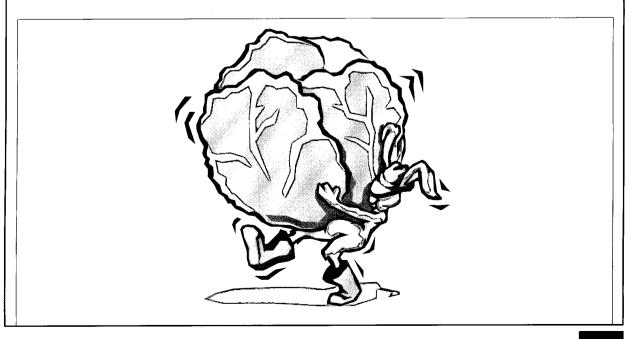
Spring 2003

News Bits and Supersized Bites

During this session you will:

- Learn about the Human Genome Project and its potential influence on future health practices.
- Discuss the ongoing trend toward larger portions in restaurants and commercial foods and how this trend could influence the portions eaten at home.
- Practice strategies that can help increase awareness of WHI standard servings.



Next Steps Follow-up

What new flavoring ideas did you use to enhance the taste of the foods you ate during the last couple of months?

What ideas did you use to increase your awareness of what you ate during the winter holidays?

Introduction

any of you have expressed an interest in learning more about advances in health research and trends in nutrition. This session addresses your interest by highlighting two very different topics.

In the first part of the session, we present a brief overview of a research project focused on future health and health practices – the Human Genome Project. Then, in the second part of the session, we look at the growing trend toward 'supersized' portions and explore how this trend might influence the amounts of food people eat at home.

Let's begin by looking at the Human Genome Project.



The Human Genome Project

hat does the word 'genome' mean? The word 'genome' refers to the genetic information within cells that contains the complete set of instructions for making a life form. Therefore, the <u>Human</u> Genome Project is a project that will provide scientists with a complete set of instructions for making a human being.

The Human Genome Project is a 15-year international research program. It began in 1990 and is managed by the National Institutes of Health and the U.S. Department of Energy. The primary goal of the Project is to explore the structure of the human genome and map the exact location of every gene in the human body.

The Project is ahead of schedule. Scientists already have a working draft of the entire human gene sequence. Currently, scientists are working on understanding the specific functions of the genes, and how they work together.

Potential Benefits. The Human Genome Project has a number of benefits that will influence future health practices. For example:

- The chance to discover what makes individuals at risk for specific diseases.
- " The ability to test people for certain diseases that are due to abnormal genes.

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- The development of new technologies which could provide more precise measures to identify different cancers and individualize treatments.
 - What do you see as potential benefits coming from the Human Genome Project?

Potential Challenges. Although there are numerous potential benefits to be gained from this genetic research, the Human Genome Project also raises a number of difficult ethical, social and legal questions. For example:

- " Who should have access to an individual's genetic information and how should it be used?
- Should people be tested to determine whether they might later develop a disease if there is no cure for that disease?
- Should fetal genetic testing extend beyond the health of the baby to screen for desirable physical and mental traits?
 - When you think about what the Human Genome Project is studying, what types of ethical, legal or social questions come up for you?

Genetics and WHI. You might be wondering if the Human Genome Project is linked to WHI. The answer is 'No'. There is no direct link between the two studies. However, in WHI, some of the blood that each of you provide has been stored to look at later for additional studies, including possible genetic studies.

This huge scientific resource will be used to answer many important questions about disease risk and dietary intake at a later date. All WHI studies, even those conducted at a later date, will maintain privacy and protect personal identity in any publication or release of results. One important way that WHI protects identity is by publishing results as group information.

Summary

The Human Genome Project has the potential to provide a lot of important information that can help us discover causes of disease and better understand who we are. However, these discoveries will take time. Scientists will understand some parts of the human genome sooner than others. But, it will take years of very hard work to really understand and explain the mysteries of the human body.

As one researcher observed: "Scientists now have a laundry list of human genes, but they need to understand their specific functions, and how they work together, to unlock their huge potential." Another researcher compared our current knowledge of human genetics to a Boeing 747 airplane: "Even though we know all the parts that are used to make the plane, we still don't understand why it flies."



Are Supersized Portions Distorting Our View?

- When you go out to eat, what changes have you noticed in the size of restaurant portions?
- How does the size of a restaurant plate compare to your plate at home?
- What changes have you noticed in the sizes or food portions available at the grocery store?

Food portions have grown over time. Everything has become bigger– restaurant portions, commercial food packages, and even standard plate sizes – all have grown in the last few decades along with the average American waistline.

