

Producer and Veterinarian

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What I would like to do is divide my presentation into three parts: (1) where have we been in scientific agriculture? (2) where are we now? and (3) where are we going? As far as where we have been, as many of you older practitioners know, in the last 40 years we have seen a tremendous increase in the quantity and quality of food produced in America. The two fields where America leads the world are in (1) scientific agriculture and (2) food technology. This was done with many things, but certainly not without the aid of pesticides, herbicides, antibiotics, hormones, steroids, feed additives, implants, and so on. All of this contributed tremendously to this increased productivity, which has resulted in the following statistics. In 1940, 23% of working people's disposal income was spent for food. Today, less than 17% of working people's disposal income is spent for food. In a time when inflation is rapid and abound, we have in fact in scientific agriculture reduced, not increased, the cost of food by 6%. Not only is it cheaper, but obviously it is more wholesome, better packaged, better wrapped, better distributed, you name it, it has been increased in terms of its availability to the housewife so that she can more quickly and adequately prepare a rapid service to her family. That is what we have done in the last 40 years, in scientific agriculture. Many new products were researched, developed, approved, utilized, with really minimal consequences as far as the crisis that may have come about. In spite of that, where are we now?

We are in a society that has healthy affluent, well fed, well educated, (many beyond their intelligence) people. They have exposure to mass media, be it in written form or on that wonderful thing called the "boob" tube. They have a working schedule that allows them to become very active in many other things than their primary job, such as the Audobon Society, the Sierra Club, getting involved with Ralph Nader, getting involved with EPA, getting involved with Friends of the Earth, getting involved with anti-nuclear energy, and any other aspect that might have some influence on what could happen to their daily lives. They are concerned that there is something out there that is going to affect them, it is in the environment, and it is either in what they eat, what they smell, what they drink, or what they breathe! Somewhere there is a problem and they have got the time to look for it. Some of these people even go on to be politicians and those politicians need votes. So, when they

get on national TV are they going to get more votes by telling the audience that they just got off the senate floor and voted on a bill that allows a cancer causing compound to stay in your food chain or are they going to get more votes by saying that we just helped veto a bill that would have put cancer causing chemicals in your food chain? I think that the answer to that question is obvious. As I said, we are in an era where the public is suspicious of everything, nothing is safe. Part of this not only comes from consumer attitudes, but also from our own scientific endeavors. Due to our abilities to measure in part per quadrillion to the tenth power, obviously many things that 20 years ago tested negative, today are highly positive. With this marked ability to measure it is very, very difficult to test anything and not find some type of compound in it that is toxic or carcinogenic. As I said, everything is toxic, even distilled water! I submitted that to a bureaucrat one time when we were on a panel. I told him that if he would put his head under it for four minutes, I guaranteed him he would drown. So nothing is safe. This leads me to a subject that has already been touched on, low level antibiotics.

My concern here is (1) we have absolutely no documentation that low level antibiotics cause a human health hazard. I have corresponded with the CDC and received statistics from them on 10 states on the East coast, industrial states that should have a population that has had minimum exposure to antibiotics, be it with livestock or feed manufacturing. I compared those states at random to ten mid-west states that have industry that revolves around animal agriculture and should have a population with at least moderate exposure to antibiotics. Next, I looked at the last 50 years mortality rate of both groups of people — 25 years before we had low level antibiotics on the market and 25 years after we had them on the market. The results of the statistics showed that the people in the mid-western states that were exposed to low level antibiotics had less death loss due to enteric infectious disease than people in the Eastern states. Furthermore, the people in the mid-west had less disease since 1950 than before 1950 when we did not have low level antibiotic feeding. I am certainly aware that there are other variables in a 50 year period of time such as possible increased health care in the mid-west versus the East coast, which could be part of the reason for the differences. However, I think this type of statistics we need to pay

attention to. We discussed yesterday on a panel, low level feeding and its effect on the treatment of animals. Let me share a statistic with you from Monfort Feedlot where they feed about 400,000 - 500,000 cattle a year. They have been feeding low level tetracyclines since the early 1950's. After about 25 years of continuous low level antibiotics in two large populations that continued to revolve in the same feedlots year after year after year, we still feel that the treatment of choice for disease in that feedlot to be tetracyclines. The death loss is not any higher now than 20 years ago when low level antibiotic feeding was first started. So, if low level feeding causes a problem why aren't we seeing an increased resistance and a lack of response to treatments with the animals much less possibly to man?

