



Fall 2000: The Whole Story

Nutritionist Note: This session contains two parts. The first part provides a review of the WHI Dietary Study and acknowledges the participants' continuing efforts to meet study goals. The second part examines the benefits of eating more whole grains as part of a low-fat eating pattern. Based on participant needs and interest, a group may choose to only address study progress or whole grains, instead of covering both topics.

Nutritionist Guidelines

Time: 120 – 130 minutes

WHILMA: Enter session in WHILMA as: 7F

Objectives: In this session, the participant will:

(Key Points)

- Review study progress and identify areas that may need attention.
- Examine the health benefits of grains, especially whole grains.
- Explore ways to incorporate whole grains into meals and snacks.

Materials:

- Overhead projector
- *WHIP 1105 overheads: studywide data on session completion, self-monitoring, average fat scores, fruit/vegetable and average grain servings.
- Custom Data Extract System - clinic-specific data on WHIP0419: (session completion, self-monitoring, average fat, fruit/vegetable, and grain scores).
- Self-monitoring tools

*Studywide overheads based on 5/31/00 data. LNs will receive an electronic copy of the Excel spreadsheet of these graphs so that they can update data and modify the graph format, as desired.

Participant Materials (Resources):

- The Grain/Bean Pyramid – Where Are My Grains? (Resource Fall-1)
- Looking for Whole Grains (Resource Fall-2: label reading)
- Great Whole Grain Suggestions (Resource Fall-3)

Other WHI Resources Related to Session:

- WHILMA Resource Packet for Nutritionists. Memo/resource packet sent to all Clinical Center LNs from the CCC Nutrition Unit on 2/24/00.
- WHI Manuals, Vol. 1 – Study Protocol and Policies, (Tab 1 – Protocol), Section 2.3.2. Dietary Modification and Colorectal Cancer, page 1-8.
- Year 1 Session Materials (Group Nutritionist and Participant):
 - Session 14 – *What's Complex about Carbohydrates?*
- Year 1 Participant Manual-Resource Section:
 - *Maximizing Grains* – pg. 53-55.

Optional - Nutritionist Background Reading

- Position of The American Dietetic Association: Health implications of dietary fiber. *JADA* 97:1157-1159, 1997.
- Slavin J, Martini MC, Jacobs DR, and Marquart, K. Plausible mechanisms for the protectiveness of whole grains. *Am. J. Clin. Nutr.* 70(3)459S-463S, 1999 (available via Internet at: www.ajcn.org/cgi/content/abstract/70/3/459S).
- Jacobs DR, Meyer KA, Kushi LH, Folsom AR. Whole grain intake may reduce the risk of ischemic heart disease death in postmenopausal women: The Iowa Women's Health Study. *Am J Clin Nutr* 68:248-257, 1998. (available via Internet at: www.ajcn.org/cgi/content/abstract/68/2/248).
- Liu S, Stampfer MJ, Hu FB, Giovannucci E, Rimm E, Manson JE, Hennekens CH and Willett WC. Whole grain consumption and risk of coronary heart disease: results from the Nurses' Health Study. *Am. J. Clin. Nutr.* 70(3)412-419, 1999. (available via Internet at: www.ajcn.org/cgi/content/abstract/70/3/412).
- Kushi LH, Meyer KA, and Jacobs DR. Cereals, legumes, and chronic disease risk reduction: evidence from epidemiologic studies. *Am. J. Clin. Nutr.* 70(3)451S-458S, 1999. (available via Internet at: www.ajcn.org/cgi/content/abstract/70/3/451S).

Optional – *Internet Resources:

- www.generalmills.com/wholegrain: General Mills - Section on 'whole grain science' provides an overview of why whole grains are important and the current research on whole grains and health.
- www.wheatfoods.org: Wheat Foods Council - grain food trends, nutrition information for seniors.
- www.phys.com/d_magazines/02glam/grains/grains.html - Consumer information about grains.
- www.kswheat.com: Kansas Wheat Commission - recipes, food fact sheets about various grains.
- www.ilovepasta.org/index.html: National Pasta Association - pasta recipes and nutrition information.

*The information in these websites is not an endorsement by WHI of specific food products or information.

Peer Group Ideas:

Here are a few suggestions for peer group activities/topics to follow-up on information provided in the Fall 2000 session:


- *Healthy Grains on Wheels*: Identification of portable grain choices when you need a quick meal or snack.
- *Quick & Whole*: Share recipes that are quick to prepare and provide sources of whole grains.
- *Grains Galore*: Explore whole grain recipes. Identify 1 or 2 whole grains that your group would like to try. Then prepare the grain(s) using a low-fat recipe and taste.

