

## Medicine by John Grauerholz, M.D.

### A bogus antibiotic scare

*The Eastern Establishment press has concocted a danger of infectious disease to attack meat production in the United States.*

The latest attack on the nation's meat supply has been launched by the editorial boards of the *Washington Post* and the *New York Times*. Reporting on a recent article in the *New England Journal of Medicine*, the *Post* featured an article, "Research Links Human Illness, Livestock Drugs," and the *Times* editorialized on "The Squandering of a Panacea."

The source for this hand wringing was a study from the Centers for Disease Control on an outbreak of food poisoning in Minnesota, caused by antibiotic resistant Salmonella bacteria. Salmonella is a common cause of food poisoning, estimated by one of the CDC researchers to be responsible for as many as 4 million cases a year. The vast majority require no treatment, although the disease can be severe, even fatal, particularly in infants and elderly patients.

In this particular study, 18 persons in four Midwestern states were infected by a particular strain of Salmonella, resistant to three different antibiotics. The single fatality was an elderly patient in a hospital who was infected by a contaminated instrument, used on another patient.

Utilizing genetic analysis of the bacteria, medical histories, and newly available computer records of the slaughter-to-market history of cattle, the CDC researchers were able to trace the meat to a farm in South Dakota. The cattle had been fed low levels of antibiotics.

On this basis, the *Washington Post* on Sept. 6 asserted: "Widespread use

of antibiotics to stimulate the growth of food animals is a major source of serious, sometimes fatal, disease in humans . . . [the] study has demonstrated conclusively for the first time that feeding antibiotics to beef and dairy cattle, hogs and poultry breeds a novel form of microbe that can later infect humans."

The *Post* then cited an editorial in the *New England Journal* which called for restrictions on the use of antibiotics to promote animal growth. This is the same *New England Journal* which on April 12 called for the elimination of high technology medical care for the elderly in the name of cost effectiveness.

The *New York Times* then chimed in with an editorial on Sept. 10, pushing the elimination of antibiotics in meat production on the basis of the same CDC report. It is no coincidence that this is the same editorial board that has called for "rationing medical care" and supported Colorado Gov. Richard Lamm's call for the elderly to "die and get out of the way."

These arguments possess a specious validity, if the assumption is made that no further technological progress will occur and that presently available technology will not be applied.

At present, nearly one-half of the antibiotics produced in the United States are utilized in livestock production. Feeding low levels of antibiotics to livestock increases growth and decreases feed costs. While there are alternatives, such as genetically engi-

neered animal growth hormones, these are presently more costly and hardly an option for livestock growers in the present economic crunch.

The argument against antibiotic feeding is that it increases the development of antibiotic-resistant strains of bacteria which can then infect humans. However, the majority of cases of salmonella infection are antibiotic sensitive, and elimination of antibiotic feeding would not eliminate transmission from animal products; that is, food-borne salmonella would still be a problem even if antibiotics were not used in animal feed. Thus the elimination of antibiotic feeding would not eliminate meat-borne disease, but would significantly decrease meat availability.

So far, Congress has resisted attempts to ban the use of antibiotics in animal feed, as proposed by the Food and Drug Administration in 1977. The FDA has commissioned a study of its own, in addition to the CDC study, and will report to Congress next year.

If one were really concerned with eliminating these diseases and ensuring adequate supplies of safe meat, one would move ahead vigorously with food irradiation. This proven technology will eliminate not only bacteria and other parasites, such as trichinosis, but also inhibits spoilage, thus facilitating transportation and storage. This will also eliminate transmission of both antibiotic-sensitive and antibiotic-resistant bacteria.

As for the problem of antibiotic resistance, the FDA has finally approved a drug, available in other countries for some time, which attacks the enzyme systems responsible for antibiotic resistance. The drug is a combination of amoxicillin, the most widely prescribed penicillin, and potassium clavulinate, a bacterial-resistance fighter.