

>> Okay so the last few slides, again, we're still finishing up these dietary guidelines. These are government guidelines posted by the government to help reduce our risk of diseases. One of the things on there is getting more foods that have a lot of potassium. Potassium is really good at keeping our blood pressure normal, or low. We get a lot of sodium but we don't get enough potassium. Potassium helps balance out the sodium. So eating too many foods with sodium, not enough potassium can increase your risk for high blood pressure. When I mention potassium, most people think of bananas but there are a lot of foods also besides bananas that have a lot of potassium. Dark chocolate, nuts, avocados, apricots have a lot. So think of other foods as well as bananas. The guidelines also go through if you're able to get pregnant making sure that you are getting enough iron from your food, whether it's from meat or from vegetable sources. You don't want to be anemic before getting pregnant. That can increase risk of all kinds of problems with your baby, particularly cognitive problems. Getting enough folate or folic acid, again, if you're about to become pregnant, foods that have a lot of folate would be grains and nuts and seeds and vegetables. Real important, it helps prevent neural tube defects or birth defects. And I go through all of this in the NF102 class which is nutrition for children. Great class. Goes over diets for pregnancy, for breastfeeding, for children, for infants and all that. How to stay healthy and it's just a great, great class. A bit easier than NF100 so think about taking that one next term. Again, for pregnant people or women who are pregnant or breastfeeding, getting seafood, fish, you definitely want to limit how much you take in because of the mercury content which is a toxic metal that's in all of our fish, but fish has a lot of omega 3 fats which is really good. It's been shown to increase the IQ of your baby if you have it while you're pregnant and breastfeeding. You just don't want to overdo it. Avoid certain foods that ha- fish that have a lot of mercury which would be the tidal fish shark, swordfish and king mackerel. I don't know who eats those, but just in case. And of course taking an iron supplement if you are pregnant would be another recommendation. I'm sure your pediatrician would go over, your obstetrician. So lastly let's go over nutrient recommendations. There are recommendations for vitamins and minerals. We call this the dietary reference intakes. You're probably more familiar with the term RDA, recommended daily allowance or dietary allowance, and let me just go through this and show you what you need to know. Please know the definition of the RDA, recommended dietary allowance. Basically this is how much of a nutrient you need to have every day, for healthy people. You know, if you don't have any health problems, how much vitamin c, how much calcium, how much magnesium. How much other vitamins and minerals do you need to get? And research has shown that most Americans are deficient in a lot of different vitamins and minerals. And we need these vitamins and minerals. They're needed. For instance, there's a handful of minerals that if you're deficient it will increase your risk of diabetes because, for insulin to function and to get glucose into your cells, you do need a certain amount of certain of these minerals which we'll go through in chapter nine. How much are you taking in? Your NutriCalc project will show you. And I do this every term and I hardly ever get a student that meets even the

