

# Global carcass balancing

## Horsemeat and the agro-food network

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**T**he discovery by European forensic science laboratories of horse DNA in food labelled as beef meat products has brought renewed public scrutiny and interest to meat supply network activities and associated politics and policies. These have included concerns about food safety, horror from national and religious communities who have been sold food that contained meat from animals that are culturally unacceptable for them to eat, and questions about the nutritional quality of low-value processed meat products. It is within cheaper-end processed meat products, including frozen beefburgers, meatballs and frozen beef lasagnes, that traces of meat other than beef (including the headline-grabbing horsemeat) have been found. In the first instance the revelations led to claims of a mislabelling scandal. However, as investigations have deepened there have been more serious allegations about the existence of fraudulent practices in a complex international production, supply and distribution network of processed meat products. The horsemeat story brings to light some of the challenges of commercializing animal bodies for edible meat products within a globalized agro-food network.

We are living in an era where there are a number of questions and concerns around food both within and between local, national and global communities. First, the question ‘Do we have sufficient or too much food to eat?’ relates to fears about food security, the distribution of food resources and food waste. Second, the question ‘Who eats what and where?’ relates not only to the distribution of food resources but also to the associated distribution of nutritional and dietary health problems, including malnutrition and obesity. There is a concern about whether there is food to eat; but eating too much of various food types in the wrong proportion is equally worrisome. Cheap food is not always good healthy food. Third, there is a question not only about health and food, but also about the sustainability of the environment that supports food production. As Lang, Barling and Caraher put it: ‘From agriculture to retailing, the economic system reinforces cheapness but mines (literally) the earth. The costs of damage to environment and health are not included in the cost of food.’<sup>1</sup> We are farming in an era when land and water resources are coming under intense pressure from both changing climate and global population growth, projected by the UN to reach 9 billion people by 2051.

The current disgust, anxiety and humour about horsemeat in burgers provides an opportunity to tell a more detailed story about the provisioning of processed meat products. How does the food animal carcass connect the health and nutritional well-being of the family eating curried chicken breasts in Swindon with the family eating soup using the stock from chicken beaks and feet in Cape Town? How is the distributed production cost of a beef carcass that supports the sale of cheap fast-food burgers to a party of drunk young people on the way home after a night out in Solihull connected to the

## The abattoir

sausages, chicken nuggets – although some other animal species may well be used in the process of constituting these products, which should be labelled somewhere on the packaging. There are a few things to note here.

A black silhouette of a donkey standing on a textured surface, divided into various regions labeled with French words. The labels include: COLLIER, BASSES CÔTES, CÔTES À L'OS, ENTRECÔTES, EAUX FIELET, RUMSTEAK, POITRINE, and others. The donkey's legs are also labeled with words like CHATELAIN, TAILLE, and TAILLE. The entire image is set against a light background.

At this stage one can only speculate about how the carcass balancing challenge featured in the misuse of horsemeat passed off as beef in some processed meat products.

Is the demand for cheaper value-end beef products outstripping demand for higher-value beef products, thereby creating a shortage, leading to non-beef meat being substituted? Or is it about finding a cheaper place to dispose of parts of the horse carcass as edibles, rather than paying for incineration? The different cultural attitudes to consuming horse-meat would lead one to expect that meat processors handle it with caution, particularly if their business is to standardize products for a range of retail clients across different countries. Yet, in other ways meat processors celebrate the global market for meat, because it provides solutions to many carcass balance challenges through the flow of product across nations and between cultures.

This leads us to a second point. The globalized market for food is extremely hetero-

geneous in terms of eating habits: what is a highly favoured part of the carcass in one culture can be least favoured in another. For example, dark chicken meat is most favoured in Asian cuisine, whereas white chicken breast is most favoured in Western cuisine. The smaller cattle breeds of South America are a better size for the restaurant plate than the inconsistently sized, and often rather large, British cattle breeds. And where some parts of a carcass may be confidently sold as 'local' to a domestic



market, other parts of that same carcass regularly make a transnational journey. Thus ultimately this is a story of how animal bodies become globally disassembled and distributed to create a highly varied range of edibles that are 'packaged' into various forms to appeal to different cultural, social and ethically shaped appetites.

