

Nutrition & Food Service

SCCMHA NETWORK SERVICES AND PUBLIC POLICY

THE Six Key Nutrients for Good Health

Nutrients	How is it used by our body?	What food source do they come from?	Additional Information
Proteins	It is the major structural component of cells and is responsible for the building and repair of body tissue.	Variety of meats Beans Eggs Nuts & Seeds	Consume between 5-6 ounces/day *1oz meat=4 dice *3oz meat=deck of playing cards
Carbohydrates	-Main source of energy for the brain -Supplies fiber for regularity	Whole grains Fruits Starchy Vegetables Sugars	Consuming whole grains and fruits can help reduce the risk of coronary heart disease as well as maintain normal blood glucose levels
Fats	Increase the absorption of fat-soluble vitamins(A,D,E &K)	Fish Walnuts Vegetable based oils	Limit intake of saturated fats(high fat meats and full fat dairy)
Vitamins (A, D, E, K, C, B complex, folic acid)	-Helps cells use energy -Aids in digestion and in having a normal appetite -Helps nervous system to function normally -Helps wounds and bones heal	Citrus fruits(orange, grapefruit) Strawberries Peppers	Vitamin D(sunshine vitamin) Folate can be found in food and can help prevent birth defects
Minerals(Calcium, sodium, potassium, iron)	Helps muscles and nerves function properly	Potassium(Bananas, Potatoes, Tomatoes) Iron(Liver, Broccoli, Spinach) Calcium(Milk, Low fat cheese and yogurt)	
Water	-Regulates body temperature -Helps remove waste from the body -Transports nutrients to cells and aids in digestion	Watermelon	

Basic Nutrition

Good nutrition is the foundation of good health. Eating a variety of foods in proper amounts provides essential nutrients needed for normal body functions. Nutrients are needed to supply energy for growth, maintenance and repair and to regulate body processes. A poor diet, poor food choices, or an unbalanced nutrient intake can result in a change in health. It is up to us as caregivers to encourage the people we serve, to make the best food choices possible.

Dietary Fiber

Dietary fiber, also known as roughage or bulk, includes the parts of plant foods your body can't digest or absorb. Unlike other food components, such as fats, proteins or carbohydrates — which your body breaks down and absorbs — fiber isn't digested by your body. Instead, it passes relatively intact through your stomach, small intestine and colon and out of your body.

Fiber is commonly classified as soluble, which dissolves in water, or insoluble, which doesn't dissolve.

- **Soluble fiber.** This type of fiber dissolves in water to form a gel-like material. It can help lower blood cholesterol and glucose levels. Soluble fiber is found in oats, peas, beans, apples, citrus fruits, carrots, barley and psyllium.
- **Insoluble fiber.** This type of fiber promotes the movement of material through your digestive system and increases stool bulk, so it can be of benefit to those who struggle with constipation or irregular stools. Whole-wheat flour, wheat bran, nuts, beans and vegetables, such as cauliflower, green beans and potatoes, are good sources of insoluble fiber.

Most plant-based foods, such as oatmeal and beans, contain both soluble and insoluble fiber. However, the amount of each type varies in different plant foods. To receive the greatest health benefit, eat a wide variety of high-fiber foods.

A high-fiber diet has many benefits, which include:

- **Normalizes bowel movements.** Dietary fiber increases the weight and size of your stool and softens it. A bulky stool is easier to pass, decreasing your chance of constipation. If you have loose, watery stools, fiber may help to solidify the stool because it absorbs water and adds bulk to stool.
- **Helps maintain bowel health.** A high-fiber diet may lower your risk of developing hemorrhoids and small pouches in your colon (diverticular disease). Some fiber is fermented in the colon. Researchers are looking at how this may play a role in preventing diseases of the colon.
- **Lowers cholesterol levels.** Soluble fiber found in beans, oats, flaxseed and oat bran may help lower total blood cholesterol levels by lowering low-density lipoprotein, or "bad," cholesterol levels. Studies also have shown that high-fiber foods may have other heart-health benefits, such as reducing blood pressure and inflammation.
- **Helps control blood sugar levels.** In people with diabetes, fiber — particularly soluble fiber — can slow the absorption of sugar and help improve blood sugar levels. A healthy diet that includes insoluble fiber may also reduce the risk of developing type 2 diabetes.
- **Aids in achieving healthy weight.** High-fiber foods tend to be more filling than low-fiber foods, so you're likely to eat less and stay satisfied longer. And high-fiber foods tend to take longer to eat and to be less "energy dense," which means they have fewer calories for the same volume of food.