This trend toward larger portions even extends into the home. When recipes for cookies and desserts in old and new editions of classic cookbooks (e.g., Joy of Cooking) were compared, the newer editions indicated fewer servings – meaning that the portions were larger.

The 'supersizing' trend began in the 1970s, but larger portions became more common in the 1980s and 1990s.

Restaurant portions have gotten so huge that many people who regularly eat out have lost the ability to tell how much is too much. A small study by the Center for Science in Public Interest found that even trained dietitians underestimated the calorie content of five restaurant meals by more than one-third (37%) and the fat content by almost half (49%).



Portion size and the ability to estimate a 'standard' serving is an issue even for people who grab a quick 'healthy' snack such as a muffin or bagel. The typical bagel that used to weigh 2-3 ounces, is now 4-7 ounces today.

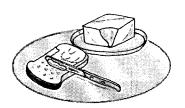
Larger portions influence the amount of food people eat. Studies show that when people are served more food, they tend to eat more food. In addition, people are tempted to order larger portion sizes for just a little more money because it feels like a better deal.

Consumers are confused. In an era of larger restaurant portions, supersized and value meals, consumers are confused about how much food represents a standard serving.

When asked to define serving sizes for common foods, many Americans have a difficult time. People often underestimate serving sizes. Part of the problem is that serving sizes can be deceiving. For example, many people don't realize that a medium-sized bagel counts as two servings of grains, not one.

• How confident do you feel in your ability to know what a 'standard' serving would be for most foods?

Creating a Serving Size Picture



• When was the last time you looked carefully at the portions you eat?

Portion Size Activity:

Select 2-3 foods from the variety of foods you typically eat (e.g., cookies, cooked pasta, peanut butter, nuts, or frozen desserts, etc.).

If you are completing this activity at home (not in your group session) dish up the portion that you would typically eat. Then take the following steps for each of the foods you selected:

Step 1: Write down your food in the 1st column on *Worksheet-1*.

Step 2: <u>Estimate</u> the portion size. Look at your food and estimate the amount. For example, if you ate rice, look at your portion and decide how much rice is in your portion (3/4 cup, 1 cup, etc.). Need help in estimating your portion? Look at the resource on pages 11-12, *Making Sense of Serving Sizes*. Record your estimated portion in the 2nd column of the table on *Worksheet-1*.

Step 3: Now, measure the <u>actual</u> portion size. Once you have estimated your portion size, use a ruler, standard measuring cups or spoons, a food scale, or other portion size tools (e.g., deck of cards, baseball, etc.), to identify your actual portion. Record the actual portion size in the 3rd column on *Worksheet-1*. **Step 4:** If you are completing this activity at home, skip Step 4 on *Worksheet-1* because you are already working with your typical portion.

Step 5: Identify the <u>WHI standard</u> <u>serving</u> size for the food. After you have measured your actual portion size; use your WHI Fat Counter to look up the WHI standard serving size for your food. If you cannot find your specific food, look at the serving size for a similar food. Record the WHI standard serving in the 4th column on *Worksheet-1*.

Step 6: Measure out the portion that represents a WHI standard serving for your food. Use standard measuring cups or spoons, a food scale, or other portion size tools (e.g., deck of cards, tennis ball, baseball, etc.).

Step 7: Compare your typical portion to the WHI standard serving. How do the two compare – about the same or far part?

- What surprised you from this activity?
- How does the WHI standard serving size compare to the portions you typically eat?



Next Steps

n today's session, you learned a little bit about the Human Genome Project which will have a major influence on the future of health practices. You also had an opportunity to create a visual picture of what WHI standard serving sizes look like.

The WHI standard servings are very similar to the serving sizes recommended for the general public in the Food Guide Pyramid. The purpose of 'standard' serving sizes is to provide a guide that you can use to estimate your own portions. The WHI 'standard' serving sizes are not meant to dictate an amount to eat. However, they can help you see if you are eating more or less than you thought.

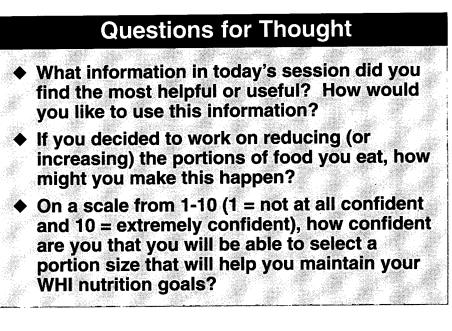
If you were surprised by some of the WHI standard serving sizes, consider taking another look at foods that you

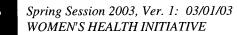


eat frequently. Compare your typical portion to a WHI standard serving.

