implanted with zeranol. The exposure level = 0.01% of the ADI.

Concern has often been expressed nationally and internationally over the possible adverse health effects of veterinary drug residues in food. However, the data requirements that must be satisfied and that form the basis for establishing a safe residue concentration in animal-derived human food are scientifically rigorous and quite conservative. When you compare the established ADI with a realistic EDI, or the TMDI, the actual or even potential levels of exposure do not approach what has been established as a safe level of exposure.

This does not mean that we can or should relax the rigorous process by which safe residue concentrations or MRL are established. It does mean, however, that we as regulators and the consuming public can have a high level of confidence in the safety and wholesomeness of animal-derived food products from a drug residue point of view.

The need to establish international standards for foods

Lester M. Crawford, DVM, PhD

Free trade in food is not a reality anywhere in the developed world at this time. The United States and the European Economic Community (EEC) are making impressive progress in their own spheres, but neither are there yet. Billions of dollars are wasted each year because of nontariff trade barriers that are based on nonlegitimate concerns. If these barriers could be reduced or eliminated, the earth would become a more hospitable planet. The standard of living for every man, woman, and child would be materially improved. World health would be favorably affected, and world agriculture would become more profitable, more sustainable, and more varied. Last, the food industries of this world would become more multi-national, more concerned with the world market, and more innovative. Because trading partners are less likely to go to war with each other, world peace could be affected.

Trade barriers are as old as recorded history. There are, however, bright hopes for establishing mechanisms for dispute settlement. The General Agreement on Tariff and Trade (GATT) has offices in Geneva and is dedicated to improving global trades and trade conditions. A new treaty is currently being negotiated. It is called the Uruguay Round (of trade negotiations). One of the principal areas of discussion is the establishment of dispute settlement mechanisms in agriculture. The basic approach is to reduce food trade disputes to a basic consideration of the relevant scientific and medical facts. If this could be done, and I think it will be, the disputants would be presented with the scientific data and, if they could not agree, the points of disagreement would then be referred to the GATT for settlement. The GATT would refer to international standards in reaching conclusions.

Generally speaking, international food standards are set by one of two United Nations organizations—the Codex Alimentarius Commission (Codex) and/or the International Standards Organization (ISO). The Codex sets food safety standards and standards of identity (recipe) standards. The ISO sets standards like weights and measures, irradiation dosages, and others.

Currently, if two nations are in dispute, they must either negotiate bilaterally (between each other) or go through the presently Byzantine process in the GATT. The proposed reformed process would specifically provide dispute settlement procedures for trade disputes in which one or more countries allege that a trade barrier has been erected that was improperly based on health and/or safety considerations.

The process works in the following manner: (1) country A makes a complaint to the GATT that country B is keeping A from exporting its products to B on the basis of nonexistent health and/or safety problems; (2) GATT agrees to hear the case; (3) GATT makes inquiries of Codex as to the existence of a standard; (4) if there is a standard, GATT (in the case of a food dispute) would find against country B; (5) if there is no standard, Codex would be asked to impanel a group of experts to provide
an advisory opinion; and (6) GATT would mediate a settlement between the two countries on the basis of the validity of the claims. Settlement could involve compensation to the offended country (A).

There are several famous cases that could have been settled effectively by use of this procedure. These include the hormone ban (EEC vs United States); nitrate in flour (EEC vs Greece); the pure beer dispute (EEC vs Germany); the vinegar standard; and the mayonnaise standard.1

We may have several trade barriers in the making at this time. Food label reform will involve an entirely new labeling scheme for US products. These changes have the capacity to erect barriers to free distribution of such products. For example, if we define a serving size of one product differently from another country, will we accept their product and will they accept ours? Attention should be given to international trade considerations during this period before the relevant regulations become final.

It is also possible that as the United States reorganizes its food inspection system in conformity with the principle of Hazard Analysis Critical Control Point, barriers could be developed. Presently, there is a serious dispute between Europe and the United States because of the allegation that meat inspection procedures are not identical. Something should be done now to prepare trading partners for the anticipated changes. The Kennedy/Waxman Pesticide Bill, if passed, would almost surely cripple our trade with other nations. This is because the bill sets up a draconian system of pesticide regulation that would put US tolerances artificially low and thus out of step with other countries. Thus, we would have made an indefensible trade barrier out of virtually every pesticide on the market. More importantly, many US pesticides (perhaps as many as 40%) would be taken off the market as a result of this legislation. Hopefully, alternative legislation such as the Bruce-Bliley Bill, which allows for consideration of Codex standards, will be enacted.

For people in countries where it is difficult to find enough food, I believe the United States needs to help them with their problems by fostering trade, and by ascribing to and participating in the development of international standards. In the meantime, food aid to such countries needs to shift from supplying grain for cattle feed to providing shelf-stable nutritious food for human beings. Some groups have said that the environment may be adversely affected by international food standards and that Codex standards are significantly different from US standards. There has been no evidence that the environment will be affected. Also, Codex standards do not vary significantly from US standards.


The practicing veterinarian’s challenge in food safety

Samuel E. Strahm, DVM

As a past president of the AVMA, I have had the opportunity to be highly involved with the animal drug issues in Washington DC, with the Congressional delegations, the Food and Drug Administration (FDA), and others. I will try to put the issue of food safety into perspective from the position of the clinical food animal practitioner.

Recent figures from the AVMA indicate there are over 52,000 veterinarians in their association, 39,250 of which classify themselves as clinical practitioners. About 25% of these veterinarians practice large animal medicine to some degree and only some of these are food animal practitioners.

I am afraid there are veterinarians who do not have a high opinion of our government. Some mistrust occurs, but the leadership, and involved and informed individuals, must and will overcome this problem by the processes of educating, informing, and reeducating. In the United States today, scientific facts prove that we have the most economical and safest food supply in the world, yet the public does not accept this. Part of the reason for this is that public information, the printed word, radio, television, and other information-generated programs do not always present the whole truth. So we, as veterinarians, should tell the public that the United States has the most economical and safest food supply in the world.

A veterinarian takes an oath to promote welfare and reduce pain and suffering in the animal kingdom. In a food animal practice, we also have a responsibility to provide effective and economical service to the producers and our clients. For a farmer or rancher, whether a pork producer, a