

# Understanding international labelling regulations for meat and poultry

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The world's meat consumption is on the rise. In fact, global meat consumption is expected to grow about 1.9% every year from 2014-2023, with meat shipments from major exporters projected to rise 2.2% each year.

Improved consumer wealth, trade and urbanisation in emerging economies are transforming countries traditionally known for grain, vegetable and seafood-based diets into some of the largest meat and poultry consuming nations on the planet.

This growth has coincided with highly publicised food safety issues, most recently swine flu and bird flu, which have resulted in fear amongst consumers and regulators. The World Health Organisation put deaths from swine flu at 18,500 since 2009, whilst bird flu has so far been contained at 402 deaths.

## Understanding regulations

For manufacturers, distributors and retailers, importing and exporting meat and poultry means understanding regulations that apply to specific products and more general rules concerning labelling and additives.

Failure to comply can cause delay when products pass through cus-

tomers and subsequent action by enforcement authorities.

In addition to protecting public health, there is a rich tapestry of cultural values driving authorities in how they want meat labelled including attitudes to genetically modified food, animal husbandry and nutritional details.

All these drivers combined with such strong growth in demand makes labelling for this sector a concern.

## Regional demand

Since 1961, the global production of beef, sheep and goat meat has more than doubled, while the production of pork and poultry increased by a factor of three and nine respectively.

Asia, having undergone a massive dietary shift, now leads overall world growth in meat consumption, with Chinese and Japanese consumers demand at the forefront. China's annual meat consumption of 71 million tons is more than double that consumed in the United States and a quarter of all meat eaten globally.

In Tokyo, Japan, for the first time in history, residents are now consuming more meat than seafood, averaging at 90g of meat daily. Since Japan has limited space for raising livestock, well over half of the beef and pork consumed is imported.

In the US, the total meat and poultry consumption remains flat at 250g per capita daily. However, chicken



has overtaken beef as the most popular meat of choice for the first time.

Beef consumption has been dropping for the past decade as consumers become more health aware, choosing leaner meats.

Across the EU, meat consumption has been influenced by economic issues, higher unemployment and inflated meat prices.

Overall consumption per capita has remained stable at 220g per capita daily but it is expected to rise, mainly due to more poultry and pork consumption.

## Core labelling

In 2009, China began to standardise its overarching food labelling guidelines. While still being modified, with key amendments currently in active debate, the core meat labelling standards for exports are clear.

Since September 2014, meat exports to China must include: product name, country of origin, production date, expiration date or storage period, storage temperature, country of destination, net weight, inspection legend, name and address of company, production lot number and specification (refers to packaging type).

In Japan, in addition to country of origin, standardised labelling on meat in Japan must include standard weight and 'best before' / 'use by' information, as well as detailed information related to additives.

In the US; widespread concern over preventable foodborne ill-

nesses and diseases drove the implementation of 2010's Food Safety Modernisation Act.

The law includes new tools to hold imported foods to the same standards as domestic foods. Since 2012, 40 of the most commonly purchased cuts of beef, poultry, pork and lamb both whole and ground, are required to display standard nutritional facts including: calories, calories from fat, total fat, saturated fat, cholesterol, sodium, and protein.

Furthermore, if a ground product is marked 80% lean meat, it must also say it contains 20% fat. There is also a voluntary-yet-US Department of Agriculture (USDA)-regulated label called 'Natural'.

It is required that the label includes a brief statement to explain what is meant by the term natural, i.e. that the product is a natural food because it contains no artificial ingredients and is only minimally processed.

In the EU, since the outbreak of Mad Cow Disease in the mid-1990s, there has been heightened concern about overall meat quality. While individual European countries still have specific guidelines, what is unique to the region is its centralised EU-wide set of labelling regulations, which is necessary for the free movement of goods once products are legitimately in the region.

More stringent than seen in other countries around the globe, the EU's food safety and labelling guidelines requires the greatest of detail in

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 terms of straightforward supply chain tracking to country-of-origin and GM labelling.

### Country of origin labelling

According to a recent EU report, country of origin labelling (COOL) is one of the top details to be included on a food label for nearly half of European consumers. The EU has mandatory COOL guidelines for meat and poultry. Beef labels must display the animal's country of birth, rearing and slaughter along with information on nutritional value and allergens for consumers. However, in April 2015, this was broadened to include pig, poultry, sheep and goat meat, which are required to indicate the animal's country of rearing and slaughter.

As a consequence of the horse-meat scandal of 2013, where horse-meat was discovered in processed beef dishes, the EU parliament voted in January 2015 for COOL for processed meat in food like lasagna or meat pizzas, which will now be put before the EU commission.

In the US, COOL is arguably the most controversial of all labelling information and, as such, requirements remain unresolved.



The regulations met with significant opposition from the domestic market and neighbouring suppliers, Canada and Mexico, who felt the guidelines discriminated against their meat products. A series of legal actions has seen the World Trade Organisation rule twice against US COOL labelling requirements.