In addition, consider checking the Nutrition Facts panel on some of the processed foods that you buy. See what the package label considers a serving. Then compare how the package serving compares to the portion you would usually eat and to a WHI standard serving.

As your nutritionist, I know that each of you is working hard to meet and maintain your WHI goals. I hope that you will be able to use the portion size activity to help you review and re-evaluate some of your current portions.





Assessing Your Portion Eye-Q

How do common portion sizes compare to WHI standard serving sizes? Select 1-2 foods you typically eat. Use the steps below to see how closely you can estimate (guess) the portion size of the food. Then compare the food portion size to: the amount you typically eat and the amount WHI defines as a standard serving.

Food Item	Estimated Portion Size	Actual Portion Size	WHI Standard Serving Size
Example: Rice	3/4 cup	1 cup	1/2 cup

- Step 1: Write down your food in the 1st column of the table above.
- **Step 2:** Estimate (guess) the portion size of the food and write the amount in the 2nd column. If you need help in estimating the portion, use the resource: *Making Sense of Serving Sizes*, pages 11-12.
- **Step 3:** Measure the actual food portion and write the amount in the **3rd** column. How close was your estimate (guess) to the actual portion size?

A lot smaller	Same size	A lot larger

Step 4: Compare the actual portion size to your typical portion. How do they compare?

A lot smaller

Same size

A lot larger

Workshee	et Spring - 1 (cont.)
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Making Sense of Serving Sizes

(adapted from University of Illinois USDA Extension)

Finding it hard to identify what a WHI standard serving looks like? Below are some ways to help you picture a serving size using everyday objects.

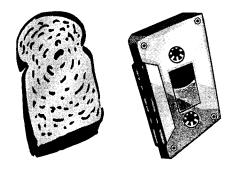
*Note: Hands and finger sizes vary from person to person, so use these as 'guides' only.

Bread, Cereal, Rice, and Pasta Group

1/2 cup rice or pasta	. size of a cupcake wrapper
	or 1/2 a tennis ball
1 standard bagel (3" diameter)	. 1 hockey puck
1 pancake (4" diameter)	size of a compact disk (CD)
1 piece of cornbread (3"x3"x1")	size of a regular bar of soap
1 slice of bread	size of an audiocassette tape
1 cup of cold cereal	size of a 'loose' fist*

Fruit and Vegetable Group

1 medium size fruit	size of a tennis ball or a 'tight' fist*
1/2 cup grapes (15 grapes)	size of a light bulb
	size of 7 cotton balls
1/4 cup raisins	size of a large egg or a golf ball
1 cup salad greens	size of a 'loose' fist or a baseball
1 baked potato	size of a computer mouse
1/2 cup broccoli	size of a light bulb
1/2 cup serving of vegetables	ss size of 6 asparagus spears,



Resource - 1 (cont.)

Making Sense of Serving Sizes

(continued)

Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts Group

3 ounces cooked meat, poultry or fish size of the palm of a hand*

	or a deck of cards
	or a cassette tape
3 ounces cooked chicken	size of a chicken leg and thigh
· · · · · · · · · · · · · · · · · · ·	or 1/2 of a whole chicken breast
3 ounces cooked fish	size of a checkbook
1 tablespoon peanut butter	size of a thumb tip*
	size of a golf ball or ping pong ball
1 ounce of nuts	

Milk, Yogurt, and Cheese Group

1 ounce cheese	size of 4 dice
	or size of a thumb*
1/2 cup ice cream	size of a tennis ball



