Muslims are supposed to make every effort to obtain wholesome halal foods. For non-Muslim consumers, halal foods often are perceived as carefully selected and processed to achieve the highest standards of quality. Halal foods must be free from any component that Muslims are prohibited from consuming (Wilson and Liu, 2010). Thus, there is a huge potential globally for halal meat because of the large growth in the Muslim population and the number of people of other religions that appreciate the benefits of halal meat. There is a lot of halal meat available in North America and Europe, although such meat most often does not include a concern for what the animals were fed, which is of concern to Muslims (Nakyinsige et al., 2012). Most animal feed contains animal by-products. These animal by-products should be of concern for those providing halal meat, and halal eggs and milk. Many Muslim consumers believe that the meat of animals that are fed feed with animal by-products and blood meal are haram. Satisfying the demand for halal feeds for food animals presents both a challenge and an opportunity for entrepreneurs in the animal feed industry.

An ideal halal feed will contain products from plants and microbial processes only. However, for economic reasons, animals are being fed with all kinds of animal-based ingredients that would not be fit for human consumption. For Muslims, this abhorrence is heightened if these animal by-products come from a pig. As a Muslim, one should therefore be concerned about what is being fed to food animals. Most consumers are not aware that simply doing the proper slaughter of animals according to Islamic law is not enough. The feed must also be halal, at least for some period of time prior to slaughter (Omar and Jaffar, 2011).

Some of the Gulf countries have already started to ask that some of their suppliers use only plant-based feeds for chickens. There have been several cases where imported livestock were rejected because cattle were fed pig-based feeds. From a marketing point of view, it will be beneficial for those involved in the meat trade to start to migrate to using halal feeds to gain a larger market share. Exporters of halal meat to Muslim countries should be ready to have their feed programs comply with halal principles as these countries require that the feed fed to the animals should be halal certified. In 2009, the Pakistan Supreme Court issued orders to destroy imported poultry feed that was contaminated with pig products and directed that action be taken against those responsible for importing the feed. In Malaysia, a committee has been formed to ensure that the chicken feed used by commercial farms in the country is free from any pig enzymes or other by-products from pig. Recently, Muslims living in Belgium and other parts of Europe were concerned about consuming fish
that had been fed pork fat and protein. The European Union (EU) approved legislation allowing EU fish farmers to use fats and proteins from animals including pigs starting in June 2013. The decision has triggered alarm among Muslim communities living in Europe and prompted Islamic organizations in Brussels, the Belgian capital, to ask religious institutions to issue an official verdict.

Also of particular abhorrence to Muslims is the use of blood meal. The first step would be to eliminate the use of swine blood, but the use of other blood meals is also of serious concern. Currently animal proteins are often a major part of the diet of food animals, but now with the greater availability of vegetable feeds, those wishing to serve the growing Muslim market can migrate to slaughtered animal free diets. (Milk and egg by-products are not a concern.)

The processing of ruminant (which are all halal acceptable animals) by-products and extracts in animal feed has become more restricted in many countries due to mad cow disease, properly known as bovine spongiform encephalopathy (BSE) in the 1990s. But these may still be used in some cases for poultry and seafood feeding.

The following discussion of feed mill inspections is meant to point out deficiencies in the implementation of the new regulations, which can impact the halal status of farmed animals. To help prevent the establishment and amplification of BSE through feed in the U.S., the Food and Drug Administration (FDA) implemented a final rule that prohibits the use of most mammalian protein in feeds for ruminant animals. This rule, Title 21 Part 589.2000 of the Code of Federal Regulations, became effective on August 4, 1997. What does the above ruling mean by “most mammalian protein”? It seems that a certain amount of pork by-products and other non-ruminant mammalian by-products might still be used to formulate ruminant feeds. About a year after the initial compliance deadline, the FDA did a thorough inspection of the industry. The results are given in Table 21.1 (FDA, 2003).

Various segments of the feed industry had different levels of compliance with the feed ban regulation. About 27% of the firms handling feeds for ruminants were inspected. Of these, 2653 out of 9867 were handling materials prohibited for use in ruminant feed (FDA, 2003). Of those handling prohibited materials, 653 (25%)...

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<td>Other firms</td>
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<td>4094</td>
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a Out of compliance
had a problem, which indicated that they might not be properly segregating materials or not labeling properly. Thus, the possible inclusion of materials of concern to Muslims might still be occurring in ruminants. Obviously, over time, the use of illegal material should become less of an issue for ruminants, but this does not cover the allowed mammalian products or other animal products, particularly poultry.

It seems that some cattle farmers and almost all poultry farmers still have the opportunity to feed the animals “protein supplements” made from rendered animal parts, including swine. Although data about the exact use of by-products is not available, it is probably safe to assume that the amount of by-products being fed to ruminants has decreased as a result of the FDA ban. Hence, it is likely that slaughterhouse by-products from cattle and pigs are more available, which may be exported to other countries, including those with a significant Muslim population. So the problem of by-products in feeds is a universal one, not just a U.S. issue.

Current halal standards in the U.S. and other countries require that the animal be slaughtered according to Islamic guidelines but they are not generally concerned with on-farm conditions (Hussain, 2002). It is important to note that Islamic scholars differ about what is “unclean” animal feed. Some scholars feel that haram animal parts fed to halal animals make them unclean and unfit for slaughter, whereas other scholars believe that an animal has to live in filth and eat filth regularly to meet the condition of unclean. The Arabic word used for this concept is jalalah (Malaysian Standard, 1500 2009). Jalalah refers to the situation where animals are living in and around heaps of filth and manure, and eating major portions of its feed out of such heaps for a good part of its life. The Prophet Muhammad (PBUH) forbade the consumption of meat and milk of such animals (Khan, 1991). It is important to keep in mind that all animals eat some dirt and filth, especially when they graze outdoors. Rendered feed containing animal organs after a high heat treatment does not seem to fit this description of filth. It would seem something of an exaggeration to apply the rule of jalalah to properly rendered animal feed in the U.S. and other countries.

Many Muslims however, feel very strongly that the feed for halal animals, whether raised for meat, milk, or eggs, must primarily be of plant origin, which the animals have been used to eating for centuries. In most cases, the majority of the feed is still plant-based. Other Muslim consumers object only to pork by-products but not to formulated feeds containing animal products. A few years back, Saudi Arabia banned products from Europe on the suspicion that the animals were given feed containing prohibited animal parts (Al-Zobaidy, 2002).

It seems that the FDA ruling that makes it unlawful to include some mammalian by-products in feeds for ruminants simply does not address the concerns of Muslim consumers. If the Muslim community is concerned about the feed of food animals, it will have to work with the halal certifiers to obtain animals that meet this standard. However, halal consumers should expect that such a standard will increase the cost of halal meat, milk, and eggs. It may also mean that milk and especially eggs, which are not currently under halal supervision, will require such supervision, which means such milk and eggs will not always be available everywhere.
REFERENCES