In October 2014, the most recent WTO ruling was against COOL for certain cuts of meat, which had already been implemented across the US market and is currently still in place. However, changes are expected in the future.

After the tragic consequences of the swine flu pandemic across Africa and South-East Asia and the more imposing threat of the spread of bird flu, Asian consumers are more wary of food safety issues. In efforts to calm fears and ensure public safety, the Chinese Government has implemented significant labelling measures

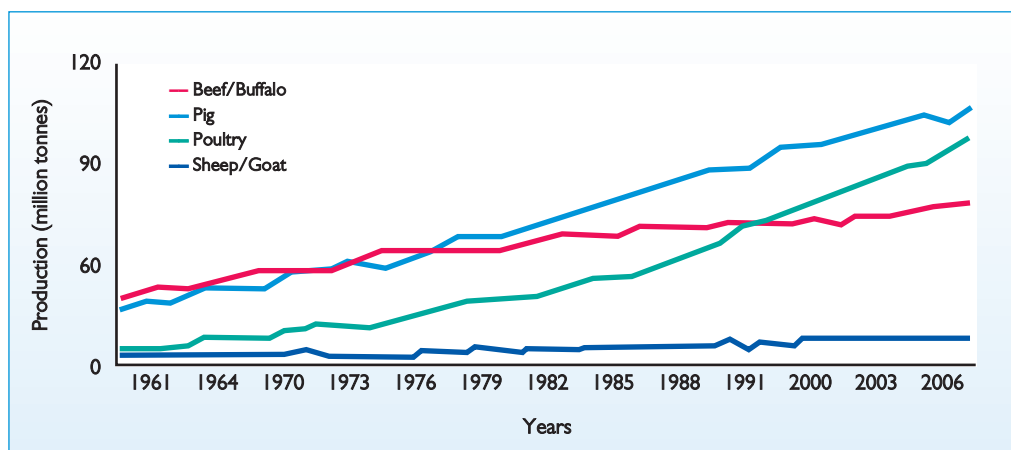


Fig. 1. Global production of meat.

including COOL since September 2014.

Japan has long held adherence to COOL to properly identify the source of the meat for both supply chain tracking as well as consumer visibility. However in the aftermath of the Fukushima disaster, Japanese consumer fear of contamination has led to a tightened specification of food's origin, both for domestic and imported food.

### GMO labelling

The debate to require information about genetically modified (GM) meat from animals fed GM grains is heating up across continents.

Currently, 64 countries around the world require labelling of GM foods as a whole, including China and Japan. In both countries, GM labelling is limited to agricultural-based products and by-products.

Meat, poultry and dairy products are excluded, since the animals themselves are not considered modified. Meat and poultry manufacturers in the Asian market still have the opportunity to distinguish products by voluntarily displaying GM information on labels.

Over the years, the EU has needed to respond to public pressure to identify GM foods and products. Since the 1990s, legislation has evolved for mandatory labelling of food products that consist of GMO or contain GMO, and products derived from GMO but no longer containing GMO, if there is still DNA or protein resulting from the genetic modification present in the product. This can include animals fed on GMO feed. The enforcement of this sits with the individual member states.

Some EU countries have gone further and completely banned GM food products altogether. And numerous large grocery chains in countries throughout Europe have instituted their own rigid GMO meat, poultry and dairy labelling or banning efforts, including Ireland's

Kepak Group, the UK's Tesco, Italy's Coop Italia and Switzerland's Migros and Coop.

However, this is certainly not the end of the story as a recent vote by European Parliament in January 2015 will now allow member states to decide what GM crops can be grown in their jurisdiction meaning labelling will be brought to the fore once again. Up to this point, only one type of GM maize was allowed to be cultivated in the EU.

In the US, only three states – Connecticut, Maine and Vermont – have passed laws requiring products containing GMOs to be labelled. None of these states have implemented the legislation to date. A number of public ballots in other states – Oregon and Colorado – were defeated in 2014. GMO crops are the primary feed for animals raised in the States and there is no requirement for labelling on meat to state this. For meat to be labelled organic in the US, it must not be intentionally fed GMO feed.

### Printing technology

After assessing the labelling landscape of the three fastest growing meat regions in the world, it clear that the field is evolving fast in response to a unique mix of consumer demand and public pressure.

Videojet Technologies Inc, a world-leading manufacturer of coding, printing and laser marking products, fluids and accessories for the product identification industry has released key tips and best practices for meat and poultry manufacturers to refer to when selecting printing technology including:

- Evaluate needs: take time to identify the application the technology will be used for, what material substrate is being coded, where will the code be located, and how fast is the manufacturing line running.
- Consider environment risks: production environment risk areas such as sanitation procedures, wash-down cycles and plant temperatures all play an important role in equipment and inks performance.
- Determine the best option: each coding technology offers different benefits based upon a manufacturer or processor's needs, so researching the technologies will help narrow down the best solution(s) to meet specific requirements.
- Run sample tests: due to the variability across packaging types and line configurations, it is recommended to test multiple coding solutions in order to establish the best fit. ■

References are available on request from the author

