

Chapter 8 Reading guide

All chapters in this text are important; however, I feel this one gives you some of the greatest ability to arm yourself with knowledge and help to affect the market by making educated choices about how to spend your money.

Make sure that you understand the food labeling, what the basic nutrients are, what their basic functions are, which ones provide energy (calories) and which ones need to be digested by enzymes; the concepts of nutrient density, whole vs. refined foods (what it means and how to tell the difference); different types of fats and their sources (which types are generally healthier and which are generally unhealthy). These are some especially important concepts.

The food labels are really important. Think of this again as your gaining the ability to EDUCATE YOURSELF, SAVE MONEY, GET HEALTHY, CHANGE THE MARKETS. Of course, sometimes you'll find that when you make a healthier choice, you may pay more. However, if you know how to make comparisons of food labels, you will be able to choose among the healthiest options and save money that way. And if you create demand, you may help increase supply/competition and prices may eventually come down. Here's an example: in Seattle, food in general is more expensive than in my hometown in Florida. However, naturals/organics in Florida are ridiculously expensive. Hardly anyone buys them, I'm sure the stores end up throwing out a bunch of them. Those types of products are actually substantially cheaper in Seattle, where lots of people buy them. And we end up with a lot more choices.

1. Compare/contrast hunger vs appetite.
2. Explain the many factors that influence when, what and how much we eat.
3. List the 6 nutrient classes. Which provide us with energy (calories)?
4. Describe the components of a healthful diet.
5. What is a calorie?
6. Describe the functions of each of the 6 nutrient classes.
7. Is bottled water generally better than tap or filtered tap? Explain.
*But 2 quick notes: 1-if you live in an old house, have your water tested for lead, even if you have some newer plumbing.
2- Besides being a waste of money, drinking bottled water a lot is terrible for the environment, not only because of all the waste but also because of the pollutants that are made in manufacturing the bottles.
8. Take the Assess Yourself quiz, and then be SURE to read the explanations for each answer.
9. If whole proteins are like long, crumpled pearl necklaces, what are the pearls called? (be sure to use the supp. lecture to help)
10. How many amino acids are there? How many are essential? What does "complete" protein mean?
11. How can a vegan (no animal foods) get complete proteins each day?
12. Do most North Americans get enough protein? Explain.
13. What are the 2 major forms of complex carbohydrates?

14. All the body's cells use glucose for energy, but most can also use fatty acids (which are really important during cardiovascular exercise and fasting). However, one type of cell/organ cannot use fats and uses glucose almost exclusively. What is the organ?
15. What are the 2 categories of simple sugars? (the author is not clear about this; they are bolded) Within each category, what are some listed examples? Which is the kind that is used primarily by our cells for fuel?
*note: author states, "... disaccharides must be broken down into simple sugars..." Really, it should say "...disaccharides must be broken down into monosaccharides."
16. How do animals (including humans) store glucose (ie, as what chemical)?
17. What are some problems with athletes eating lots of sugar?
18. Discuss benefits of a high-fiber diet. What are some strategies to increase fiber intake?
*note: to the list of suggestions by the text, add: eat nuts and fruit for snacks, and include legumes (beans, lentils) as much as possible. Overall, a strategy for getting enough fiber (and 25-30 mg should be MINIMUM), follow this guideline: eat at least 5 servings of fruit and veggies, plenty of whole grains, legumes and nuts, and limit processed/refined foods (white breads, pastas etc) and animal foods.
19. Discuss LDLs and HDLs; what are they, what do they do, why is one considered "good" and the other "bad?"
*note: CHOLESTEROL IS GOOD FOR YOU! Surprised? Well, here's the thing: you don't need to eat much of it. Your liver makes it from the fats in your diet. But here's why you need to have some cholesterol in your blood, in LDLs: Cells need cholesterol to be delivered to them in LDLs; they use the cholesterol to perform a variety of functions that keep them and you alive, for example, for membrane integrity fluidity control, to make hormones (like estrogen, testosterone and cortisol), to help insulate neurons so that they function properly, and more. It's only when there are TOO MANY, and when they get too old, that LDLs are "bad." By the way, dietary cholesterol affects blood cholesterol a little teeny bit. What REALLY increases LDLs in the blood are trans-fats and saturated fats. But, most food high in sat fat (animal foods) are also high in cholesterol, so when you limit sat fats you typically limit cholesterol, too. Get your blood lipids tested regularly, keeping track of dietary changes, to see how diet affects yours... some people are more sensitive to dietary cholesterol.
20. Explain how to evaluate whether a grain product (bread, pasta, etc) is whole.
21. Are plant oils or animal fats generally considered healthier? Explain why.
*the health value of PUFAs is controversial, in part because they degrade easily and THEN they aren't good for you. As you will see in a couple of pages, they include (but are not limited to) the omega-6s and omega-3s, which are essential (our bodies can't make them, and we need them). Both O-6 and O-3 are good, but getting too many O-6 *relative to* O-3 can promote inflammation. O-6s are generally very abundant in our diets (from a variety of plant oils), while O-3s are generally lacking. Good sources of O-3s are fish, walnuts, flax and canola oil.