Below is a list of the maintenance session planned for 2000/2001. This information will help Nutritionists plan ahead when responding to participant requests for ‘additional information.’

Upcoming Maintenance Session Topics:

- **7W** - Winter 2000 Weight Management
- **7SP** - Spring 2001 Women and Heart Disease
- **7SU** - Summer 2001 Nutrient Density
- **8F** - Fall 2001 WHI Progress: Motivation and IIP

Fall 2000: The Whole Story (Facilitation Outline)

| | GROUP SHARING/NEXT STEPS FOLLOW-UP (20-30 minutes) |
|--|---|
| (20-30 minutes) | <p>Objective: Participants share experiences and strategies with other group members about how they manage meals prepared outside their homes.</p> <p>Purpose: Build group cohesion and self-efficacy.</p> <p>A. Group Sharing/Next Steps Follow-up Ideas: Sharing Ideas: Q/A: Consider using the questions below, or develop your own:</p> <ul style="list-style-type: none"> ☛ Think about the meals you ate during the past month, how often did you eat a meal that had been prepared away from home? (e.g., 2-3/wk., 1/wk., 1/mo., etc.) ☛ On a scale of 0 to 10 (0=no effect and 10=significant effect), how much would you say that your meals prepared away from home influenced your ability to meet your WHI goals? ☛ What types of surprises/challenges did you encounter when you ate meals prepared away from home and how did you choose to deal with them? ☛ If you chose not to deal with the challenges, what might need to be different next time to increase your chances of meeting your WHI goals? <p>-----</p> <p>Peer Group Sharing (If peer groups): Purpose: Provide support and recognition of peer group activities and promote interest. Consider focusing discussion on meals prepared away from home:</p> <ul style="list-style-type: none"> ☛ What restaurants have you tried as part of your peer group ‘get-togethers?’ ☛ What lower-fat restaurants would your group recommend? ☛ What other peer group activities have helped maintain your interest in the WHI Dietary Study? ☛ What other types of group ‘get-togethers’ would be helpful? |
|  Notes | |

| | NEW MATERIAL (50-60 minutes) |
|---|--|
| (2 minutes) | <p>1. Overview/Introduction</p> <ul style="list-style-type: none"> Let participants know that the first part of this session will provide a review of the progress in the WHI Dietary Study and acknowledge participants continued efforts to maintain study's goals. The latter part of the session will focus on the health benefits of grains, especially whole grains in a low-fat eating plan, such as WHI. |
| (20 minutes) Overheads for studywide and clinic- specific data | <p>2. WHI Update: Where are We Now?</p> <p><u>Objective:</u> Review study progress and identify areas that may need attention.</p> <p><u>Purpose:</u> Acknowledge participants' efforts and increase awareness about areas that may need attention.</p> <p>A. Develop Interest of Group.</p> <ul style="list-style-type: none"> Let the participants know that you would like to update them on the WHI Dietary Study in terms of the following areas: <ul style="list-style-type: none"> Study participation: percent session completion and self-monitoring. Study progress: average fat grams, F/V and Grain servings. Ask the women if they would be interested in seeing this information. <p>B. Review Study Participation and Progress</p> <ul style="list-style-type: none"> Review basic studywide and CC-specific information. <p><u>Studywide data:</u> (graphs are based on studywide data as of 5/31/00)</p> <ul style="list-style-type: none"> Overheads 1-2 provide an overview of the percent of women completing sessions and self-monitoring. Overheads 3-5 provide an overview of average fat scores, F/V and Grain servings (tie grain information into session). <p><u>CC-specific data:</u></p> <ul style="list-style-type: none"> Consider creating your own clinic-specific graphs using the Custom Data Extract system (WHIP 0419). [See 2/24/00 CCC memo on use of Custom Data Extract-WHILMA Resource Packet]. Offer to present an update on the study using the information provided on the overheads. Ask participants to discuss the trends they see and share their thoughts about the benefits of WHI participation. Consider using the questions suggested on the next page, or similar questions. |

Overheads
1-2
(studywide
data)

QA – Study Participation (Potential questions):

- What do these graphs tell us about session completion and self-monitoring?
- How does our clinic compare to the study as a whole?
- How do you think participating in DM activities (DM sessions, self-monitoring) helps a person reach and maintain their WHI eating pattern?
- What would need to change for you to participate more fully in the WHI Dietary Study (attend group meetings and/or self monitor)?

