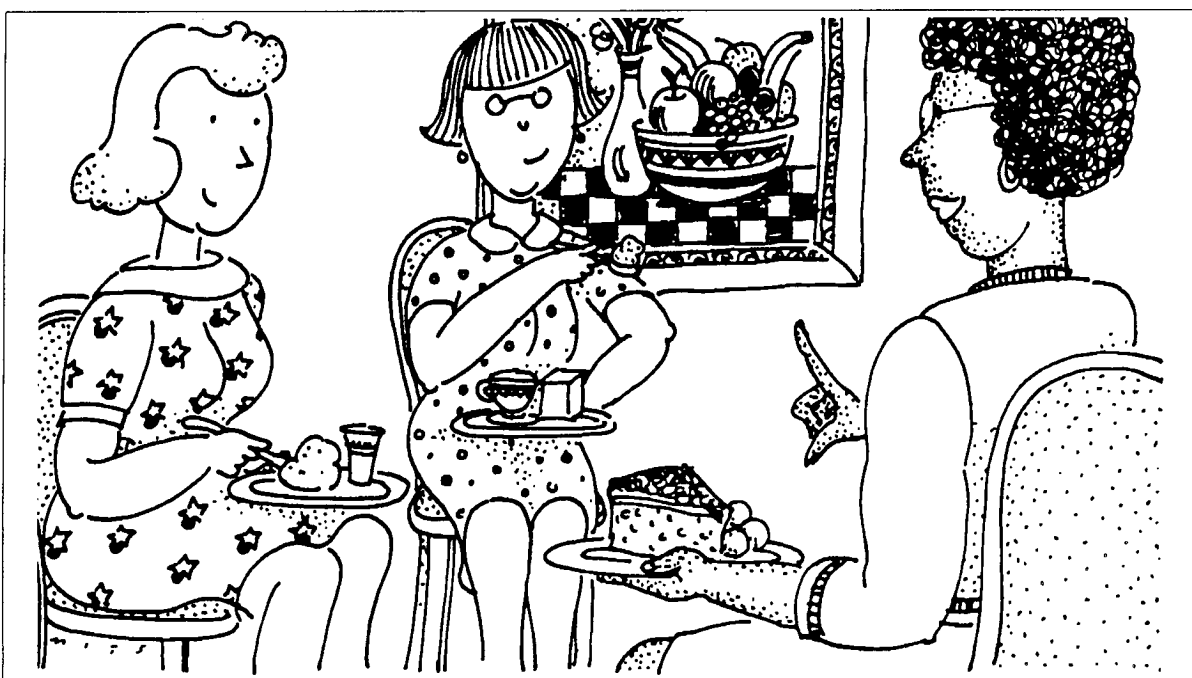


Fall 1999

You are the Answer

During this session you will:

- ◆ *Learn why WHI is a landmark study.*
- ◆ *Review WHI progress and identify ways to help the study.*
- ◆ *Renew your commitment to meet WHI dietary goals.*



Goal Follow-Up

- ◆ What soyfoods did you sample as part of your meals or snacks?
- ◆ What other steps did you take to include more plant-based foods in your meals?

Recruitment Success

The Women's Health Initiative (WHI) is the largest and most complex nutrition study of the century. The enormity of the research and its importance to public health is demonstrated by the \$625 million budget approved by the US Congress. There are

40 clinical centers across the U.S.

The study began recruiting participants in September 1993 and ended in August 1998 when they had successfully enrolled 161,861 women. About 93,700 of these women are part of the Observation Study.

A little more than 27,000 are taking part in the Hormone Study and about 48,800 women are participating in the Dietary Study.

About forty percent (19,542) of the women in the WHI Dietary Study are in dietary change groups. There are

WHI Clinical Centers



over 1,500 dietary change groups study wide.

The women who joined the Dietary Study were between 50 to 79 years when they joined the study. The largest group of women (47%) were between the ages of 60 to 69. A slightly smaller

percent of the women (37%) were between 50 to 59 years of age and about 17% were between 70 and 79. About two-thirds of the women (63%) were married when they entered the study. Women from all races are represented in WHI in similar amounts

to the population of the US. Nineteen percent of the participants represent minorities, 10% African Americans, 4% Hispanics, 2% Asians and 1.5% Native Americans and other minority groups.