In any event, PUFAs do degrade easily, so store high PUFA oils in a cool place (like the fridge) in dark glass.

High MUFA oils are the best choices for general everyday use and cooking (ex, olive oil).

22. Discuss the advice under the section “Reducing total fat in your diet.”
*To this advice, add: choose organic, pastured and/or free-range animal products (meat, eggs, dairy); the meats tend to be leaner, and all tend to have better fat profiles (less sat fat, more O-3), in addition to a host of other benefits to you, the environment and the animals.
23. What are *trans* fats? How are they related to fats that have been “partially hydrogenated?”
24. What are problems with *trans* fats?
25. If a product claims “*trans* fat free” or “0 grams *trans* fat,” does that guarantee no unnatural *trans* fat? How can you guarantee that a product really has NONE, when reading a food label?
26. Is it possible to eat too little fat? Explain.
27. What are essential fatty acids? Name the common O-6s and O-3s. Do we North Americans generally get too many O-6s or too many O-3s? Explain.
28. List some good strategies for increasing EFAs and eating them in the correct proportions (O-6 : O-3).
29. List the fat-soluble vitamins. Now list the water-solubles.
30. Are vitamin supplements generally required for most N. Americans? Explain.
*some exceptions, because they can be difficult to get enough of from food:
-vitamin D: especially high latitudes, like Washington state. Very few foods contain any D; we get most of it by sun exposure. Our skin stores a chemical that is similar, and sunlight starts to convert that chemical to vitamin D. But high latitudes simply don’t provide enough sunlight year-round. You can store some, but not enough for the whole winter. So supplements make sense. But be careful, too much can be fatally toxic.
-folate: especially for women of childbearing age. The text discusses this in more detail.
-more are covered by the text.
31. Can vitamins be destroyed by processing? Explain.
32. List the macro- and trace minerals.
33. How much sodium does the average adult require? How much does the average N. American eat daily?
34. Where does most sodium come from in the typical N. American diet?
35. What are some potential problems with too much sodium?
*related to this, or part of the problem of too much sodium, is too little potassium. Sodium and potassium travel in opposite directions during cellular processes, they are exchanged. Having the correct proportion is important, and some researchers suspect that part of the problem with too much sodium might come down to a problem of too little potassium relative to sodium. Processed foods are not only

loaded with sodium, but notably lacking in potassium. Adequate potassium intake is linked with reduced blood pressure and a variety of other benefits. Potassium is abundant in unprocessed plant foods and dairy. Coffee and tea have quite a bit, too!

