ACRES U.S.A. “Let food be your medicine,” so said Hippocrates, but nowadays the medical profession seems to think that medicine should be our food. What is your take on all this?

ARDEN ANDERSEN. In fact I was at a conference in Chicago a couple weeks ago where there was an excellent presentation made by a doctor showing that 75 percent, in some cases more, of all medical research today is actually funded by industry — the drug makers. With that understanding, most or many doctors are going to insist, “Well, gee, drugs are going to take care of everything!” The last thing they want to use is something that’s going to replace that research money — and that would be food.

ACRES U.S.A. But in fact there are a lot of things in addition to food that replace the cold-tar derivative drugs.

ANDERSEN. Of course. There are many herbal blends, a lot of extracts from food, a lot of nutrients that should be in food (and in some cases are in food) that actually provide the same kind of medicinal results in disease and illness as drugs. They do so in a much different way, however. The reality is that drugs don’t provide you with nutrition — they only block or fool the body into believing, on a temporary basis, that something is balanced. In fact, there was a study completed about 10 years ago in Europe comparing drug versus non-drug therapy for heart disease. They ran this study for 20 years as opposed to the typical 10 years. What they found was that for the first 10 years the drug group taking anti-hypertensive drugs, anti-cholesterol drugs, whatever it might be for heart disease, they found that those people fared a little bit better. Not tremendously better, but they did fare a little bit better than the non-medication group. However, when they looked at the second 10 years of that same group, what they found was that the non-drug group fared better just in function, they had a lower death rate than the drug group. What that study proved is that it’s still nutrition that operates the body, that gives the body the energy to function like it’s supposed to. You can get by for 10 years with drugs, but eventually you’ve got to pay the credit card, and that’s why in that second 10 years the drug group fared worse, had a higher death rate.
ACRES U.S.A. Doctors may understand this, but the layman does not understand that the reason there’s almost no research on things that actually work to replace drugs, is because the pharmaceutical companies can’t make a dime out of it.

ANDERSEN. That’s correct — a lot of these things are almost totally driven by patentability. If you can patent something, that means you can monopolize it in the market. However, there’s already a tremendous amount of research out there despite the fact that a lot of people are in the business of creating new things as opposed to using old tried-and-proven remedies — and a lot of foods are old tried-and-proven remedies.

ACRES U.S.A. We know some people who have osteoporosis and arthritis, and holistic practitioners tell us that one of the tried-and-true remedies for this, either to control it or reverse it to some extent, is something as simple as diatomaceous earth, once called diatomaceous sand, which is a silica.

ANDERSEN. Sure. Absolutely. The thing about it is, osteoporosis is not caused by a lack of a drug. Osteoporosis is caused by a lack of adequate nutrition and appropriate digestion in the human in order to utilize that nutrition that went into the system. I rarely use any drugs in my practice for osteoporosis — I don’t find them necessary, and I find that many women can’t even tolerate them as far as their stomach. I rely on good nutrition, if we’re really aggressive with it, I supplement things like diatomaceous earth, things like tricalcium phosphate. With good nutrition and making sure that we have good digestion, we find that we don’t have any problem regenerating osteoporosis fully.

ACRES U.S.A. Would you make a comment on trace minerals? They seem to be surfacing an awful lot in the news these days, and we’re interested in the correct access to them and the best organic forms of them.

ANDERSEN. That’s a really good question, and there are a lot of supplement companies out there that wish they had the opportunity to answer it because they would all say that their specific product is the best. Over the years we’ve heard a lot of tag terms — it’s micronized, it’s colloidal, it’s this and that. The reality is that if we have first of all the nutrient presence, then we have to have good nutrition in the gut as far as appropriate microbiology, such as lactobacillus, bifidobacteria and so on, and the proper acid and enzymes to digest those foods. So there has to be a combination of all of those things in order for the trace minerals to be valuable. We find that most of the food grown today contains some degree of the major nutrients — calcium, magnesium, potassium, those kinds of things — but zero levels of very important critical nutrients — for example, silicon, strontium, vanadium, chromium, iodine, lithium and so on. So, the only way we are going to get those things today is through supplements. Among the various supplemental products on the market today, I prefer to use, if possible, amino-acid chelated materials, as well as a higher-grade product that I know has a specific amount of these nutrients in them. Trace minerals are critical for the immune system to function properly. For example, selenium is very important relative to the prevention and treatment of cancer. Very important for countering the mercury we are exposed to in the environment. Unfortunately, a lot of the food today doesn’t have any selenium in it. I prefer the amino-acid chelated selenium, the selenomethionine. You can get selenium as a sodium selenite, but again, it goes back to digestion, and I find that if I give a patient a trace mineral mix — whether it be in a tablet supplement or a liquid or maybe even in food, for example, through seaweed or some such material — if I don’t also address their digestive system it doesn’t work, because metals require a good acid level in the gut as well as good enzymes for assimilation.