Group Nutritionist Note: Study Participation Graphs - help participants make these points themselves:

- The % women who are completing sessions has been decreasing over time.
- The % women completing scores (self-monitoring) is also dropping over time. The decrease in people self-monitoring is more rapid; this suggests that participants appear to find it easier to come to group meetings than to self-monitor.
- Both session completion and self-monitoring are important for the success of the study because they help women: 1) strengthen commitment; 2) maintain awareness of WHI dietary goals; 3) meet WHI goals; and 4) reassess their eating patterns for a healthy balance of fat, fruits/vegetables, grains, and beans.
- In addition, data from WHI itself, indicates that self-monitoring and session attendance are significant predictors of dietary adherence.
- Acknowledge that people joined the WHI Dietary Study for a variety of reasons and that attendance at group meetings, as well as self-monitoring, may be influenced by many different factors, such as personal preferences, health, and other major life transitions. Let participants know that they are important to the study, in whatever capacity they can participate.

Overheads
3-5
(studywide
data)

QA – Study Progress (Potential questions):

- What changes do you see in the average fat scores over time?
- How do you think the decrease in the number of people self-monitoring could change how the average fat scores look?
- (Optional) How has the average servings of fruits/vegetables changed over time?
- What does the graph showing the average servings of grains tell us?
- How does our clinic compare to the study as a whole?

Group Nutritionist Note: Study Progress Graphs - help participants make these points themselves:

- Fat scores decreased during the first year of Intervention, but have drifted up over time.
 - As the number of women self-monitoring decreases, fat scores may look unrealistically good because they represent a smaller subset of participants who self-monitor. (Invite other explanations from participants).
 - The average intake of fruits/vegetables gradually increased during the first two years of the study and has remained high.
 - Average grain servings gradually increased during the first two years of Intervention, but grain intake has fallen slightly during 1999. On average participants are eating about 5 servings of grains per day. This is less than the recommended 6 servings per day.
-
- Acknowledge that self-monitoring can be challenging and takes extra effort. However, it can also help people create a clearer picture of their eating patterns and make more informed decisions.
 - Ask participants if they would like to spend a little time talking about the health benefits of grains in a low-fat eating pattern.



Notes

(25-30
minutes)

3. Self-Assessment: Wholesome Decisions

Objective: Examine the health benefits of grains, especially whole grains.

Purpose: Identify interest and areas for skill building to promote self-management & self-efficacy.

A. Discuss the Health Benefits of Grains.

- Ask participants to share the reasons they believe grains are important to their health and how grains could help them eat less fat.

QA – Grains (Potential questions):

- How can eating grains be important for health?
- How could your WHI grain goal help you eat less fat?

Group Nutritionist Note: help participants make these points themselves:

- A number of population-based studies have shown links between a high intake of grains, especially whole grains, and a lower risk of cancer, heart disease, and diabetes.
- Grains are usually low in fat, and provide vitamins, minerals, protein, dietary fiber (soluble and insoluble), and a number of phytochemicals.
- The dietary fiber in grain foods promotes regularity and can help reduce constipation.
- In low-fat eating patterns, such as WHI, grains (especially whole grains) help people eat less fat because they help people feel full.
- Mention that the mechanisms by which grains function in disease prevention are not known. However, researchers think that the nutrients in grains may perform some of the following functions:
 - Act as antioxidants to protect against tissue damage. (Vit. E, selenium, and phytochemicals, such as phenolic compounds, and lignans).
 - Prevent the formation and growth of cancer-causing substances (phytochemicals, such as phytic acid, saponins).
 - Bind or dilute bile acids (soluble fiber in beans, oats and barley). This reduces cholesterol and reduces exposure of gut to potential cancer-causing substances.
 - Lower cholesterol (short chain fatty acids and plant sterols, such as beta sitosterol).
 - Increase stool bulk and speed waste through the intestinal tract (insoluble fiber in whole wheat products). This helps reduce exposure of gut to cancer-causing substances and may also reduce cholesterol.
 - Influence glucose and insulin metabolism (fiber, magnesium, Vit. E).

- Point out that both WHI and the USDA Dietary Guidelines recommend that people eat at least 6 grain servings per day. Acknowledge that sometimes people feel this recommendation is too high. Ask participants how they feel about this recommendation.