Goals and Purpose of the Dietary Study

The goals of the Dietary Study include all of the following:

- ◆ to reduce fat to 20% of energy from fat
- ◆ to increase fruit/vegetable intake to 5 or more servings a day
- ◆ to increase grains to 6 or more servings a day, and
- ◆ to maintain these dietary changes for 9 years.

The study realizes that these are ambitious goals, but they are critical to be able to answer the important public health question: Does a very low-fat diet, high in fruits, vegetables and grains reduce a woman's risk of getting breast cancer, colon cancer and heart disease?

While there is research that suggests that these dietary changes will decrease risk, there is no scientific proof and the only way to answer this question is with a study like WHI.

Previous Research Studies

Before WHI, most large research studies had been done with men or smaller groups of women. For example, in the 1970's, MR FIT recruited 12,866 men to test whether a low-fat diet could reduce the risk of heart disease in men. At the end of the study, the men in the dietary change group had 7 percent fewer deaths from heart disease than the comparison group, but this reduction was

not significant. The researchers believe that the less than expected difference in diet between the two groups (comparison and dietary change) reduced the study's ability to find significant results.

By the early 1980's more attention was placed on women's health. In the 1980's, several studies demonstrated that women could reduce their fat significantly. In these studies the women reduced their fat to 21%

of calories from fat and the majority of women maintained these changes one year after the intervention ended. The results of these studies showed that women could make and maintain major dietary changes. These studies also helped convince scientists that it would be a good investment to fund a study to address the dietary fat question. WHI is that study! It is truly a landmark study, because of the large sample size and long follow-up.

Your Participation is Important

Follow-up Visits

The WHI study results depend on your participation. We need a minimum of 90% attendance at annual visits. So far, we are meeting our goals studywide and we want to thank you for coming to your annual clinic

visits and completing your annual visit forms. The information gathered at these visits helps scientists track the study's progress.

Participation in Dietary Change Activities

It is also important for you to continue to participate in your dietary group activities. The old saying "Out of sight, out of mind" is very appropriate. The group meetings help keep

people stay active and involved in maintaining the dietary changes they have made. Look at the graph below. It shows Attendance, Make-ups and Percent Scores Completed by Session. As you can see, attendance at the first session is pretty good (86%), but by the end of the first year, attendance at group meetings drops off to about 70%. And by the end of the third year, group attendance declines even more to less than 60%.

The graph also shows that during the first year, most people take time to makeup the group meetings that they miss (completed sessions).

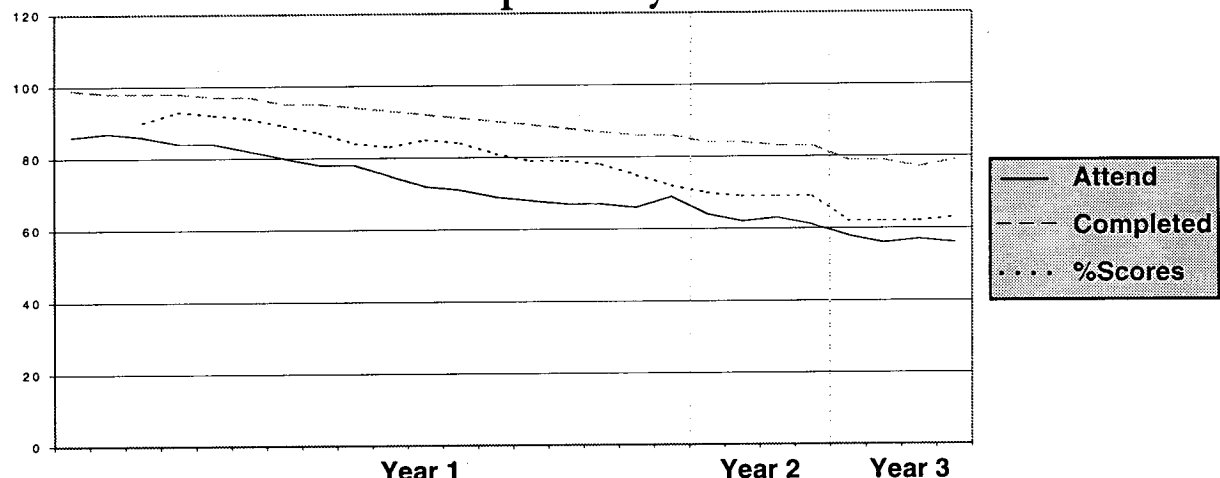
However, make-ups gradually decline from a high of about 99% to slightly less than 80% by the end of the third year. Remember that it's important to stay connected with the study and one of the best ways to do this is by attending your group meetings. Each clinical center has a variety of group meeting times and days. So, if you cannot attend your own group meeting, check with your nutritionist for the meeting times for other groups.