## **distribution and brands**

Retail food brands respond to the problem of balancing the carcass in quite different ways. In part this offers some explanation of how and why some brands have escaped being identified as having horsemeat in their products, whereas others have been less fortunate and have resorted to big newspaper spreads admitting they must try harder, while others talk confidently about why you can continue to trust them. Some retail brands forge strong relationships with farmers to ensure that their herd meets their production standards, including the conformation (shape, size and fat content) of the animal's body, along with on-farm animal welfare standards. In this way they take on the responsibility of supporting the processor in balancing the carcass by buying it all. In these retailers own-brand beefburgers may be sourced from the same animal carcasses that account for steaks that are sold a little further down the supermarket meat aisle. Interestingly, the different qualities of retail own-brand products – value, standard and premium – may be differentiated not so much by production standards as by the quality of cuts of meat and overall carcass quality.

In other examples, commercially beneficial relationships may be struck between retailers and/or food service suppliers, who may work with a meat processor to buy only parts of the carcass – one buys the hindquarters for fresh meat cuts, the other buys the forequarters for burgers – but importantly both require the same carcass quality standard. Instilling product qualities that constitute a brand's 'brandness' – in the case of both food service brand and supermarket brand in these partnerships – can begin in the field, on the transport lorry and in the abattoir.

But this is not the whole story. There are plenty of other cases where supermarket, manufacturer and food service brands have little interest in the carcass as a whole and are just buying parts of animal bodies on the supposition that basic industry assurances on food safety and production standards have been met, with no direct knowledge of the farm from which the product was originally sourced. And whatever the work

carried out to balance the carcass and to retain the ‘added-value’ of high specification carcasses, it appears that parts of the carcass are usually, with very few exceptions, downgraded. During research interviews, the organic laying hen industry spoke of how opportunistic the organic baby food market was in creating an end-of-life market for their organic spent hen carcasses. The use of high-value meat specifications for a processed meat product is extremely unusual in the marketplace. It is clear that much of the higher animal welfare, organic, farm-assured product does not always retain its value once more popular meat cuts are removed from the carcass. It is rare, for example, to find frozen organic meatballs. Premium-quality meat cuts attract customers interested in paying more for that extra special quality. This factor reduces as you move down the value system for different meat cuts, within and across cultures. Thus, conversely, where the horsemeat story has highlighted the misleading labelling of the food animal species present in a product, there is no similar scandal about higher-quality meat being served up as value range.

It is perhaps no surprise that it is the cheapest value ranges of processed meat products that are being identified as containing horsemeat. And it is no surprise either that these are products that should contain beef, which is a more expensive meat than, say, chicken. Has beef for processed products become just too expensive, even though it is, in effect, a waste product from a carcass that produces more desired cuts of meat?



With food prices rising, retailers are trying to avoid price increases to meet the needs of cash-strapped consumers coping with rising food and fuel bills, but has this made some meat unaffordable for the poorest in society? Or, rather, is it the case that the number of people who are turning to the cheapest meat products is exceeding those who buy the more expensive options, as consumer purchasing power falls in some sectors?

The body part within meat production and processing practices is a political player. It informs who gets what to eat, where, and for what price. It places demands on commercial meat practices. An integrated food policy should address those who feast from the same carcass: the mouths eating nutritional-value, cheap meat and the mouths eating the conjoined body parts of premium-quality meat cuts. We need new policies committed to tackling the availability of cheap manufactured meat protein products, often with high fat and salt content, that become staple foodstuffs for the poorest in industrialized, meat-based culinary cultures around the world. De-sinewed meat became unfit for food in Europe in 2012. Should other parts of the carcass be taken out of the meat supply chain?

The question ‘Do we have sufficient or too much food to eat?’ leads to a story about how commercial practices are creating excesses – excesses that can map onto those who find they are eating too much. A counter-argument might be that producing fewer animals and eating the whole of the carcass represent a good use of resources. But it has to be asked, what are the likely health consequences if the least healthy processed products are sold so cheaply that those eating on a budget in cultures where eating meat equates to eating well consume them too often? The prospect of meat grown in a Petri dish is one possible future with obvious environmental benefits.

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## Notes

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1. Tim Lang, David Barling and Martin Caraher, *Food Policy: Integrating Health, Environment and Society*, Oxford University Press, Oxford, 2007, p. 171.