Another benefit attributed to dietary fiber is prevention of colorectal cancer. However, the evidence that fiber reduces colorectal cancer is mixed. We should encourage the consumers we serve to eat a high fiber diet to help with all of the above listed benefits.

Fluid intake

For fiber to work in the body, adequate fluid must be available. Plain water is fine, but any liquids will do **except those with caffeine**. Caffeine increases the excretion of water from the body. Healthy adults should aim for a total fluid intake of at least 64 oz. daily (8 oz. glasses). Including beverages at meals.



Implementing Good Nutrition

Menu Planning

Menus are the plan for good nutrition. Menus translate nutrition information into meals. Here are some factors to be considered when planning menus:

1. Menus should be planned using the MyPlate model
2. Menus should be written at least one week in advance
3. Portion sizes should be identified on the menus.
4. Other factors such as budget, seasonal availability of foods, food preferences of the people you serve (not staff), kitchen equipment and schedule should also be considered.

“Cycle” Menus

A series of written menus covering several weeks (Spring/Summer and Fall/Winter). At the end of the cycle, the entire series of menus is repeated. These menus are sometimes written by a dietician and provided to the homes as a resource for staff. They include a daily meal plan and serving suggestions for various caloric needs within the home. It should be noted that not all homes use cycle menus and it is best to check with your Home Manager to see what kind of menu is used.

Community residential settings are encouraged to use a “cycle” menu because:

1. The menu is planned to include recommended foods and portions according to USDA Dietary Guidelines
2. It provides a basis for grocery shopping and food preparation
3. It may be required for licensing and certification
4. It saves time and money.

Each community residential setting should have someone designated to coordinate grocery shopping and meal preparation. Although you may not have a major responsibility for menu planning, it is important to understand how nutritious meals are planned. For example, there may be times when a substitution must be made for part of a planned meal. Being familiar with guidelines for menu planning will help you make the best substitution.

How to Make Substitutions

1. Identify the menu items to be changed. For combination dishes, refer to recipe and substitute for all major ingredients.
2. Using the substitution guideline, identify the food group to which the menu item belongs.
3. Select a substitute from within the same food group. Choose foods as similar to the original as possible.
4. Check previous day and next day meals to avoid serving the same food days or two meals in a row.
5. If an individual is on a modified diet or prescribed diet, follow instructions provided by the registered dietician.
6. If specific food recipes are consistently rejected by individuals, requiring constant substitutions notify the registered dietician and request a menu evaluation.

A menu might be substituted due to seasonal availability, weather and temperature (example...on a hot day serve chilled tuna pasta salad), Holidays, and birthdays, special events, emergency situations, etc.

****A menu should never be changed or modified because a staff member does not like the planned menu****

Snacks

Snacks may be a source of calories and nutrients. They may be a planned part of the cycle menu or served occasionally at other times. Snacks should be low in fat and high in fiber, or supply other nutrients or fluid necessary for good health. Examples of nutritious snacks and fluids are:

1. 1 ounce of cheese with 5 whole wheat crackers
2. 1 cup cantaloupe
3. Fruit or Veggie chips
4. ½ cup of yogurt or cottage cheese and ½ cup fruit
5. 3 Tablespoons of Hummus and 1 cup raw veggies

Preparing the Shopping List

Steps to preparing the shopping list include:

1. Reviewing the menu for the week and all recipes
2. List all foods and ingredients needed to prepare all meals.
3. Think about individual likes and dislikes, and make substitutions, if necessary. Involve clients in menu planning, shopping, cooking, and cleanup helps them develop independent living skills.
4. Confirm the amounts of food to purchase by checking whether some foods are already present.

Nutrition-Related Issues

A change in food intake or weight may be one of the first signs of illness or of a change in health status. Food acceptance and weight can also be altered due to changes in mental or emotional health, medication side effects, change in their environment, limited access to foods or over-indulgence.

Changes in Appetite or Weight:

Occasional fluctuations in appetite or refusal of a meal or particular food may be normal. However, if foods from one or more food groups are consistently refused, a registered dietitian should be notified. A significant change in weight should be reported to the appropriate health providers. Taking and recording weights regularly and accurately is an important part of monitoring a person's health.

Swallowing Problems:

Persons with chewing or swallowing difficulties (dysphagia) may be or may become poorly nourished if they are unable to take in adequate food or liquids. They may be at risk for choking or aspiration-which means, food, liquid, or other materials entering the airway or lungs, instead of the stomach.

