Transatlantic Trade and Investment Partnership (TTIP)

Beef Production in the EU and US

The substantial differences between EU and US bovine meat production methods and legal protections continue to be a problematic issue in transatlantic trade relations. The EU and the US recently signed a Memorandum of Understanding on 'Hormone Beef' to freeze a long-running trade dispute in the World Trade Organisation (WTO). In this briefing, World Animal Protection and Humane Society International outline concerns about the impact of this agreement for the welfare of animals.

The present briefing outlines why achieving a trade deal should not be at the expense of the EU's higher animal welfare standards and more stringent, precautionary measures to protect consumers.

Value and volume of EU-US trade in bovine meat

The US remains the world's first bovine meat producer with 11.6 million tonnes produced in 2013. The EU ranked third in terms of global production, lagging slightly behind Brazil, with a total production of 7.4 million tonnes. However, both the US and the EU have near to equivalent cattle populations, with headcounts at 89.3 and 87.1 million animals respectively. [1]

2011 bovine meat production and cattle population records, as outlined in the table below, provide comparable data on source EU Member and US States. In the European Union, France, Germany, Italy and the U.K were the main producers and represented together approximately 55% of total EU production. In the US, 38% of production took places in three States, namely Texas, Nebraska and Kansas.

2011 Production of bovine meat and cattle population[2]

EU Member States	*1000 tonnes carcass weight*	*Number of beef cattle 1,000 head*	*US States*	*1,000 tonnes live weight*	*1,000 tonnes carcass weight[3]*	*Number of beef cattle 1,000 head*
France	1477.1	19,129	**Texas**	3,249.39	1,917.14	13,300
Germany	1159	12,527.84	**Nebraska**	2,079.26	1,226.76	6,200
Italy	1009.21	6,251.93	**Kansas**	1,818.90	1,073.15	6,300
UK	935.52	9675	**Oklahoma**	1,029.59	607.46	4,200
Spain	604.11	5,923.11	**California**	950.41	534.19	5,100
Ireland	546.76	5,925.32	**Iowa**	796.84	470.14	3,900
Netherlands	381.56	3,912	**Colorado**	760.83	448.89	2,650
Poland	379.93	5,500.94	**South Dakota**	665.66	392.74	3,700
Belgium	272.29	2,471.6	**Minnesota**	581.57	343.13	2,380
Austria	220.66	1,976.53	**Wisconsin**	521.84	307.89	3,450
Sweden	147.78	1,449.73	**Montana**	462.69	272.99	3,950
Other EU MS	*397.41*	*11,864.72*	***Other US states***	*5951.76*	*3,511.54*	*37,552.4*
Total EU 27	**7531.33**	**86,607.72**	**Total US**	18868.74	**11,106.02**	**92,682.4**

[1] USDA Foreign Agricultural Service, http://apps.fas.usda.gov/psdonline/circulars/livestock_poultry.pdf

[2] Eurostat and US Agricultural Statistics 2011, VII-10, Table 7-15. And Table 7.17 (US data converted from pounds to tonnes)

[3] EU data provides carcass weight figures whereas the US provides live weight figures. US carcass weight figures have been estimated using the average ratio of 59% of live weight (this 59% represents meat and skeletal portion of an animal compared to its live weight) www.thebeefsite.com/articles/759/dressing-percentage-of-slaughter-cattle

EU Beef Production and the Impact of CAP subsidies

EU beef production has undergone major changes in the past 20 years, primarily due to changes in Common Agricultural Policy (CAP) subsidies.

Cattle in the EU are primarily reared on a grass and forage-based diet. In Member States, such as the UK, Ireland and France, grazing and grass finishing of cattle is prevalent, whereas Scandinavia primarily feeds cattle on harvested forages. In Central and Southern Europe, where grain yields are higher, cattle tend to feed on less grass and forage and more grain, but not nearly to the extent of the United States. From an animal welfare perspective, beef cattle reared and finished on pasture benefit in terms of health and well-being and have the opportunity to express natural behaviour. Cattle are adapted to a life spent grazing on pasture, which provides them with an appropriate diet for their ruminant digestive system. Beef cattle on pasture also have more opportunities for natural behaviour such as grazing, walking, choosing different areas for lying and social interactions.