The amount of self-monitoring (% scores) that people turn in also declines over time. Over 90% of participants self-

monitor (turn in scores) during the earlier sessions (Sessions 3-8). However, by the end of the first year, only about 72% of women are self-monitoring and by Year 3 only 60% turn in scores.

The graph clearly shows that participation in WHI is decreasing overtime. This decreased participation may interfere with meeting study goals and may decrease our ability to answer the study questions.

Session Attendance, Make-ups and Percent Scores Completed by Session



Are We Meeting the Dietary Goals of the Study?

During the first year, most WHI participants were meeting their fat goals. The average fat gram goal is 25 and during the first year, the average fat score was 25. So, we know that most participants have the ability to reach their fat gram goals. However, during maintenance (Years 2+) fat scores have increased. The average fat scores are now around 28. (See graph below.) To help WHI be successful, everyone needs to put in the same effort they did during the first year to maintain their fat gram goals.

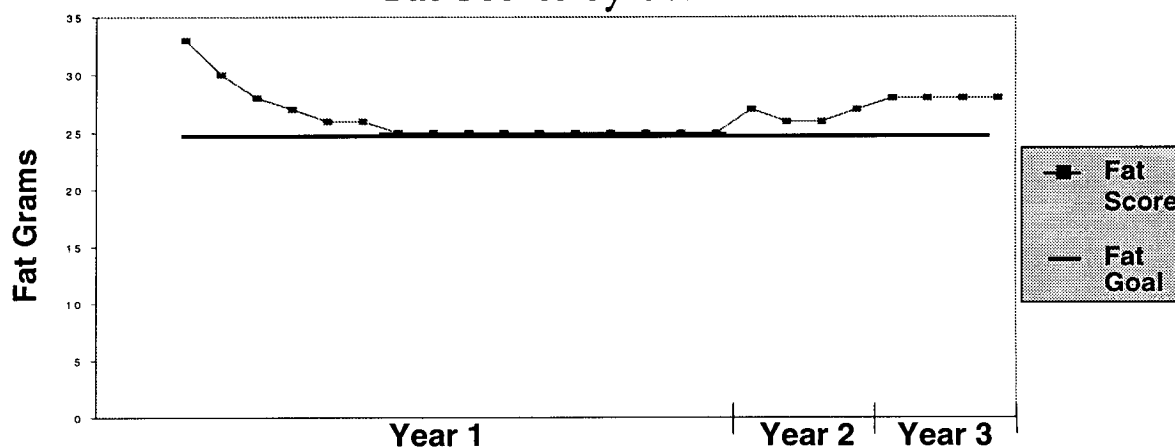
In contrast to fat gram goals, most participants have exceeded their Fruit and Vegetable goals. During the first year, Dietary Change women increased their intake of fruits and vegetables to an average of 5.7 servings per day. This increase was maintained during Year 2 and actually increased during Year 3 to an average of 6 servings per day. Great job!

Participants are also making progress in meeting their Grain goals. During year 1, grain servings gradually increased from less than 5 to 5.4 servings per day. In addition, by the third year of maintenance, the average grain servings

were about 5.6 per day. Again, nice job, keep it up.

However, it is important to keep this information in perspective. Remember, the earlier graph showed that overall self-monitoring (% scores), session attendance and make-up are declining over time. Therefore, even though the averages for fat scores, fruits/vegetables and grain scores look pretty good, they represent only 60% of the women in the study during maintenance. The other 40% of the participants, who are not keeping track of what they eat, could be farther away from their goals.

Fat Scores by Session



You Are the Answer

Everyone has made some changes in their eating habits. However, some women have made more changes than others. For this study to be successful, all participants need to try their best to meet the goals of the study. If

meeting your goals has been easy, you may be able to help the study by helping and encouraging other group members to meet their goals. If you are struggling to meet your goals, don't give up; just do the best you can. Sometimes you may need

to take time off from WHI and lower your participation temporarily. It's O.K. to take time out, but it hurts the study if you drop out.



