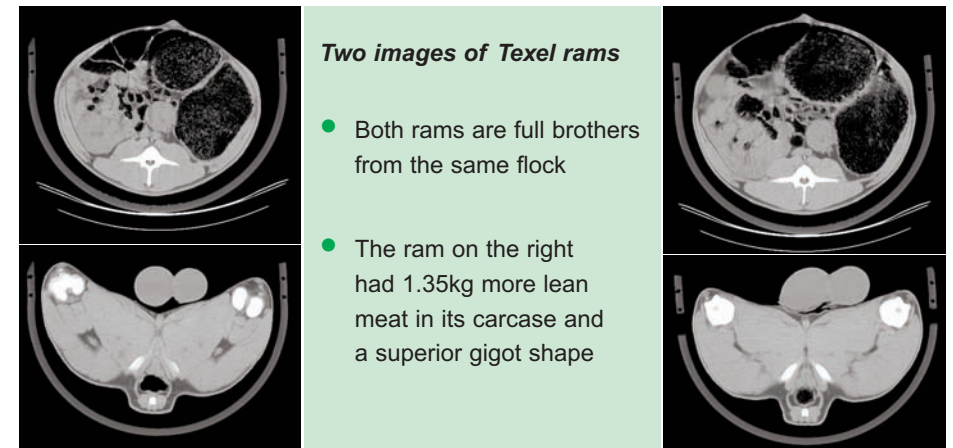
What does CT scanning tell you?

Raw CT measurements will show the:

- Weight for fat, muscle and bone in the carcass
- Percentage of fat, muscle and bone in the carcass
- Killing out percentage (total tissue weight / liveweight)
- Ratio of muscle to bone and muscle to fat in the carcass
- Distribution of muscle in the carcass – including the percentage of muscle in the leg, loin or chest
- Gigot shape and eye muscle area

The accuracy of Estimated Breeding Values for growth and carcass traits will be greatly enhanced through the incorporation of CT data into the evaluation of your flock.

Indexes and EBVs will be increased if CT measures prove an individual or family to be genetically superior.



Two images of Texel rams

- Both rams are full brothers from the same flock
- The ram on the right had 1.35kg more lean meat in its carcass and a superior gigot shape