ACRES U.S.A. Can you make clear for our readers the vitamin connection? We talk about trace minerals, but we also talk about vitamins and there’s a lot of confusion about those two concepts.

ANDERSEN. Vitamins are the catalysts, the lighter fluid, if you will. I know you remember before gas barbecue grills, when you had to go to the grocery store and buy charcoal briquettes. In order to get those charcoal bricks going you had to add a little lighter fluid. Well, vitamins are very much like that in our biochemical pathways. They’re catalysts for the other things to operate properly, to get the minerals up and utilized — and of course a lot of vitamins have mineral components. For example, vitamin B₁₂ has cobalt, and the vitamin is that link in the system for making things happen, if you will, in the manufacturing process of proteins, amino acids, carbohydrates, cell components and then the cells assembled to form tissue and so on. The vitamins are the catalysts for those processes — so we can have all the minerals present, we can have all the proteins and carbohydrates present, but if we don’t also have the vitamins, then nothing is going to occur. It’s just debris in a heap. The other thing that vitamins are very important for in that catalytic process is helping to collect free radicals. For example, vitamin C and vitamin E work very closely with glutathione, selenium, manganese, copper and the other antioxidant minerals.

ACRES U.S.A. Is zinc included? Iodine?

ANDERSEN. Absolutely. All of those trace elements are very important components in that process of, you might say, dousing out the fire of free radicals, which are causing damage to the tissue. So the vitamins are triggering those intermediate processes that allow us to take that fire, cool it down, and actually...
Andersen. We find that if we have adequate vitamin D, a number of these things work very well. For example, there's a lot of work recently looking at the issue of sunlight causing skin cancer. If you track that, what they have found is that skin cancer has paralleled the use of sunscreen, and in fact what they showed was that sunlight actually decreases the incidence of some major cancers — lung cancer, prostate cancer, breast cancer, colon cancer. Of course that sunlight will be correlated with the manufacture and utilization of vitamin D by the body and with overall health, particularly of the immune system, which is going to correlate to every disease you can have. When people had tuberculosis years ago they put them in an asylum, and what did they do? They put them out in the sun! Sunlight is something that the ancients and our forefathers understood was a very important component of health and healing.

ACRES U.S.A. Let's move onto something that affects both animals and human beings and this matter of omega-6 and omega-3 fats — namely, how the animals are grown, whether they're on pastures or in the feedlot consuming highly refined carbohydrates.

Andersen. What this has to do with is the biochemistry in the gut and with the microorganisms that are part of that biochemical pathway. Ruminant animals were never designed to be healthy on a concentrate, a highly refined carbohydrate or grain carbohydrate diet, or alcohol or sugar or whatever is in the latest, greatest computerized ration. Yes, some of them actually put alcohol in animal rations! But the organisms in the rumen were not intended to digest those substances — they can, but they were never intended to. When we put those things in the rumen, we alter the animal's biochemistry, which means we change the nature of the fatty acids that are produced. Those fatty acids get absorbed into the bloodstream and then end up determining what type of omega oils are going to be formed in the fat. When we have a high-grain diet, we're going to get more omega-6 fats, which means more saturated fat in the meat. That is a stress response. We know that relative to people, and we know that relative to chickens, if we stress people or animals, their cholesterol levels go up. Thus, if we stress the rumen with a high-concentrate diet, those saturated fats go up — of course, the animal is going to gain weight because you're going to be putting fat onto the system, but you don't have full nutrition. If, instead, we get grass into that animal, the biochemistry the rumen gives us omega-3 building blocks, which are absorbed into the animal and produce omega-3 fats. If we then take it a step further and we feed grass that has a brix reading of 12 or above, we can get omega-3 to omega-6 ratios in the beef animal that are at least 1:1, and it's possible to actually get more omega-3 than omega-6 in a beef animal, and still get over three pounds a day weight gain.