QA Consider using the questions below, or develop your own:

- ☛ How important do you think it is to eat 6 or more servings of grain foods each day?
- ☛ How has eating more grains improved your eating patterns?
- ☛ (optional): How has eating more grains interfered with your healthy eating patterns?

B. Participants Identify and Classify Current Grain Choices.

- Ask participants to share the grain foods they currently eat. Use a method that actively involves participants in the process.

Suggestion:

- Ask participants to identify the grain foods they typically eat. Have a group member (or Group Nutritionist) list the foods.
- Ask participants to look at the list of grain foods and verbally identify the foods that they would consider ‘healthier choices.’
- Place a star next to the grain foods that the group identifies as ‘healthier grain choices.’

Group Nutritionist Suggestion: Instead of providing criteria to rate ‘healthier grain choices’, ask participants to express their ideas about the grain foods they consider to be healthier choices.

C. Participants Discuss Healthier Grain Choices.

- After the group has identified their ‘healthier grain choices’, use the questions below (or similar questions) to ask them **why** they think certain grain foods may be healthier.
- Follow-up by asking the group to define what they think the terms *whole grain* and *refined grain* mean and what types of foods they would associate with these terms.

Q/A: Consider using the questions below, or develop your own:

- ☛ What do you think makes one type of grain food a ‘healthier choice’ than another?
- ☛ When you hear the term *whole grain*, what does it mean to you and what types of foods come to mind?
- ☛ What foods do you think of as *refined grains*?

Resource
Fall-1

- Have participants look at **Resource Fall-1** (Grain/Bean Pyramid). Point out that the grains listed in the top and middle sections of this pyramid are considered ‘refined grains’ and the grains at the bottom of the pyramid are considered ‘whole grains.’
- Consider using the questions below (or similar questions) to ask participants to share where some of their grain choices would fall in the pyramid. Ask if they are surprised by the placement of any of the grain foods on the pyramid.

Q/A: Consider using the questions below, or develop your own:

- ☛ Think about the grain foods that you usually eat, where would they be on this Grain/Bean Pyramid?
- ☛ Are you surprised by some of the grains that are not considered to be whole grains?

Optional
Overhead:
‘Whole
Grains
Make
Sense’

- Mention that sometimes, a refined food, such as pancakes or cookies may be considered a whole grain if it is made with a whole grain flour. For example, pancakes made with whole wheat or buckwheat flour instead of white flour would be considered a whole grain.
- Provide an overview of the differences between whole and refined grains. Consider using the optional grain overhead on page 16.
 - *Whole grain* means that the grain contains all its parts – the bran (outer layer); the endosperm (starchy middle layers); and the germ (fatty inner portion) of the grain.
 - *Refined grains* have the bran and the germ sections removed, thereby reducing most of the important vitamins, minerals, fiber, and phytochemicals.
- Point out that the recommendation is for people to eat about half of their grain servings as ‘whole grains.’ In WHI, this would mean that about 3 servings per day would come from whole grain sources, if at all possible.
- Ask participants if they would like to explore some ways to include more whole grains in their meals and snacks. Move into a skill building activity that would be of interest and benefit to the participants in your group.



Notes

(30-35
minutes)

4. Skills Practice/Food Tasting

Objective: Explore ways to increase use of whole grains in meals and snacks.

Purpose: Provide practice to promote self-management and self-efficacy.

Delivery Ideas: (Select one suggested activity or develop your own ideas):

1. Demystifying Grain Labels

- Provide a variety of grain food labels (whole and refined): cereals, crackers, breads, etc. Have participants use label information to identify whole grain products. (Label reading tips are provided in Participant session materials).

2. Including Whole Grains in Meals/Snacks (two suggestions):

- Wholesome Meals.
 - Provide 1 or 2 sample menus that contain little or no grain servings, and/or only refined grain choices (e.g., snacks and desserts). Ask participants to modify menus to include more whole grain choices.
- Grain and Bean Display.
 - Set up a display of whole grains/beans with cooking instructions and sample recipes.
 - Ask participants if they are currently using any of these products. Encourage them to share ideas about low-fat preparation methods. If participants bring in recipes, have them place their recipes next to the type of grain or bean that their recipe contains.