36. Besides bone structure, what are other functions of calcium?
37. Besides dairy what are other good sources of calcium?
38. How does vitamin D affect calcium status? How does excess sodium affect calcium status? How does stress affect calcium status?
39. What is the most common nutrient deficiency worldwide?
40. Why should iron supplements be placed out of children's reach and taken with caution by adults?
41. List good whole food sources (not fortified or enriched foods) of: B6, folate, B12, V-C, V-D, V-K, calcium, magnesium, potassium, iron, zinc.
42. Explain generally how the Daily Values for nutrients are derived; what is the purpose of reporting the DVs? How many calories are the DVs based on?
*The DVs are recommended amounts for the average person, which is calculated by kind-of averaging the RDAs (specific for age and gender) for children, women and men. It's not really an average, more like an estimate. The DVs are based on a 2000-calorie per day diet. They are just intended to give you some idea of how much of your requirement for a given nutrient you are getting by eating a serving of the food you are eating.
43. Explain serving sizes and provide an example for each food type (grains, meats, etc).
44. Why is physical activity part of MyPyramid?
*MyPyramid is a good guideline, but there are still some lingering problems with the pyramid. For example, beans should not be lumped with meats. Besides protein and iron, they are TOTALLY different! Beans should be eaten with wild abandon, eat them daily, eat them with every meal, eat them while you sleep! Meat, on the other hand, is healthful (especially lean, organic, pastured), but to be eaten in smaller portions, and not necessarily even every day. Another problem with the pyramid is the dairy group. MOST adult people in the world can't even digest milk sugar and rarely eat dairy. As long as you are eating plenty of other calcium-rich foods, you really don't NEED dairy from cows, goats, etc. The only dairy you ever really NEEDED was your mom's, until you were about 5 years old ☺. However, do be careful about getting enough calcium, and certainly there is no problem for many of us in having some lowfat dairy daily.
45. What does "nutrient dense" mean? Explain, comparing a 100-calorie apple with a 100-calorie serving of honey.
46. Define vegan, lacto-ovo-vegetarian and pesco-vegetarian.
47. What are some health benefits enjoyed by people who follow a careful vegetarian diet?
48. What are several nutrients often lacking in vegan diets?
*I think the text is a little misleading here, so just to clarify: vitamin B12 is only naturally found in foods of animal origin (meat, dairy, eggs). The B12-like substance found in nutritional yeast doesn't seem to work in our bodies. So, the

only non-animal based sources (usually soy products) are fortified with B12. See my supplemental lectures for more info on B12.

49. Explain what antioxidants are and how they work.
*no single-supplement antioxidant (pill) has been able to replicate the health benefits found from eating plenty of antioxidant-rich foods. Researchers are confident that the antioxidants are very important for our health, but it turns out that most likely, it is the combination of different antioxidants found in foods that imparts the benefit. Antioxidant pills, supplements and fortified foods just don't give us the same benefit. So, rather than buying expensive pills and energy drinks with antioxidants, just eat the stuff we know actually works: berries (esp. blue, black, rasp, straw, cran), broccoli and its relatives (kale, cabbage, etc), dark chocolate, tea, pomegranate, artichoke, beans, apples, citrus, nuts, garlic, onion, whole grains, spices (notable: cinnamon and turmeric), dark green leafies (spinach, chard, etc), tomatoes.... These are some of the heaviest-hitters but all whole plant foods contain some. This list sounds familiar, right? Sounds like a healthy diet?
50. What are probiotics?
51. Summarize the bulleted information under "changing the meat and potatoes American." After the bullets, what does the author conclude about meat intake vs. fruit/vegetable intake?
*I agree with the author. We get too much focus on what NOT to eat. I'm afraid that without more knowledge, hearing about what NOT to eat might lead someone to choose an alternate but not any more healthy food. For example, when we all heard the message "don't eat fat," we ended up getting a bunch of products that had just as many calories and were loaded with sugar, even though they were low fat. Another bad choice people make these days, thinking they are healthy, is energy bars. For the most part, energy bars are just highly processed candy bars with a vitamin pill and caffeine. See below for more on energy bars and drinks. So, focus on what TO eat: plenty of fruits, veggies, beans, nuts, whole grains and plant oils. Eat lean, organic pastured meats, dairy and eggs in moderation. If these make up the majority of your diet, occasional indulgences probably won't set you back. Eat your salad and vegetables first when you get your meal, and you'll be less likely to eat too much meat and potatoes ☺ (of course, potatoes are perfectly healthy in moderation for most people)
52. What are some strategies for eating healthfully when you are short on money and time?
53. Discuss how to make "good" choices when dining out.
54. What are some common symptoms of food poisoning?
*Note: the wording in the text makes it sound like organic foods are more likely to be contaminated than conventional. This is not true, and I don't think the author meant for it to sound that way. Contamination rates (by pathogens) are about the same, but of course organics have no pesticides. Also, in the case of meat and eggs, organic products are generally LESS likely to be contaminated with pathogenic bacteria; they are safer, especially when the animals are allowed to pasture and are not kept in crowded areas.

