### Dear Students:

Each student will be required to answer session questions for this Class Discussion-Written Project. The questions within each session correspond to the topic area of that session. It is recommended that you work on completing the session questions prior to moving onto the next session or taking the quiz for that session or upcoming sessions. In addition, completing this written project will prepare you for taking the final exam.

For the project, you should use a 12 point font (Times Roman Numeral) and the document must be single spaced. Separate your answers to the questions by the session number. For example, write all your answers for session one questions under the title: Session One Answers. Follow **the "Writing Assignment Guidelines and Listing References"** details found in the Syllabus. There is no limit to the number of pages required to complete this assignment.

#### **Grading and Cover Sheet:**

Grading will be based upon the presentation, project format, and your ability to answer the questions correctly. Spelling, grammar, and quality of work will be graded as well for this written project and all future written materials you hand in. In addition, the report should include a Cover Sheet that includes your name, email address, course title, project title, and date. This written project is worth 100 points.

#### **Project Completion:**

This written project is due prior to receiving a final grade in this course. As soon as you have completed the project, please email the project based on the directions provided in the SESSION. After receipt, the instructor will grade your report and post your grade in the Grade Book. The instructor may email you correct or recommend responses along with possible changes or edits you may need to make to your project before receiving a final grade. Please allow several days for the instructor to grade your assignment.

#### Directions on how to email the CDQ Written Report:

1) send the file as a Word document

2) use your last name as the name of the Word document file and add in the document file name FFclassdisuss. Example: Student's last name: Liang - Title of word document should be saved as:

SECTIONALiangFFclassdiscuss.doc

3) submit your paper to me by email at my designated email address

4) it is REQUIRED to place in the Email Subject Heading: NUTRITION Student-SECTION A-FF-Class Discussion Project

If you do not send the report by following the directions 1-4 above your written report will not be graded.

Good luck with your project!

Please complete Part I by answering 3 out of 6 of the class discussion questions (CDQs) and Part II in complete detail for full point value.

### Part I:

- 1. Comparing the different definitions of a functional food provided in lecture (ADA, IFIC, ILSI, Health Canada, Institute of Medicine in the National Academy of Sciences, etc) how would you define a functional food? Give an example of two functional foods and their benefits. Do you include any functional foods in your diet? If so, which ones and why?
- 2. Describe the health benefits from the following components of functional foods:
  - Calcium enriched foods
  - Artificial sweetener
  - Phytosterols and phystostanols
  - Phyto-estrogens
- 3. List several steps a consumer or health professional can take to independently evaluate the health and safety of a functional food.
- 4. In your own words, what is a free radical? Explain how free radicals cause damage to cells. How do antioxidants work to quench free radicals?
- 5. Explain the chain of free radical damage.
- 6. Using the slide which contains examples of foods with content of nutraceutical substances and/or the weblink: <u>http://www.foodinsight.org/</u> (questions and answers about functional foods) evaluate your meals from today and yesterday for functional food content. List the food you ate and the functional component. Briefly summarize the health benefits.

## Part II:

Please complete Part II by reviewing numbers 1-9 below. After review and in your reply to Part I questions, write the following sentence "I have read the syllabus for this course and agree to abide by the points addressed in Part II for each course in the certificate program" and sign/type your name with the DATE.

1a. I have reviewed the course syllabus and course content.

1c. I can review the entire format of the certificate program on the STUDENT REGISTRATION TAB on each course website.

1b. I can download a document in Session 1 that provides a list of all required textbooks and course materials for all current and future certificate courses.

- 2. I understand the grading procedures and point distributions.
- 3. I understand that if assignments are not turned in on time, points will be deducted or I'll receive no credit.
- 4. I understand that I cannot make up any missed quizzes or exams.

5. I understand that I will be the only individual that uses the userid and password that I developed and I will not allow others to access the course.

- 6. I understand that I will not copy course material/information for either myself or others to use or copy.
- 7. I understand that I will not divulge questions or answers on quizzes or exams.
- 8. I understand that I must maintain and use an active email account during this course.

9. I understand that in any email correspondence with any instructor, that I will put in all email subject headings "**Nutrition Student and Course Name**"

10. I WILL NOT REPLY directly to emails sent from any instructors that indicate noreply@pageout.net because I understand that the instructors will not receive these emails.

11. By taking this program you are agreeing to: This program is provided for general information only. It is not intended as medical advice, and should not be relied upon, as a substitute for consultations with qualified health professionals who are familiar with your individual medical needs. Use of the program material constitutes an agreement by the student not to hold the instructor or any individual or institution associated with the course liable from all claims arising out of or related to your access or use of, or your inability to access or use, the information contained in this program or any information or materials linked to or viewed

from this program or anyone else for any decision made or action taken by you in reliance on such information or for any consequential, special or similar damages, even if advised of the possibility of such damages.