Some signs of dysphagia or chewing and swallowing difficulty are:

- Gagging or coughing during or after eating or drinking
- Swallowing one bite many times
- A gurgly or “wet” sounding voice
- Drooling
- Food pocketing, or food remaining in the mouth or throat after eating
- Breathing difficulties during eating or drinking
- Unexplained weight loss
- Unable to gain weight
- Low body weight
- Persistent unexplained fever or temperature
- Frequent respiratory infections or pneumonia
- Excessive movement of tongue, mouth, or head while eating or drinking

If a person shows signs of chewing or swallowing problems, an evaluation by a speech therapist, occupational therapist, and a registered dietician is needed. In addition, a video fluoroscopy (x-ray of swallowing) may also be done in a hospital or other health care facility. Recommendations will be made after the evaluation for specific ways the individual needs to eat and drink. Some of the recommendations may include:

- the use of adaptive eating aids (curved spoon, weighted utensils)
- positioning or ways to sit while eating or drinking
- the best type of food consistency (finely chopped, pureed)
- whether liquids should be altered to make them thicker (honey thickened, nectar thickened)

If a person with a chewing or swallowing difficulty has a specific eating plan, it is important to follow that plan. Modifications in eating, positioning, or consistency of foods or liquids should not be made unless specifically recommended by a professional team.

****If a consumer's weight drops significantly within four weeks, you should notify the appropriate health care provider promptly. Please note that this may be different for the individuals that you serve and should be monitored according to their plan of service.**

Modified Diets

Modified diets may be ordered to treat medical or chronic health conditions. A physician will write the appropriate diet order. A registered dietician or physician will provide specific information about the diet. A modified diet is part of the individual plan of service.

****There must be an order written by the physician before making a change or alteration in food intake**

Types of Modified Diets Include:

Therapeutic Diets

- changes the nutrient content
- are followed for medical reasons (hypertension management, blood sugar management, fluid shifts)
- Carbohydrate Controlled Diet, No Salt Added Diet, Low Fat Diet, Cardiac Diet (Heart Smart), High Calorie/High Protein Diet

Mechanical Diets

- Changes the food consistency for consumers that have difficulty chewing and/swallowing
- Mechanical Diets need to be followed for the safety of the consumer
 - they prevent aspiration, choking, pneumonia, etc.

Meal Time

Meal times are a significant part of everyone's day. They satisfy nutritional, social and emotional needs. They give consumers and staff a chance to talk, enjoy food, and be with their friends.

If you are assigned to prepare dinner on your shift your very first task should be to review the menu and recipes for the dinner meal. Using the recipes provided for the meal is important because:

- recipes contain a list of ingredients necessary to prepare food
- recipes provide direction for preparation of food.
- recipes produce foods that are consistent in quality, quantity, and nutritive value.

Prior to every meal, hands should be washed. Hand washing is the single most important factor to prevent the spread of bacteria. Food should be served within 15 minutes after removing it from the stove, oven or refrigerator. Foods heated in a microwave may develop "hot spots" or excessively high temperatures. Use caution when serving to avoid a burn.

Food should be served within 15 minutes because:

- Food Safety: Food kept too long at room temperature provides ideal growing condition for food-borne bacteria that can cause illness.
- Hot food may cool down and not be as acceptable
- Cold food may warm to room temperature and not be as enjoyable.

If an individual eats slowly, it may be necessary to re-heat hot food after approximately 20 minutes or give only a portion of the food at one time. Keep food hot on the stove or in the oven at **140 degrees or higher; keep cold food in the refrigerator.**

Food Safety

Safety is everyone's responsibility. Bacteria are present everywhere-in the air, in food, on our hands, mouth and skin, on animals and insects, on land and in water. Most of the time, these bacteria are not present in large enough quantities to be harmful, but, when they are in food, they can multiply quickly and cause food-borne illness, or food poisoning. Food borne illness can be very serious-even fatal.

There are several different kinds of bacteria that can cause food-borne illness. The symptoms however, are usually similar and include:

- severe abdominal cramps
- diarrhea
- nausea
- vomiting

The most common food-borne illnesses are caused by improper handling during shopping, storing, preparing or serving food.

To help reduce the risk of food-borne illness:

- handle food safely
- maintain proper food temperatures
- wash hands frequently
- using a different cutting board for raw chicken and fresh vegetables (cross contamination)

Food should be stored away from pet foods, poisonous or toxic materials, including cleaning supplies.

Kitchen Clean Up

All surfaces and utensil used in food preparation must be cleaned and sanitized before meal preparation. A solution of household liquid chlorine bleach and water** is the most common and least expensive method of sanitizing these surfaces. Other commercial products may be acceptable, but directions must be carefully followed. You cannot use any cleaning product for any cleaning job.

