

DifferentTakes

Britain's Man-made BSE Disaster: Boundless and Without Borders

by Dr. Lynette J. Dumble

In 1985, a mystery disease now known as Bovine Spongiform Encephalopathy [BSE or mad cow disease] first appeared in a dairy cow from Kent, England. Within the space of three years, the annual number of BSE-infected cattle in Britain rose to 731. By 1989, 400 new cases appeared each week. By 1992, 100 new cases appeared daily. BSE subsequently spread to fifteen other mainland European countries, leading to the slaughter of five million cattle over the past sixteen years.

The agent of the invariably fatal spongiform encephalopathies incubates in animals and humans for a prolonged period of time

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c/o Population & Development Program
Hampshire College-CLPP
Amherst, MA 01002-5001 USA
413/559-6046 fax 413/559-6045
<http://hamp.hampshire.edu/~clpp/popdev.html>

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before outward signs of the infection surface: in cattle, on average, after five years. Human spongiform encephalopathy [Creutzfeldt-Jakob disease or CJD] has a sporadic incidence of less than one per million, but when occurring as a consequence of contaminated surgical instruments or corneal transplants, or human pituitary hormone injections to overcome short-stature and infertility, has an incubation period ranging from as few as two to as many as thirty years. Once symptoms appear in cattle, the brain already bears microscopic cavities, leaving the cattle confused, trembling, and deprived of their own feet to stand on. CJD-symptomatic humans also have gait problems, and over varying periods of time are progressively robbed of their ability to hear, see, and speak. Gone too is their understanding of written and spoken native language.

Despite evidence that BSE may be the result of cattle exposure to organophosphate pesticides, authorities have concluded that BSE arose from a post-World War II British strategy adopted to increase the milk yield of dairy herds. With total disrespect for animal integrity, cattle were turned into carnivores via protein-enriched feed manufactured from rendered animal carcasses, including those of scrapie-infected sheep. Subsequently, between the years of 1985 and 1988, cattle were turned into cannibals when the remains of BSE-infected cattle made their way into rendered animal feed.

Britain's first move to halt the spread of BSE came only in 1988 when the feeding of rendered animal remains to cattle was banned. A year later, while remaining adamant that BSE-infected beef was harmless for humans, UK authorities gathered the world's leading CJD researchers to seek advice. One, Laura Manuelides, Yale

University physician and neuroscientist, proposed that future BSE outbreaks could be avoided by the immediate cull of infected herds. Britain's attitude to the Manuelides solution was, in her words, penny-wise, pound-foolish, and her solution dismissed because due compensation of the herd owners was deemed unaffordable.

Borderless BSE

Placing market profits ahead of public and animal welfare, Britain instead set about globalizing the already tragic BSE disaster. First, an estimated 700,000 BSE-suspect cattle were passed fit for human consumption in Britain. Next, the British Ministry of Agriculture, Fisheries and Food (MAFF) issued secret orders to civil servants to skip the 1990 Brussels designed computer vetting of calves aimed at excluding BSE-infected animals from the European food chain. As a consequence of MAFF's sabotage, between 1990 and 1995, two million unvetted calves brought an unknown quantity of BSE-contaminated veal to mainland Europe.

As the European market for rendered animal feed fell to zero by 1992, Prosper de Mulder, Britain's largest rendering company, spent the next four years exporting 20,000 tons annually to Indonesia, Israel, Japan, Kenya, Lebanon, Malta, Saudi Arabia, Singapore, South Korea, Sri Lanka, Taiwan and Thailand. Belgium, the Netherlands and France followed suit, concentrating imported British animal feed, and exporting it on to the Middle East and North Africa, where, before being fed to cows, it was diluted back down with locally produced animal feed. It wasn't until 1996, when then-Prime Minister John Major publicly admitted that BSE had jumped the species barrier to cause a novel variant of CJD [vCJD] in humans, that Britain finally

banned the export of rendered animal feed. Several mainland European countries waited until January 2000 to halt the exportation of their varieties of rendered animal feed.

