

>> Okay, so let's move on to another introductory chapter, Chapter 2. This is going to deal with, like I said, a little bit more introductory information, but we're going to go over what is a healthy diet and the different diet plans that are out there right now. Pretty interesting chapter actually. Like we talked about in the last chapter, now we've come to realize that most diseases are really due to eating the wrong kinds of foods and not enough of the healthy foods. So blaming cancer, heart disease, diabetes and so forth on genetics, most scientists now agree that about 80 or so even up to 90 percent of why you get these diseases is because of your diet and lifestyle factors such as smoking, lack of exercise. So too much saturated fat, too much trans fat, too much salt, alcohol, sugar, sugar is a big one for increasing risk of heart disease and cancer and diabetes and so forth. And actually the cholesterol, I'm going to take that out, cholesterol, and we'll talk about that in another chapter, but cholesterol has been removed from the dietary guidelines as far as increasing risk of heart disease. And we'll get into that in a little bit. That was removed I believe in 2016. Meaning that cholesterol in your foods like eating eggs, eating meat, eating chicken, yes, these foods have cholesterol. But they've been shown to not increase your risk for heart disease. What they do show that increases risk of heart disease are foods with sugar. Sugar, the processed, vegetable oils like corn oil cottonseed oil and the transfats which are in fried foods. But we'll get more into that. You should know what phytochemicals are. This is a good thing. These are substances that are in fruits and vegetables and whole grains that help prevent diseases particularly cancer. So these are substances that give – for instance with fruits and vegetables you see the different bright colors, yellow, green, oranges, reds, these are substances that act like antioxidants. They help prevent disease. They're very protective which is why the more fruits and vegetables you can eat in a day the more protective your diet is against disease. So you can see here all the different colors. Some people I see make a salad and it's just like green, a bunch of lettuce and maybe a couple slices of tomato or a few peels of carrots. And that's not really going to give you enough. You want all the colors. You want as many different colors as possible. So celery and cucumbers and radishes and peppers and tomatoes and squash even. The more colors you can put in your salad, of course, the tastier. But also you're going to get more phytochemicals. Nutrient density, this shift looks at how many calories are in your food relative to how many nutrients are in it. So are you eating food with a lot of calories like a candy bar or a potato chip, but it doesn't have a lot of vitamins and minerals. So nutrient density means that the food is dense or very high amounts of vitamins and minerals. And, again, we know now that actually if you don't have enough vitamins and minerals and antioxidants on a daily basis that is what sets you up for chronic diseases. And remember these chronic diseases start when you're young. So when you're in your 30s, 40s, 50s this is when you start seeing people falling apart depending on how they've been eating since they were a child. So you want to try to concentrate on foods with a lot of nutrient density. Okay, your book then goes into what we call the A, B, C, D, Es, assessing nutritional status. So like I as a nutritionist I would do these things on somebody. Many nurses do this, dieticians. Basically

we're assessing how peoples' lifestyles or diets have affected their body. And you can take different measurements and see how it's affected how healthy they are. First of all there's something called anthropometric assessment. It's a mouthful. It's basically body measurements. Taking height and weight, but taking body fat measurements, actually getting your percent body fat measured. We'll talk more about that in Chapter 10. But many of you maybe have had this done. You belong to gym, a lot of times personal trainers will measure your percent body fat. That will give you an idea of how much – well, about your diet. You know, are you eating too many calories, too much sugar, not enough fruits and vegetables and so forth, too many carbs. Too many carbs is a big problem with being overweight. And taking body circumference measurements, you know, using a measuring tape. Measuring around your legs, your arms, your abdomen and so forth. So this is a good thing to start like a baseline if someone starts – maybe your personal trainer or your nutritionist or dietician will get a baseline of these measurements. Change their – put them on a different diet and lifestyle protocol, and then take measurements in a couple months and see how things have changed. It's very motivational for people when they see the changes from their efforts. So those are the body measurements. So we're going down A, B, C, D, E. B for biochemical assessment. This is taking blood tests and urine tests and looking at nutrients. So you can look and see, you know, are you diabetic or pre-diabetic? A lot of people are walking around with pre-diabetes and not even aware of it. So looking at how much sugar or glucose you have in your blood, looking at your total cholesterol, your HDLs and LDLs, your triglycerides and so forth so you can get an idea of how you've been eating and how it's being reflected in your blood. A lot of times you don't realize you're walking around with really high levels of fat in your blood. And, again, it usually comes from too much carbs and sugars. A urine test to look at your kidneys, your liver health, again your sugar levels. So this is a great – I mean everyone I think over the age of 20 should get this done yearly. Keep a copy of your test and check and compare year to year how you're doing. You know, has your cholesterol gone up? Has it gone down, your sugar levels, etc. C, clinical assessment. This is something that you, again, as a trainer or as a nutritionist, a dietician you might take a patient's blood pressure. And maybe someone that's, again, on a poor diet, too much salt, not enough fluids with potassium they might have high blood pressure. Maybe taking an x-ray and seeing they have osteoporosis. Again, osteoporosis has a lot to do with your diet, eating too much salt, too much sugar, too much caffeine, smoking, things like that, not eating enough foods with minerals. Dry skin this can be a sign of not enough of the healthy fats in your diet. Brittle nails, thinning hair can be a lack of protein, lack of vitamins and minerals. So there's a lot that your diet reflects on the outside. Your outer appearance is a reflection of your inner health. So you get a lot on someone's health by taking these measurements. And, again, as nurses you'll be doing a lot of that. The slide won't advance. There we go. You can see the dry skin, again, that's usually a sign you're not deficient in lotion. You're deficient in usually healthy fats like nuts, seeds, olive oil, avocados, etc. Okay, D for dietary assessment. You guys will be doing this in a couple of your assignments where