Beef production is a highly subsidised activity in the European Union, with payments provided to livestock producers providing incentives to follow EU environmental and animal welfare principles. CAP subsidies are intended to reduce dependence on imported food, encourage the sustainable production of agricultural goods and strengthen the economies of rural areas. Today, about two-thirds of the beef produced in the EU is from bull calves originating from the dairy industry. However, recent changes in the "decoupling" of subsidy payments for milk (i.e. subsidy payments are not linked to actual production) have translated into a contraction of milk production in the EU. This in turn has led to an increase in Europe's 'suckler cow' industry, in which calves are raised exclusively for meat production.

The EU has progressively developed traceability systems that include mandatory animal identification and product labelling. Animal welfare legislation has been introduced, banning electric cattle prods, phasing out certain routine management practices including castration without pain relief, dehorning and branding as well as the introduction of housing requirements during the winter season. Provisions on the welfare of cattle are laid down in Council Directive 98/58/EC concerning the protection of animals kept for farming purposes, Council Regulation (EC) No 1099/2009 on the protection of animals at the time of killing and Council Regulation (EC) No 1/2005 on the protection of animals during transport and related operations.

US Beef Production and use of Growth Promotants

A high level of intensity and management control generally characterises beef production in the United States. Cattle are typically fattened in concentrated animal feeding operations (CAFOs, in this case known as 'feedlots') and mostly administered with non-therapeutic drugs to increase quantity and speed of meat production.

Beef cattle in North America are typically born and reared until weaning in cow-calf operations on pasture, living on pasture for their first 6 to 9 months before they are sold on for backgrounding and finishing for slaughter. Nearly all cattle are finished in feedlots, with a high-grain diet. The finishing stage typically takes from 3 to 6 months, some industry sources stating a minimum of 4 months.[4] An animal feedlot is a lot or building or combination of lots and buildings intended for the confined feeding, breeding, raising, or holding of animals and specifically designed as a confinement area in which manure may accumulate, or where the concentration of animals is such that a vegetative cover cannot be maintained within the enclosure.[5] The cost of feedlot finishing is extremely high for animal welfare. Poor flooring and housing conditions impact negatively on the welfare of beef cattle, which are forced to endure extremes of cold and heat, sometimes knee-deep manure when the weather is wet and faecal dust when the weather is dry.[6]

---

[4] Cattlemen's Beef Board and National Cattlemen's Beef Association, 2009, Factsheet, Modern Beef Production. http://www.explorebeef.org/CMDocs/ExploreBeef/FactSheet_ModernBeefProduction.pdf

[5] Minnesota Department of Agriculture, http://www.mda.state.mn.us/animals/feedlots/feedlot-dmt/feedlot-defs.aspx

[6] PEW Commission on Industrial Farm Animal Production (2008), Putting Meat on the Table: Industrial Farm Animal Production in America, Pew Charitable Trusts and Johns Hopkins Bloomberg School of Public Health

Growth-promoting hormones are widely administered in US beef production and are now believed to be used on approximately two-thirds of all cattle. In large commercial feedlots, the use of growth-promotants approaches 100%.[7] Two main types of growth promoters are used in bovine meat production: hormones and beta-agonists. Producers administer these non-therapeutic drugs in view of reducing production costs as they allow animals to grow larger and more quickly on less feed. Growth promotants are problematic for animal welfare both because they stress the animals' metabolism – diverting resources into growth rather than maintenance, increasing hunger and vulnerability to suboptimal management – and because some of these drugs are used as an easy alternative to good husbandry, suppressing disease but allowing other poor practices such as overcrowding.

EU Ban on Hormone Beef and WTO Dispute

In line with its precautionary principle, the EU has enacted a series of bans on the production and importation of meat and meat products emanating from animals treated with growth-promoting hormones.[8] The EU ban covers meat products from animals treated with six growth promotants including estradiol, testosterone, progesterone, zeranol, trenbolone acetate and melengestrol acetate, all in use in US bovine meat production.

In 1996, the US took the case to the World Trade Organisation claiming that the EU measures were inconsistent with the EU's WTO obligations under the Sanitary and Phytosanitary (SPS) Agreement. After a series of WTO consultations, dispute panel and appellate body decisions, the
WTO authorised the US to impose trade sanctions in the form of high import tariffs on selected EU agricultural goods whilst allowing the EU to maintain its ban. The 'hormone beef' trade dispute reached a stalemate with each party claiming the proceedings vindicated their positions.