As far as new drug approval or removal, I feel a double standard is present. For a drug manufacturing company to get a new product on the market, it takes well controlled, replicated studies done at a number of sites that have good data to show that it is statistically significantly better than the control. It takes several years to do chronic toxicological data in laboratory animals. It takes several years of work to prove that it is not a carcinogen or belongs to any family that is associated with carcinogens, and it takes five or six million dollars. Next, it takes two or three years of waiting to see if the results will be approved. When all of that is completed, then hopefully a new compound is brought on the market. This is the standard to get a new drug approved and my major issue with FDA, USDA, and the politicians is that the standard to get a drug removed is **not** the same. All they have to do is say, "You know, those low level antibiotics could be a problem", have a couple of committee meetings and say, "based on our hunch, we had better take them off the market" and let the chemical company do defensive research and when they prove it is not a problem, then we will approve manufacturing and sale of the drug again. We have a double standard which indicates to take a product off it will be done with hunches and opinions and to put one on, we will do it with well documented fact.

I just don't think this is the American way. America did not get where it is today doing those kinds of things that way. I say that if we are going to take them off, let's do it with the same set of standards used to put a product on — well controlled, duplicated studies to prove beyond a doubt that it is a problem. I do not know of one major pharmaceutical company in this country, or one feedlot, or one cow/calf producer, or anyone in agriculture, that would be opposed to this approach and I feel very strongly this is the standard we need to push for.

What about the future? I think it is positive. I think there are a lot of things that we can do and it involves you and me getting involved in politics in addition to veterinary medicine. I feel strongly that science alone will not do it. If it did, DES would not have been taken off the market and low level antibiotics would not be under the fire they are under. We have got all kinds of documented facts to prove that they are not a problem. Yet, one has already been removed and

the other is under fire to be removed. We have got to get the documented facts and then do a much better job of selling our documented facts. As I see it, we can only do that two ways, either get it in the hands of the right politician that will level with the public, and say "I don't care if it does sound appealing that they voted not to put cancer-causing agents in the food chain, I am here to tell you that they were not cancer-causing in the first place". If we cannot get enough politicians to tell the straight story, then we are going to have to go to the consumer and educate the consumer. They are just like our clients. The worst consumer in the world is one that is not educated. The worse client in the world is one that is not informed and educated. If we can educate the consumer, I guarantee you that they will educate the politician that they put in office when they start telling him or her if you vote out one more feed additive and increase my food bill one more time, and decrease the availability and the quality of the groceries that I bring to my home, I will vote you out of office. I think this turn around is starting to come in our country. I think that there are people anymore that, if they heard a report from the government that a new product was toxic, they would immediately drink some to prove the government wrong.

The other option in the future is to sit back and just let them keep taking products away. I am convinced that if they do it long enough, not only in animal agriculture, but in plant agriculture, finally the food bill will get high enough and the quantity and quality of that precious product on the table will get low enough that the public will finally start to realize that they have been lead down a primrose path by a bunch of "do gooder" politicians. This is obviously not the positive approach, and I hope it will not come to that. This approach kind of fits a little poem that I brought with me today that is called "Keeping in Balance with Nature".

In Balance With Nature

In the beginning there was Earth, beautiful and wild.
And then came man to dwell; at first he lived like other animals,
Feeding himself on creatures and plants around him,
And this was called, In Balance With Nature.

Soon man multiplied.
He grew tired of ceaseless hunting for food.
He built homes and villiages;
Wild plants and animals were domesticated.

Some men became Farmers,
So that others might become
Industrialists, Artists, Lawyers, Doctors and Engineers.
This was called Society.

Man and Society progressed.
With his God-given ingenuity, man learned
To feed, clothe, protect and transport himself more efficiently,
So he might enjoy life.

He built cars,
Houses on top of each other,
And nylon,
And life was more enjoyable.

The men called Farmers became efficient.
A Farmer grew food for himself,
And for sixty-four Industrialists, Artists, Doctors, Writers,
Engineers and Teachers, as well.

To protect his crops and animals,
The Farmer produced substances
To repel or destroy insects, diseases and weeds.
These were called Pesticides.

Some of the substances
Were made by Doctors and Veterinarians
To protect humans and animals.
These were called Medicine.

The Age of Science had arrived;
And with it came better diets,
And longer, happier lives
For more members of Society.
Soon it came to pass that certain well-fed members of
Society

Disapproved of the Farmer using Science.
They spoke harshly of his techniques for feeding, protecting
and preserving plants and animals.
They deplored his upsetting The Balance of Nature.

They longed for the good old days,
And this emotion appealed to the rest of Society.
By this time, Farmers had become so efficient,
Society gave them a new title, Unimportant Minority.

Because Society could not even imagine a shortage of food,
Laws were passed abolishing pesticides, fertilizers and food
preservatives.
Insects, diseases and weeds flourished,
Crops and animals died; food became scarce.

To survive, Lawyers, Industrialists, Artists and Doctors
Were forced to grow their own food.
They were not very efficient.
People and governments fought wars to gain more
agricultural land.

Millions of people were exterminated.
The remaining few lived like animals,
Feeding themselves on creatures and plants around them,
And this was called, In Balance with Nature.

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