ACRES U.S.A. Whereas an animal in a feedlot has little or no opportunity for movement, never gets a breath of air that isn't loaded with fecal dust and chemicals and so on. Would that be correct?

Andersen. Absolutely correct. We don't need to have those animals there in order to achieve the production levels we need to feed the population.

ACRES U.S.A. I've often wondered why people that are interested in cruelty to animals don't land on the feedlot system.

Andersen. I think that's a discussion for the politicians!

ACRES U.S.A. Let's move on a little bit here and discuss medical consequences. What are the consequences of pesticides, herbicides, fungicides being in, around and on the food supply?

Andersen. One of the reasons why I wrote my book *Real Medicine, Real Health* was to point out, first, that people have options in medicine, but at the same time — and you're not going to find this in the agricultural literature, you're not going to find it in *Farm Journal*, you're not going to find it at one of your university publications out of...
the Ag schools — there's a tremendous amount of medical research in which the correlation, both directly and indirectly, between disease and pesticides is extremely well established. We're not just talking about conjecture. We're not talking about wishful thinking. There are absolute correlations, the medical literature shows, between these substances and childhood cancers, for example — without question. It's all about pesticides and the lack of nutrition which goes with those pesticides.

ACRES U.S.A. Meaning compromised nutrition, when you have chemical molecules tied up, indigestible?

ANDERSEN. Absolutely. The thing about it is, you're not going to need the pesticide if you have nutrition. The two are not mutually compatible in the same system. When we have appropriate agricultural practices, what we find is that we have the nutrition — the brix readings go up, and we don't have the pesticide pick-up by the roots of the plants — it simply doesn't occur. We also know of a connection between pesticides and Parkinson's disease, which is a very devastating neurological illness — three very good university studies coming out of the Gulf War correlated organophosphate pesticides to Parkinson's disease. That was a landmark study because agriculture wasn't interested in looking at it at all, and in fact had no connection with it. It came about because all of these organophosphate pesticides were used on our troops in the Gulf War and they were coming back with so many incidences of Parkinson's-like syndrome that the government investigated and eventually linked it back to organophosphate pesticides. So looking at these incidences of Parkinson's disease in our non-military population, then, we have to look at pesticides, particularly organophosphate pesticides. In fact, younger and younger people are getting Parkinson's disease these days.

ACRES U.S.A. Organophosphates have also been implicated by Mark Purdey, the expert on Mad Cow disease, as being the agent that, given enough time, distorts the prion that may inhabit the brain of an affected animal. Have you looked into any of that?

ANDERSEN. Yes, I've looked into his work and I think it's very, very intriguing. It doesn't surprise me at all that there is a potential link between organophosphates and neurological disease or neurological aberration, because that's what the whole Mad Cow issue is — it's an aberration of the central nervous system, and again, the research all correlates organophosphates to those kinds of problems.

ACRES U.S.A. What happens when these chemicals actually inhabit the gene, penetrate the gene?

ANDERSEN. A number of things can happen. The chemicals essentially interfere with the overall communication of the system. So picture for a moment that you have a computer program that operates a robot to build an automobile. Then somebody comes in and throws a monkey wrench into the robot. Well, all that's going to do is break the robot. That's like getting a heavy metal or something like that in the body. But what happens if somebody comes in and they interfere with the computer program that runs the robot? It's no longer a matter of simply fixing the robot, we have to go back and correct the basic information package. The problem is, if we don't catch that problem quickly we may end up with 1,000 automobiles made defective because of that flawed information package. Well, our genetic material is like that software program, and when we have a chemical, a pesticide, in the system it interferes with that information transfer to the hardware, plus we can end up with hardware that is duplicated with defects.

ACRES U.S.A. Or goes into wild proliferation.

ANDERSEN. Absolutely, and frequently that happens as well — it's called cancer.

ACRES U.S.A. Lindane or organophosphates or any of those things can do this?

