

Comprehensive Cancer Care: Integrating Complementary & Alternative Therapies
The Dietary Treatment of Cancer (Part I)

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Dr. Dattner: I'm Dr. Alan Dattner. I'm a dermatologist from northeast Connecticut, now associated with the Schachter Center in New York. My background has taken me to both worlds, both parts of the whole might be a better way to put it. I'm a board-certified dermatologist. I have been in and out of the world of immunology starting 35 years ago, most recently as a visiting scientist at the National Cancer Institute 19 years ago. After that I left to work at a holistic medical clinic and have evolved my own form of alternative treatment involving a lot of nutrition. Nutrition was the only word we could use about ten years ago. If you said anything else people looked at you with their eyes kind of screwed up and funny. I'm excited to be at this conference and feel the whole, the worlds reuniting again.

The first speaker I'd like to introduce is Dr. Robert Atkins. In a way he needs no introduction. He has made diet and diet treatment a popular word in this country more than anybody else with the wide popularity of his books, *The Diet Revolution*, *New Diet Revolution*, and his latest book, *Vita-Nutrient Solution*. He heads the Atkins Center in New York, where he has treated over 60,000 patients. Nearly everybody I talked to who has even the slightest inkling of knowledge of alternative medicine has heard of Dr. Atkins. It's very easy for me to identify myself into that world just by mentioning his name. I don't think he needs much more introduction. I'd like to get him up here to tell us a little bit about the work that he's been doing in this area.

Dr. Atkins. Thank you, Alan. How many people heard the breakout session which I was in this morning? All right. I wanted to find out whether I was going to be repeating myself. I thought maybe this time I'd tell the opposite story. Hardly. I'm pretty internally consistent. Bernie Siegel said something that really inspired me this morning. He said a good doctor can be judged by how many critics he has. I tore up my conciliatory speech and decided that I'm going to have so many critics that they'll never invite me back. That would be a shame, because there are some problems that we heard.

The most important one is this, and we've got to get it straight. I'm sorry that it's just in this room that this important message gets across. Up to this point, complementary medicine has been defined incorrectly. It has been defined by just about everybody, particularly the mainstream voices, as something complementary to mainstream medicine. I believe that I brought that term to this country. I put on my awning, The Atkins Center for Complementary Medicine, around 1980. In 1985 I put out a book called *Health Revolution: How Complementary Medicine Can Extend Your Life*.

For the last 13 years I have assumed that I had defined what complementary medicine was. It is not do your orthodox medicine and then look for something complementary to it. Hardly. It's learn about all the healing arts. Learn how to use them. Learn their place. Make therapeutic decisions based on this broad knowledge of all the healing possibilities. That means, very specifically, if something destroys the immune system, and you have a therapy based on making your immune system, then you wouldn't find a place in your strategy.

The program says I'm going to talk about diet. If I did, I would tell you about 5% of our program, so allow me to expand the term diet to encompass all of the things that work nutritionally. If we do that, things which allow the body to do what it has to do, that would bring

it up to about 75%. I figure maybe you want to hear a whole program that works. That's what we're going to talk about, a whole program that works.

Let's talk about mainstream medicine – where it belongs, and whether we should keep it or eliminate it in certain cases. When do we complement it? When do we put it aside? Here's the mistake that's being made in mainstream. The number one mistake is the “cure or kill” option. Have you ever heard of that one? You go for a cure, and if you miss, you really risk losing the patient. What is the “cure or kill” option based on? It's based on the belief that the tumor is the disease, that if you get rid of the tumor you get rid of the disease.

I've never met a complementary physician who feels that way. A complementary physician feels that the disease is the propensity to form the tumor, an imbalance. The complementary physician thinks that all illness is an imbalance. Therefore, if you don't correct the imbalance, you don't correct the cancer. What exactly does kill or cure achieve? It eliminates a strategy that in our experience at the Atkins Center in New York has proven successful for well over half our patients.

That strategy is fighting cancer to a prolonged standstill at a point where it is not producing any symptoms. Imagine that. No symptoms. The cancer doesn't grow. You still have it, and you go through life like that. You turn it into something like a benign tumor. For every person whose life is saved by the “kill every last cancer cell” approach, how many people must forfeit the viable option of building up their natural cancer defenses, so that the cancer can be kept under control? A case in point very well might be Jacqueline Kennedy. As soon as the diagnosis was made, she got an awful lot of chemotherapy pumped directly into her brain. A few months later, her non-Hodgkin's lymphoma was described as unusually virulent. It may just

be that her immune system was unusually depleted. That shows that even the people seeking the best of medical care can have things like that happen to them.

How many people heard the first two speakers yesterday, the National Cancer Institute and American Cancer Society? All right. I have to respond to what they have suggested, because if this conference gets off in that direction, it will prove worthless. Let me tell you why. There are four very urgent realities in cancer care. One is that people are still dying of cancer at the same rate as they've been doing for half the century, and with an unnecessarily horrible quality of life, due to the therapy very often. These people need to be helped now, not when something is proven. They're asking for proof. Even they want proof that nontoxic therapies, a whole conglomeration of vitamins and minerals, whose side effects are that they help you with something else, they want all that to be proven before they're going to stop giving something which is a destructive therapy.

Second, they're asking for evidence-based proof. But do they know that the kind of proof that they want costs the kind of money that will never come from somebody that doesn't have pharmaceutical support? Maybe they do know that, and maybe that's the strategy to make sure that non-chemotherapeutic approaches never take place. It's very much like unto a group of playground basketball players who are so good that they feel they can take on the Chicago Bulls. However, until somebody gives them a court, a basketball, a referee, and the willingness of the Chicago Bulls to embarrass themselves, that game will never be played. That's what's happening.

Thirdly, look what they're doing to complementary medicine itself. They're asking us to dissect the components. Our medicine is a holistic group of many, many therapies put together. There isn't a single one of them that would pass muster, not one. But the entire program does.

Fourthly, I still believe that individuals are individuals. They don't seem to. They're looking for commonalities. Yet if you took away the fact that complementary physicians treat every patient as a unique individual, it wouldn't be complementary medicine. That's what they're asking to do.

Putting these realities together, the real answer can only be to compare the two systems head to head. Play the game. Have your Superbowl. Have people from Dana Farber treat a group of cancer patients, or Sloan-Kettering, and have people from complementary facilities treat an identical group, and compare the results. I know who would win. There's no question in my mind. I think just about every patient who comes to our center gets results better than are generally expected out of mainstream medicine.

Before I present any slides, there are several other points I want to make. In the first place, all of medicine, throughout the last 130 years, ever since Pasteur and Bechamp had a little debate. They were talking about which is primary – the illness itself or the host, the terrain, as Bechamp called it. Everybody heard that argument, and for 100 years everybody said that the essence of good therapeutics is to weaken the illness and strengthen the host. But there is one exception – mainstream oncology. Mainstream oncology has provided nothing to strengthen the host. Complementary approaches to oncology therefore emphasize the strengthening of the host more than any other modality.

Secondly, complementary medicine can benefit virtually any cancer patient. Here's how it's done. It's not with a single magic bullet. I went to a conference of all alternative cancer therapists. We said after the meeting, how many modalities can you come up with that have been shown in either formal studies or informal studies or animal studies to help the cancer patient in some way? At the session I was at we heard one on garlic, another one on eight herbs

called PC SPES, and a few other people had some other ideas. By the time we tabulated all of the substances and techniques and modalities that would help a cancer patient we came up with over 200 of them.

All shared the same thing – basically nontoxic, basically unable to hurt somebody. Any one of them is not a magic bullet. But put together 30 of them, 60 of them, or 100 of them, and you have a powerful army – a powerful army of buck privates, but they can get the job done and we've shown that. Most of the things work in support of host resistance. It's absolutely important that if any study is done it be the true complementary medicine, not this bogus stuff that they're talking about, take your chemotherapy and do some mind-body work. That's not what I'm talking about. I'm talking about a new system, a system where you evaluate all of your therapeutic possibilities and you think about what Hippocrates taught physicians, *primum non nocere*, "first do no harm."

Third, a broad knowledge of and a willingness to use a whole range of complementary treatments enables the doctor to create strategies for success in more than one way. This is what we're able to achieve. The quality of life improves consistently. Why shouldn't it? Every therapy that we use is designed to make the person healthier. We see weight loss in less than 5% of our patients. We have pain in less than 2% of our patients. I must confess that even though I've treated 1,000 cancer patients, I am almost totally ignorant as to how to treat pain, I've had so few opportunities to learn. We don't get the mucositis, hair loss, nausea and vomiting, kidney failure and other things that go with chemotherapy.

More importantly, the majority of the patients stabilize their illness as the cancer growth is held to a standstill. If I have time, I'll go into how we do that. We follow them with tumor markers. We see the tumor markers head downward with the beginning of our therapy. After

we relax the therapy, the tumor markers drift upward again. We then intensify our therapy, and they go down. We use about three or four tumor markers on each patient. When we don't use tumor markers, we use a high resolution microscopy, which also tells us how our patients are doing. We're rather certain that what we've created for the majority of our patients is the equivalent of a tug of war, where with the hundreds of pullers on our side, we're able to equal, sometimes get ahead of, the power of the malignant process. Sometimes we have to curtail our therapy, usually for economic reasons, would you believe. I think you all would. Then we see the cancer getting ahead.

We know the whole concept of a tug of war, or a standstill, is not only doable, but it's the usual result. In a minority of cases, a prolonged remission or cure will be achieved. Sometimes our therapies work very well, and we do that. The more I learn about some exciting new therapies, some at this conference, many at the last conference I was at in Europe, I think that the percentage of cures or prolonged remissions that we get will even outstrip the control group. But both cure and long-term stalemate in an asymptomatic state can be classified as successful results.

This second successful result has not been discussed at this conference, has not been offered by the National Cancer Institute or the American Cancer Society as an option to consider. When you consider it, your strategy is completely different. Your strategy is, I've got this patient for a couple of decades. What are we going to do to make sure these couple of decades or more are in good health? You have to do it like a master chess champion. You have to think 10 and 20 moves ahead. One of the things you think of is, if I give chemotherapy now, what will be its delayed effects on the immune system 5 and 10 years from now? You must keep that in mind.

