

# **YOUNG LIVING TRAINING CD #74**

## **“Research Facts - Ningxia Wolfberry”**

### **How the American Botanical Council Helps YL Distributors**

#### **Marc Schreuder - Wayne Silverman**

*We welcome you to Training CD #74 from the 2005 Young Living Annual Convention, a highly informative lecture by Marc Schreuder on the low glycemic index or sugar levels of Ningxia wolfberry and the beneficial effects of Ningxia wolfberry on blood sugar. Marc will be followed by an exciting presentation by Wayne Silverman of the American Botanical Council. Wayne will present the vast array of information available on the [www.youngliving.com](http://www.youngliving.com) website as you click on the American Botanical Council logo. And now, here is Steve Bentley, CEO of Young Living, to introduce Marc Schreuder.*

#### **Steve Bentley - Introducing Marc Schreuder**

We have Chinese scientists; we have rocket scientists, and we have a “mad scientist.” It is my privilege to introduce to you now Marc Schreuder, who is our resident mad scientist! Marc has been with *Young Living* for about eight years and he has traveled the world with Gary and *Young Living* researching and writing about essential oils and about our products. He has been a marvelous addition to our knowledge base and to what we are able to provide to you. Marc and his wife, Connie, are also the proud parents of a brand new baby girl, Marci. So let’s welcome Marc Schreuder!

#### **Marc Schreuder - On Macular Degeneration**

How are you doing today, guys? Are you awake? I am going to talk a little bit today about glycation. You probably want a definition of that. It’s simple –it’s how the wolfberry relates to sugar. We are not going to talk about essential sugars, but we are just going to talk more about the glycemic impact of the wolfberry and how it can benefit people who have issues with diabetes or vision problems.

#### **Wolfberry and the Eyes**

The first thing I am going to talk about is Wolf-berries and how they relate to the eyes. The largest cause of blindness is age-related macular degeneration and with people over 55 it is the largest cause of blindness. It occurs as the receptors (the rods and cones in the back of your eye, the retina) start to slowly burn out. They say it is attributed to high energy blue light over the years; there are currently 7.3 million people at high risk of that.

#### **Two Forms of AMD, Wet and Dry**

There are two forms of age-related macular degeneration (AMD)—the wet and the dry forms. For all purposes, we are going to call them good for both of them,. They are a little bit similar. The wet form involves hemorrhaging behind the retina of the eye; the dry form does not involve the hemorrhaging or the neo-vacuolization (and it is more prevalent), but they are both of concern.

(Screen projector in use) Here is a picture of what a normal person will see. As you get older you will see that the center of the eye becomes fuzzy—you are starting to lose cones and rods—you are losing the ability to see. You will also see that the center of your vision slowly deteriorates until eventually you are blind. The only thing you see in the world is through a periphery.

#### **Studies on Zeaxanthin and Lutein**

How many of you know anybody that has aged-related macular degeneration? On a study done by Norman Korensky and his colleagues at the Florida International University (in fact, the Florida International University has been conducting a number of very interesting studies on carotenoids and how lutein and zeaxanthin in particular influence the progression of age-related macular degeneration. Also, they have actually determined the levels that lutein and zeaxanthin occur inside the macular pigment, inside the eye which is the most sensitive part of the eye that is being burned out through age, through life, through sugar, through diabetes, etc. You can see one of their papers here. They are discussing how lutein and zeaxanthin in the

diet, through dietary consumption can slow the

When you look in the eye—and we are talking about the macula right here, that is responsible for this high central acuity vision that you see right there. If you see that little spot, that's the macula, and inside of that there is something called the fovea which is the center of the macula.

### **Ocular Sun Screens**

You will see that in foods there are a number of different carotenoids. The paper we just saw where we looked at lutein and zeaxanthin are the bottom two. Lutein and zeaxanthin occur in very high amounts in the macula. I look at lutein and zeaxanthin as ocular sun screens. They literally screen out damaging free radicals, the damaging blue light, and they protect the very delicate retinal pigment behind from what they call the formation of drusen or the formation of lipofuscin type granules that slowly lead to blindness over time.

In recent studies done by Stewart Richter at the University of Illinois he found that supplementing the diet with lutein and zeaxanthin was able to reduce the progression of AMD markedly. So there is a lot of good science behind lutein and zeaxanthin.

### **Zeaxanthin Versus Lutein**

We are going to talk about zeaxanthin in particular because they are finding that zeaxanthin is far more important than lutein for eye health because in the very center of your eye the ratios of lutein to zeaxanthin drastically favor zeaxanthin. There is far more zeaxanthin in the center of the eye (or the fovea) where the light-bearing rods and cones are than there is anywhere else in the human body or anywhere else in the eye. It is basically 75% zeaxanthin in the very center of the eye and that is what protects the eye from damage.