ANDERSEN. That is correct. The interesting thing, though, is that nature does provide us with the opportunity to reverse all of that, if we provide the proper building blocks to do so. We can do that in the soil, we can do it with plants, animals and people, but not without having full nutrition. That's why we make that link between agriculture and medicine, agriculture and human health.

ACRES U.S.A. Lately we've been giving the food crops over to the genetic modifiers.

ANDERSEN. Really, genetic engineering is just another excuse to avoid good nutrition and it's another way of further monopolizing the industry against the farmer, against the consumer, and of course it perpetuates an increasing use of pesticides and more use of medications. We have more illness, more allergies, etc. All of that is documented in the medical literature. So we have to understand that all genetic engineering is doing is throwing a monkey wrench into the body's software program, and that software program then is forever defective.

ACRES U.S.A. What do they call that in computer talk?

ANDERSEN. A computer virus — absolutely! Literally that's exactly what they are creating with genetic engineering. They attach a virus to the gene because that virus acts as an activator component, but then they have to add an antibiotic-resistant marker so that they can tell whether or not that gene was successfully inserted, so we automatically end up with things like antibiotic resistance throughout the entire food chain.

ACRES U.S.A. So, we've grown corn, it's genetically modified, we're extracting the sugar from that corn and substituting all other sugars with corn sugar because it's cheaper. What is that doing to our metabolic systems?

ANDERSEN. We're having some significant problems with that. It's directly connected to obesity and diabetes. What people don't understand is that high fructose corn syrup is a combination of refined fructose and sucrose from corn. We thus have a combination of refined sugars going into the food chain at very high doses on a regular basis, so we're both stimulating and overriding the insulin response system on a daily basis with no nutrition to back it up. We end up with greater weight gain, we end up with significant obesity problems in our youth. In fact, if you track the amount of sugar that goes into the American popu-
IMATION, there has been a continuous increase over the past 50 years, particularly after the advent of the corn sweetener. Now, in addition to the straight chemical problems of corn sweetener containing both fructose and sucrose, we’re having a problem with it being genetically engineered. So we’re also seeing greater and greater allergic reactions to corn products. That then tracks to more allergies and more inflammatory disorders throughout the human population.

ACRES U.S.A. Metabolically, how does the body handle this new sugar?

ANDERSEN. You have to kind of break it up into sucrose and fructose, because the two have different pathways in which they’re utilized and trigger different responses in the body. The sucrose is going to stimulate the insulin response system. Since it’s not carrying any nutrition with it, however, it’s all useless stimulation of that insulin process, leading to insulin resistance, hyperglycemia and eventually Type II diabetes, as well as obesity and all the things that go with that. The other component is the fructose. This is not the same fructose that you get from eating a piece of fresh fruit — that fructose is combined with all of the other nutritional components that go with it — enzymes, trace minerals, major minerals, vitamins and so on — so that fructose has a different signature into the system. But when we take refined fructose and throw it into the system, we end up with the problem that we can’t metabolize it throughout the body. It’s only metabolized in the liver, and we see similar reactions in the liver from high-fructose diets as those that occur in alcoholics. We end up with fatty liver issues. The satiety or satisfaction from eating is not stimulated by that refined fructose, so you overeat because the body doesn’t feel satisfied. We find that people on a high-fructose diet will overeat more and more, they seem to crave more and more of that sugar — it becomes an addictive process. They get more, and then they crave more, and so on.

ACRES U.S.A. Is that what makes many of these sodas so addictive?

ANDERSEN. Absolutely right — the body gets to the point where it craves more and more and more of these sugar drinks in the system.

ACRES U.S.A. How does this affect what we call a “dry drunk”? Someone who spent his formative years drinking and then goes dry?

ANDERSEN. One thing that we see with alcoholics is that part of the whole alcoholic process is a carbohydrate metabolism problem.

ACRES U.S.A. And that carries forward even after they quit drinking?

ANDERSEN. Yes — they have some kind of carbohydrate problem to begin with typically and alcohol becomes that satisfactory thing, which is why many alcoholics become soda-pop-aholics to compensate as a replacement of their alcohol. They still have a problem dealing with carbohydrates.

ACRES U.S.A. They can also become aspartame addicts.