****Please consult with your group home policy regarding the use of bleach or any products containing bleach BEFORE attempting to use them**

Dishwashing

Use of an automatic dishwasher is recommended for dishes, flatware, cups, glasses, utensils, and adaptive eating devices. Follow manufacturer's directions for dishwasher use. Use sanitizing(hottest water wash) cycle and the heated drying cycle. Use chlorinated detergent specifically made for dishwashers. If the dishwasher is not available, a hand dishwashing procedure is suggested.



U.S. Department of
Health and Human
Services



National Institutes
of Health



National Heart, Lung,
and Blood Institute



Portion Distortion

Do You Know How Food Portions Have Changed in 20 Years?

National Heart, Lung, and Blood Institute
Obesity Education Initiative



BAGEL

20 Years Ago



140 calories
3-inch diameter

Today



How many calories
are in this bagel?



BAGEL

20 Years Ago



140 calories
3-inch diameter

Today

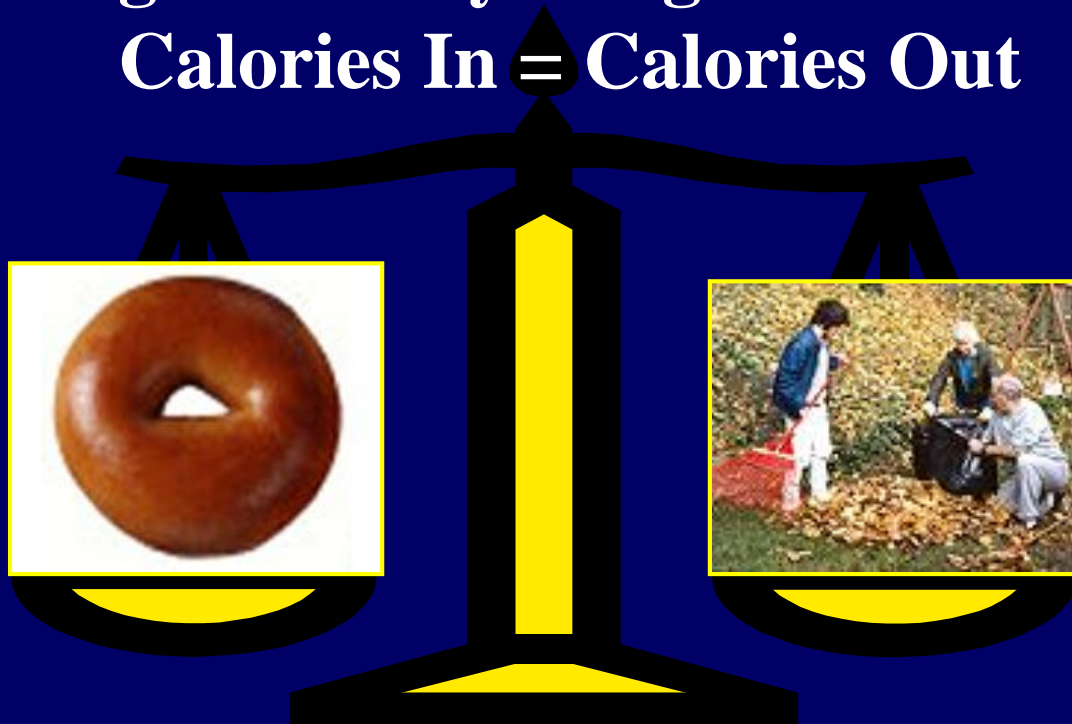


350 calories
6-inch diameter

Calorie Difference: 210 calories



Maintaining a Healthy Weight is a Balancing Act Calories In = Calories Out



How long will you have to rake leaves in order to burn the extra 210 calories?*

*Based on 130-pound person



Calories In = Calories Out



If you rake the leaves for **50 minutes** you will burn the extra **210 calories**.*



*Based on 130-pound person



CHEESEBURGER

20 Years Ago



333 calories

Today



How many calories are
in today's cheeseburger?