3. Estimating Grain Servings (two suggestions):


- What's a Serving?
 - Consider setting up stations that help participants estimate the number of *Grain servings* in commonly eaten foods. For example: cereals, bagels, breads/tortillas, ½ cup noodles, rice, pasta, etc.
- Mixed Dish Grains – Are You Counting Them?
 - Build on information presented in Summer 2000 session (estimating fat, F/V and Grain servings in mixed dishes). Provide examples of regional grain dishes (i.e., macaroni & cheese, burritos, etc.). Ask participants to estimate the *Grain servings* and fat grams in these dishes. (Consider using Dairy Council paper food models for the mixed dishes).

Group Nutritionist Suggestion: If possible, consider postponing grain/weight issues for the Winter 2000 session which will be addressing weight management.

Food Tasting Ideas:

- Meals on the Run: whole wheat pocket sandwiches with favorite low-fat filling, quick bagel breakfasts, whole grain wraps, etc.
- Whole grain or bean side dishes.
- Meatless grain meals

*Notes*

| | NEXT STEPS (15 minutes) |
|--|---|
| (15 minutes) | <p>Objective: Identify possible choices that would help increase intake of whole grains.</p> <p>Purpose: Increase likelihood that participants will use session information and skills to support WHI goals.</p> <p>A. Participants Summarize</p> <ul style="list-style-type: none"> • Help participants summarize these key grain points themselves: <ul style="list-style-type: none"> - Grains, particularly whole grains, are an important way to maintain a low-fat eating pattern and provide key nutrients such as, vitamins, minerals, fiber and phytochemicals. - It's important to look at current grain choices in terms of variety (whole vs. refined grains) and number of servings. <p>B. Participants to Share.</p> <ul style="list-style-type: none"> • Ask participants to think about their current use of grains in terms of variety and number of servings. • Then ask them to think about a dietary change that they might consider making in the grain foods they current eat. For example: <ul style="list-style-type: none"> - A change in grain choices (whole vs. refined grains). - A change in grain servings (frequency or portion size). - A new whole grain to try. • Have each participant share a change that she might consider making AND how this change might help her meet or maintain her WHI fat gram goal. <p>Q/A Consider using any of the questions below, or develop your own:</p> <ul style="list-style-type: none"> ➤ What would need to happen in order for you to consider eating more whole grains? ➤ What do you like about eating grains? What don't you like? ➤ How did learning more about grain serving sizes help you re-evaluate your current intake? ➤ What whole grain have you never tried that you would be willing to try? |
|  Notes | |