EU-US Memorandum of Understanding on Hormone Beef

On 13 May 2009, the EU and the US finally reached a political agreement to freeze the WTO case through the signature of a Memorandum of Understanding (MoU) which would allow the importation of US beef from animals not treated with certain growth-promoting hormones in exchange for increased duties applied by the US to certain EU products (for an equivalent annual value of USD 116.8 Million).[9]

The agreement sets out three phases:

- **Phase I** (August 2009 – August 2012) : lifting of US retaliatory sanctions on certain EU agricultural products in exchange for the opening of a zero-duty tariff-rate quota (TRQ) for high quality hormone-free beef (20,000 tonnes). The new quota is in addition to the pre-existing 11,500 tonnes allowed entry into the EU.

- **Phase II** (August 2012-August 2013): (a) Suspension of sanctions (all increased duties) imposed in connection with WTO dispute settlement proceedings in *EC-Measures Concerning Meat and Meat Products (Hormones)* as well the explicit prohibition of WTO litigation, and (b) expansion of TRQ for "high-quality beef" to 45,000 tonnes on a most-favoured nation basis.

- **Phase III** foresees that (a) the EU maintains the TRQ for US "high-quality beef" at 45,000 tonnes, and (b) the US removes its trade sanctions, leading to a long-term resolution of the dispute. Phase III will begin with the official notification to the WTO Dispute Settlement Body of the withdrawal of the case. Parties have not reached permanent settlement to enter this phase.

---

[7] "The EU-US Beef Hormone Dispute", US Congressional Research Service, 7-5700, 6 December 2010

[8] Council Directives 81/602 (July 1981), 88/146 (7 March 1988), 88/299 (17 May 1988). Council Directive 96/22/EC concerning the prohibition on the use in stock farming of certain substances having a hormonal or thyrostatic action and of ß-agonists.

[9] Memorandum of Understanding between the United States of America and the European Commission regarding the importation of beef from animals not treated with certain growth promoting hormones and increased duties applied by the United States to certain products of the European Communities: www.ustr.gov/sites/default/files/asset_upload_file254_15654.pdf

On 14 April 2014, the European Union and the United States notified the WTO of a revised MoU, which consists of an extension of the Phase II for two extra years with the TRQ remaining unchanged, allowing parties to negotiate a definite solution to the dispute by August 2015.

Animal Welfare impact of the USDA Non-Hormone Treated Cattle Program

To meet EU requirements, the USDA developed the Non-Hormone Treated Cattle (NHTC) Program, which introduces control measures to facilitate the trade of non-hormone treated beef. There are three principal components of the NTHC program: [10]

(1) Cattle are to be grown in approved farms/feedlots and delivered to the slaughter establishment with an affidavit from the grower attesting to their non-hormone treated condition.

(2) Non-treated cattle and beef are segregated at the slaughter establishment and handled in a fashion that ensures that they are not commingled with other animals or meat.

(3) Tissue samples from non-hormone treated cattle are collected at slaughter and analysed by accredited independent laboratories for residual levels of restricted compounds.

The USDA currently recognises 14 accredited feedlots in which non-hormone treated cattle are segregated to be fattened –or 'finished' – on a high energy grain diet prior to slaughter and subsequent exportation to the EU.[11] All cattle intended to be exported under the current 45,000 tonnes quota must transit through these Concentrated Animal Feeding Operations (CAFO) prior to slaughter. These CAFOs concentrate animals on an industrial scale; for instance, one of the accredited NHTC feedlots, AzTz Cattle Co, is currently the 15th largest CAFO in the U.S with a capacity of 144,000 animals distributed over two yards.[12] As further developed below, industrial feedlots raise three significant animal welfare concerns: (a) health problems and injuries (b) discomfort and risk due to the feedlot environment, construction and design, and (c) inability to graze and perform other natural behaviour.

'High Quality Beef': a definition tailored for US industrialised production

The EU-US Memorandum of Understanding that enabled the freeze of the WTO Hormone Beef dispute concedes US beef to be labelled as 'High Quality Beef' when marketed in the EU.[13] The agreement provides a definition of 'High Quality Beef', which is tailored for US industrialised beef production, and negatively impacts both animal welfare and consumer confidence.

The 'High Quality Beef' definition foresees that in the last 100 days before slaughter, beef cattle be fed with 62% minimum grain or concentrate feed, *de facto* excluding bovine meat and meat products emanating from grass-based production systems.

Cows are natural ruminants and high grain rations constitute unnatural foraging diets. The European Food Safety Authority's (EFSA) Panel on Animal Health and Welfare (AHAW) recently concluded that excessive grain feed is detrimental to the welfare of the animals and may provoke excessively rapid fermentation, accompanied by the destruction of many normal rumen bacteria, "with potentially extreme consequences for welfare, including abdominal pain, metabolic acidosis and, in severe cases, death."[14]

---

[10] USDA Food Safety and Inspection Service, "Food Safety and Inspection Service's Program for Certifying Non-Hormone Treated Beef to the European Union", 12 June 2007

[11] USDA Agricultural Marketing Service, Official Listing of Approved Sources of Non-Hormone Treated Cattle: www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRD3107503

[12] National Cattlemen's Directions Statistics: www.beefusa.org/CMDocs/BeefUSA/Producer%20Ed/2013%20Directions%20Stats.pdf

[13] The definition can be accessed here: www.ustr.gov/sites/default/files/asset_upload_file254_15654.pdf

[14] EFSA Opinions on "Welfare of cattle kept for beef production" (SCAHAW, 2001) and Opinion on the "Welfare of cattle kept for beef production and the welfare in intensive calf farming systems" (SCAHAW, 2012)EFSA Journal 2012;10(5):2669, p.35

Grain-feeding of cattle can also lead to food safety concerns. A grain diet is unnatural for the ruminant digestive system, designed to metabolise forage such as grass. Populations of the *E. coli* bacteria, which can cause severe food poisoning, have been shown to be higher in grain-fed cattle compared to those fed on forage.[15]

Furthermore, to assume the mere absence of growth-promoters as sufficient to label beef 'High Quality' is misleading for European consumers. Regulation (EC) No 1760/2000 sets out specific labelling requirements for beef products "*to give maximum transparency in the marketing of beef*" as well as "*strengthen the confidence of consumers in beef and to avoid misleading them.*"[16] Whilst the Regulation institutes labelling provisions covering country of origin and slaughter, it does not set-out specific criteria to assess beef quality. As a result 'High Quality Beef' remains largely undefined within the European internal market.

Impact for Hilton Beef Quota Countries

Beef-exporting countries, most often emerging economies, have echoed concerns that the EU-US Memorandum of Understanding on Hormone Beef is inconsistent with WTO rules since it allows for an increase in the US quota without making similar concessions to other countries. As a result, exporting nations such as Argentina, Brazil, New Zealand and Uruguay are arguing in favour of an extension of their TRQs to 45,000 tonnes under the 'Most Favoured Nation' clause.

Specifically, beef exporting countries in which grass-grazing is the production norm argue that the 'High Quality Beef' definition unjustifiably discriminates against them by privileging US intensive production methods at the expense of more sustainable agricultural practices.[17]

World Animal Protection and Humane Society International urge TTIP negotiators to consider the impact of transatlantic beef trade on the welfare of cattle. Given that the sole purpose of the USDA's Non-Hormone Treated Cattle program is to export beef to the EU, it is essential that the program comply with EU legislation. The 'High Quality Beef' definition included in the EU-US Memorandum of Understanding on Hormone Beef requires significant revision to guarantee non-discriminative market access against grass-grazed cattle products. US beef should not be allowed to be marketed in the EU as 'High Quality' unless it respects EU animal welfare and consumer protection standards.

10th July 2014

World Animal Protection

Brussels
Emily Rees
EU Trade Specialist
EmilyRees@worldanimalprotection.org

Washington, D.C
Amanda Mayhew
International Trade & Public Policy Manager
amandamayhew@worldanimalprotection.us.org

Humane Society International

Brussels
Dr. Joanna Swabe
EU Director
jswabe@hsi.org

Washington D.C
Masha Kalinina
International Trade Policy Specialist
mkalinina@hsi.org

[15] Callaway, T.T. et al. (2003), Forage Feeding to Reduce Pre-harvest *Escherichia coli* Populations in Cattle – a Review, *Journal of Dairy Science* 86:852–860.

[16] Regulation (EC) No 1760/2000 of the European Parliament and of the Council of 17 July 2000 establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products and repealing Council Regulation (EC) No 820/9, Article (4) and Article (30)

[17] www.ictsd.org/bridges-news/bridges/news/new-issues-arise-in-eu-us-beef-trade-dispute