I have seen a lot of lutein supplements—they have very small amounts of zeaxanthin. Why take a lutein supplement that is 95% lutein and 5% zeaxanthin when your eye is using the reverse? Your eye is using primarily zeaxanthin and not lutein. That's the problem.

You will see it in the standard American diet; we probably get 12 to 1 of lutein to zeaxanthin. Most of that is coming from spinach, corn, collard greens—that kind of thing. You can see the outside

progression of AMD.

of the macula is actually a 1 to 1 ratio and the inside of the macula is a 2 to 1 ratio. One of the recent papers coming out is identifying the ratios of lutein and zeaxanthin in different foods. We are obtaining these from separate studies. It is stated the U.S. nutrition base (if you were to go online and look at the government database for food content where they measure all the different vitamins, minerals, and phytonutrients in foods) they lump lutein and zeaxanthin together as one composite because they haven't had the technology in the last ten years or there has never been the demand to really break those out separately.

### **Studies on Red Peppers and Egg Yolks**

There have been some studies done, and you will see that the highest known source currently of zeaxanthin is red peppers. Eggs yolks is very high and egg yolks is one of the only foods where zeaxanthin and lutein occur 1 to 1. In most foods you will see lutein dominate vastly.

So as I started looking at the wolfberry (and I know Dr. Young was very, very interested in how the wolf-berry would benefit the eye, I wanted to find out how the zeaxanthin levels in the Ningxia wolfberry are in comparison to common foods and very uncommon foods. As I said, the highest known current source of zeaxanthin in the diet is red peppers. Where do you think the wolfberry fits in on this? Would you be disappointed if I told you it is somewhere between red peppers and egg yolk?

### **Ningxia Wolfberry Highest Source of Zeaxanthin**

The Ningxia wolfberry is the highest known reported source of zeaxanthin in a whole food that exists. Dr. Young and I compiled that data in 2001 and it has gone ignored by everyone. No one knows about it, so it's really old news—but it's new news. You can see here the date of this report where it was submitted—March 20, 2002—this report is three years old! It was done by Europhins Laboratories, their Alpha Tech Division, which specializes in carotenoid analysis, and they derive their status from the pioneer in this field in setting standards. You can see here 278 micrograms per gram, of zeaxanthin per gram. That's not very much wolfberry, but if you were to do it for a common food measure for 100 grams, you would have to

multiply that by one hundred, so you have about 27 milligrams of zeaxanthin in one-half cup of dried wolfberries.

### **Volunteers Test Wolfberries**

What does that mean therapeutically? There have been some recent papers. This paper was done in 2005 at the Hong Kong Polytechnic University where they actually fed human volunteers Ningxia wolfberry and then measured the zeaxanthin levels in their blood. What you have here is not just the highest source of zeaxanthin and a good source of lutein as well, but you have a source of zeaxanthin that's in the form of an ester. German researchers found that this esterified zeaxanthin (also known as zeaxanthin palmitate) is far more bioavailable than common isolated zeaxanthin.

Once again, this boils down to a whole food obviously being more powerful than the fragmented or isolated nutrients. You can see here in this Hong Kong University study the serum zeaxanthin fed to volunteers (placebo versus 15 grams of wolfberry) tripled the zeaxanthin levels in the blood. Only 15 grams of wolfberry. Do you know how much that is? Three teaspoons of dried wolfberry—that's it. You are not talking a lot. I know a lot of people that spend a lot of money on lutein, like \$100 a month plus—and there are no vitamins in lutein and in lutein supplements, and here you have a wolfberry that's got more vitamin C than oranges, more beta carotene than carrots, more potassium than any known food, more magnesium than almost any known food, more calcium than cottage cheese—and you also get all these other benefits.

### **Diabetic Tests on Rats**

They actually have measured the effect of *Lycium barbarum* on the retina of diabetic rats when they feed them wolfberry extracts, and you can see the dramatic improvements. One gram a day for two weeks reduced lipid peroxides in the retina by 20%, increased SOD levels in the retina by 80%, and increased residual absorbate by 30%. Why do they measure that? It's because vitamin C is very important to ocular health and it builds up in the eye and as it gets burned up or used up through free radical generation in the eye, you'd get something called residual absorbate.

How much therapeutically are people using? The average intake in the U.S. and Europe is 2 milligrams a day of lutein and zeaxanthin combined.