55. Discuss strategies for avoiding food poisoning.
56. List some common food additives. What does the author recommend about choosing foods based on the presence of additives?
57. Explain food allergy vs. food intolerance. Which is more common?
58. What are "organic" foods? What is a known benefit? Why is it difficult to measure effects on people?

Supplemental Lectures

- I. **Calories in the calorie-containing nutrients.** As you know: fat, carbs and protein are the only nutrients that provide energy (have calories). What this means is that our cells can extract the energy stored in these nutrients to make little cellular batteries, which each cell uses to do work. Vitamins, minerals and water are essential for helping to access that energy, and for other functions, but our cells cannot extract any energy from vitamins, minerals or water to make batteries.

How much energy is in each nutrient type? (these are estimates)

Proteins provide 4 calories per gram of protein

Carbs provide 4 calories per gram of carb

Fats provide 9 calories per gram of fat

So a food that claims to contain 20 g of carb, 9 g of fat and 5 g of protein will contain:

$(20 \times 4) + (9 \times 9) + (5 \times 4) = 181$ total calories.

(100 cal from carb) + (81 from fat) + (20 from protein)

Of those 181 total calories, what percent is contributed by fat?

$(81 \text{ fat cal}) / (181 \text{ total cal}) \times 100 = \text{about } 45\%$

Now you calculate: of those 181 total calories, what percent is contributed by carbs? By protein?

Sometimes when you calculate calories of a product based on reported grams, your totals won't match that reported by the manufacturer (but it is generally close). This is because of rounding at multiple steps and becomes sometimes fiber is included in the total carbs reported; fiber has no calories. Anyway, don't concern yourself with small mismatches.

II. A word about the nutrients, their digestion and absorption-

"Digestion" refers to whole foods being ripped up into pieces that are small enough to pass through individual cells lining your digestive tract and then into your blood (that

process is called "absorption"). The cells have some ability to pick and choose what can cross through them. Anyway, these small pieces are microscopic, they are individual molecules and atoms (elements). Here's what happens:

First, food must be mashed up and wetted down: your mouth starts that process. This separates big chunks into smaller and smaller pieces, and starts to free some individual nutrients.

Then, some nutrients are made of long chains of small molecules. These nutrients are like pearl necklaces, or charm bracelets, in which the individual pearls and charms must be removed. The pearls and charms are the molecules that are small enough to be absorbed. This is the job of DIGESTIVE ENZYMES: they are able to remove the individual pearls and charms. The nutrients that are made of "pearls and charms," so to speak, are carbohydrates, proteins and fats (triglycerides). These are the ONLY ones that require digestive enzymes to get them down to small enough pieces for absorption.

The "pearls" of carbohydrates are called monosaccharides, and include glucose, fructose and galactose. They are the molecules that are small enough to get into the blood. Starch, for example, is a necklace made of thousands of glucose pearls strung together. The necklace is way too big to be absorbed, so digestive enzymes pick off the individual glucose molecules (pearls) which are small enough to get into the blood.