Thank you and Good luck!!

# Session Two

Please answer 3 out of 5 of the class discussion questions (CDQs) provided below for full point value.

- 1. Describe at least two benefits of using spices in your diet. Be sure to provide examples.
- 2. Explain the difference between causation and correlation. Why is this important when evaluating research studies? Is the relationship between garlic and cancer causation or correlation? Why?
- 3. What are the health benefits from a diet which contains cinnamon? What compounds in cinnamon provide these benefits? Provide some suggestions for including cinnamon in your diet.
- 4. What is the difference between in vitro studies and in vivo studies? Which type of studies support the health benefits of turmeric? What are the known health benefits of turmeric?
- 5. Why is rosemary beneficial for your liver? Be sure to include a definition of choleretic and hepaprotective. How can you increase your consumption of rosemary?

# **Session Three**

Please answer 3 out of 5 of the class discussion questions (CDQs) provided below for full point value.

- 1. Compare and contrast the processing techniques used to produce green tea and black tea. Be sure to discuss how the processing affects the catechin content of the tea. Should tea be included in a healthy diet to prevent disease? Why?
- 2. Blueberries are often referred to as a super-food. What health benefits are associated with the consumption of blueberries? What components of blueberries are beneficial to health?
- 3. Discuss the roles of cocoa flavonols and procyanidins as in vivo antioxidants. How do they work in the body? What are the benefits to the body of flavonoids?
- 4. Why is fiber a functional food? Be sure to include a definition of functional food. What is the difference between soluble and insoluble fiber?
- 5. Explain the benefits of soy. Include a discussion of how the phyto-estrogens in soy work in the human body. Are phyto-estrogens only found in soy products? If not, where else are they found? It is known that soy may increase bone mass density, what are two other ways of increasing bone mass density?

## **Session Four**

Please answer 3 out of 6 of the class discussion questions (CDQs) provided below for full point value.

1. The American Dietetic Association conducted a survey which showed 2 of 5 people in the US thought following a healthful diet meant completely giving up foods they enjoy. What does following a healthful diet mean to you? Be specific and descriptive in your own diet design. What are some key principles of your own diet which have been shown to have health benefits?

2. What is a phytonutrient? Where are they found? Provide specific examples on how they work. Is your diet rich in phytonutrients?

3. What are some examples of flavonoids and their proposed health benefits? Answer this question using the power point slides and this link: <u>http://www.ific.org/publications/factsheets/antioxidantfs.cfm</u>

Do you include any foods in your diet specifically because of their flavonoid content? Explain your answer. If not, how would you plan to do so and why?

4. Name 3 different color categories of foods and their proposed health benefits. Do you include these colors in your diet on a daily basis? Explain how you incorporate them or could incorporate them into your diet on a daily basis.

5. Summer time is a popular time to grill because it's quick and easy and can provide lower fat options by omitting additional oil in food preparation. What are some steps one can take to decrease cancer risk when grilling?

6. In addition to their micronutrient (vitamins and minerals) benefits, tomatoes also contain valuable phytochemicals, including carotenoids and polyphenols. Name at least 3 proposed health benefits of tomatoes or the components listed above.

### **Session Five**

Please answer 3 out of 6 of the class discussion questions (CDQs) provided below for full point value.

1. How do plant sterols work to lower cholesterol? What are the amounts used and do these doses occur in similar amounts in foods naturally? Are there any potential negative benefits to plant sterols?

2. Compare and contrast your diet using the new MyPlate -at <u>http://www.choosemyplate.gov/</u>. How would you change the MyPlate to make it more functional food savvy? Be specific in your description.

3. Using the internet and a search engine, find 5 examples of products that would be considered functional food. Do you consider them healthy?

4. Plan and list a day's worth of meals, including functional foods at each meal. Make the plan realistic and briefly summarize at the end of the meal plan the proposed health benefits.

5. List 5 grains that aren't common in the American Diet. What are some health benefits of whole grains? What percent of whole grains occupy the grocery store shelves of most grocery stores?

6. Go to: <u>http://www.aicr.org/site/PageServer?pagename=dc\_rc\_home</u>. Find 3 recipes that are high in functional food content. List their functional food content and in 1 sentence or more explain the proposed functional food benefit. Why did the recipe appeal to you and do you plan to use the recipe for a meal?