We don't get a whole lot in our common diet. If you follow US Dietary guidelines you get 3.8 milligrams (about 4 milligrams a day).

### **Studies Show...**

What do the studies say? The Sedness Study in 1994 (which was conducted at the Massachusetts Eye and Ear Infirmary in Boston, MA. and was published (by the way) in JAMA (Journal of the American Medical Association), the Sedness Study found that 6 milligrams a day of lutein and zeaxanthin caused a 57% drop in the risk of AMD. This is in JAMA, look it up—1994 Seden. Another study, 1999, more recent found that lutein and zeaxanthin at the same level (6 milligrams per day) resulted in a 20% drop in the risk of cataracts. The type of cataracts we are talking about is senile cataracts or metabolic cataracts. I am not talking about the seven or eight different kinds of cataracts—I am just talking about the most common ones. They actually have cataracts relating to lupus. There is a collagen type of cataracts, they have hereditary cataracts, they even have one related to rubella, but we are only going to talk about the metabolically influenced type due to diet or due to age.

### **Zeaxanthin Results**

Another study, the Richter Study that you saw earlier, done at the University of Illinois, used 10 milligrams a day. Lutein and zeaxanthin showed markedly reduced risks by 43%—43% in central acuity using 10 milligrams a day of lutein and zeaxanthin! So how much lutein do we get in a tablespoon of dry berries? It gives you 50.1 milligrams of zeaxanthin! Is this not a cost effective way of giving yourself vision assurance?

The results on zeaxanthin are really only for us. They are new. Gary and *Young Living* are the pioneers for this. No one else has this data. It was published for the first time in Gary's book.

### **About Free Radicals**

I want to go on a little bit about free radicals. You have heard about the superoxide, hydrogen peroxide, etc. We are missing one free radical. Can any of you guess what that is? Look Gary—we all know that you are a stress grenade, but we'll forgive you! Besides Gary, what do you postulate would be the most common free radical in the body and the most damaging free radical and the

one that magnifies the effect of every known free radical. SOD is superoxide dismutase—that's a scavenger of free radicals. I'll put up the molecular structure on the board and see if you can identify it.

What is this? Someone gave me the right answer! D-glucose (dextro rotary glucose), also known as sugar, pure sugar. It's not even cane sugar because that's sucrose, that's a diet saccharide. Sugar magnifies the effect. We need it to live, but in excess it hastens the aging faster than any known substance.

### **Blood Sugar, Enemy or Friend?**

Blood sugar—is it your enemy or is it your friend? This study was done by Bucall in 1993. He's been doing a lot of work with Anthony Seremi on glycation and aging—how sugars react with proteins to hasten the aging process. You will see here that the higher the levels or the concentrations in a solution of glucose, the higher the levels of rancid fats in the tissues. Look at that.

In fact, if you were to look at Equitable Life Insurance statistics, it will tell you these facts: 29 year-old diabetics lived 16 years less than non-diabetics; 49 year-olds lived 10 years less. Look at the influence of high blood sugar levels—they are shaving decades off your life.

I'll ask you a question: How many years do a pack a day of cigarettes leave off your life? Seven and one-half years! High sugar levels are at least twice as damaging as smoking a pack a day! We call ourselves healthy! I call myself healthy as I open up a three-pack of Newman's own Peanut Butter Cups, or as I take just one last square of the Crispy Rice, Newman's own chocolate bar.

But the bottom line is "sugar is killing us" and I know some church functions where they literally hand out chocolate chip cookies loaded with sugar, but they would never dream of having an ash tray or a cigarette girl dishing out packs of cigarettes!

### **Diabetes Incidence**

Let's look at the incidence of diabetes—4.9% of the population in 1990. Eight percent of you in this room have diabetes, but there is even some more interesting data (and this was an unintended study). They did not expect to find it, that 3.2% of people in the population don't even know they have diabetes.;

4.9% don't even know if they have diabetes if you look at oral glucose tolerance tests.

There are two kinds of tests you can do. You can do it by WHO (World Health Organization) or you can do it by the American Diabetic Association. One is a fasting glucose measurement where, if you walk in, they take your blood sugar and if it is above 125 milligrams per decaliter of blood, you have diabetes. But that, they have been finding is not accurate. The true measure as to whether or not you are a diabetic is if you have oral glucose tolerance. They will feed you 50 grams of glucose, 75 grams of glucose and then measure your blood sugar over a period of one hour or two-hours and if your blood sugar at any point goes above 200 milligrams per decaliter of blood (that is the WHO criteria for diabetes).