The "pearls" of proteins are called amino acids. I won't list all of them because there are 20 basic amino acids, plus some derivatives of the 20. But the same concept is true for proteins as is true for carbs. Different enzymes work on them, and proteins require more work because they are really 3-dimensionally complex.

Finally, the "charms" of fats are called fatty acids. I use the charm bracelet analogy here, because unlike a pearl necklace, the fatty acids aren't linked together in a chain, but instead hang off of another molecule. That molecule acts like the bracelet, and the fatty acids are the charms hanging off. Anyway, digestive enzymes pick off the fatty acids from the "bracelet" molecule.

Three types of nutrients simply need to be freed up from the original food, and are "stand alone." They do not exist in long chains, and are not chemically linked. They do not require digestive enzymes. They are the vitamins (single molecules), the minerals (single atoms/elements) and water (single molecules).

As it turns out, carbohydrates, proteins and fats are also the only nutrients that provide energy (calories) to our cells. Vitamins, minerals and water help the cells use those calories, but do not actually provide any energy.

III. Some extra practical information

>>A. The text talks about complete and incomplete proteins, and I want to be a little more clear about this. In general animal proteins (meat, eggs, dairy etc) contain complete proteins. Plant sources (grains, veggies, etc) do not. However, an exception is soy: it is complete, but still quite low in a couple of the essential amino acids. However, vegetarians need not fret. As the book points out, by being sure to eat from a variety of plant types (especially grains and legumes) you will obtain all of the essential amino acids. While grains lack two specific amino acids, legumes (beans, lentils, peanuts, peas) contain them. And, legumes lack two different ones, but grains contain them. You don't need to combine these at every meal, just within each day.

>>B. The text talks briefly about refined carbs in this section, and a little more later on. Most of the bread we eat these days is made with refined wheat flour; white rice is refined too. This means they are not whole, and so lack in fiber and nutrients. A whole grain is a seed: it contains a baby plant (the germ, with lots of nutrients, vitamins, good fats, proteins etc), starch to feed the baby plant, and a protective outer covering (the bran, with lots of fiber and a good amount of minerals, vitamins etc). Refining removes the bran and the germ and leaves just the starch; another way of thinking about this is that refining removes most of the fiber, vitamins, minerals, and proteins and just leaves calories (essentially that's 90% of what we use starch for... maybe more than 90%).

So, choose "whole grain" whenever you can. And don't be fooled by "wheat bread," "wheat flour," etc. White flour IS wheat flour! It's just been refined. So, you may see a brown bread that says "wheat bread." Well, it's a white bread with molasses or some other colorant. You need to see the word "whole" to know that it is made with unrefined, whole grain flour. One way to get an idea of how much whole grain is in a product is to look at the fiber. If the fiber is about 15% or more of the total carbs, then there is probably a reasonable amount of whole flour (even if there is some refined flour).

>>When you are reading the ingredients lists, here are some ingredients that are "sugar," ie- these are other words for "sugar:" anything ending in "-ose" (ex, dextrose, high fructose corn syrup), anything called "syrup" (ex, cane syrup, maple syrup, high fructose corn syrup), anything malted (ex, malted barley), cane juice, honey, molasses, concentrated fruit juice. (the last three are preferred IF you have decided to eat something sugary, as they do contain some antioxidants and nutrients)

IV. A little bit about food sources of some nutrients-

Plant foods do not contain cholesterol. Period. Some manufacturers will espouse "no cholesterol!" on their foods as if their brand is superior because of that. If it's a plant-based food, like most pastas for example, then most brands are naturally cholesterol-free. Unless some of the brands add animal fat, which is unusual. Read your labels, educate yourselves, save money.

Animal foods are the only natural sources of B12. Period. Oh, unless you are a coprophage :). Those of us who prefer not to eat poop need to get it from animal foods or supplements. However, B12 supplements are perfectly viable and well-absorbed, so a carefully planned vegan diet can be absolutely complete and healthful.