Summary

The WHI Dietary Study was very successful in recruiting the women to address important public health questions. We realize that the WHI Dietary Study is a challenge, but it is also an important study. The WHI staff appreciates all that you do and we need your continued

commitment and support. Participation in WHI is high and participants have made major changes in their eating habits. To answer the study questions, everyone needs to do their part. If you are having problems with your dietary goals, please do not hesitate to contact your nutritionist.

Questions for Thought

- ♦ How can I help WHI?
- ♦ How can others help me be successful in WHI?

My Plan



Areas I will work on during the next 3 months:

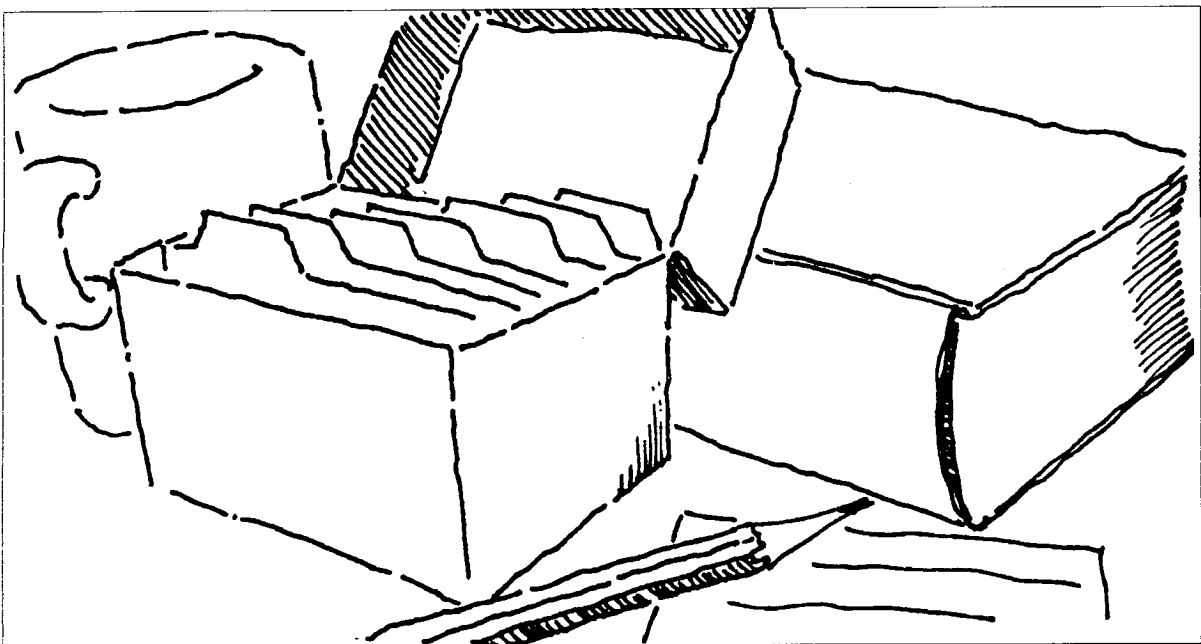
You can help the study be successful, by participating in the study to the best of your ability. Check off the things you will do to help:

- _____ Attend clinic visits and complete all of the WHI Forms
- _____ Attend maintenance sessions. If I am unable to attend my own group, I will join one of the many groups at our clinic.
- _____ Record what I eat on one of the many different self-monitoring tools, at least 3 days per month.
- _____ Meet my Fat Gram, Fruit/Vegetable and Grain Goals.
- _____ Support other participants by providing advice, transportation or other assistance.
- _____ Other ideas _____

Fall 1999

Recipes

- ◆ *Taco Soup*
- ◆ *Marinated Balsamic Bean Salad*
- ◆ *Black Bean Pumpkin Soup*
- ◆ *Fresh Lemon Glaze Cake*



Taco Soup

1 pound 93% lean ground beef, crumbled, drained and blotted*
1 medium onion, chopped
1 medium bell pepper, chopped
28 oz. can tomatoes, chopped
1 can whole corn (kernel)
1 can hominy
2 cans pinto beans
6 oz. tomato paste
1 package taco seasoning
1 package Hidden Valley Ranch Dressing Seasoning
2 cups water
1/2 cup Picante sauce

Cook ground meat, chopped onion and bell pepper together. Drain grease and add the remaining ingredients--liquid and all. Simmer for one (1) hour.