I will tell you I was shocked at people in the office that had no idea they were diabetic, and I sure wasn't going to test my own blood! If you look at this, blood sugar really acts like a free radical—it reacts with oxygen, it reacts with protein, it reacts with fats. It is a free radical!

### **Testing Ramifications**

They followed over 3,000 people for four years that were all free of diabetes. They all had normal glycated hemoglobin levels—and that is long-term glycated hemoglobin measures, the long-term blood sugar levels in your body, the hemoglobin that is linked to glucose. There is a certain percentage that is linked to glucose. They looked at how high fasting blood sugar could raise heart disease risk for cardio-vascular disease risk. High fasting blood sugar resulted in almost a tripling of your risk for cardio-vascular disease, but when you did it accordingly to an oral glucose tolerance test it was 3.2 times even higher—over triple!

### **Glucose Reactions with Proteins**

Here are some of the wild mechanical mechanisms by which glucose reacts with proteins (and I am not going to get into a lot of this—this will put you to sleep even more than I probably already have), but basically it's involving shift basis on the dairy products where- as glucose reacts with proteins it becomes irreversible. Usually it's a two-way reaction and you can see here where the shift base is a two-way, where it goes back where the body can break it down, but eventually it cannot break it down.

When you get to amidiory products you start getting it built up and you get something called lipofuscin and lipofuscin builds up, and that is basically a marker—it's an age pigment. It's basically a final reaction product where the body cannot get rid of it, the body cannot dispose of it. It is basically a buildup of glucose reactive proteins that build up over the years.

You can see here the longer you live, the more you have of your intercellular space filled with lipofuscins. The point is, you get to be 70 or 80 and it's 55% or you can have the same level of lipofuscin if (for example) you are a chronic Peanut Butter Cup user.

### Effects of Sugar on Carotid Artery

I am going to flip through some of these. Let's look at a normal carotid artery—that's the artery in your neck. This is the carotid artery from a normal, non-diabetic 45 year-old. He is a healthy Seventh Day Adventist. Dietary, carotid artery. Now let's look at one from a diabetic 49 years old. Look at how glycation and blood sugar are literally reacting away and inflaming away that artery. Epithelial cells have lined that artery. Fatty streaks—there may be traces here of a Peanut Butter Cup—I don't know!

### What Works Better?

Recent study—New England Journal of Medicine. In the diabetes prevention program researched and conducted by Nowler. This was done at the George Washington University at Maryland, and they followed diabetes over a period of two years. They decided, "What works better? Drugs for diabetes, control, or diet?" You can see here that Methformin reduced the incidence of diabetes by about 31%. They were reluctant to share with people that in the very same study published in the New England Journal of Medicine that diet (low glycemic foods) and lifestyle, a little bit of exercise outperformed Methformin by almost 100%, double the effect. Just diet and lifestyle!

Do we really need drugs? So in the New England Journal of Medicine David Ludwig, an MD, PhD, working in the Children's Hospital in Boston is linking low glycemic foods with preventing obesity, diabetes, and cardiovascular disease. Basically, what we are saying is low glycemic foods and conversely, the habitual consumption of high glycemic foods

conversely may increase the risk for obesity, type 2 diabetes, heart disease, a hypothesis that derives considerable support from laboratory studies, clinical trials, and epidemiological analysis.

### Using the Glycemic Index

Clinical use of the glycemic index is a qualitative guide to food selection which seemed to be prudent in view of the preponderance of the evidence suggesting benefit and absence of adverse effects. No bad side effects on this one. This is published in a recent New England Journal of Medicine. So we know that consuming a diet of low glycemic foods can be very valuable in preventing aging and slowing the onset of diabetes, and not making you a risk casualty for Equitable Life Insurance.

Some of the high glycemic foods you'll see here—bread, white sugar—68 and that's cane goodness, that's cane sugar. Grapenuts cereal. People say, "Oh, Grapenuts is wonderful. Look at all that wonderful fiber, look of those B vitamins." Well, it has a glycemic index right under that of 67. Moderate glycemic foods include oatmeal, brown rice, whole grain, pinto beans, and wheat. Low glycemic foods include yogurt, navy beans, skim milk, lentils, barley. So we were very curious. What is the glycemic index of the dry Ningxia wolfberry? Are you curious about that? Gary was also very curious about that. I was very curious about that, so we undertook a study using the David Jenkins protocol. He was a University of Ontario nutritionist and biochemist who in 1981 created the first International Tables for Glycemic Index. He did a protocol in which he actually analyzed glycemia.