This is our strategy. Find cancer in the early stages. This is a problem for alternative practitioners. Dr. Josef Issels told me about his success rate. It was about 19 or 20%. It was on people who had been treated with everything. It was leftovers that he treated. To prove our point, that a natural medicine and a nontoxic medicine should be mainstream, it should be done with an equal playing field. The first doctors that people should see should be complementary physicians. Contrast this with what they're trying to say. Look for a nice complementary strategy to taking radiation, chemotherapy or whatever else they're trying to do. It's important to do this because that's where your good results are.

Do curative surgery though, if possible. However, that doesn't apply to prostate. I'm very happy to report that in my trip to Germany I found a way to get rid of breast cancer without surgery as well. It's done through electrochemical therapy, through a magnetic field through which a small dose of a cancer-destructive chemical migrates. They have seen 80 cases in a row where the cancer was eradicated in lieu of any kind of incisional surgery. Plus the advantage of that is that if it fails, you then could do a mastectomy or a lumpectomy. That's the advantage of nontoxic therapy. You never forfeit the ability for mainstream therapy to work. Do it the other way around, and you forfeit the alternative therapy's possibility to succeed.

Avoid therapies that risk weakening cancer defenses. I've been talking about that all evening. Employ therapies that work by enhancing the body's own cancer defenses. That's also logical. Employ therapies that favor the growth of normal tissue over malignant tissue. That is very interesting. Does chemotherapy apply like that? Barely. Maybe it's got an edge of 96 to 94 in overtime. But there are many things that work exactly the way we want. Our number one concern is how to control cancer without weakening the host. That is the best way to win the tug of war. Let's see what we can identify.

First of all, I will talk about diet for a minute. The number one thing which differentiates cancer nutritionally from normal cells was demonstrated by Otto Warburg. He won a Nobel prize for this more than half a century ago. He showed that cancer is anaerobic, doesn't require oxygen. What does that mean specifically, nutritionally? It means that the normal cell that's holding the cancer in check, right adjacent to the cancer cell, is depending on oxygen. The anaerobic cancer cell has only one fuel, and that's glucose. A lot of people answered that by having glucose blockers, sugar blockers, as part of the therapy. To the best of my understanding, they all seem to work.

However, there's an interesting dietary approach: Cut out simple sugars. That is one of the bases of the dietary approach which we offer our patients. Sometimes it poses a dilemma, because there are some foods which have a very high glycemic index. The glycemic index is a measure of how much it raises your sugar. Some of these are very therapeutic, things like carrot juice, and beet juice, well known nutritional treatments in Europe. They actually work, yet they certainly will raise the blood sugar.

I would rather find different phytochemicals to accomplish the same job than present them along with something which raises the sugar. For the moments in which the sugar is elevated, it gives the cancer an edge. I'm not very interested in giving the cancer an edge, even for an hour and a half in any given day. There are other things that do that, by the way. You could give oxygen. That's very important. Not only oxygen but hydrogen peroxide, ozone, which is an oxygen ozone mixture. Something called DC4, chlorine dioxide, and the wonderful catalyst for oxygen metabolism that Dr. Koch came up with in the 1920's called glyoxylide. Then there's germanium, a sesquioxide, which will increase the oxygenation of the tissues, and something called squaline, one of the essential fatty acids.

Let's go on with the rest of the list. We're going to strive for maximum overall health. That's very important. Very often we have people where it's nothing more than they've had surgery for a colon cancer or breast cancer, and we're just going to prevent it from coming back. At the same time they may have diabetes, or high triglycerides, or high cholesterol. Their dietary needs may be more in line with the other condition. It's not that everybody has to go and say, "Oh my God, cancer. It must be a cancer diet." Sometimes the best cancer diet is whatever makes that person healthiest. The last point is to use the tumor markers. It's a way of following the patients to know how your program has worked.

Now, for more specifics. We have an oral program. The oral program (and this is an incomplete list), starts with antioxidants, vitamin E and the tocotrienols. Remember vitamin E is a complex. You need all of the vitamin E substances, all of the tocopherols, and then the tocotrienols, which are better antioxidants than even vitamin E. Selenium. Every study makes selenium look good. It's a major player in both treating and preventing cancer. Cysteine and N-acetyl cysteine, which are there to help produce glutathione, when giving glutathione doesn't work very well. Alpha-lipoic acid, another one that helps not only with the glutathione but to protect the concentration of all of the antioxidants.

The flavonoids, particularly quercetin, are very valuable. Coenzyme Q₁₀ is extremely valuable. At one conference before on prostate I found out that really high doses of that were remarkably effective in a series of 15 prostate cancer patients. All of the carotenoids, not only beta carotene. If you don't give the lutein and the diadzein and all the other carotenoids, then the beta carotene doesn't work. That's why the beta carotene study alone was a failure. Proanthocyanidins, pycnogenol, grape seed, taurine, antioxidant immune stimulant.

The enzymes are very important. When you hear Nick Gonzalez' talk you're going to see just how important the enzymes are. Crude pancreatic enzymes work. The German one called Wobenzym is also extremely good. The essential oils – fish oil, flax seed oil, GLA, every one of these essential fatty acids has been shown in some study or another to help the cancer patient with immune defenses. Squaline I mentioned. CLA, conjugated linolenic acid, supports the immune system. The shark cartilage, the bovine cartilage, both of them. We've talked about it at other parts of the conference.

The only non nutritional one on this list is hydrazine sulfate. That has been shown to help not only with the cachexia. One of the reasons our patients don't lose weight is that when they look like they might, I put them on hydrazine. But hydrazine also has an antitumor effect that has been demonstrated. A lot of people think it's one of the more underrated nontoxic cancer therapies.

Giving the thymus gland, the direct way to support the immune system. Thymic protein A is a good example. There's a booth that shows that. Beneficial bacteria, not only the beneficial bacteria restoring the healthy bacteria. Most of our patients have yeast overgrowth because the immune system can't handle it, and this is one of the steps. This implies an entire program of detoxification, where we may use psyllium or clay products, or even a coffee enema. It's very important to have a detox program going. I mentioned germanium. There is a lot more that isn't on this slide. The alkyl glycerols, the butarates, DHEA and melatonin, two hormones which improve the immune system.

The herbs in the oral program are again an incomplete list. The venus flytrap is extremely important. This is the carnivora, dionaea, in widespread use in Europe. It grows in North Carolina, and even the Germans have to get it from North Carolina. It helps modify the

tumor. I use it on just about every cancer patient. It's one of the reasons I think that we've been able to fight cancer in this tug of war. The effect of carnivora is to take away the malignancy of the tumor – not the tumor, but its malignant potential. Because of that it's easier for us to control.

The Essiac group of herbs. I presume most people have heard of Essiac. We use it pretty routinely. We actually make them fresh, the sheep sorrel, burdock, Indian rhubarb and slippery elm. We have that made up fresh. Fresh herbs are more valuable than ones that have been sitting on a shelf. The same is true of the Hoxsey herbs, nine more. Then there's cat's claw, one of the great contributions from the Amazon, *uña de gato*.

The medicinal mushrooms should be near the top of the list. Maitake D is particularly a good one, but there are some other combination mushroom products that we're looking at because some great success has been reported with it. Mistletoe is major and well proven. The studies shown on mistletoe's effect on immune parameters makes it a no-brainer. There are so many studies. Who wouldn't want to have their T lymphocytes get better? Who wouldn't? It does that absolutely routinely. Who wouldn't want to have a depleted count of natural killer cells brought up toward normal? We put it in every program.

Another herb is chelidonium majus, or celandine, the herb from which ukraine comes, which I hope I'll have time to talk about. Astragalus, but that's just part of the list. There's echinacea, and both ginsengs, panax and eleutherococcus, turmeric, silymarin, aloe, soy. All the Chinese and Japanese and American Indian and Ayurvedic herbs. I don't even understand what they look like, but I know they're good. It's all in the literature. It's part of those 200 things which have all been shown in well-conducted studies, not peer-reviewed studies. Peer-reviewed means an American journal let it get published. Why would they want to publish something

when they're making so much money on chemotherapy? I bet I made a non friend on that one. But it is published. It's published in the European literature. It's published in the world literature. The studies were well conducted. They were more than believable. They were reproducible, and they were reproduced.

Then we have an injectable program. Here's the way it works. Some of the really important stuff we'd rather give intravenously. At the top of our list is ukrain. Ukrain comes from the celandine plant, but thiophosporic acid has been added. That's a mild form of chemotherapy, but the purpose of it is simply to neutralize the toxicity of the alkaloids in this plant. Another plant in the same family is blood root, *sanguinaria canadensis*. These will destroy tumors. Now we're getting into a natural treatment that absolutely destroys tumors.

Here's a story about ukrain that everybody from the NCI should hear. It passed the NCI screening test, which is 60 cell cultures of various cancers. It absolutely killed, through programmed cell death, apoptosis, 56 out of the 60 lines. For the other four it simply controlled their growth. It should have passed. But the National Cancer Institute says it doesn't make any difference that it's safe to normal tissues. It was by a factor of $1/10^{\text{th}}$ not strong enough, just not strong enough. You had to boil off 90% of the water, and then it would have passed, according to what they said. It shows what's going on at National Cancer Institute. The real truth of the matter is it had no financial backing, and still has none. That's the real truth. Without financial backing, you don't exist, I'm sorry to say.

Amygdalin. That's laetrile. You heard it was bad, but it isn't. It's very valuable. I wish somebody would ask Dr. Schachter about his experience. He tells me some wonderful experiences that he's had using amygdalin, both orally and by injection. Whenever people would run out of it, he had the same experience that I had when they run out of one of my special

therapies. The tumor markers start to climb up. You have to get them back on it, and the tumor markers start to go down.

I don't understand why people can't use a single case history to arrive at a conclusion. No way should you keep a control group. The only kind of study that should be done is the entire system tested against the entire other system. Have each one put in its starting five, if you will, and have an absolute Superbowl of cancer therapy. That is what we should do. I know I've run overtime. Whatever else it is that I was going to say, I'll say it later.

These are our results. I want to talk about how it all works. Virtually every patient we see will show not only an initial response, but particularly the response of well being. Every one of our treatments is there for the same purpose, to make the person healthier. The healthier you are, the better you feel. I have had people who still come back ten years later. I say you don't need it. Everything is under control. They say, "Yes, but every time I get one of these treatments, I feel so well." Contrast that if you will with chemotherapy. I want this to happen – a quality of life study. Even if the extension of life is not proven, I would lay 100 to one that we could whip anything in mainstream medicine when it comes to quality of life. Thank you.

Dr. Dattner: Thank you very much, Dr. Atkins. It's always a pleasure to hear your speech, all the information you have presented and what you've seen in your experience.

We'll go right ahead to the next speaker, Gar Hildenbrand. He has had quite an extensive and varied background. His original background was in theater, and some life-changing experiences forced him to look into healing and alternative healing. In doing so, he wound up becoming a science writer. He wound up getting involved with the group that does the Gerson

Therapy, and now with the CHIPSA center in Tijuana. He has been their chief spokesperson and actual information person from my perspective. He knows what's going on with this.

I first met Gar when he was presenting his work at the POMES meeting last year here in the Washington area. He presented some very impressive work on melanoma, which the Gerson therapy has been very useful in. I recently met a patient with a history of having developed metastatic melanoma and being told there wasn't much that could be done. The patient went down to the old Gerson Therapy, and after 13 juice drinks a day for 20 months was quite well healed. As a dermatologist very familiar with the statistics, I find that boggling. Without going further into the pages of description of what Gar has written and his membership on various committees (with the Office of Alternative Medicine, putting together some of this information), I'd like to get him up here to tell us a little bit about his work.

Mr. Hildenbrand: Bob and I were talking about the generational difference between us, so I want you to switch to MTV editing mode. Bob brought seven slides. I brought 55 slides and about 45 overheads, and I'm going to try to do that in 25 minutes. I don't think it's humanly possible, but we'll do what we can.

I was very impressed with the overview that Bob brought to the discussion here, especially the difference between the terrain and the pathology. In asking the whether any of the components of the integrative management can be demonstrated to have potency, let me play God's advocate and say yes.

Gerson's management represents a terrain management. I'll cover the details of that. Let me show you a picture of the old man. Max Gerson was a fellow who was pulled from obscurity by a well known surgeon by the name of Ferdinand Sauerbruch. Sauerbruch was the richest

physician in the world, and the most influential physician in the world. He developed Sauerbruch's antiseptic cabinet in which open thoracic surgery could be accomplished. Thoracic surgery was Sauerbruch's contribution. He was the first to ever go into the thorax. He did it in order to create another procedure which is called pneumothorax in tuberculosis. I mention tuberculosis because of Bob's observation about the terrain. I'll be delving into tuberculosis literature as well, because Gerson's Therapy was first used at the University of Munich in prospective trials in tuberculosis. My modern epidemiological stuff has been published in cancer, but the entire developmental literature is in tuberculosis.

What's the difference between cancer and tuberculosis? One is an aberrant genome, apparently a deviant genome creating immortal clones, or at least apparently immortal clones. They grow where they're not supposed to grow, and eventually contribute to the death of the host. Tuberculosis is one of these really wicked bacterial infections that goes inside of immune cells and floats around. A macrophage can eat it. It will go around the body in the macrophage, then burst out of the stomach of the macrophage, and create another lesion. In some ways it makes me think about AIDS. In some ways it makes me think about the cell wall deficient forms and the mycoplasma infections that were the subject of the miasma studies of Enderlein and all of those. I don't know if you know about all of those things. I see some heads nodding. Some of you do.

Let me move forward. Gerson was permitted to speak at what I think was the first integrative cancer management seminar in the world, held in Germany in 1952. Bircher-Benner gave up a speaking slot so Gerson could talk, because he wasn't on the roster. Gerson shared a bunch of x-rays. He was so well accepted that he was asked to come back at night. He talked at night from eight to midnight. Then Josef Issels, who worked with our practice for the last two

years of his life, went up at age 45 and talked with Gerson until dawn about what to do to bring the management of disease forward. This is the woman who kept the therapy alive, Charlotte Gerson, Max Gerson's daughter. She has a booth in the exhibit hall. They're selling books.

CHIPSA and my epidemiology group is not at all involved with Charlotte Gerson's group. They're independent. But I think that the findings can be translated to their efforts, because frankly, the cases were developed during a time when the Gerson Institute and CHIPSA worked together. There were 18 years of clinical practice together. There's only one set of charts, one set of outcomes. That's what I'm reporting on. There are not two Gerson outcome camps. There are not two sets of patients, only one.

Unconventional cancer treatments was the study that started my inquiry into Gerson's outcomes. It actually was a hostile study in the beginning, but was exposed by historian Patricia Spain Ward. Pat McGrady, a bunch of other people got involved, Peter Barry Chowka, in pointing out that there was a quackbuster in the staff of the Office of Technology Assessment for Congress. That person went to the Unproven Treatments Committee for a meeting and took them to task at the American Cancer Society for not being hard enough on quackery. That was Hellen Gelband, Hellen spelled with two l's, if you can believe it. At any rate, once the study was taken out of the hands of that set of authors and given a new set of authors, the executive summary recommended meritorious funding for evaluation. It recommended logistic support and so on.

How did we do data collection? I know there's at least one good epi in the audience, so I'm going to say it wasn't easy.

Sometimes when the fights begin,

I think I'll let the dragons win.
But, then again, perhaps I won't,
Because they're dragons, and I don't.

That's by the guy who wrote *Winnie the Pooh*. It really works for me.

When we set about to do this retrospective review protocol, we had to build a database, sort the charts by condition, enter the existing data by ID, diagnosis, status, alive, dead, lost to follow-up, locate the patients and families with letters, questionnaires and an equifax search, check the social security death index, call phone numbers from the charts, interview alive patients. You've got to have medical release forms, request documentation, networking, best case reviews by diagnosis, stage patients at time of admission by TNM, which is the international standard of staging, make note of the histological grade, calculate the endpoints of interest. We use five-year survivals.

The Karnofsky performance status is of very great interest to us, because frankly it's the best global measure of quality of life. Can you get up and go to the bathroom on your own? This is what Bob was talking about. The complementary patient is going to be able to basically take care of himself most of the time. We wanted to look at tumor regressions, and we did. Compare to other data bases in the literature. That's the harder part, but we did it anyway. I don't know that we did it all right, but I don't think there's a right way to do it yet.

There's a lot of confusion about what should or should not be done epidemiologically. I heard somebody say that you have to subject everything to randomized prospective clinical trials, because when you do an open trial, those results disappear when you randomize it and begin to study it prospectively. I would like to also observe that the wonderful effects seen in

randomized prospective clinical trials disappear when the medicines go to the street, and are used where medicine meets the public. They disappear. They go away. In a meta-analysis of individual case results in the field, British researchers found that compared to a meta-analysis of randomized clinical trials, there was only 50% the clinical response. I suspect that meta-analyses are not perfect and flawless themselves. That's my observation, that the treatment results are not always where you want.

The rule of thumb is look for chaos. If you're going to try to dig back into a doctor's charts, (I was just talking with Bob about that), you can go back to those charts, and you can make them say something. Good clinical care doesn't require research documentation. It won't be there. In your initial review of records, if all the charts are accounted for and alphabetized, the data is appropriately collated into the carts, and all histological and staging documents are present, you probably have taken a wrong turn at Albuquerque. You may be standing in a research facility or perhaps the Huntington Library. They're pretty good.

Even excellent clinical settings have none of the usual research requirements. Look for spiders, dust mites, on top of a hopelessly disorganized and incomplete mess, and then start digging for gold. Christine did the first crawling with a flashlight over boxes to get to the file cabinets of 7,500 Gerson therapy treated patients in storage, with the idea that the first cockroach and she was out of there. Fortunately, that didn't happen.

We had to struggle through the border to get to Mexico. There were miles and miles of cars. A number of facilities were involved in the study. The Gerson Therapy was practiced by the same medical group at the La Gloria facility, the La Mesa facility, the Del Sol facility, and finally the CHIPSA facility, which is the modern facility with its own pharmacy. It even has a birthing unit. It has modern operative facilities.

We gathered these little file index cards from the Gerson Institute's files. It was just before the split between the CHIPSA organization and the Gerson Institute. There's a little 3 x 5 card with everybody's name and address and maybe the diagnosis on it. These are the actual cabinets full of cancer patients, and an observer down in the corner there. There was a fire at La Gloria and about 900 charts were lost. This is the shape of many of the charts that we had to review initially.

Long distance telephone calls were made collect by the patients. That gave us a great edge on being able to find people. We could use those numbers. We sent releases, we sent questionnaires, we collated the charts retrospectively. In other words, we catalogued everything that wasn't there. We got what we needed, the pathology reports, the surgical summaries, the discharge summaries. We worked late. You see the clock says 8:15 at night. It's raining outside. Daughter Rebecca is on the phone with a patient. You have to call all over the world to make this happen, and the time zones are different. This is another daughter with an I Love My Mom poster behind her, doing data entry. And this is our student program, which is a very important part of everyone's activities.

Let me start our historical perspective here. "History of the Gerson Therapy" was written by Patricia Spain Ward, who held the Morris Fishbein Chair of Medical History at the University of Illinois, Chicago. She was asked to write a report on the Gerson Therapy for the OTA Report, which report was hidden by Hellen Gelband for months until Sen. Chuck Grassley wrote a letter to her and said maybe you'll give it to me. She wrote, "It is one of the least edifying facts of recent American medical history that the profession's leadership so long rejected as quackish the idea that nutrition affects health." She said of Dr. Gerson, "A scholar's scholar and a superlative observer of clinical phenomena, Gerson was a product of the German medical education, which

Americans in the late 19th and early 20th centuries considered so superior to our own that all who could afford it went to Germany to perfect their training.”

Christine and I did a lot of looking. We found even that the index catalogue of the library of the surgeon general’s office had a complete section on Gerson’s dietary therapy. You can see Gerson, Herrmannsdorfer and Sauerbruch up there. It’s a whole section on the diet. Gerson first published in the U.S. in the *Review of Gastroenterology*, November-December issue of 1945. His “Dietary Considerations in Malignant Neoplastic Diseases: A Preliminary Report,” showed that what he was aiming at was a salt-free, low fat, protein-restricted, nutrient rich, especially potassium-rich diet. It was rich in carbohydrates, had a lot of fluid, rich in vitamins and rich in some liver substances, and so on.

Medications were dicalcium phosphate and Viosterol. Obviously this was a man who was ahead of his time. He was looking at the intracellular phosphate pool, ATP production, mitochondrial activity. His potassium salt choices indicate that he knew about the Krebs cycle, and he was obviously trying to stimulate metabolism. He used niacin, lube, which was just plain old bile from calves, liver powder, vitamins A and D both in the diet and in the medications, liver injections, dicalcium phosphate supplements replaced by a phosphorous compound later on.

By 1949, when he published in the *Journal of Experimental Medicine and Surgery*, Gerson hadn’t changed the dietary, but the medications did change. He added lugol solution which is potassium iodide and iodine, in the belief that iodine was the metabolic stimulant for the body. He also added thyroid, lugol being fast acting, thyroid being slow acting, attempting to get the terrain to behave more alive to counter the effects of the disease. His potassium salts

here, potassium phosphate, acetate and gluconate, do evoke the Krebs cycle, if you think about it.

Gerson also published in the foreign literature, and this is where you see the concept, “*Kein Krebs bei normalem Stoffwechsel.*” No cancer in a normal metabolism. This was published in *Medizinische Klinik* which is an excellent journal in 1954. Also in 1954, “*Krebskrankheit, ein Problem des Stoffwechsels,*” which is the illness of cancer is a problem of the metabolism. There was even a third publication in 1954, “Questions and Answers about the Medications of the Management of Cancer after the Manner of Gerson.” Gerson summarized his work in this monograph, “A Cancer Therapy: Results of 50 Cases.” It’s a misleading monograph, because the earlier works are not really represented in it. Without a total knowledge of the facts or the oeuvre of Gerson, you don’t know what you’re doing. You can’t go by the last monograph and have a cogent sense of what he was doing.

Here’s something about tuberculosis. This is quite fascinating. This was published in the *Journal of the American Medical Association* in 1929, when Morris Fishbein had just taken over the editorship. Morris Fishbein later turned into Gerson’s worst enemy. “My own experiences,” said Edgar Mayer, a well-known phthisiologist, “very largely agree with the evaluation of it made by the Hamburg Medical Congress that the diet is a distinct therapeutic advance as an aid generally effective in the treatment of lupus vulgaris and occasionally in bone and joint tuberculosis, and that its value in other forms, more particularly pulmonary tuberculosis, is yet to be determined. The leading authorities report favorable effects from this diet in the treatment of lupus vulgaris.”

That’s skin tuberculosis. Tuberculosis is the largest killer today of women between the ages of 18 and 45 worldwide. It is on the rise. Now we’ve got the tuberculosis germ totally

mapped. The genome is mapped. All *four* million, 500 thousand segments of the genome. Now we'll be able to make new drugs. But what about the terrain, because what these responses indicate is an improvement in the terrain could vanquish the infectious disease.

Emerson, "Treatment of tuberculosis by altering metabolism through dietary management (Gerson-Sauerbruch-Herrmannsdorfer method)." in the *Nebraska State Medical Journal* in 1929. "It may be further stated that the Munich diet has become in the Lincoln General hospital almost the routine medical management of tuberculosis by members of the staff. Dr. J. M. Mayhew, chief of staff and head of the Department of Internal Medicine and others in that department report very favorably on it."

Banyai, writing in *American Review of Tuberculosis*, 1931, "The dietary treatment of tuberculosis." "Favorable results were seen in 36% of our pulmonary cases. Gain in weight, decrease in cough, expectoration, temperature and pulse rate, improved appetite, and complete or partial abatement of subjective and objective symptoms were recorded. Considering the fact that 82% of our pulmonary cases had far-advanced tuberculosis, with serious complications in many instances, we fell that the beneficial results found justify the further application of the Sauerbruch, Herrmannsdorfer, Gerson diet in the treatment of tuberculosis."

Goeckerman, writing in the *Proceedings of the Staff Meetings of the Mayo Clinic*, in 1932, "Effect of a diet low in salt in cases of tuberculosis of the skin." "Although the last word on the Gerson diet as such, or the mechanism by which it acts probably has not been said, it must be conceded that good clinical results have been obtained."

Urbach, speaking of dermatology. Goeckerman was a good dermatologist, and we could call Urbach the grand dean of American dermatology during this time frame. Urbach in 1932, writes in *Skin Diseases and Nutrition*, "The treatment of tuberculosis of the skin has been

immeasurably enriched by the dietetic methods of Gerson as well as Sauerbruch and Herrmannsdorfer. It is true that Struwe as long as 100 years ago, prescribed a salt-poor diet for the treatment of cutaneous tuberculosis, and that H. Straub emphasized long ago the importance of chloride-poor nutrition for various diseases, but it is to Gerson's everlasting credit that he profited by a fortuitous observation to inaugurate the dietotherapy of tuberculosis of the skin and carefully studied the influence of a salt-restricted and vitamin-rich dietary on the clinical course of this disease."

Urbach again in 1932, says, "Since both dietaries (Gerson, and Sauerbruch and Herrmannsdorfer) have successfully stood trial in the largest Austrian and German hospitals and institutions over a period of six years, it is safe to say that dietotherapy constitutes one of our best weapons in fighting cutaneous tuberculosis."

That's the cover of a 1946 monograph by Urbach, *Skin Diseases, Nutrition and Metabolism*, in which Urbach said, "The question of nutritional therapy and skin diseases was again placed in the spotlight, when Gerson, alone at first and then in collaboration with Sauerbruch and Herrmannsdorfer, demonstrated that a low-salt diet brought excellent results in certain forms of skin tuberculosis. This dietary was soon tried in other acute and chronic inflammatory conditions of the skin, sometimes with very good results."

This is one of my favorite Urbach quotes. He says, "It's interesting that Job, who suffered from a persistent itching and weeping dermatitis seems to have been cured, finally, merely by adhering to a salt-free diet (The Book of Job, chapter 6, verses 6 and 7). The earliest account of the etiology, symptoms, and treatment of vitamin deficiency appeared about A.D. 392, when St. Jerome described a skin disease suffered by St. Hilarion as the result of four years of diet limited to barley bread and vegetables cooked without oil. It appears that addition of oil

to the diet was followed by recovery (Taylor). There is nothing new under the sun. Twenty-five hundred years before Gerson's time, an unknown, obscure physician prescribed a salt-free diet for a patient with dermatitis, and fifteen hundred years ago the clinical picture of vitamin A deficiency was described."

Urbach also wrote, and this is the most important of his observations, "Gerson's dietary therapy for cutaneous tuberculosis has been extensively tested and approved by the majority of authors (Jesionek, Jesionek and Bernhardt, Bommer, Vok, Wichmann, Jadassohn, Stuempke and Mohrmann, Brunsgaard, Scolari, Dundas-Grant, Stokes and others). Particularly noteworthy are the investigations which Jacobson and Brill and Gawalowski carried out over a number of years on extensive material. The Russian authors treated 124 patients who were under observation for five years, while the Czechoslovak Investigator followed 127 cases. Both groups showed marked improvement. Interesting, too, is the report submitted by Simon and Kaplanskaja which shows the necessity of adhering to the salt-poor diet for an adequate period of time."

Cope, "A medical application of the Ling Association-Induction, Hypothesis: the high-potassium, low-sodium diet of the Gerson cancer therapy." This guy was my teacher. He was also the chief of the biochemistry laboratory, the Vets Administration, Department of the Navy, in Warminster, Pennsylvania, and a man who taught the developer of the MRI how to use nuclear magnetic resonance machines. That was Raymond Damadian. Cope was my tutor for three years. He wrote, "From the nature of the measures that gave good results, and from the laboratory medical science available at that time, Gerson attempted to deduce the reasons why his therapy was effective in curing cancer. His deductions led to some unconventional ideas regarding the nature of human cancer and the mechanisms of therapy. Some of his hypotheses were vaguely stated and incompletely validated, but they are of great importance because they

imply that those approaches to cancer therapy that will be effective are mostly different from those now used.”

William Regelson, who is here today, in talking about what he talks about, hormones and all sorts of things, wrote an article for the *JAMA* in 1980, saying, “We may shortly have to ask if Gerson’s low-sodium diet, with its bizarre coffee enemas and thyroid supplementation, was an approach that altered the mitotic effect of the intracellular sodium for occasional clinical validity in those patients with the stamina to survive it. Was the Establishment correct in turning its back on these programs?” The other two programs were Lincoln’s bacteriophage and Coley’s toxins, that were highlighted in that article. I think the stamina to survive a diet therapy should be compared with the stamina to survive other approaches to cancer.

Eli Seifter got up in front of the American Chemical Society in 1985. He’s a brilliant vitamin A expert. He said Gerson went in front of the Senate, and he made a bad mistake. When he was asked to demonstrate patients, he demonstrated five patients who should have died and who didn’t die. Seven corroborating physicians gave testimony. He submitted a ten-case review to the National Cancer Institute, which lost it. I found it in the National Archives by the way, even though they couldn’t find it at NCI. Seifter said poor Gerson was asked by the Senator what we could do to help ourselves, to prevent cancer. Gerson listed cutting the salt, cutting the fat, cutting the red meat, increasing fruit and vegetable intake and whole grain intake. He was ridiculed for this by members of the U.S. Public Health Service, the American Cancer Society. The American Cancer Society of course adopted those recommendations without any credit to Gerson in 1985.

We reported on melanoma. We reported, although it wasn’t statistically significant, that in a small sample of 14 Stage I and II patients, in a follow-up of more than 20 years, none of

those patients recurred. The worldwide rate would say that at least 18% should have been dead at five years. When we see that in the context of the Stage III findings it's much more interesting. 82% of 17 Stage IIIA patients were alive and well at five years. Even in a combined 50-50 mix of Stage IIIA+B patients, 70% were alive and well at five years. 39% of Stage IVA patients. Those patients have a median survival of 7.2 months in conventional management or without treatment, because that doesn't make any difference.