CHEESEBURGER

20 Years Ago



333 calories

Today



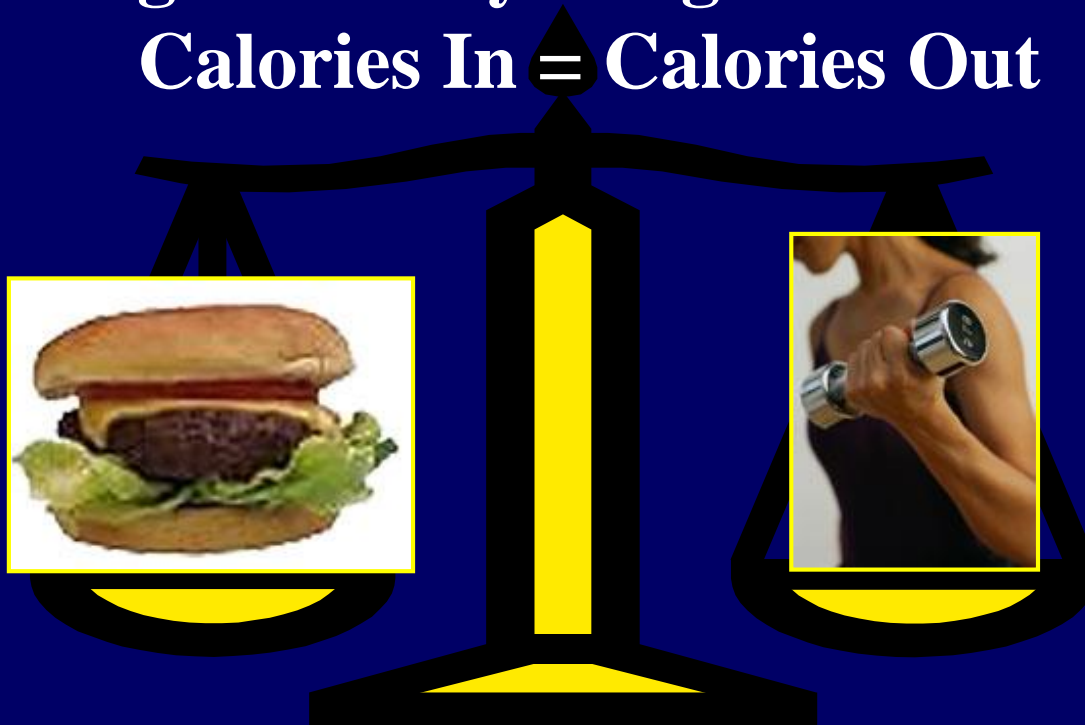
590 calories

Calorie Difference: 257 calories



Maintaining a Healthy Weight is a Balancing Act

Calories In = Calories Out



How long will you have to lift weights in order to burn the extra 257 calories?*

*Based on 130-pound person



Calories In = Calories Out



If you **lift weights for 1 hour and 30 minutes**,
you will burn approximately **257 calories**.*



*Based on 130-pound person



SPAGHETTI AND MEATBALLS

20 Years Ago



500 calories
1 cup spaghetti with sauce
and 3 small meatballs

Today



How many calories do
you think are in today's
portion of spaghetti and
meatballs?



SPAGHETTI AND MEATBALLS

20 Years Ago



500 calories

**1 cup spaghetti with sauce
and 3 small meatballs**

Today



1,025 calories

**2 cups of pasta with sauce
and 3 large meatballs**

Calorie Difference: 525 calories



Maintaining a Healthy Weight is a Balancing Act Calories In = Calories Out



How long will you have to houseclean in order to burn the extra 525 calories?*

*Based on 130-pound person



Calories In = Calories Out



If you **houseclean** for **2 hours and 35 minutes**, you will burn approximately **525 calories**.*



*Based on 130-pound person



FRENCH FRIES

20 Years Ago



210 Calories
2.4 ounces

Today



How many calories are in
today's portion of fries?



FRENCH FRIES

20 Years Ago



210 Calories

2.4 ounces

Today



610 Calories

6.9 ounces

Calorie Difference: 400 Calories



Maintaining a Healthy Weight is a Balancing Act

Calories In = Calories Out



How long will you have to walk leisurely in order to burn those extra 400 calories?*



*Based on 160-pound person



Calories In = Calories Out



If you **walk leisurely for 1 hour and 10 minutes**
you will burn approximately **400 calories.***



*Based on 160-pound person



SODA

20 Years Ago



85 Calories
6.5 ounces

Today



How many calories are
in today's portion?



SODA

20 Years Ago



85 Calories
6.5 ounces

Today



250 Calories
20 ounces

Calorie Difference: 165 Calories



Maintaining a Healthy Weight is a Balancing Act Calories In = Calories Out



How long will you have to work in the garden to burn those extra calories?*

*Based on 160-pound person



Calories In = Calories Out



If you work in the garden for 35 minutes,
you will burn approximately **165 calories**.*



*Based on 160-pound person



TURKEY SANDWICH

20 Years Ago



320 calories

Today



How many calories are in today's turkey sandwich?



TURKEY SANDWICH

20 Years Ago



320 calories

Today



820 calories

Calorie Difference: 500 calories



Maintaining a Healthy Weight is a Balancing Act Calories In = Calories Out



How long will you have to ride a bike in order to burn those extra calories?*

*Based on 160-pound person



Calories In = