

Chapter 23 Reading guide

1. What is the difference between complementary and alternative medicines?
2. In general, how much is known about the safety and effectiveness of CAM?
3. Which CAM modalities have been most widely accepted by allopathic medicine?
4. List the common Alternative Medical Systems.
5. Describe generally the 4 major domains of CAM. Place each of the following treatment types into its proper primary domain: Feldenkrais, chiropractic, acupuncture, psychoneuroimmunology, dietary supplements, herbal remedies, osteopathic, shiatsu, body work, nutraceuticals
6. Describe PNI. Is there any evidence that it might be effective?
7. Why are biologically based therapies pretty controversial?
8. If something is natural, does that mean it's safe? Explain, provide several examples. These could come from all over the chapter and my notes.
9. For each of the herbal remedies listed in the text (but NOT in table 23.3), explain:
 - a. What it is used for
 - b. Have scientific studies supported claims of its use; if so, are findings conclusive?
 - c. What are side effects and/or other concerns?
10. For each of the Special Dietary Supplements listed in the text (but NOT in table 23.3), explain:
 - a. What it is used for
 - b. Have scientific studies supported claims of its use; if so, are findings conclusive?
 - c. What are side effects and/or other concerns?
11. From table 23.3, which supplements have no (or only mild) known risks? (FYI, even the only one listed as "none" can have negative effects if taken in megadoses, including kidney stones.
12. What are some examples of "nutraceuticals?" FYI, if you focus on eating a wide variety of whole plant foods you'll get most of these 😊. Include some cultured dairy (ex, yogurt), too, if you like, especially if you are stressed or on antibiotics or antacids. But remember that the sweetened yogurts are desserts; choose unsweetened and add your own fruit and honey (you won't use as much but it will taste as sweet).
13. Using figure 23.3, list examples of CAM treatments that are probably:
 - a. Safe and effective
 - b. Safe, effectiveness is unclear
 - c. Effective, safety is unclear
 - d. Unsafe and ineffective
14. What kind of safety and efficacy (effectiveness) standards are nutritional supplements held to in the US? Are reported dosages always accurate? Explain.
15. Summarize considerations you should have regarding CAM treatments.
16. Why should you look for herbal supplements whose dosages are standardized?
17. Have herbal supplements ever been shown to be contaminated with poisons or pollutants, such as fungicides? Explain.
18. What are some things to consider when selecting a CAM provider?

Two quick notes:

- 1- **“Natural”**- The book points out that “natural” does not equal “safe.” While in some instances it makes sense that a more natural approach would be safe, that is not always the case. For example, in choosing a healthy diet, it makes sense that we should be eating the “natural” human diet: mostly whole plant foods, some lean animal foods, minimally processed foods etc.

However, there are plenty of “natural” things that are very harmful to humans. For example, hemlock (the celery relative, not the pine relative) is a beautiful plant. I found a seedling growing in my backyard one year and let it grow to a size at which I could identify it. When I discovered it was hemlock, I dug it out immediately, bagged it and disposed of it. It has killed many people, both via accidental ingestion and purposeful poisoning (the extract was used as a poison).

Some other examples of natural, but very harmful, things are: ricin (derived from a plant), anthrax (a bacterium), deathcap mushrooms (a fungus), snake venom (from an animal).

- 2- **Lack of evidence**- You’ll see in this chapter a lot of “lack of scientific evidence” and similar statements. You should definitely take this to heart, and realize that this may mean the treatment/method doesn’t work.

But it doesn’t absolutely mean that. It could just mean that the particular treatment/method has not been tested enough, or with rigorous enough studies, to say anything about it conclusively.

So, in this chapter and in life (reading in the media, etc), don’t confuse a lack of scientific evidence/knowledge with NEGATIVE results. Understand that it just means “we don’t really know.” When something has been shown NOT to work, statements will say something like, “scientific evidence refutes the claim that...,” “studies have repeatedly shown that it is ineffective, etc.” You will see these statements in our chapter about Echinacea and cold prevention, for example.

Sometimes you can’t tell what a negative statement about research means. For example, the text states about claims for Ginkgo biloba “...much of this information is scientifically unsubstantiated.” It is difficult to tell from this whether they mean there simply isn’t much good research, or whether good research has refuted claims about ginkgo. In this case, the answer is a little bit of both... while there have been some negative results, not enough research has been done to be conclusive.

Also, if you are ever considering CAM, look at risks and effectiveness... but also look at risks and effectiveness of allopathic treatment. Compare the two. Sometimes it’s easy to look at the list of risks with a treatment (St. John’s Wort,

for example) and think “forget that! I’m going with Western treatment.” But, if you compare that list to the list that comes with Prozac, it might not look so bad. On the other hand, the effectiveness of Prozac is much better established, especially with more serious cases of depression. Knowing the risks and effectiveness of both Western and CAM treatments could open up more treatment options for you.