ANDERSEN. Well, the aspartame just increases your craving for more and more sugar, or carbohydrates, so they’re still craving carbohydrates — the process just continues on. What we really have to do as part of a rehab program for alcoholics is to revise their diet to take out the refined carbohydrates and only allow them to have the complex carbohydrates, high-fiber carbohydrates, as well as the full nutrition that goes along with that, particularly the trace minerals, so that pancreas-liver process of carbohydrate metabolism can once again operate like it’s supposed to.

ACRES U.S.A. BST — bovine somatotrophin. What is it doing to people? They claim it’s exactly the same as what the cow naturally manufactures.

ANDERSEN. They have to claim that, because if they admitted the truth, we’d shut them down. The reality is, we know that the first human experiment on genetically engineered products was L-tryptophan, and we know Showa Denko in Japan in 1988 was the only genetic engineering firm producing L-tryptophan. It caused 1,500 cases of eosinophilia-myalgia syndrome and 37 deaths. The FDA chose to view that as a contamination of a supplement on the market, despite the fact that none of the manufacturers of non-engineered L-tryptophan ever had a problem. With that history in mind, look at bovine somatotrophin, a genetically engineered bovine growth hormone. The Canadians did a review of the animals receiving BST and found that there is a significant problem. The organs grew larger — but they actually lost mass. They lost weight. They had more problems with infertility. They had more defects. They had more mastitis issues. If it were just a natural thing and there were no problem with it, you wouldn’t see these consequences in contrast to natural growth hormone.

ACRES U.S.A. What about consequences for the human being, though?

ANDERSEN. In my opinion, from what I see, the consequences for the human being are going to be very similar to the L-tryptophan fiasco. I think we’re already seeing that in the human population with increased incidence of diabetes, more childhood cancer and so on.

ACRES U.S.A. Milk intolerance?

ANDERSEN. Tremendous milk intolerances, and the problem is that a lot of people think, “Milk intolerance, that just means you have a lactose intolerance.” No, it doesn’t mean that. In fact, that misapprehension is exploited as a diversion from what’s really going on. Lactose intolerance is an enzyme issue. It has nothing to do with the immune system. What we’re talking about is an immune reaction — an adverse immune reaction — to dairy as a foreign protein, an invader in the body, just like an infection. This is absolutely separate from the so-called lactose-intolerance factor. What I see in my practice is that dairy, eggs, wheat and corn are the four most common sensitivities in the population. Well, the dairy in this country, unless it’s organic, is going to be genetically engineered through bovine growth hormone and a majority of the cows eat genetically engineered soybean and corn — all of the chickens, unless they’re organic, are going to have genetically engineered soybean and corn that they’re eating, just as most of the corn products in this country, unless they are organic, are going to
be genetically engineered. You talk to other doctors, you talk to government officials on allergies, exactly the same thing. We’re seeing more and more allergies and sensitivities to those foods and particularly an acceleration over the past decade.

ACRES U.S.A. Is that why many people report that their children were lactose intolerant until they switched to fresh milk, or raw milk, at which point they were no longer lactose intolerant?

ANDERSEN. I can’t say that happens 100 percent of the time, but it’s certainly more than a coincidence. I see frequently in areas where people are able to get those kinds of fresh dairy products, they say exactly the same thing: “Gee, we don’t have a reaction anymore!” or the child doesn’t have a reaction anymore. Sometimes you’ll see it just by going to organic dairy, even the pasteurized stuff. There are many times that we’ve seen the disappearance of reactions that we get from commercial dairy, which we know has a lot of genetically engineered components to it.

ACRES U.S.A. Winding this up, would you be able to give us a quick précis of what your new book is all about?

ANDERSEN. Yes I do. With many of the common ones, we get quite specific. I spend a fair amount of time in the book talking about autism, about attention deficit, about childhood illnesses. Personally, I feel that if we don’t take care of our next generation, a lot of it’s all for naught anyway. So I spend a fair amount of time addressing issues of children and of young people, and unfortunately cancer is spreading faster in children than any other age group. We’ve got to take care of these children. I also spend a fair amount of time on neurological and injury issues and cardiology. So basically, the medical issues that concern farmers.

Dr. Arden Andersen has just released an expanded and updated edition of Real Medicine, Real Health. See page 56 of this issue for more information, or visit www.acresusa.com.

For more information about Dr. Andersen and his work, visit www.ardenandersen.com or e-mail info@ardenandersen.com.