you'll look at someone's diet and you can tell what's missing, what are they getting a lot of. You can do what's called a 24 hour recall where you just ask somebody what'd you eat yesterday? What did you have for breakfast, lunch, dinner, snacks? So you can get an idea. Did they skip a whole meal? Did they just eat processed carbs? Did they eat any fruits and vegetables. Diet history I do this a lot. I'll ask somebody what's your typical breakfast, what's your typical lunch, your typical dinner and so forth? That tells you a lot. And what you guys will be doing is the NutriCalc. That's a computer program. You'll be buying the software from the publisher of your textbook. Again, it's about \$20. And you'll input your diet for about three days, everything you eat and drink. And it's going to print out a bunch of graphs showing how are you eating. How much fat are you taking in? How much sugar, how much salt? Are you getting the minimal amounts of vitamins and minerals? So it tells you a lot. It's like taking your car in and putting it on one of those diagnostic machines, okay? Again, we know that 80 percent or 90 percent of why we get diseases is related to our diet and lifestyle. These are such important tools that we should be doing at any age. And then you can take a look at my plate, food guide pyramids, the RDAs. We'll be going over those. E is for environmental assessment. Your textbook goes over this. And it's just about some people maybe they can't afford to buy vitamins. Maybe they can't afford healthier foods. They're eating hot dogs and hamburgers because quite frankly, yes, you can get a lunch for a couple bucks. Is it healthy? No. But if that's what they're able to do then you have to work with that. College students a lot of times they don't cook, and so they don't maybe eat on the healthier side either. So these are things to take into consideration when you're doing diet analysis. And the other thing to think about is it can take years and years for a poor diet to catch up with your body where you actually start not feeling well and breaking down. And that's what prevents a lot of people from making changes. A lot of people make changes in their diet when they get sick. I'll ask people how come you changed, why did you change how you eat? Well, I became diabetic, or my husband became diabetic and I didn't want to go down that path. Or I'm osteoporotic now and so forth. If you smoke usually the ramifications don't manifest until you're in your 50s, 60s and what not, things, alcohol. So people don't think about changing until they get much older unfortunately. But the process starts years, 20, 30 years prior to it manifesting. And so that's what you've got to try to keep in mind. You may want to not think about what you're eating and how it affects your health, but it does affect. It just takes time for you to feel it. So what should you eat? And this is the big question. I'll be going over – there's tools that are in your textbook, the my plate, how to read a food label, the dietary guidelines. And by that [oldwayspt.org](http://oldwayspt.org) you see on that slide is a great website that goes over a lot of different ethnic, food diet pyramid, the Mediterranean pyramid, vegetarian and so forth so you can check that out. This is the Mediterranean diet. Your book goes through it, and I always spend a lot of time on this because this diet has been studied since the 1960s. It's not really a diet, it's a way of life, it's a way of eating that most people in the Mediterranean countries eat this way. The Middle East, Greece and Italy, Spain, Portugal and all those

countries out there this is how they eat. And you see daily physical activity. At the bottom you see daily, weekly, monthly. Every day eating whole grains. Every day eating fruits and vegetables because the fruit and vegetables have all the phytochemicals, the fiber. Beans and nuts every day because they have a lot of fiber and healthy oils that help lower risk of heart disease and cancer. Olive oil is the healthiest oil pretty much out there. Lots of antioxidants, helps lower risk of heart disease, cholesterol. It's also been shown to lower risk of breast cancer. Cheese and yogurt on a daily basis. Weekly, so that means two or three times a week eating fish, poultry, eggs and sweets. Notice sweets a couple times a week. And monthly you see red meat. Red meat is like the worst according to the research for many reasons. It does increase risk of colon cancer among other things. But you see this is an overall eating pattern. It's just loaded with lots of the fruits and vegetables and beans and nuts, healthy oils. Not fried foods and sweets. And it's a healthy diet. Researchers have been studying this like I said since the 60s and have found that people that eat like this that they have significantly lower rates of heart disease, cancer, diabetes. It helps lower your cholesterol. It can help lower your risk for diabetes and even turn it around. It's just been scientifically shown to help prevent many different cancers. It's just a lot of research behind it. So I encourage you to take a look a little bit more at this diet. And let me stop the tape here, and then we'll continue with the chapter in the next set of slides.