Talking apples and oranges

The EU and the USA continue to struggle over exports of US hormone-treated beef to Europe

For 15 years, the USA and the EU have been butting heads over whether the use of growth hormones in beef production poses any risk for consumers. The dispute has even spilled over on to the streets when protesters at the World Trade Organization summit in November, 1999 in Seattle attacked the WTO for, among other things, lining up with the USA and trying to force their hormone-treated beef on to the European market. Each side has continued to assert that it possesses scientific evidence supporting the use, or the ban, of growth hormones in beef production. In American parlance, the argument is 'like talking apples and oranges': an argument that reveals little common ground and vastly different agendas. Neither side has given in since the EU banned growth hormones in 1985, despite numerous talks to resolve this dispute. At the heart of the dispute is the EU's concern that the use of hormones in livestock production poses a health risk for consumers, whereas the USA is worried about lost income. From 1997, when the USA exported 6975 metric tons of beef to the EU, trade has fallen steeply to ~106 metric tons in the first six months of 2000, a loss that the USA does not take lightly.

Recently, the US position took a few hits. In December, 2000, a respected US medical advisory panel, the National Toxicology Program's Board of Counsellors, placed oestrogen, one of the hormones used in cattle production, on the 'list of known carcinogens'. This would appear to fly in the face of the American assertion that adding hormones to beef is safe and without risk to the consumer. In addition, Sweden took over the presidency of the 15-nation EU in January with a clarion call to extend the 'precautionary principle' to the chemical industry, to protect consumer health and the environment. According to this principle, which EU policymakers have long invoked against hormone-treated beef, new technology cannot be approved unless it can be proved to do no harm to humans and the environment (Iaccarino, 2000). Indeed, the non-profit environmental law firm Earth Justice in San Francisco, CA, cites the precautionary principle with respect

to hormone-treated beef in its amicus brief defending the EU's concerns. 'The EU has the right to protect its citizens against any health risk, no matter how small, according to this principle,' said Earth Justice Director of Programs, Martin Wagner. The ongoing mad cow disease crisis in Europe is another factor rendering EU members even more cautious about consuming US beef. The spread of the disease to France and Germany has increased the fears of European consumers

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that there is further danger lurking in the food supply. Add to this the fact that the USA now has a Republican President and majority in Congress, understanding the Republican party's long-stated opposition to the precautionary principle.

But even in the USA, growth hormones have moved into the line of fire. In October, 2000, an expert US panel called together by the Environmental Protection Agency, the Endocrine Disruptors Low Dose Peer Review meeting in Research Triangle Park, NC, said that oestrogenic chemicals from non-animal sources could cause biological effects at levels lower than those normally thought to be safe. In October, 2000, the cover story of *Time* magazine was 'Early puberty—Is it hor-

in livestock production to therapeutic purposes. Since then, the use of growth hormones in agriculture has been illegal under EU and member states' law, and the import of hormone-treated beef is prohibited. But from early on, the USA tried to overturn the import ban, claiming, according to the Office of the US Trade Representative, that all hormones used in agriculture—progesterone, testosterone, zeranol, trebolone and melengestrol—had been 'safely' used since the 1950s. However, the EU directive became operative in January, 1989, in spite of US attempts to resolve this issue bilaterally through GATT (General Agreement on Tariffs and Trade).

In the USA, the Trade Representative, the Food and Drug Administration (FDA), the Center for Veterinary Medicine, the Department of Agriculture and the National Cattlemen's Beef Association all maintain that there are no proven health risks from eating beef produced with any of the FDA-approved hormones. All stress that hormone levels in beef are lower than those found in eggs, milk, soybeans, wheat germ and broccoli. The USA cites a February, 1999 Joint Expert Committee on Food Additives of the World Health Organization and the Food and Agriculture Organization of the UN, which re-examined and confirmed the safety of three naturally occurring hormones—17- β -oestradiol, progesterone and testosterone—for use in cattle. In short, the USA considers the ban as 'arbitrary and scientifically unjustified,' as Timothy Galvin of the Foreign Agricultural Service at the USDA put it.

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mones? Fat?...*Time* cites meat and milk treated with hormones as possible causes of an 'epidemic' of early puberty sweeping the USA. Interestingly, it was a similar story in the European media in the early 1980s that triggered the discussion about hormone-treated beef.