V. *Trans* fats and hydrogenated oils:

Let me make this clear: if you see the word "hydrogenated" in the ingredients list, there ARE *trans*-FATS in the product, even if the nutrition panel says there are none. Legally, if ONE SERVING of a product has less than .5 g of trans-fat, the manufacturer may list "0" under trans-fats. What this means is, let's say there is .5 g of trans-fat in one serving of a product you are eating, like potato chips. Let's say instead of eating the 13 or so chips that make a serving, you eat half the bag (hey, we've all done it). So, now you've probably just eaten about 5 or more servings. That's at least 2.5 g of trans fats... remember, we don't know how much is okay, and those chips probably aren't the only product you'll eat this day/this week with trans fats. The easiest thing to do to avoid trans-fats is read labels and choose products without the word "hydrogenated" in the ingredients. At restaurants, avoid baked goods and fried products unless you can see the ingredients, or ask if they use shortening or margarine. If they tell you they use vegetable oil, ask them if it is liquid or solid vegetable oil (at room temperature). Hydrogenated oil is solid at room temperature.

VI. Fish and mercury

The text advises pregnant, nursing women and children to avoid fish with high mercury. Um, methyl mercury is a neurotoxin that accumulates in your tissues. Shouldn't we ALL avoid high mercury fish? Why eat fish that is high in methyl mercury when there are other choices? Here is a very short list of some high-mercury and low mercury fish. By the way, halibut has moderate amounts of methyl mercury. (later in the quarter we will revisit this and I'll provide links with more information)

FISH TO AVOID: Shark, swordfish, amberjack, tuna- canned (yep, sorry) and steak (yep, sorry), many farmed fish that are otherwise okay

FISH TO EAT WITH WILD ABANDON: Pacific salmon, Pacific cod, tilapia, shellfish (which are not actually fish, they are more closely related to insects)- although crab can sometimes have moderate rather than low amounts.

Of course the environmental impacts of the fish choices you make is a different story, you'll learn that when you take Environmental Science :)

VII. A little more on omega-3 fatty acids and a pitch for grass-fed beef:

Omega-3 fatty acids are found in small amounts in plants and algae. It's difficult for us to get enough from plants alone; save a few notable sources such as walnuts.

Grazing animals (deer, cattle, etc) accumulate omega-3 fatty acids, because they eat huge amounts of some of the plants that produce them, like grasses. Fish accumulate omega-3s by grazing on algae and eating other omega-3 rich fish.

Most of today's beef cattle are fed an unnatural diet: grains. Grains do not contain as many omega-3 fatty acids, and grain-fed beef offer fewer omega-3s than grass-fed beef. We are lucky that we live in an area with several local farms that produce grass-fed beef. In addition to having a healthier fat profile, grass-fed ("pasture-raised") beef are also leaner, so they have less total fat AND the fat they do have is better for you!

Finally, the cattle themselves are healthier when pasture-raised. They have very specific digestive tracts that do not deal well with grains (actually, they are very dependent on the bacteria that live in their gut to help make food available to them, and it's the bacterial populations that get sick on grains); the cattle are more prone to sickness when fed a grain-fed diet. The only way to give cattle grass is to let them graze, so cattle are healthier (and leaner) because they are less cramped and move around more. And when I say cramped, I mean cattle nose-to-butt, walking around in mountains of poopy sludge. Don't believe me? Drive through the valley in California some time, open the windows and let the sweet perfume knock you on your butt! Anyway, open grazing (healthier diet, more room between cows) translates to less need to pump cattle full of antibiotics. THAT, in turn, reduces the chances of producing super-bug disease bacteria that are resistant to antibiotics.

So you see, the benefits are many: you get to feel less guilty about eating red meat because it is better for you, the cows themselves are healthier and happier, and we slow the process of bacteria gaining resistance to antibiotics. However, it requires a lot of space... which is not a good thing for the environment... so if you are concerned about that (as I am), you would still restrict your intake of red meat :).