### Independent Glycemic Testing

We followed that protocol. Ten males, ten females—he said you only needed between five and ten. We actually wanted to increase our sample size, so in every case we did more than ten. We did over 20 people because the larger your sample size, the better your statistics. We did it primarily with people in the office. The reason I did that was because I wanted to see who was diabetic or not.

This involves giving people 50 grams of a food 12 hours for a 12-hour fast. We allowed people to fast and come in the next morning and they would consume either glucose tablets or a test food like Ningxia wolfberry or *NingXia Red* or the *Wolfberry*

*Crisp Bars*, and we will determine through an area under the curve (where we actually measure the area under the curve), which is what Jenkins did, of the glycemic response over a period of two hours.

I am going up to their desk every 15 minutes and we were pricking blood. We had to get an area under the curve. So this is a fairly rigorously designed and rigorously executed study. We wanted to make sure it was equivalent to any of the data out there for glycemic index. You can see here the dried Ningxia wolfberry has a glycemic index of 28.8 or 29.

How does that compare with low glycemic foods? It makes it one of the lowest glycemic foods. Why is that? How can a berry (which according to the nutritional label) is 42% sugar and is also a dry fruit have such a low glycemic index? They say that dry fruit is loaded with sugar. I was surprised. I was not expecting it to be as low as it was. I just let the data tell the story—and there were some cases where I had to scratch data because I looked at the numbers and I said, “We need to redo this.” I wanted this to be very rigorous and very fair.

### **Why the Low Glycemic Index?**

One of the reasons, I believe, for the low glycemic index is probably that it is one of the highest foods in chromium known—higher than beef, cheese, liver, whole wheat bread, rye bread. Loads of chromium, which is crucial to something called the “glucose tolerance factor.” It is part of the glucose tolerance factor that gets glucose into the cell.

This was a study in which they actually said, “Use wolfberries, wolfberry extract, and measure their effect on diabetic rabbits. Watch their ability to lower blood sugar levels on their own.” You can see here there is a control group here. The red group is after treatment with Ningxia wolfberry and the top group is before treatment—diabetic rabbits, so we know that they have an anti-diabetic effect.

### **Glycemic Index of *NingXia Red***

What is the glycemic index of *NingXia Red*? Curious? I hear it all the time. “Gosh, is *NingXia Red* suitable for diabetics?” It has a glycemic index of 10.57! I would say, “Yes!”

This test was done using a 50 gram sample. All these tests were done with 50 grams, so 50 grams of *NingXia Red* has a glycemic index of about

11. Fifty grams of dried wolfberries has a glycemic index of about 29. This is the first time this has been reported. This is included in Dr. Young’s new wolfberry book.

Here is one diabetic. If I were to call him a diabetic they would be very angry at me, but according to World Health Organization’s status for diabetics, you can see here the red underneath there is 50 grams of Ningxia wolfberry and the blue is 50 grams of glucose tablets. You can see the difference and compare the food versus the glucose.

Here is another diabetic—the same thing. Here is another diabetic—the same things, so these are not affecting blood sugar levels in diabetics.

### **Comparative Analysis**

Now we look at glycemic responses of different beverages, *Via Viente* and *G-3* in this case. We were very curious to see what their glycemic impact would be. You can see here—the purple one is *Via Viente*—look at that spike! Look how injuring it is. Look at the *G-3*, the green one, and then look at the *NingXia Red* below it—a very gradual and delicate rise in blood sugar.

Let’s look at the *Crisp Bar*. Glycemic index of 14! Same thing in the diabetics. You can see here in the first diabetic—minimal impacts, seconds, thirds. All of this information has been printed for the first time in Dr. Young’s new book, and this book is due to Gary’s persistence and his vision with the wolfberry. This is why this book is here. Were it not for Gary’s vision, this book and this data would not exist. Thank you very much!

### **Steve Bentley - Introducing Wayne Silverman**

Thank you, Mark! Are you excited about what you have seen? That is absolutely awesome!

Please help me in welcoming Wayne Silverman.

### **Wayne Silverman - Impressive to be Here!**

Good evening, Young Living. This is incredible! I was very honored and humbled that they had a Silverman Award ceremony—it was very pleasing to me. When I got dressed this morning to come here, I put on my conservative white shirt and my dark tie and I went downstairs and had a shot of *NingXia Red*—I didn’t understand what happened! In fact, the *NingXia Red* had some inner consciousness about the people who were drinking it—it gave me a Jerry Garcia tie! I am so impressed with what I have seen over the last two days—it really speaks to the

vision of Gary and Mary. I am thankful, as well, for Bill Poppin for having the vision to bring American Botanical Council (ABC) into the fold of *Young Living*—so thank Gary, Mary, and Bill for this.

