Niche market opportunities from Veal Production

Modern veal production

Legislation banned the use of veal crates in the UK in 1990, and Europe-wide in 2006. Modern veal is pink in colour, due to the inclusion of adequate iron and roughage in the diet. A combination of regulations and voluntary schemes ensure high standards of animal welfare, leading to a high welfare premium product. In the UK, the product is usually marketed as "Rosé Veal" to reflect this.

It is imperative for producers to first identify a secure market for their veal, and to ensure they fully understand the requirements of their customer(s) for production standards and carcass quality.

Although the market for veal in the UK is small, both home produced and imported product is available. Outlets include some major retailers, the food service sector, as well as smaller shops and direct sales. Veal is also exported to the Continent, where the market for veal is much larger.

Producing veal under contract is a good option as it provides security of end market provided the contract specifications are met. Alternatively some producers identify their own customer, such as a specialist wholesaler for instance, or market direct to consumers via a website or through farm shops and farmers markets. These latter options require considerable additional effort away from the core activity of rearing animals, but can be successful if appropriate resources and skills are available. Consider the need to find a sustainable market for the whole carcase, not just the premium cuts.

Veal production systems

Source healthy calves

Calf selection is important: not all calves are suitable to rear.

- Pure dairy-bred male calves (Holstein and Holstein-Friesian types) are the most commonly used for veal production
- Select calves from a known source, ideally direct from the dairy farm. It is vital they have received sufficient colostrum early in life. This can be ascertained by a blood test to determine the level of colostral antibodies
- They should be alert, healthy and presented in a clean condition. Calves should weigh at least 50kg at 2 weeks of age
- Work with your vet to develop a suitable vaccination and disease control programme.

Calf rearing

Calves should be reared in group conditions. They need to have access to sufficient fibre in their diet. Castration is not necessary, and disbudding if required should be carried out early on to prevent stress later, which could affect growth. Ensure the building has good ventilation and air flow. It should allow safe and efficient handling and management of calves.

Current welfare standards allow for a range of production systems. A key consideration is the target age and weight at slaughter: this will inevitably determine the feeding system required to achieve this performance. Current UK practice broadly falls into 2 categories:

- A 6-7 month system, producing smaller carcases of up to 150kg from up to 300kg liveweight animal
- A 10 month system, producing carcases of 200kg from a 400kg liveweight animal.

It is important to agree with the customer the type of end product and production system required.

There are several milk feeding systems to consider. These include once or twice a day or ad lib feeding systems, teat or bucket feeding and automatic milk feeders. Each has its pros and cons in terms of labour and investment requirements. In addition, the type of milk replacer needs consideration. Skim-based powders tend to be more costly and have high inclusions of skimmed milk powder, giving higher milk protein levels. Whey based milk powders, have higher milk sugar levels. Milk powders containing a combination of these ingredients are also available.

Most calf milk replacers are formulated to suit a particular feeding regime, so it is important to match the powder used to the feeding system employed. Remember in veal production, maximising growth rates is key to finishing the animals as efficiently as possible.

See [www.holsteinbullcalves.co.uk](http://www.holsteinbullcalves.co.uk) for advice on calf selection, rearing systems and weaning as well as other useful pointers.

Finishing systems

6-7 month system

In faster finishing systems, calves tend to be offered milk replacer for the duration of their lives. This is supplemented with concentrates or rolled cereal as they grow, rising to about 2kg/day at 6-7 months of age. Ad-lib straw is supplied throughout to ensure the calves have constant access to sufficient fibre. The key to this system is a high energy (ME) content of the diet, principally provided through the milk
(ME of 15 MJ/kg) as opposed to the cereal (ME of 13 MJ/kg), to ensure fast liveweight gains, averaging 1.2 - 1.4 kg/day over the duration of the system. A calf is expected to consume around 375 kg of milk replacer and 150 - 175 kg of rolled cereal in its lifetime.

10 month system
In the 10 month system, calves are initially reared on milk replacer, supplemented with a concentrate blend (often in the form of calf starter pellets or coarse mix) and ad-lib straw. Various weaning regimes can be used. Often calves are weaned at 5 - 6 weeks old and around 80 kg. Alternatively weaning can be delayed until calves are up to 12 weeks old and 110 - 115 kg, to maintain high growth rates achieved from milk replacer. Successful weaning, as in any other system, depends on the calf readily consuming sufficient concentrate prior to making the transition off milk and onto the finishing ration. At weaning, calves should be consuming at least 1 kg of concentrate per day.

Finishing diets can take a variety of forms, such as maize silage with a cereal and protein blend. The diet should be high in starch to promote muscle growth, as opposed to frame. Grass based feeds should be avoided. Co-products from the food processing industry may also be included, provided starch levels are maintained. Straw should continue to be offered to ensure effective rumination. All diets should also be balanced for minerals. Following weaning, calf growth should accelerate as quickly as possible to average 1.3 - 1.5 kg/day over the finishing period and reach a target slaughter weight of 400 kg. Each calf can be expected to consume 1.6 tonnes of concentrate during this period. Target conformation class is O with a fat class of 2.

Targets
- Select a healthy, well managed calf of around 50 kg at 2 weeks of age
- Killing out percentage of 50% minimum
- Liveweight of 400 kg over 10 months, or 270 - 300 kg over 6 - 7 months.

Key points summary
- High energy ration encourages rapid growth and muscle production
- Profit margins are very sensitive to feed prices so it is important to calculate a cost of production before commencing
- Ensure your enterprise is approved with the RPA to be labelled as "Rosé veal" if slaughtering after 8 months of age. Meat from cattle over 12 months old cannot be classified as veal.

Labelling veal products
Note that under an amendment to the Beef Labelling Guide rules, meat may only be labelled "Rosé veal" if approved by the RPA and independently verified. The rules for labelling meat from cattle slaughtered under 12 months of age are as follows:
- Meat from cattle aged under 8 months must be labelled "Veal" and state "Age on slaughter: up to 8 months"
- Meat from cattle aged over 8 months must be labelled as "Beef" and state "Age on slaughter: 8 - 12 months"
- The term "Rosé veal" may also be applied to meat from animals over 12 months old, if it is produced under an approved system:
  - Fed an ad-lib, varied diet which must include straw and an ad-lib concentrate or meal after the age of 8 weeks
  - Reared in a welfare-friendly environment (loose housed in open yards)
- However, if the animal is aged over 8 months, the compulsory term "Beef" must also be used.