British authorities admit to debating the propriety of exporting rendered animal meal considered unfit for sale in Britain. In the end, the decision was left to importing countries, the excuse being that responsibility stopped with providing information about the BSE risk. In keeping with the current practice of rich countries and transnational corporations' dumping of dangerous products in poorer countries, the European Union lifted bans on export of BSE-suspect bovine products to Third World countries in 1996.

Post-1990, Britain exported 3.2 million live cattle to 36 countries. Supposedly BSE-free, these exports have in fact already introduced mad-cow disease to a number of non-European countries, including Canada, Oman and the Falkland Islands. Other European countries also exported millions of live cattle all over the globe, and in December 2000, BSE was discovered in a three-year-old dairy cow exported from mainland Europe to Kuwait.

Britain was not alone in the duplicity which effectively globalized mad cow disease. In September, 1996, the French newspaper Liberation revealed that French official Gilbert Castille suggested back in 1990 that Britain be asked not to publish its research results, saying "it would be better to minimize BSE by practicing misinformation." Moreover, Guy Legras, head of the European Commission's agricultural directorate, also cautioned MAFF in 1990 of the financial repercussions and kept news of the BSE situation invisible for five years.

Boundless Implications

Following the initial ten cases of vCJD linked to BSE-infected beef in 1996, a further ninety humans fell prey to the disease by February 2001, the vast majority being permanent or temporary residents of Britain. In contrast to victims of sporadic CJD who are generally older than sixty, all but one of the vCJD victims has been aged less than forty, most in their twenties, and several in their teens. However, a BSE-infected food chain amounts to far more than steak and hamburger. Bovine-based products such as dairy products, pet food, medical vaccines, health supplements, certain cosmetics and gelatin-enriched confectionery are part and parcel of everyday lives.

Equally, the public health implications of BSE extend further

than the consumption of infected bovine materials. Laboratory experiments since the 1970s have shown that, compared with the blood route, the oral pathway is a relatively inefficient means of transmitting these types of diseases from one animal to another. British neuropathologist Helen Grant suggests that, "vCJD victims are hitherto so young because, being children at the time of their exposure to BSE, they were shedding teeth and the raw areas in their gums enabled the organism to enter the bloodstream directly which shortened their incubation period." Based on similar reasoning, vCJD may ultimately claim fewer men than women since global traditions place more women than men in the kitchen to risk knife injuries with BSE-suspect meat.

Additionally, BSE-infected beef consumers are likely living incubators of vCJD. Like asymptomatic carriers of other blood-borne infections, e.g. hepatitis and syphilis, carriers of the vCJD agent have the potential to transmit infection by way of recycled surgical instruments, and blood and organ donation. Overall, in the context of BSE-infected edibles, surgical instruments, blood transfusions and organ transplants, a pandemic looms which may well put HIV/AIDS in the shade. For Third World countries, the message that the agent of vCJD/BSE may survive standard sterilization techniques is daunting (Brown et al, 1990). Barely able to afford surgical instruments for repeated reuse, the world's poorest countries are likely to find it difficult, if not impossible, to afford disposable instruments, translating into a death sentence for many—perhaps millions over time.

The Blair Administration has doubled the previous estimate of BSE-related mortality

in humans, warning that vCJD deaths could number 250,000 and serving notice that UK authorities are working with the hypothesis that BSE will kill one in every 250 Britons. Nonetheless, the be-moaned multibillion-dollar clean up of Europe's BSE-related crises may be far outweighed by the social and environmental costs of BSE dumped in developing countries. In fact, from any angle, the borderless and boundless BSE pandemic, manmade in Britain, is a shameful indictment of a world smitten with market profits.

Dr. Lynette J. Dumble is a medical and environmental scientist and the International Co-ordinator of the Global Sisterhood Network.

*Visit the website of the Global Sisterhood Network at:
<http://home.vicnet.net.au/~globalsn>.*

Between the years 1970 and 1998, Dr. Dumble held senior research and teaching positions in surgery, and history and philosophy of science, at the University of Melbourne, the University of Illinois in Chicago, and the University of Texas in Houston. She has a major interest in women's health, and is the author of Medical Misogyny, to be released by Zed Books London in December, 2001.

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