Suggested Session Reminder

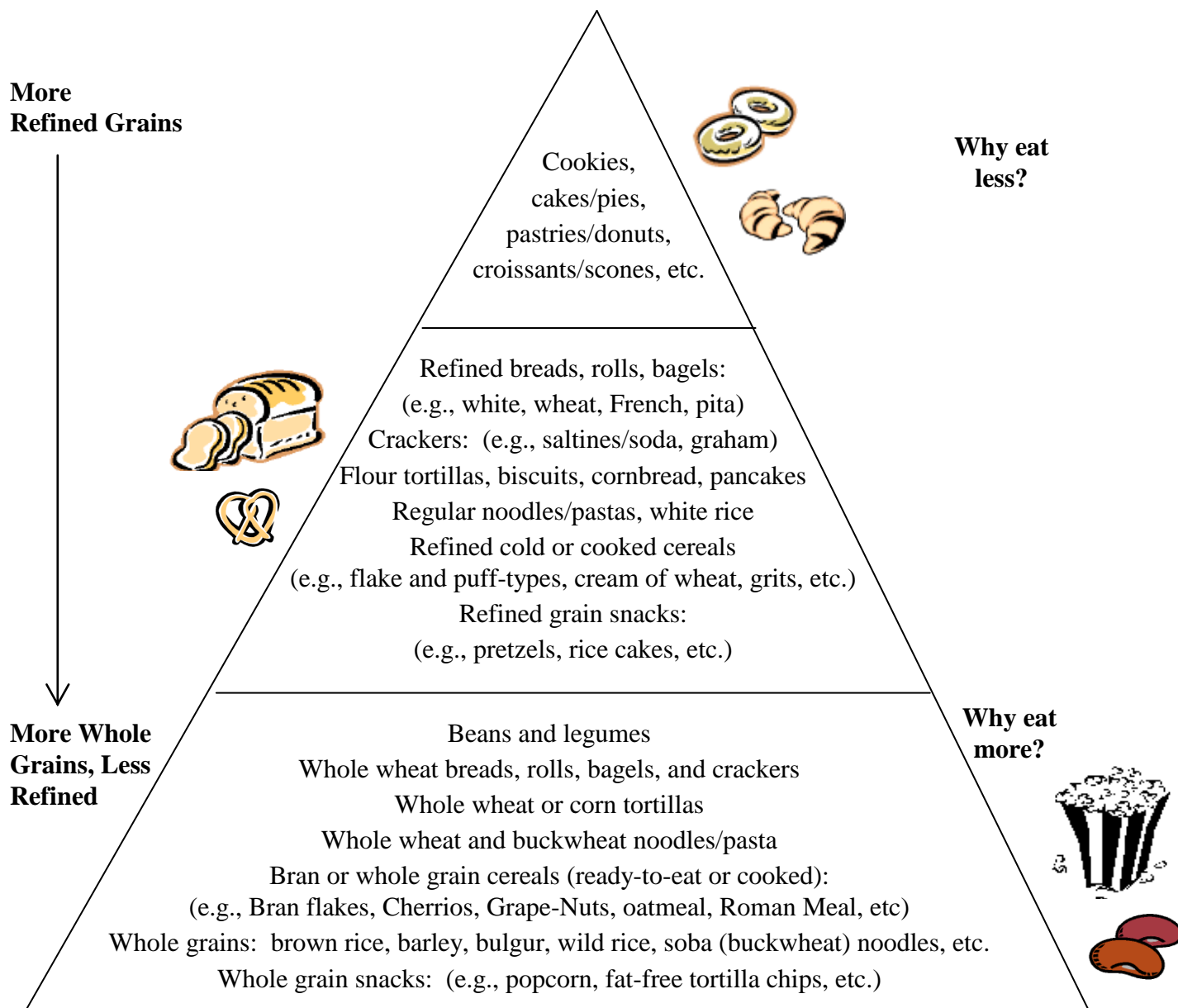


The Whole Story

Information has shown that whole grain foods are important in reducing the risk of cancer, heart disease, and diabetes. However, whole grains currently represent only about 5% of all the grain foods eaten in the U.S.

Join us for the Fall 2000 session to find out what foods are considered ‘whole grains’ and why grains are important for a low-fat eating pattern and your health. Bring your questions and a favorite low-fat grain or bean recipe to share. We look forward to seeing you!

The Grain/Bean Pyramid



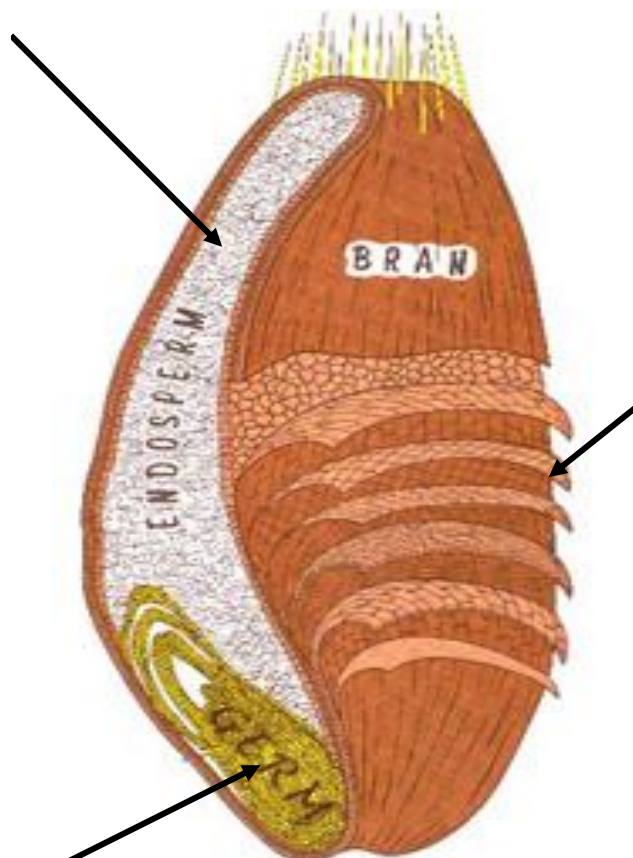
Other grain foods I ate: _____

Whole Grains Make Sense

Other phytochemicals:
lignans, flavonoids,
phenolic acid, phytate

Endosperm

- protein
- complex carbohydrate
- iron
- some B vitamins



Bran Layers

- fiber
- B vitamins
- protein
- trace minerals

Germ

- rich source of Vitamin E
- greater share of B vitamins, including folate
- fiber
- trace minerals: iron, magnesium, chromium, potassium, manganese, copper, selenium
- phytochemicals: phytosterols