We use the standard staging system. We use the TNM. We presented life tables showing the five year data analysis. We did this in conjunction with UCSD and USC and UCLA. They all reviewed it for the best ways to present the data. Surgery and the prevention of recurrence. Bob mentioned that you want to get the tumor out of there. We have a very clear example of that, a graphic example of a comparable group of Stage IIA, IIIB + IVA melanoma patients. 75% of 32 operated patients were alive at five years vs. 35% of 17 patients who avoided surgery. It's clear that if you debulk the tumor, the host is going to bounce back. It's also clear that diet therapy alone and surgery alone have about the same outcome. We saw in the lymphoma patients 13 instances of extraordinary complete responses with no other influence than the dietary therapy. This is consistent, I'm sure, with Dr. Atkins' experience with lymphomas. They're very sensitive to host manipulation and immunity.

Although this has not been compared to any other data base, and we didn't do a statistical comparison, we saw also that 64% of 11 operated-to-cure patients who followed surgery with diet therapy for Duke's C colorectal were alive and well at five years. I need to do the data, because I'm sure it's already significant, especially against the SEER data. Our colleague and my dear friend Peter Lechner, recently retired from the University Hospital in Graz, wrote in 1990 that after nearly six years of using adjuvant diet therapy which was a modified Gerson, all

the juices, two coffee enemas a day, vegetarian diet, salt, fat restriction, but no thyroid, lugol or liver injections, they were able to report the following preliminary data. Tumor cachexia is prevented or delayed. Fewer post-operative complications and infections are seen. Lesser side effects of radio and chemotherapy are seen. Significantly less analgesics and psychotropic drugs than controls, and that's from a prospective trial. Good psychological states. Slower progression of existing liver metastases. There are actually some that disappeared. Less marked occurrence of malignant effusions.

Integration is what this is about, isn't it? Integrative medicine means you put everything on the tabletop in front of you, and you ask what will help? I don't care if was developed by Dow Corning or Bristol-Myers Squibb or by Danopoulos or Gerson or Galvallo working in relative isolation. The question is, will it help the individual? In this case, surgery combined with diet therapy helped. Another interesting finding was that in the melanoma patients there was a distinct drop in survival after 1985. When we broke that down further we correlated it with a cessation in safe, usable, raw liver juice, shades of Adele Davis. Gerson used to mix carrot and liver together. Three times a day there would be a half a pound of raw liver juice given.

That's no longer possible, because animal husbandry has resulted in a failure of immunity in the calves. Almost all of the liver specimens are contaminated by *Campylobacter fetus*, subspecies *fetus*, which is a major cause of gastroenteritis, already topping salmonella now in the United States. You get it from drinking water and produce as well. At any rate, this sent us into the literature. One of the questions that came up when we were doing our melanoma data was what about the loss to follow-up? It was Bob Wittes who said that. He said, "I just don't see it. Loss to follow-up could confound everything."

When we did our presentation at POMES we showed that in 1993 we started with 44 known outcomes. By 1997 we had 68 known outcomes, because we located 14 lost to follow-up, added nine newly assessable cases, and we used the SSDI and located one early stage patient. Yet the average rates of survival were literally static after the sample built to a certain extent. We reported in 1995, and things are not going to change. The average survivals are going to ride right where they were. This is the way it works, really, in the data. The data works in trends. You can think of voting booths. Think about going to the poll in California, but knowing already who is president because New York's polls have closed. They've taken an exit poll and they've told you, even before the count, just with a sample.

This is a more interesting finding. This we compared with the SEER data base, which is incredibly disturbing, looking at the Gilda Radner stage of FIGO Stage III ovarian cancer. We compared this, and in every instance, at third year, fourth year and fifth year, was statistical significance. We looked at combined surgery and diet therapy. We asked what happens when you have an optimally debulked ovarian cancer patient, and then the patient ran away before chemotherapy and took the diet therapy. Optimally debulked means you take the shot vacuum to the gut. A total abdominal hysterectomy, bilateral salpingo-oophorectomy, omentectomy, node sampling and peritoneal wash sampling happened in all of those patients.

That's what you're looking at, optimal surgery, survivals of 3, 4, 5, 7, 12.5 and 13 years. FIGO Stage IIIC, ovarian carcinoma. In the SEER database, if you look closely, you'll see that 1799 patients were observed with the same stage of disease. At the end of five years, 17 were alive out of 1799. This is a very important finding. Again, it speaks to the strength of the milieu therapies. We're looking at a therapy that mopped up residual studding, because all of these cases have residual studding in the abdomen. No surgeon tries to get it all. That means that the

health of the host was stimulated to such an extent that the immunity was able to mop up residual disease. This is what the Kaplan Meyer survival curve looks like for those patients.

If I don't say something about mechanisms it will be a total cheat. We know at least a couple of the mechanisms, one of which is edema management. Edema is a local or generalized condition in which the body tissues contain an excessive amount of tissue fluid. I would say, "Read that cell." Cells contain an excessive amount of hydration. The great Christine Waterhouse, working with Albert Craig on a grant from the American Cancer Society, published in the journal *Cancer* in 1957, "Body composition and changes in patients with advanced cancer." "Recent communications from this laboratory have emphasized that gross-weight changes in patients with advanced cancer may be minimal, even when large amounts of body fat are being lost. Under these conditions it has been shown that there may be a great gain of total body water even though there may be no detectable edema."

They estimated that the average cancer patient is carrying about a gallon of extra intracellular fluid. Think about that. Can cells that are overhydrated transport sugars? Can they transport oxygen. Can they manufacture ATP? If they can't, and if this is the general condition, then no wonder cancer patients get fatigued, have dull hair and sallow skin and can't heal wounds and bruises. If that's the condition, a generalized subclinical, not visible to the physician's eye but measurable through resistance impedance testing, if a condition like that exists, then how can we ...?

This is really great. Christine Waterhouse said if they're losing fat, let's try to force feed fat. Let's see what happens. She put an NG tube down the patients below the pyloric valve, pumped tons of fat into the patients. She found that. "Our data do not warrant any direct analysis of these changes, but if one assumes that the calculated caloric discrepancy is approximately

correct and that this is all made up by body fat stores, in every instance a gain in weight as a result of forced fat feeding was due almost entirely to a gain in intracellular fluid.” Think about that and TPN, Total Parenteral Nutrition, which is awfully high in lipids.

This is our friend the mitochondrion. I have to say this because, and Bob this is in the spirit of friendly debate, there has been a great deal of confusion about whether this organelle survives in malignant disease. Otto Warburg thought it was killed. Otto Warburg thought that he had actually created a throwback to fermentative metabolism by creating almost a bacteria-like metabolism. He thought that because when he put a petri dish full of sheep fetal cells into a bell jar with a vacuum pump and sucked most of the oxygen out, most of those cells died, and the ones that lived started to pump out lactic acid. He reasoned that that meant that they had reverted to enzyme metabolism.

This is his ugly face, Otto Warburg, winner of two Nobel prizes. He defined cellular respiration. He received one Nobel Prize in 1931 for the oxygen-shuttling enzymes of the mitochondrial respiratory system and in 1941, I believe, for the hydrogen-shuttling enzyme systems. But he was wrong about the cancer generalization. He was wrong in that the mitochondria aren't dead. Cells in mitosis rely on glycolysis to break their sugars. Cancer cells don't mature. They grow older, and then they start to divide. It's because they're always dividing that they're always making tons of lactic acid. So what you have is a very interesting and very different turn on that.

I want to comment on the subject of sugars. This is why we have the confusion about what carrot juice is good for or not. There's not just one way to grow a healthy rat. I'd say skin a cat, but that sounds so vulgar. If you look in the international journal, *Cancer Research*, in 1982, you will find a most provocative experiment done by Jähde and Rajewsky at the

University of Essen Cell Biology Laboratory. They demonstrated that they could take a 50% glucose solution, hang an IV on a tumor-bearing rat and destroy the tumor. With an intertumoral probe they demonstrated that the lactic acid was being used against the tumor. Tumors have forgotten to downregulate. They destroyed the tumor by dropping the pH below 4.5 pH. They dropped it by causing the tumor to overproduce lactic acid. This may be why carrot juices taken throughout the day have a beneficial effect. They may be swamping the greedy tumor that has forgotten its table manners with its own metabolic byproduct. Tumors have mostly forgotten to downregulate sugar and insulin uptake. They'll basically take whatever is in serum.

This is something that's exploited in a number of alternative approaches, insulin, glucose loading of the tumors. These have been used prior to chemo for chemo sensitization, for example. Demitrio Sodi-Pallares, the eminent Latin cardiologist, demonstrated tumor regression using GKI solutions taken from myocardial care, hanging glucose potassium insulin IVs on patients and causing melanomas to shrink down – unbelievable result.

“The high-potassium, low-sodium diet of the Gerson Therapy has been observed experimentally to cure many cases of advanced cancer in man.” F. W. Cope. Why did he say high-potassium, low-sodium? This is another mechanism. I'll conclude here, although I could go way, way beyond this.

The tissue-damage syndrome was defined by Freeman Cope based on the work of Ling. The question was what makes a cell swell? What makes a human cell swell beyond the normal level of hydration to where it gets sick, to where its mitochondria will get hyperplastic and die? There are four global causes – oxygen starvation, trauma as in a physical blow, and bruising, poisoning and nutrient deficiency. What that causes in a cell is a loss of potassium, an increase of sodium, swelling with water, and loss of cell energy production. Gerson devised a strategy

against edema based on observations that were later corroborated by the developing science of physiological chemistry and physics. That strategy was potassium supplementation, sodium restriction, which is a logical answer to the reversal of normal sodium potassium loading in cells, nutrient hyperalimentation, caloric restriction, fluid forcing, extreme fat restriction, periodic temporary protein restriction, acceleration of metabolism by thyroid.

Let me conclude by saying too that – most of you don't know this. There was an excellent discussion yesterday in the diet group about caloric restriction. I want to say that right now Bill Allaben and Kevin Keenan (Bill's at FDA, at the National Center for Toxicology Research. Kevin Keenan's at Merck), are struggling to finish a draft of a report which will be issued to laboratories throughout the country from the FDA. It will advise them to cut down on how much their rats are being fed, because *ad libitum* fed rats are so obese and sick by the end of the study periods that too many are dead. Too many of the control animals are dying. Kevin Keenan said it this way. He said, "It's a joke in our lab, but not a very funny one, that the most toxic thing we've tested for the last 20 years has been the food. In many cases the animals given a toxic chemical do better than the controls, because the chemical ruined their appetites." Think about chemotherapy and whether or not it might be inducing caloric restriction, because you can't eat when you're vomiting. That's just one more rationale.