Oh, and the dairy that comes from pasture-raised cows has a better fat profile, too. It is still high in saturated fat, but contains more beneficial fats than milk that comes from grain-fed cows. So, if you are going to eat dairy fat (milk, butter, cream, ice cream, cheese), you might as well choose products that use organic, pasture-raised cows (for example, Organic Valley brand). But it's still not a good idea to eat more dairy fat than you normally would, it is still high in saturated fat.

And guess what? Some captive-raised fish are fed unnatural diets low in omega-3s as well, and those fish provide fewer omega-3s to us. And the fish are not as healthy.

You can find pasture-raised (grass-fed) beef products at the local Farmer's Markets in Seattle, at PCC, and sometimes at Trader Joe's. I'm sure Whole Foods carries them, too, and there are several farmers in Western Washington through whom you can order directly. See below for resources.

Don't even get me started on chicken :)

VIII. A word on power bars, energy bars, energy drinks:

They are candy bars and sodas with caffeine, Metamucil and vitamin pills crushed into them. They are a waste of money and loaded with sugar. What a racket!!

Eat a banana with peanut butter and a cup of tea instead. Or, peanut butter toast and tea. Or, black bean soup and tea. Or, chicken salad with some grapes and tea. Or some fresh fruit and a couple handfuls of nuts and some tea. Or a little bit of dark chocolate, dried fruit and some nuts with tea. Or any of the above with a little coffee. See where I'm going?

Unless you are going on a serious multi-day hike, you are much better off getting the vitamins, minerals, fiber and caffeine (and amino acids) from REAL food, just as convenient, with fewer overall calories and WAY less sugar. □

IX. Some resources for your shopping ease and pleasure (I focus on specifics when it comes to animal foods because I think they are the most difficult to find organic and pastured)- just FYI, I won't test you on this of course ☺

- a. PCC- carry many local foods, organics and whole foods. NO products contain ANY hydrogenated oils or high fructose corn syrup. Carry organic, pastured animal products (Williamson Farms is best beef, Rosie's is best chicken). Expensive, but a one-time \$60 membership fee (for life) gets you monthly 10% and 5% discounts, plus hundreds of dollars worth of coupons. Members can vote on policy and representation. Not publicly traded. Just be aware that not ALL of their products are organic or whole grain; while the deserts are made with "real" food, they are still fatty and sugary!
- b. Farmer's markets- Ballard and University markets are year-round. Local, mostly organic. Tons of produce, also a few vendors that carry meat, egg and dairy products from animals that are TRULY range-free and cows that are 100% grass fed. Notable for animal foods: www.skagitriveranch.com (meats, eggs, awesome sausages with no nitrates), www.samishbay.com (meats and cheeses), www.estrellafamilycreamery.com (cheese). You DO need to look for "organic," and "whole grain." not all vendors are organic or whole grain. (whole is more important than organic with non-animal foods)
- c. National brands- Organic Valley provides dairy products from cows that are pastured most of their lives, Organic Prairie provides meat products from animals that are pastured most of their lives
- d. Theo chocolates- a local company, apparently the ONLY "bean to bar" chocolatier in the country! Anyway, that's interesting but not enough to make it to my list. The reason they are on my list is because they buy only organic and fairly traded beans. They sell high-percentage dark chocolate baking and eating bars. For health benefit, choose the highest cocoa content: 70% or more is ideal. Theo is expensive! Oh, they also offer daily tours of their facility, which is in Fremont.

- e. Local farms- use the “farm finder,” http://dnr.metrokc.gov/wlr/Farms/farms_produce_finder.asp, choose organic only if that is important to you, and indicate if you want to find markets, farm stands (where you go to the actual farm), CSAs (where you get a box delivered regularly, but not to your home), or delivery (where you get a box delivered to your home). I haven’t been to many farm stands, but I can recommend www.south47farm.com.
- f. Book: What to Eat, by Marion Nestle (highly respected nutrition researcher). A fabulous, easy-read book which is basically a guide to shopping.