The political battle erupted in 1985 when the EU banned synthetic hormones and restricted the use of natural hormones

On the other hand, after various food scandals, consumer protection has become a high priority for the EU. The union would rather accept retaliatory tariffs than face the wrath of consumers—and eventually voters. Consequently, the EU did not move an inch when the WTO decided, in December, 1997, that the hormone ban was not based on scientific assessment. In return, the USA increased

duties on luxury goods from the EU, thus raising the fury of European producers of wine, cheese and champagne. In January, 1998, the Appellate Body of the WTO upheld the decision. In July, 1999, arbitrators guided by the WTO levied a retaliatory tariff against EU imports to the USA to the tune of \$116.8 million per year—the same amount that the USA asserted it was losing in revenue due to the beef ban.

This provoked protest from environmental and consumer protection groups in Europe and the USA. Many of them took their cause to Seattle where they expressed their anger that the WTO could overturn laws designed to protect consumers and the environment. 'The WTO is not set up to make scientific decisions,' explained Wagner, 'it's a trade group.' The EU's most recent risk assessment should be enough scientific information to satisfy the WTO, he added. Testimony by Samuel Epstein, Professor emeritus at the University of Illinois's School of Public Health, provides much of the European case (Epstein, 1998). 'Virtually none of the 130 million cattle slaughtered annually are monitored for residues in meat of oestradiol or the other five hormones,' Epstein said. 'Confidential New Animal Drug Applications submitted to the FDA by the animal industry since the 1980s reveal excess residues of these hormones,' he added.

Epstein also noted that it was only in 1979 that diethylstilbestrol (DES), a steroid hormone analogue, was banned from animal feed in the USA, 40 years after it was first shown to be carcinogenic. 'The meat industry then promptly switched to other carcinogenic additives, particularly the natural sex hormones oestradiol, progesterone and testosterone, which are implanted in the ears of >90% of commercially raised feedlot cattle,' he wrote. But, unlike the synthetic DES, residues of natural hormones may not be detectable, and cannot be differentiated in tests from the body's own hormones. Epstein connects recently rising cancer rates in the USA with the use of natural and synthetic sex hormones in beef products. He also finds it ironic that the disruptive effects of oestrogenic pesticides and plastics are currently under examination, but not the more carcinogenic effects of oestradiol in meat. Epstein asserts that hormones are used in the USA to maintain an economic advantage, and that science is made to serve those interests.

The EU bases its opposition to growth hormones on a report of the Scientific Committee of Veterinary Medicine relating to Veterinary Health (SCVPH), published in April, 1999, which states that using these six hormones in cattle poses a risk to

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consumers 'with different levels of evidence'. Specifically, the SCVPH group said that it could envisage developmental, immunological, neurobiological, immunotoxic and carcinogenic effects from these hormones. For oestradiol, it stated that 'there is a substantial body of evidence suggesting that it has to be considered a complete carcinogen, but it was not possible to quantify the risk.' The panel emphasised that 'even exposure to small traces in meat carries risks. No threshold levels can be defined for any of the six substances.' Pre-pubescent children are at greatest risk, it added. The results from 17 studies launched in early 1998 indicate that 'very significant gaps in current knowledge exist'. Dan Glickman, former-Secretary of the US Department of Agri-

to be able to take measures; and is not obliged to follow majority and mainstream scientific views—minority views can also be taken into account.' Also in May, 2000, then-President Clinton signed legislation to rotate retaliation on the EU beef ban every six months.

However, as recently as last October, the prospect of ending the long-running trade battle looked good, said Greg Frazier, US special trade negotiator for agriculture and food policy, after two days of talks with the EU in Brussels. On the table was a proposal that the USA would reduce sanctions on importing European luxury goods worth \$117 million if the EU agreed to allow more hormone-free beef on to its market. The USA has not been able to fill a small quota for such beef because the 20% EU tariff makes it financially unviable for US beef producers to refrain from using hormones, added Julie Quick of the National Cattlemen's Beef Association. 'Before mad cow, the US was in ongoing negotiations to increase our unmet non-hormone beef quota of 11 500 metric tons,' she said.

And, indeed, BSE might change the whole picture. At talks in December, 2000, further efforts to solve the problem, such as the USA offering to label its beef so that EU consumers can decide for themselves, languished as BSE diverted attention from this topic. With a greater

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culture, and Charlene Barshefsky formerly the US Trade Representative called the EU Hormone Report of May, 1999 'another misleading report...not a risk assessment. It repeats the same unsubstantiated arguments...that the WTO panel of experts have flatly rejected.'

On May 24, 2000, the European Commission reiterated its opinion of April 1999 'that the use of hormones as growth promoters in cattle poses a health risk to consumers,' and that lifting the ban on the use of growth-promoting hormones in meat production was not warranted. The EC asserted that, according to the WTO Appellate Body, 'a member has the right to choose the level of health protection it deems appropriate; and is not obliged to assess risk in a quantitative form in order

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