There's so much more. It goes way, way beyond this. For anyone who is interested to know more about the way the dietary is used at the CHIPSA facility and the other programs of vaccines and so on, there's some information on CHIPSA on the presenter table. How many of you are doctors, scientists, researchers? I love it. You should walk up to Ernst Wynder and say, "No, really, there are professionals here, Ernst. It's not just lay people." He was fussing about it. Tell him, "It's okay, don't worry about it. We're here." That's all, Alan.

Dr. Dattner: Thank you, Gar, for a terrific seminar. This is really enlightening, and truly in the spirit of this session. Some of your most impressive results were truly complementing surgery with the dietary therapy. This is what the future is looking towards.

I now want to introduce our commentator, Dr. Douglas Weed, who is an MD, PhD. He's Chief of Preventative Oncology Branch at the Division of Cancer Prevention of the NCI. He also is involved with the Cancer Fellowship Program. His background is in engineering, medicine, public health and epidemiology, with a number of degrees from Ohio State, and the University of North Carolina, where he received his PhD. We're honored to have Dr. Weed here to give us a little perspective from the basis of the NIH. I'll put him on with no further ado.

Dr. Weed: Thanks very much. As you can appreciate, the role of a commentator in this situation is not an easy one, but not because I come from the NCI. Let me explain that. The reason this role is not an easy one, is that being a commentator in a situation like this is a bit of a crap shoot. It depends. It's not like you get this information up front. It's like being a contestant on one of those daytime quiz shows, like Jeopardy. You're sitting there and saying, "I hope the category" You can imagine someone there. They've gone through the first round, and they say, "I'm cool with everything unless it's something about France." The first category on Double Jeopardy comes up, French Film Stars. Everything rests on what comes up on the board, what questions are asked, what puzzles are presented.

Speaking of puzzles, I'm not really sure why I'm here today. I'm not very well known. I'm certainly not famous like the gentlemen here that you've been listening to. I'm not an oncologist. I'm not an alternative practitioner. I'm not a nutritionist. I'm not cancer survivor.

Almost, actually. I've got an interesting story about that. I was about 15 years old, and was sitting around. My dad took photographs of us as kids. He had a light and a camera. He loved cameras. He took pictures of us. In the summer he had a picture of me with my shirt off. My mom said, "Doug there's a bump on your collarbone in the picture." We said, "Yeah, there sure is." A couple of days later we went down to Ohio State. My dad's a professor there. We saw Jack Vasko, who was one of the great thoracic surgeons. He took a look at me and took a look at my collarbone, and he said, "We'll be admitting you today." You know, 15 years old – cool.

Then he said, "Sign this waiver, that if we need to take your collarbone out, that will be okay." I said, "Sure, whatever." The next memory of all this was I was laying in recovery and all I could hear was screaming. Screaming. Having been raised in a very fundamentalist Christian environment, I was sure where I was. Very soon after that a very sweet nurse came over to me and said, "It's okay. You're doing just fine." It turns out, it was very unfortunate. It was also a young kid, a hemophiliac, who did not understand much of life, and did not understand certainly why he was in the hospital. He had some teeth taken out, and he was in some considerable discomfort. That was the best way he could explain it at that time. That's the reason he was screaming. I liked nurses ever since then, married one, happy ending. But I'm not a cancer survivor. It was nothing. It was normal tissue.

My mom is, though. She's a survivor of endometrial cancer. She didn't use any complementary therapies. My aunt, my uncle, my mother-in-law all died from cancer. In a sense I guess I understand the personal side of cancer, the sorrow, the desperation, the resilience, the letting go, the loss, as many, perhaps nearly all, of you in this room do, although I'm no more an expert on the human condition than any of you. I'm no expert on cancer therapy. Like I said, I'm not an oncologist. I've been trained in epidemiology, and have spent most of my whole

career in cancer prevention. I am employed at the National Cancer Institute and very happily employed there. I have no responsibilities in the cancer therapy programs at all, intramural or extramural.

So why am I here? I do have a couple of things that I like to think about quite a bit, and I have published a bit on. I know a little bit about ethics, and I know a little bit about evidence and its interpretation. I'm a student, if you will, of the philosophy of science and of the ethics of medical research. I'm a senior fellow at the Kennedy Institute of Ethics. I am very intrigued by this phenomenon, this bringing together, this integration of two rather disparate cultures – the traditional community on the one hand, and the alternative/complementary, you name it what you want, community on the other side – this collection, this integration with collective knowledge and ethics and practice.

I think this conference does represent a true shift in the paradigm from the old to the new. The old represented two very distinct cultures that did not speak to one another, and the new is represented now by two communities beginning to speak to one another. As Dr. Wittes said yesterday, and I agree with him about that, the big challenge is to find a common language. We may all agree that we are here, obligated to be here for the benefit of the patient. Can we agree about that ethical norm, the beneficent norm of medicine? Let's all say we can. And let's all say we have respect for each other. We will try to do that very hard. That is sometimes a little more challenging for some people than others.

Then there's this third part of language we talked about a little bit yesterday, respect for the evidence and its interpretation. I'm going to focus for just a few minutes on this notion of evidence. Why is this so important? What am I talking about here? Well, each person here, whether it's me, or Dr. Atkins, or Gar, we all have an evaluative system. Everybody here today

has talked about things like better, or proof, or benefit, and in each case there was a way that that was being evaluated. That is a very key notion. We need to look rather carefully at the various evaluative systems and see if there are some commonalities.

This is not an easy problem. Let me tell you right off the bat that I think there are rather radical differences in what counts as credible evidence, how much evidence is enough to warrant some action, the effects of biases on evidence, the kinds of interpretations that can be defended on the basis of evidence. There are lots of differences here. There are a lot of strong opinions and a lot of differences within the traditional community. This is an area of considerable interest and not much attention. But I do believe it is the crux of the matter, assuming that we are both talking on the same ethical plane, we're all interested in the benefit of the patient, and we have mutual respect for one another.

I'm coming today not as a critic, even though it said I was, not as an oncologist, traditional or otherwise, but as a practitioner of the healing arts and sciences. Remember, it's a healing art and science. I too have taken the Hippocratic oath and continue to follow its norms, and as a student of the philosophy and ethics of contemporary science with an emphasis on evidence and its interpretation. Are you all cool on where I'm coming from here? Good. Let's talk. I'm going to open it up for a little bit about evaluative systems.

Let's take the concept of proof, which as you heard Dr. Atkins claim, was what the NCI or mainstream medicine requires. I can't quote people very well, but Bertrand Russell said something like this. If you're going to talk about proof, then you're talking about mathematics or logic, but you are not talking about science. If anyone in science tells you that they have the exact truth about anything, they are a very inexact person. Proof is not in the language of

science. There's evidence in science, and there's some very strong evidence, and there's some not very strong evidence, but it is not proof.

What kinds of evidentiary systems are there? You've heard little bits and pieces. There is the great randomized clinical trial, which (I know you all appreciate historical arguments) was first used in the *New England Journal of Medicine* 1947, Austin Bradford Hill, streptomycin and tuberculosis. There are covert studies. I'm not going to go down through all this hierarchy, but at the bottom of the list is something called expert opinion. Expert opinion as a way to examine, as an evidentiary system, simply say, "It's so because I say so, and I am who I am." You might appreciate that that is a rather challenging notion from a scientific perspective. What we require in science is empiricism. That's a fancy word. You measure things.

Let's step back, take the two talks we've heard today, and look at the evaluative systems that are being proposed, being used, in these two very different talks. Let's see where they come together, that is where the system is joint, and let's see as well where these presumably very untraditional systems actually have some evaluative evidentiary criteria that are precisely the same as traditional medicine. Let's look at some of these. I will use the ones Dr. Atkins put up, from his slide. He said that he evaluates the patients in his clinic by lack of growth, quality of life, remission/cure, and by implication, survival. If somebody's cured then they'll survive for a while, anyway.

The interesting thing about those is that each one of those is precisely what "traditional mainstream medicine" sees as part of its evaluative system of therapy. Did the tumor get smaller? Did the patient live longer? Is the quality of life of the patient better? These are precisely the same evaluative standards. The difference is that in order to make the claim that things are better you have to measure them. Is this an easy thing to do? Some things are easier

than others. Survival is rather easy to measure. It still has its problems. Quality of life is not rather easy to measure. Tumor growth is reasonably easy to measure. The point is, if you're going to lay this out as your evaluative system, then make the measurements, and please do submit it to a peer-reviewed journal. I will take issue with one thing. I serve on two editorial boards, the *Journal of the National Cancer Institute*, and the *American Journal of Epidemiology*. Nobody pays me to do this. I review papers. I do not care anything about them except what's in the paper and what's the science. For me, and I can only speak for my own self and my own personal character, there is no conflict of interest when a paper shows up at me. That is key. I won't go on and on about that.

Dr. Atkins said another couple of things. I'm not picking on Dr. Atkins. I'll get to you, Gar, in a minute. He said find cancer early. Do surgery. That's about as mainstream as you can get. The only thing he left out was prevent cancer before it happens. That's an interesting concept too. The National Cancer Institute is spending extraordinary sums of money to examine preventive interventions for cancer. I know about this part, because that's where I work.

I want to make one other point about evidence and the notion of the individualization of cancer therapy. I point to two statements. One is why can't we individualize all cancer therapy. The second is why can't we use the results of an individual's therapy as evidence that the therapy is effective? You've gotten yourself into a logical quandary. You have a problem if you say everybody's therapy is individualized. Then the results of that person can't possibly apply to anybody else, because you've just said it only applies to this one person. Everybody's different. Believe me, this is a very big, very interesting problem.