### **The Power of Plants**

I am here to talk to about the benefit that you have, the value that you have from the resources that ABC

is providing to *Young Living*. I named this presentation “The Power of Plants” because what you are feeling when you are using these products, what you are feeling when you talk to others, is about that nature is bringing into your lives.

I call this The Power of Plants because you need to be aware of what it is you are saying to people. You need to understand inside of you what the nature is of the plants that you are dealing with.

The American Botanical Council has a vision. Our vision for the planet is that the public will make educated decisions about the use of herbal medicines as a part of the accepted health care of our country. Wouldn't that be a great vision for everybody to have!

### **Understanding the Vision of ABC**

Getting toward that vision, our mission is to provide education with science-based materials based on traditional use. We serve the public, we serve researchers, academics—everyone who is involved in the natural product industry.

I have been so struck by the energy of the people in this room. I have been in the Natural Products industry for 10 years and during those 10 years I have been to 50 (I counted them) conventions. In fact, on Saturday I will be in Las Vegas with 25,000 of my nearest and dearest friends at the NNFA convention, but I don't experience the kind of family and the kind of strong connections that people have for each other as I have over these last couple of days, so thank you for providing that to me.

Speaking of vision, ABC was the vision of Art Bloomingfall. He's the Founder and Executive Director of the American Botanical Council. Back in 1988 he founded ABC and actually started publishing *Herbal Gram* five years earlier. We have a number of programs that we will talk about today—*Herb Clip*, *Online Licensing* (which is what *Young Living* participates in). We publish the *German Commission E-Monographs*, we've done the

*Expanded Commission E-Monographs*, and the *ABC Clinical Guide to Herbs*. This is a book that we have designed for health care professionals to get continuing education credit. We are trying to bring it into the conventional health care industry as well. We have the largest herbal education website as well.

### **Teach Others How to Teach Others**

Who knows what this plant is? I started with this plant because I felt it demonstrates the passion that you all have and the passion that you can bring to others as well. All the plant photos that you are going to see in this presentation were taken at our site within the last two weeks. We have some beautiful gardens around our place. We feel that *Young Living Essential Oils* and its distributors are totally dedicated to quality health care. It is evident from the two days I have been here that this is true. The things you're learning, the reading of this program that you can do, that you can purchase from ASP to improve your knowledge (and this is a key idea). Marc and I were talking about what I was going to bring to you, and he said that one of the things that people from *Young Living* would probably want to do is to develop the ability to teach others how to teach others.

### **ABC Provides the Tools**

That's kind of the way that you could build your own organization—learn how to teach others to teach others. This is a photo of Christopher Hobbs, probably of the nation's leading herbalists, doing an herb walk at ABC last month. We provide the tools that enable a wide range of people to teach and learn, both in this kind of setting and on the internet all over the world. ABC is an international organization, and we feel that the power of the natural world is in the plants. It's in the chemical structures of the plants. That's what the plants are—that's the nature of the plants. These can combine. You can combine them together and somehow that synergistic effect creates positive energy.

*Young Living* extracts—we all extract from the plants and I am extending that to the knowledge and how to harness the knowledge, how to harness the energy in plants and how to deliver that to others.

### **Supplements = Completes**

Resources from ABC provide information about dietary supplements. When I was thinking about this program I thought that we are essentially providing educational supplements. These are the things for your mind so that you will understand what you are telling others about the plants. I decided to look up the word “Supplement.” Supplement is from the Latin *supplere* which means to complete, so perhaps instead of thinking that a supplement or some product that we are using is “adding” something to our diet or adding something to our lives, maybe it is something that “completes” our lives, makes it whole.

Speaking of completion, there is a guru standing on top of the mountain, he found the secret to happiness, but the FDA wouldn’t let him release it! Obviously, his completion can’t come to fruition! ABC brings online information to you, easily accessible.

### Resources at Your Fingertips!

I have been upstairs at a table next to the clinic for two days, and people have been telling me, “Oh, I’ve seen that button.” Someone else said, “I’ve actually used that, and it’s really good.” Some people say, “I didn’t even know we had it.” We have a tremendous number of resources at your fingertips right on your website.

You never have to leave your site when you open our Content. When you close the Content you are back on the site. You can search for things that you want to look for. There are links from the products directly to the Content. You can choose articles. Those of you who understand some of the legal and regulatory issues in the United States know what is meant when we say “third party literature.” This a term that the Dietary Supplement Health Education Act provide so that a third party can provide health information, etc. whereas the company can’t do that on their product labels.

