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## Hormones in U.S. Beef

What's Your Reaction?

U.S beef is heavily contaminated with natural or synthetic sex hormones. The hormones in past and current use include the natural estrogen, progesterone and testosterone, and the synthetic zeranol, trenbolone, and melengesterol. When beef cattle enter feedlots, pellets of these hormones are implanted under the ear skin, a process that is repeated at the midpoint of their 100-day pre-slaughter fattening period. These hormones increase carcass weight, adding over \$80 extra profit per animal.

Also, and not surprisingly, but contrary to longstanding claims by the FDA and USDA, residues of these hormones in meat are up to 20-fold higher than normal. Still higher residues result from the not uncommon illegal practice of implantation directly into muscle. Furthermore, contrary to misleading assurances, meat is still not monitored for hormone residues.

Increased levels of sex hormones are linked to the escalating incidence of reproductive cancers in the U.S. since 1975, 60% for prostate, 59% for testis, and 10% for breast. Nevertheless, the FDA and USDA maintain that hormone residues in meat are within "normal levels," while waiving any requirements for residue testing.

Following a single ear implant in steers of Synovex-S, a combination of estrogen and progesterone, residues of these hormones in meat were found to be up to 20-fold higher than normal. The amount of estradiol in two hamburgers eaten in one day by an 8-year-old boy could increase his total hormone levels by as much as 10%, particularly as young children have very low natural hormone levels. Not surprisingly, the incidence of childhood cancer has increased by 38% since 1975.

These concerns are not new. As evidenced in a series of General Accountability Office investigations and Congressional hearings, FDA residue-tolerance programs and USDA inspections are in near total disarray, aggravated by brazen denials and cover-ups.

A January 1986 report, "Human Food Safety and the Regulation of Animal Drugs," unanimously approved by the House Committee on Government Operations, concluded that "the FDA has consistently disregarded its responsibility - has repeatedly put what is perceives are interests of veterinarians and the livestock industry ahead of its legal obligation to protect consumers, thus jeopardizing the health and safety of consumers of meat, milk and poultry.

Based on these concerns, Europe banned imports of U.S. beef in 1989, and Japan followed up with its own ban in 2003. Before the ban, Japan was the most lucrative overseas market for American beef, importing more than \$1.5 billion worth in 2002.

In this connection, it is well recognized that American women have about a five-fold greater risk of breast

cancer than Japanese. However, as recently confirmed by studies of cancer rates in Los Angeles County, the most highly populated ethnically diverse county in the U.S., the low risk in Japanese women increases sharply in immigrants to the U.S. after one to two generations. This, and a wide range of other studies in migrant populations, are supportive of avoidable, dietary, and possibly other "Westernized" lifestyle, causes of breast cancer, particularly hormonal meat.

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