It's an interesting problem in medicine. It's an interesting problem in the philosophy of science and the philosophy of biology. We are trying to make some balance between the

individual, which we all believe, because we all are individuals, and the generalizable. We want to be able to say, as every person up here has said, this therapy, whether it's a single agent or a bunch of agents, is good for more than one person. At the same time we understand that each person is an individual. There's a balance there that we need to meet. I took a lot of notes here. I was going like crazy. It was great.

Let me go to Gar. I'm no expert on this stuff, believe me, in terms of what people are doing, but I do see a very interesting phenomenon. That is the collection of the information. The beginning of collecting of the information and making comparisons. I'm not going to go into a nuts and bolts, blow-by-blow critique of the way in which these comparisons were made. I will tell you that these comparisons would not likely make it past peer review. Any time you come up with an N of six, you're going to have some problems from a statistical perspective. Why? Because small numbers do funny things. That's not me, that's not mainstream medicine, that's statistics, the science, theory of statistics. Let's not get into it.

What is important is that what you see there is the beginning of the integration that's taking place from an evaluative sense. That is to say, we've got these patients, we're doing this to them, and the "this" is whatever you want it to be. We're going to measure this. Then we're going to see what happens and we're going to measure that too. Then we are going to send it to peer review, and peer review people are going to take a look at it. If it all happens just right, then we will see a real change.

I have one more point to make. I thought yesterday Tom Harkin had a great metaphor. Remember what he said yesterday? He said when there's a paradigm shift, there's the old, and it has to be ushered out, and the new has to be ushered in. The people who usher out the old are called the pall bearers, and the people who usher in the new are called the torch bearers. It

occurred to me, in this sort of metaphorical funeral procession, that if it takes place when we're mostly in the dark, and we are, then I suggest that each one of us is likely to be both a pall bearer and a torch bearer, with one hand on the coffin and the other hand on the light. Thank you.

Dr. Dattner: Thank you very much, Dr. Weed. It's always a pleasure to have the perspective and maintain the tenor and the tension of this meeting, which involves both bringing together the two different perspectives, if I may separate them so artificially, and also having the contrast, so that we can keep refocusing on the direction that we want to go in the future.

I'd like to open up the floor for some questions. I ask that people use the microphone. Things will be better recorded. It is 4:00 o'clock. I'll ask your forbearance to stay on a little bit. I'll also make a comment or two.

The first comment is that this has been very exciting for me. It was very exciting to see one of my mentors, Eli Seifter, mentioned. He is one of the people who I studied with at Einstein who did extensive nutritional work. It was in vitamin A, probably 20 or 30 years ago, and in a number of animal systems, showing everything from vitamin A breaking stress to other things which have been incorporated into my life. We can see that in medicine, nutrition has been back and forth and back and forth. It has been in and out. There's no question that we have some of the pioneers here right now of bringing it back in.

Participant: I have two questions, one for Dr. Weed and one for Dr. Atkins. Dr. Weed, I would like your response to Dr. Atkins' comment about first do no harm.

Dr. Weed: An excellent point. We might want to point out a couple of things. First of all, the Hippocratic oath is not sufficiently described by that specific statement. The Hippocratic oath is not three words long. It does talk too about bringing benefit to the patient, and as any good practicing physician knows there is a balance of benefit and harm. As Dr. Atkins pointed out, sometimes you do surgery. You can talk about surgery as a benefit, or you can say it hurts, and there's a certain potential survival disadvantage to people who have surgery. There are infections and things. To take this as an absolute notion, that physicians do no harm to anyone, ever, means no shots, either, no pain. There is a balance. I think that modern medicine is probably driven better by the principle of beneficence, which is the balance of good and harm. It's a struggle. It's not an easy thing to do. Don't get me wrong. It's a very big challenge. Anyway, that's the answer to that question.

Participant: Thank you. Dr. Atkins, I would like your opinion of the comments that we just heard from Dr. Weed:

Dr. Atkins: First do no harm is really just a part of strategy. The strategy is what I outlined. When you are planning your chess moves, 20 moves ahead, you have to think in terms of what might I do which has the highest benefit-to-risk ratio. That is my interpretation of first do no harm. I absolutely agree that it's not don't ever do anything that has any risk at all. I agree with that. But what we have in mainstream medicine right now that I believe has to be changed are practices such as adjuvant chemotherapy immediately upon learning that one node was positive. That is a way of saying first do something extremely risky. That's what I'm arguing against. I'm saying that if there is a safe treatment which can get the job done, that

should be your first choice. If the safe treatment does not work, then a less safe treatment might be your second choice. Finally, a risky treatment might be your third choice.

Participant: My question has to do with my sister's personal situation. She's in California. She was just found to have metastatic breast cancer in her liver and scapula bone. I always thought of California as the place where they are doing the most far out things. I looked through every panelist here, and nobody at this entire conference for three days is from California. She's been having a very hard time finding people like the Atkins Center who specialize in complementary therapy. She is going to embark on a conventional treatment program with radiation and strong chemotherapy, but she wants to explore complementary things as well.

I've been trying to help her find things out there. She's in the LA area, and it's been impossible. Her oncologist says, "I don't discourage that, but I cannot recommend anything in particular." He doesn't know about anything. It's so darn frustrating that these oncologists at comprehensive cancer centers – I think of comprehensive as all of these things. That's not the way it's defined out there. My question is where can I direct my sister so she doesn't have to pick up and move? She has two small children. She needs to be able to stay out there and get comprehensive care.

Panelist: The only comprehensive cancer care available to Californians is out of state or out of country.

Participant: It's incredible.

Mr. Hildenbrand: The statute that governs this is California State Statute 1707.1, which we call the Krebiozen law. It was instituted to try to blunt the effect that Andrew Ivy was having during the development and testing of Krebiozen. That was 1959, I believe, that it was passed. Essentially it says that if you use anything other than the standardized treatments that are FDA approved, you have to go through a special tumor board at the state level that's never been convened since the law was written in 1959. There is no interest and there is no ability to change that at this point. The most interesting part of the law is that it makes a physician a felon to do anything else.

Bob's been involved, and Mike Schachter, and Paul Scharff, in changing the laws in New York. The idea is to make New York's peer review more balanced. In order for physicians to gang up on other physicians regarding practice, they have to first of all have some familiarity and be conversant with the practice. They have to have some evidence that they are capable of that kind of medical practice that they're critiquing. In the second place they have to prove harm. That's the most important. In California, that isn't necessary. Your license can be yanked for doing something that's just not consensus medical community thinking. That's the problem.

Participant: Do places like Atkins –I wasn't here for the first part of the presentation, so I only came in on the tail end. I'm familiar with Atkins, and I know there are many others. Will you work with an oncologist on the West Coast?

Dr. Dattner: Considering the number of people we have here, it might be better if you speak to Gar afterwards. You can also ask me. There are people who do unconventional work. I maintain a California license also, and read the bulletins coming out of there. California's such a hotbed of extremes that it's a terrible place to get canned legally one way or another for doing anything alternative. You have to be extremely careful there. This is the kind of thing that keeps physicians from expanding into doing everything that they know. They don't want to get thrown out after the 25 or 30 years that they built up doing what they're doing. That's why many of the California alternative practices are actually in Mexico.

Participant: I have two questions for Dr. Atkins, and one for Dr. Weed. Dr. Atkins, are you including treatments other than what you've told us today – mind-body techniques or other nutritional things, anything else that you didn't finish letting us know about? Second, are you doing any outreach to other centers, like the person before me asked? Herb Benson and Dean Ornish are having centers around the country that are doing their programs. Are there any other places that are doing your program?

Dr. Atkins: We certainly are doing other therapies. I couldn't go through the whole list. I didn't have enough time. Our mind-body work is very interesting. On the one floor where we give the IVs, we make sure that all the cancer patients meet each other. Most of them are feeling much better than they ever did; most of them feel better than they've ever felt in their lives. That interchange allows them to develop the number one psychology there is, which is confidence that you're going to be able to beat it. You get that confidence because you know you're a part of a system. You know you've elected to do something quite special. You've elected to do

something that everybody else is not doing. You immediately have to say, “I don’t have to buy into the prognosis that this oncologist gave me when he said I had six months to live.” You opt right out of that because you’re not in that system. That’s our strongest mind-body thing.

As to whether there would be Atkins Centers, we’re talking about it. However, the last thing I would do is use it to treat cancer. That would be a business decision of incredible boneheadedness. I would set up metabolic centers to treat metabolic disease, which I can teach to a good competent internist in about a long *four*-day weekend. To teach a person how to treat cancer is very difficult, since I change my mind every conference I go to, when I learn something new. I haven’t even adopted the things that I learned at the last conference. So that is not what we’ll be doing.

Dr. Dattner: We’re going to have to clear out very shortly. They have to set this up for the general meeting at 4:30. Why don’t I let one more person ask a question? Then perhaps we could get a few questions to the people up here in front as we’re leaving.

Participant: I’m a breast cancer patient, and I have a couple of questions for Dr. Atkins about some of the supplements you mentioned and some you didn’t mention. I’ve been told not to take germanium because its quality control is suspect and there’s no proven clinical evidence on it. Can you comment on that?

Dr. Atkins: Well, the part about proven clinical evidence probably applies to all of complementary medicine, usually voiced by somebody who really hasn’t got the feeling for what complementary medicine has to be. We have urgent decisions about patient care, and the patient

is in the office now. We have to make our decisions on the basis of the best available evidence. Sometimes the best available evidence may well be the experience that our colleagues have had who have used something, or that we ourselves have had from seeing how it worked. As far as germanium is concerned, a good quality sesquioxide, I've never had it pose any problems. The germanium that we use in the office has never posed any problems. There's no question that you can get a germanium which is not even sesquioxide and is capable of doing damage.

Participant: I'll skip some of this other if I could just ask

Dr. Dattner: Why don't we, perhaps if we try to squeeze in a few more, maybe you could ask that after, and let somebody else ask another. I'm sorry we're under such time pressure here.

Participant: I had a quick question for Dr. Atkins. You were talking about the success in your treatment and talking about prolonged remissions and using terminology like that. I was just wondering what is the average length of those pronged remissions, using your treatments?