Speaking of the news about Celebrex and Alieve, doctors say, “Don’t take two pills and call me in the morning..” There is a little bit of fear and concern on the part of the conventional health care field. That’s where you are coming in; that’s where the things that you are doing are going to make a difference. I am not going to bash the FDA, but—

### Accessing ABC Content

So here we are on your website. You can get to our Content either by going to your virtual office or you can go to Essential Oils on the left. In other words, you don’t have to be logged in to your virtual office—you can have some of your downline and some of your customers go in through the Essential Oils button on the left. So we link directly from Peppermint—and we say, “What do we want to learn from Peppermint from *Herbal Gram*, for example?” *Herbal Gram* has been published since 1990, and so automatically there is a search that’s done in *Herbal Gram* called “Peppermint.” You may want to select an article like “Essential Oils for Headache.” It was the fourth article that came up. Click on the article and you can read it; you can copy it; you can relay some of the issues to people that you are working with. Once you are in this page, notice all the buttons on the left. Those are the databases that you now have access to. Staying with *Herbal Gram* online and you may want to do your own search. You may want to put in Lavender Oil, for example. You enter the search term, you click the submit button, and you get *Lavender*. Select an article—there’s the very first one that pops up is “Lavender Oil Used for Severe Dementia.” You click on it, read the article on severe dementia. This is an article in *Herbal Gram* that we wrote.

Speaking of dementia, one of the peasants comes to the wizard and says, “Those memory pills you sold me don’t work.” and the wizard says, “I didn’t sell you any memory pills.” The guy leaves. That was easy! You want to guard against any kind of negative information, but that would be appropriate there!

### Herb Clip Database

A second database is *Herb Clip*. We have been doing *Herb Clip* for 12 years. We review articles from the literature all over the world. We review 12 of them every two weeks and publish them to the website, and so every two weeks you can go back to *Herb Clip* and see the 12 new articles that weren’t there two weeks ago. It has summaries of these articles and reviews of these articles—it’s not just abstracts.

So let’s go to *Herb Clip* and see what it has on *Peppermint*. The second one—“The Effects of Peppermint Oil and Caraway Oil on Dyspepsia.” Click on the article, and then you can read it. You can also do a search on *Herb Clip* similarly as we did before: *Lavender* Oil came up with an article

entitled “Effects of Lavender Oils Baths on Mood and Well Being.” Hopefully, some of you are going to put some *Lavender* oil in your bath tonight in your hotel room and feel calm. I know I will. Then you can read about that article as well.

### **Germany Leads Out in Herbal Medicine**

One of the governments that has been the most efficient and advanced in the field of Herbal Medicine through the years has been the German government. They published the *German Commission E- Monographs* and we translated all 380 monographs. It took us five years to translate those monographs. We put them together in a big, fat green book—750 pages with cross-references indexes, and we decided rather than lugging this five-pound book around, let’s put it in an electronic form.

So here’s how you use *Commission E*. Let’s say someone asked you, “What is *Commission E*—what herbs does *Commission E* approve for bloating?”

### **Using *Commission E***

Go down to the therapeutic index (uses and indications), then you click on Gastrointestinal, and then Bloating is there on the list. What you get is a list of herbs or combinations that *Commission E* approved for bloating. *Fennel* oil is on the list. Then you can read a short monograph on *Fennel* oil.

Go to the pharmacy and get a big gallon-size bottle of pills and (actually, the pills are quite small), but we needed the room to list all the side effects!

This is not to say that herbs don’t have side effects. Just because herbs are natural doesn’t mean that they are safe; just because they are natural doesn’t mean that you don’t have to be careful about interactions and what the effects are, so be aware of those for herbs as well.

Let’s say you wanted to do an actual search of Clinical Studies. We have a database that looks at clinical studies all over the internet. It’s called *Herb Metro*. Let’s say that *Clove* is on your screen. What do the Clinical Studies show of evidence for *Clove* oil? You click on it; you get a list of studies. These studies were evidences of human efficacy. There was a study that was done that talked about stimulating the olfactory system and what that produces.

Hormone replacement has been in the news and people take black cohosh, they take Vitex. This lady decided that with all the drugs and the herbs and the herbs she was taking, she needed another replacement in order to cure her problem!

### **Communicating with Customers**

A very important thing that we want to get across is “How do you communicate with customers? What are the key things you should do and not do?”