Serve with: 1/3 less fat shredded cheddar cheese
(1 oz. = 1/4 cup shredded = 6 gms fat)

or 50% less fat shredded cheddar cheese
(1 oz. = 1/4 cup shredded = 4 gms. fat)

and low fat baked tortilla chips: 13 chips = 1 gm fat and 1 grain serving

Makes 13 (1 cup) servings

Fat: 2 grams per serving*

Fruit/Vegetable Servings: 1 per serving

Grain Servings: 1/2 per serving

Recipe from: *Memphis WHI Clinical Center*

*Note: Toppings not included in recipe calculation.

For a complete vegetarian soup, use Morning Star Farms Low Fat Burger Style Recipe Crumbles (one 12 oz. bag). The fat grams are the same since this product has 3 grams of fat per 2/3 cup.

Marinated Balsamic Bean Salad

1 cup frozen whole kernel corn
1 cup frozen cut green beans
1 can (16 oz.) kidney beans
1 can (15 oz.) chickpeas (garbanzo beans)
1 can (15 oz.) black beans
1 cup diced red onion
1/2 cup balsamic vinegar
1/4 cup water
2 tablespoons Dijon mustard
1 tablespoon dried basil
1 tablespoon olive oil
1 teaspoon sugar
1/4 teaspoon salt
1/4 teaspoon ground white pepper
2 garlic cloves

Combine the first 5 ingredients in a colander; rinse and drain. Combine onion and remaining ingredients in a bowl; add corn and beans, tossing gently to coat. Cover and marinate in refrigerator at least 4 hours, stirring occasionally. Serve with a slotted spoon.

Makes 7 (1 cup) servings

Fat: 4 grams per serving

Fruit/Vegetable Servings: 1 per serving

Grain Servings: 1 serving

Recipe from: *Cooking Light* Magazine,
September, 199, contributed by *WHI Seattle
Clinical Center*

Black Bean Pumpkin Soup

1 large red onion, chopped (2-1/2 cups chopped raw)
4-5 large cloves garlic, minced
1 tablespoon olive oil
1 tablespoon + 2 teaspoons ground cumin
1/2 teaspoon ground cinnamon
1/4 teaspoon cayenne pepper
1 can (15 oz.) chicken or vegetable broth
2 cups cooked mashed pumpkin or other dark orange squash
1 can (16 oz.) diced tomatoes (with juice)
3 cans (15.5 oz.) black beans (undrained)
1/4 cup sherry
2 tablespoons seasoned rice vinegar (or apple cider vinegar)

Chop onion and saute in olive oil until wilted. While onions are cooking, add the garlic, cumin, cinnamon, and cayenne pepper. When the onions are barely golden brown, add the broth, cooked squash, tomatoes, black beans, sherry, and vinegar. Bring back to a boil, turn heat down, and simmer for about 15 minutes.

Makes 12-13 cups

Fat servings: 2 grams per cups

Fruit/Vegetable serving: 1 per cup

Grain serving: 1 per cup

Recipe from: *Houston WHI Clinical Center*

Fresh Lemon Glaze Cake

1 box Betty Crocker Super Moist Lemon Cake mix
1/3 cup unsweetened applesauce
3/4 cup fat free egg substitute or 5 egg whites
1-1/4 cups water
Grated rind of 2 lemons, juice lemons and reserve juice
Nonstick cooking spray

Glaze:

1/2 cup fresh lemon juice (from above)
1 envelope Butter Buds
1 to 1-1/2 cups confectioners sugar

Preheat oven to 350°F.

Lightly spray a 9 x 13-inch cake pan. In medium bowl, mix together: cake mix, water, egg substitute, applesauce and all of the lemon rind. Beat until just mixed and pour into a prepared pan. Bake 30 minutes.

Meanwhile, measure 1/2 cup fresh lemon juice and place in a small bowl. Heat slightly (30 seconds) in the microwave. Stir in the envelope of Butter Buds. Stir until smooth. Add confectioners sugar and stir or whip with wire whisk until smooth. Glaze should be runny.

When cake is removed from the oven, poke holes into top with a toothpick. Pour glaze over the cake and spread around evenly.

Allow to cool completely. Cover and chill if using the next day. This cake tastes great if refrigerated overnight.

Cut into 12 pieces.

Makes 12 servings

Portion size: 1/12 of 9x13-inch cake

Fat: 3 grams per serving

Grain Servings: 1 per serving

Recipe from: *Memphis WHI Clinical Center*