Dr. Atkins: Well, we can't average it. These people are still ongoing, they're still in the tug of war. Most of our patients are not in prolonged remission as much as they are in this tug of war. The ones whose tumor markers go up if you abandon or slow down the program, I don't know how long this will last. Some of them have been coming for 15 or more years, and they're doing just as well now. Others I believe are past the last challenge. I believe they're cured, but I'm not sure. The more things we take away and the tumor markers stay down and there's no sign of any illness.

I have never tried to treat a patient with the idea of convincing someone else. It wasn't until I realized what we were accomplishing, which is a new goal, for a large number of patients – the idea of having a prolonged, perhaps permanent, struggle with cancer where we were equal to what the cancer could do, and where we did it at an early stage, where there was no suffering or loss of life quality. This is absolutely something that everyone in mainstream medicine must be made aware of. The entire strategy of treating a patient is completely different if you realize that that is a viable option, and one that you might want to shoot for. That would put an end to “cure or kill”. That's what needs to be ended.

Dr. Dattner: We got a reprieve, so we can ask a few more questions. They're not going to knock this room down. They're going to knock down the rest of the place. We have about 10 or 15 minutes before the general session, so I'll continue questions as long as our panel and our audience is interested.

Participant: With a little bit of fear, I felt a need to come up as a traditional medical oncologist and chemotherapist and make some comments. I did appreciate Dr. Weed's comments about evidence and ethics and morals. I would also say that as a traditional medical oncologist, I am interested, and that's why I'm here, in complementary therapy and do different types of therapy of that nature in my practice now, along with Dr. Nichols, who is a nutritionist. Also at least I am and many oncologists are aware that there are strategies of living with cancer. It's not all, as you had put it, kill the cancer or kill the patient. That's a gross over-simplification and exaggeration of how oncologists think. Certainly I don't think that way, and I don't think many of my colleagues do.

I also think this panel should have had a medical oncologist up there and have had a more even-handed approach rather than the approach that was taken. We've heard from a few medical oncologists in the beginning of the session from the American Cancer Society, National Cancer Institute. Particularly with Dr. Atkins, I feel some of the ground rules as far as lack of respect and the attitudes towards each other were a little bit broken.

But all that aside, I'd like to give an example, since you mentioned the example of adjuvant chemotherapy, of the way I approach it and many of my colleagues do, even with a patient as you mentioned who has one lymph node positive. You said they're jumping to chemotherapy. There are randomized controlled trials that show that patients who have even in some cases no lymph nodes positive, but certainly one lymph node positive, have a high risk of recurrence. Randomized studies have been done which we're all aware of, with groups like NSABP, where there was no treatment given versus adjuvant, either hormonal therapy in certain situations or chemotherapy. If you look at the survival curves, you see that survival is better in the group that got adjuvant chemotherapy or hormonal therapy for a limited period of time than in the group that did not get any therapy. Quality of life often is, in most of the chemotherapy studies, better, not worse, than the others.

A person comes to me in consultation to make this very difficult decision. What should I do? Should I do nutrition? Should I do something alternative? Should I take chemotherapy? Should I take hormonal therapy? Who should I believe? It's a crucial decision, and the evidence really has to be there. It's not hearsay, or somebody's impression, or somebody's clinic out in one place. You need to see the data. I didn't hear how many breast cancer patients you treated, or how many colon cancer patients you treated, and what their survival was, or even comparisons. Even those would suffer from selection bias.

Getting back to that patient, I try to give that patient the best information that I know of within my medical field of traditional medicine. I try to tell them what the benefits are, what the toxicities are, what the side effects of the drug are, and I try to give them their options. That includes no treatment. That includes going to a clinic like yours. I'm open to all of those things. I try to give the patient the evidence and educate the patient the best way I know. and let the patient make the decision. There's a definite role for chemotherapy. I believe that survival has been enhanced and quality of life has been enhanced by many of these therapies, so I think there are a lot of exaggerations. There's some truth in what you say, but there's also a lot of exaggeration and sensationalism.

Dr. Atkins: Well, I guess that calls for a comment. In the first place, I want to talk about adjuvant chemotherapy since I brought it up. I looked at a meta-analysis of about 80 studies. There was a survival advantage, but it was a pretty straightforward six percentage points across all the different situations. This means that it was a correct decision, compared to no treatment, 6% of the time, which by implication would mean it was an incorrect treatment 94% of the time. Since what we're trying to do is exactly the right thing 100% of the time, what can we do to bring that up to 100%?

There's a large group of people who are surgically cured. Why are they being subjected to adjuvant chemotherapy, when the technology exists to follow people carefully with the more sensitive tumor markers and find out who is beginning to fall into the category of people who have recurrences? That was never part of the study. The idea of keeping a third arm of the study to look for people as they began to have recurrences, using something like the AMAS, which in

its prime was an extremely valuable test. Now it has sort of faded away a little bit. That third arm of the test would have been very dramatic.

Also, even when there is chemotherapy, look how many other powerful therapies there are, such as ukrain. It happened to be rejected by the National Cancer Institute for further study, yet is in widespread use in Europe. 90 papers have been written in the European literature. Why is that not used?

There should be a meeting of the minds. I'm sorry that I was not conciliatory. But my point of view had not been verbalized in this entire conference, the point of view of somebody who is in the trenches practicing complementary medicine. It is very unfortunate that complementary medicine was redefined as something which it isn't. It was redefined by too many different speakers as an add on to, something that you did after the mainstream consensus decisions were made. I feel that there should be considerable reflection done on the mainstream system of making decisions. There are others.

Take the whole idea of using chemotherapy because it was in a protocol, when a technology exists at least for finding out whether the tumor is responsive or destroyable by each chemotherapeutic agent. There are about *four* or five labs that do that, and none of those have been included in an arm of the study. If we are going to give chemotherapy, we have to be able to give it more precisely. I have seen mainstream medicine, not just in oncology, but in every specialty, diabetes, hypertension, cardiovascular disease. I've seen mediocrity programmed into a concept of let's find a commonality which would work for the least common denominator. What is something that we can tell everybody to do? In looking for something in the way of a commonality we have sacrificed the ability to make distinctions in individuals. That is a community-wide problem.

Dr. Dattner: The decision trees of the future are going to include what we often include, asking people with cancer at our clinic to go to the oncologist, get their opinion, and come back to us. We don't treat people, at least in one of the clinics I work in, until they are given evidence on both sides. You made a good point that there are different statistics that go along with different disorders. People need to be presented with this. I think that in the future there's going to be a multimodal decision tree that's offered to a patient, with choice points at different places, whether for supporting the immune system when chemotherapy is given, or in making the choice whether you want to start with that or not. I'd like to let Gar talk, and I would like to get your rebuttal also. It's important, because we didn't have somebody who had the same interest and experience doing oncology on our panel. I would like to hear your comments again.

Mr. Hildenbrand: I'd like to speak to the general issue of the role of chemotherapy. Enough evidence has been amassed that one would have to be either blind or terribly biased to say that chemotherapy is not a tool in the toolbox. The question we're asking here at this conference is really one of context. We're asking, if there is an enlarged context in which nutrition becomes a clinical field of potency again, if there is a context in which immunotherapy for cancer grows and flourishes and comes into its own, what will that do to the balance? Where will chemotherapy be once we have a balanced set of options? I think those will be the trials of the future and those will be of tremendous interest.

The efforts, the labors of oncology to date to develop these drugs will not be lost. As always happens when a larger paradigm unfolds, it makes sense of the earlier smaller paradigms. It helps us to see them in context, and we come out with a more workable model. That's the way

medicine always is. We always see a little piece of things first. Then we see another piece. Then we have trouble putting the pieces together, and finally it will grow beyond even the consideration of how many of these pieces are right. We're looking at emerging to a larger picture.

I do agree that there's some left-over resentment, some left-over name calling, and attitudes. When we met at the POMES conference, when I got to make my summary remarks, I recalled the words of Robert Bly, who said, "Find the inner child and kill it." In other words, get over it. If we work in a fair relationship into the future, it's not going to be a place to adjudicate our past grievances. We have to move forward together.

Dr. Dattner: Why don't we have one more person, and then let me have you make a rebuttal comment.

Participant: I wanted to make one comment. It had to do with what Dr. Weed was saying, that sometimes there can be a not understood tyranny on peer-reviewed journal boards. I'm by no means accusing you of that, but everybody on a peer-reviewed journal board comes with their own biases. As an example, I'm a physician. I treat some cancer patients. I have an Ivy League M.D. degree. I was taught when I base a treatment on something, to go to the literature and try to evaluate it for myself the best I can. Then, when you apply it, you see what your results really are. Invariably, as Gar was saying, you take things that come out in the *Journal of the National Cancer Institute*, you apply them to patients, and the results aren't always what were in the study.

As an example, there's an unimpeachable editorial board for the *Scientific Review of Alternative Medicine*, the new journal headed by Wallace Sampson. I mean unimpeachable to the tune of nine Nobel laureates and 41 other people who are really well respected in the medical community. But knowing the research, there's an article on homeopathy in the opening journal. I'm very familiar with the homeopathy research and know full well that at least one critical statement in that article which was made was an absolute misquote. People who don't know the literature aren't going to have any sense of that. I don't think this ends up in intellectual nihilism. I really don't think it does. It represents what just went on here, a mutual respect and exchange of ideas in an open forum, so that the "truth" You said before there's no proof. I'm not sure there's any truth. This kind of exchange has to be done so that we can ultimately do the best for the patients. Very few people are going to read, very few colleagues of mine who don't have any familiarity with complementary medicine are going to read the literature on homeopathy and say, "Well, even though it's Wallace Sampson and his 50-person editorial board, maybe it's not absolute truth." There's a death knell, by the way, in that same issue, on hydrazine sulfate, which is also not exhaustively done, as far as the research that goes into it.

Dr. Weed: A couple of related points. First, truth and proof are ideals that we aspire to. That applies as well to journal articles as anything. You have, as a reader of that journal, an opportunity to comment directly on what you see in that journal. Write a letter to the editor. Point it out. That's the way the system works. Interestingly enough, typically a letter to the editor is not given the same kind of severe scrutiny, so that most likely if you point something out like that you can get your voice heard by those people who read that journal. That's a good thing.

Participant: Do people actually read the letters to the editor?

Dr. Weed: Well, whatever. You either read the funny pages in *The Washington Post*, or you don't. I don't know. Good point.