Part of this is from our *Herbal Information Course* that I will mention later, but you should avoid providing information that might be construed as medical advice, unless you are a practitioner. Don’t play doctor. Be careful about how the information comes across. The online materials are very useful in this way because you can show someone, “Here’s what the research shows.”

So avoid presenting yourself as a practitioner— instead tell them what it is that you found in the literature. The effect is the same. The person is learning something about what it is that they are taking, but it’s not you saying, “I have diagnosed your problem. I’ve taken your case history and here’s the answer.” Let me through. I’m not a doctor!

### **Use Science-based Information**

If the customer heard what was in the news about an herb, go to the literature. Confirm it, avoid diagnosing and prescribing in that way. So a few things to remember: Use responsible science-based information, stay within boundaries.

You in *Young Living* can build a clientele that understands how to use and consider supplements. The result of this, both for you and, if you train your downline to use the same resources and show them, this is a wonderful resource for us, and a positive feeling about *Young Living* will be developed.

This guy’s wife hasn’t found a cure (or he hasn’t found a cure) for dealing with her, so he wants to be frozen until there’s a cure for PMS!

### **Certification Offered**

There are a couple of multi-ingredient formulas that you have to reduce PMS symptoms with—what are they? (I am hearing very much the same all around the room.) So I mention the *Herbal Information Course*. This is about a four or five-hour online course for people who talk to others

about herbs. It's a certificate course. We offer the certificate—this is not part of the *Young Living* offering, but you might consider this as part of your own education.

This is a little demonstration of what happens when you overload with too much information—too many regulations. What I have shown you is actually an abbreviated version of what's on the CD so you wouldn't feel like this animal that is obviously over-loaded.

A little bit about ABC. We have been publishing *Herbal Gram* for 23 years. It's a beautiful journal, full color. Everything is peer-reviewed; we are a non-profit organization, I didn't mention, actually. In addition to *Young Living* licensing our Content, there are other entities that license our Content, other for-profit entities, the whole foods market has some of our Content on their site, but there is also some non-profit entities that license our Content. The FDA pays us money to have this Content available to all 10,000 of their employees—isn't that something! The M. D. Anderson Cancer Center in Houston license all our Content for all of their employees.

These are the two books that I referred to. Both of them relate to the Commission E. Our latest book *The Clinical Guide to Herbs* is an excellence reference and it provides accreditation for health care professionals.

### **Botanical Tour of Peru Available**

Another thing that ABC does is that every year we take a botanical tour of Peru. We spend seven days in the Rain Forest and six days in the Andes, and we give physicians and pharmacies a full year of continuing education credit for going on this trip. Anybody can go, but it's the Pharmacy From the Rain Forest is what we call it. It's a very interesting trip.

We go on a canape walk. There are 80 of these bridges going from one tree to the next and you see all the flora and fauna that exist up in the canape, different from the forest floor. We end the trip in the ancient city which was the center of the civilization for the Incas—it's a beautiful place up in the mountains. Anybody can go on this trip—it is open to the public.

### **ABC Headquarters in Texas**

I found this property (this is a 2½ acre site where ABC has their headquarters). It's in a 150

year-old house. There was a land grant from the Republic of Texas in 1850. We have transformed the house and we have 15 herbal medicinal theme gardens around the property. It's a beautiful place. If you are ever in Austin, Texas, please come and visit us. This is our wonderful staff who helps produce the things. If you called us on the phone you would talk to these people; it's a real organization.

### **Plants are Complete**

I would like to end with a few things that kind of tie back to the concepts of why I'm here and why *Young Living* decided to incorporate our Content into your educational materials.

We feel that plants are powerful—or at least they produce powerful molecules, and that having know-ledge about how to harness those molecules is a key to success. We have talked about “supplement” meaning to complete. Plants are complete, and the knowledge we gain from them can make us feel more complete.

How many people are feeling more complete as a result of being at this conference for the last few days? That's what this process is about. It's about you feeling more comfortable with the knowledge that you gain.

As I said before, I coined the phrase “educational supplements.” Those are the things that are required, just like if you take the supplement, if you use some essential oils, you also need to replenish your body and your mind with education on a regular basis.

ABC is honored to be associated with *Young Living*. We are very honored that *Young Living* has decided to expand your offerings and to complete (in a way) your lives and the lives of those who work with you.

I will mention that at ESP, room 151 there is a more extensive version of this program, plus two other resources all on one CD. It's an excellent CD—it's \$8 by itself or you can get it and hard copies for \$18.

*Research Facts - Ningxia Wolfberry*

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## KEY WORDS AND PHRASES USED IN YL TRAINING CD #74 INCLUDING REFERRAL PAGES

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