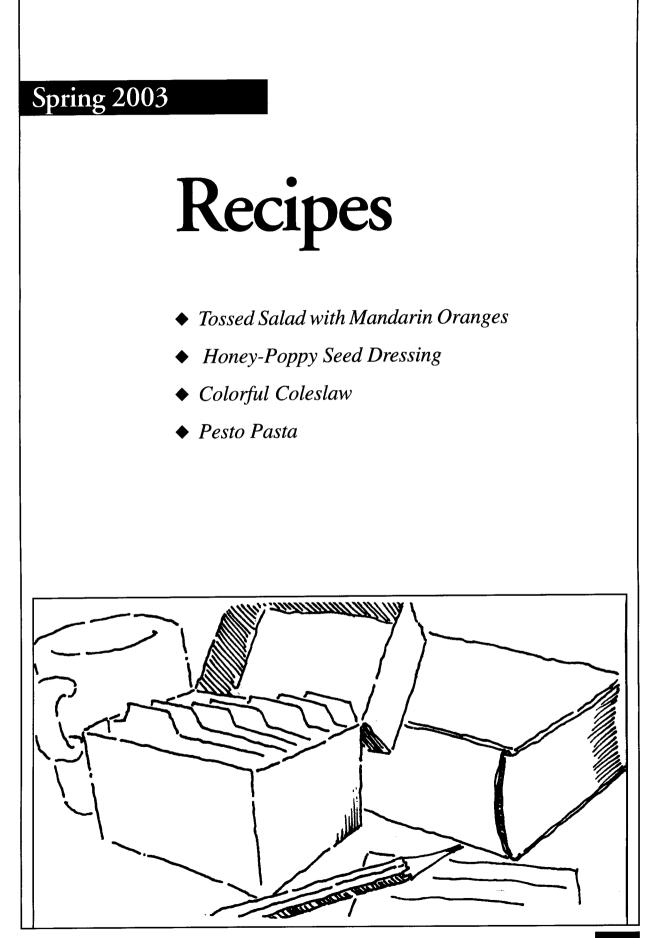
Fats, Oils, and Sweets

1 teaspoon butter or margarinesize of a thumb tip* or one die (dice)
1 tablespoon salad dressingssize of a thumb*
(e.g., French, Ranch, Italian, etc.)

Serving Dishes and Utensils

1/2 cup	size of a custard cup
⊥	size of a large cereal or soup bowl
*	size of a cafeteria vegetable dish
1 1/2 cups pasta, noodles	size of a dinner plate, not heaped





Tossed Salad with Mandarin Oranges

10 cups loose leaf lettuce; torn into pieces (red leaf lettuce is especially pretty)

3 medium kiwi; peeled & sliced

1 can (11 oz.) mandarin oranges; drained

2 cups fresh strawberries; sliced (optional)

To prepare salad, layer 1/3 of lettuce in serving bowl or dish. Sprinkle with 1/3 of each: kiwi slices, mandarin oranges, and strawberry slices. Repeat layers twice.

Serve with Honey-Poppy Seed Dressing (recipe below).

Tip: A clear bowl or serving dish makes an especially attractive presentation.

Makes 10 servings

Fat: 0 grams per serving

Fruits/Vegetables Servings: 2 per serving

Honey-Poppy Seed Dressing

1/4 cup honey

- 2 tablespoons oil (olive or other vegetable oils)
- 3 tablespoons vinegar (white wine tarragon-type or any other type)
- 1 tablespoon green onions (or other type of onion), minced or finely minced
- 1 teaspoon poppy seeds
- 2 teaspoons prepared mustard (Dijon or any other type)

In a blender or bowl, combine all ingredients and blend until thoroughly combined. Cover and refrigerate until ready to serve. Makes 2/3 cup (or 10 - 1 tablespoon servings)

Fat: 3 grams per serving

Colorful Coleslaw

8 cups shredded cabbage 1 1/2 cups frozen whole kernel corn, thawed 1 cup shredded carrot 1 cup chopped purple onion 1 cup chopped sweet red pepper 1/2 cup sugar 1/2 cup white vinegar 2 tablespoons water 1 tablespoon vegetable oil 1 teaspoon celery seeds 1/2 teaspoon salt 1/2 teaspoon chicken flavored bouillon granules 1/4 teaspoon ground white pepper 1/4 teaspoon mustard seeds Dash of hot sauce

Combine first 5 ingredients in a large bowl; toss well. Combine sugar and remaining ingredients in a small saucepan. Bring to a boil, stirring constantly until sugar dissolves. Pour over cabbage mixture; toss well. Cover and chill at least 2 hours. Toss before serving. Serve with a slotted spoon. Makes 10 (1 cup servings)

Fat grams: 1 gram

Fruit/Vegetable Servings: 2 servings

Recipes taken from *Cook Healthy: Cook Quick*, Cathy A. Wesler

Pesto Pasta

1 package fettucine Juice from 1 lemon or lime 2 packages fresh basil, rinsed 1/4 cup pine nuts 1/4 cup fat free Parmesan cheese 2 or more cloves of garlic Salt to taste Water to make smooth consistency Cherry tomatoes

Blend lemon juice, basil, pine nuts, Parmesan cheese, salt, and garlic in blender. Add water to make a smooth consistency.

Cook fettucine in boiling water.

Pour pesto over fettucine and toss. Add tomatoes and mix.

Serve immediately.

Fat grams: 5 grams per serving

Recipe from In the Kitchen with Rosie: Oprah's Favorite Recipes, Rosie Daley, Oprah Winfrey