minimal levels of these RDAs. So most of us are not getting— which is a good reason not just to eat better but also to take a vitamin mineral supplement. But so again the RDA is the daily amount of these vitamins and minerals and other nutrients that you need to keep you healthy. It's the minimal levels. It's not even for optimal health, okay? So there's an RDA for protein, for vitamins, for minerals. There's different RDAs depending on your age and gender. For instance, an older woman would need more calcium than a younger woman. Women need more iron than men. And so forth. There's also RDAs for pregnancy and lactation or breastfeeding. So if you're pregnant or breastfeeding, you also have different, a different set of vitamin and mineral needs for some. Like iron and other ones. Folic acid. The RDA, it's an average, you know, over several days. If one day or two days you don't get enough iron, you're not going to become anemic. So it looks at your average which is what your NutriCalc program will be doing for you by the way. The estimated energy requirement— this is how many calories do you need to keep you at a healthy weight? Again, the NutriCalc will also calculate this for you. There's also what's called the tolerable upper limit. This is, you don't want to take too much of a vitamin or mineral from supplements. You don't have to worry about it from food. Because some supplements, like too much calcium would not be healthy for you. It could be hard on the kidneys. But think about it, most of us don't get enough. We certainly don't get too much. Most of us don't get enough, and how often do you hear on the news that someone got sick or died from taking too many vitamins or minerals? So, that's not really something to be concerned about. Lastly, using food labels. Let me, I'm going to go over how to read a food label because you want to compare— that's why you have them— is like which cereal has more fiber? Which cereal has less sugar? Which salad dressing has less vegetable oils and more of the healthy oils? So you want to compare food labels. Food labels also have what's called a daily value. I'll show you what that means. Basically what this is is a value that's close to the RDA. So for instance, a food label's not going to have— remember we went over the RDAs are different for age and gender and pregnancy and lactating— they're not going to have all these suggestions on the food label. So they're going to have something similar, it's called a daily value. And I'll just go through it when I show you a food label. But by law there's got to be two vitamins listed, vitamins A and C, and two minerals, calcium and iron, on every food label. So you'll always see how much A and C and calcium and iron is in it and plus anything that's been fortified. So like milk they add vitamin D, so it'll list vitamin D as well. And keep in mind here, four grams of sugar is a teaspoon. So if you see a food label that says 20 grams of sugar, that's five teaspoons, okay? I see a lot of students that are drinking soda and soda has something like 60 grams of sugar. You know that's a lot of teaspoons of sugar. So you want to definitely look at the sugar content. Keep in mind if there's fruit in the item, some of that sugar will be the naturally occurring, but most of the foods that we're eating nowadays are added sugars. So take a look at that. And I'll show you on the food label but if the daily value is 5% or less, that's not very much. So if something is 2% calcium, it's very low. If it's 20% or more, it's considered a good amount.

So let me just show you what that means. You see here on this food label that, first of all always look and see how many servings are in this container or the item. Okay so this says one cup is a serving. You know if something has two servings, you have to double all these numbers on here. So you can see the percent daily value over on the right and you'll see fat, zero percent. So there's like nothing in it. 5% sodium, not very much. 17% protein. We're getting higher. I don't really look at the daily value. I'm looking over on the left, how much trans fat is in there. Cholesterol like we said we don't care about anymore. That should be removed shortly from the food label. It takes years to get these things changed. How much sodium is in the product, how much fiber, how much sugar. You see that's 11 grams. How much protein. There's your two vitamins, A and C. Calcium and iron, the two minerals. And vitamin D. Because this is a dairy product, they've added vitamin D. Let's lastly look at plain yogurt versus regular yogurt. Sorry, my dog. You can see here that the plain yogurt has 110 calories. If we switch to the fruit yogurt, it now has 240. That's a lot of extra calories. Well what happened here? Well the fruit yogurt has 44 grams of sugar if you can see that, whereas the plain yogurt only had 10. But if you look down at the ingredient list, you can see that the plain yogurt, of course it's going to be made of milk— this was nonfat milk— some whey protein, pectin carrageen. Okay if you go to the fruit yogurt, now you see they've added high fructose corn syrup in addition to the apples and whatever else is in here. So the fruit yogurt has like two little miniscule pieces of fruit but they've added high fructose corn syrup and that's how we went from 10 grams of sugar which is the naturally occurring sugar in dairy, to now 44 grams which is what? 11 teaspoons of sugar. 11 teaspoons. You start your day off with a bowl of fruit yogurt, wow, 11 teaspoons of sugar. That's quite a bit. So please read the labels. Look at the amount of sugar. I think that's very important. Look at the ingredient list. See if there's been added chemicals or added sugar. So really kind of get into reading the food labels. You'd be amazed at what's on some of the food that you're eating, particularly like chips and Doritos. The length of the ingredients is unbelievable. All the chemicals and whatnot. Lastly, health claims on food labels. The FDA does allow a couple health claims. You can check your book out, I'm not going to go through all of them. For instance, oatmeal and Cheerios will say helps lower cholesterol or heart disease because of the oatmeal. The oatmeal in the Cheerios has some fiber. The problem with— I mean oatmeal's fine, it has a lot of fiber. The problem with Cheerios is what? Sure it's got some fiber but they've added so much sugar it defeats the purpose because the sugar raises your cholesterol levels so. But anyway, I hope you got a lot out of this chapter. Please go through your textbook, the chapter there. There's a lot of pictures that you can look at, and go over the content that I went over because that's what I'll be testing you on. Alrighty, that is a wrap up of chapter two.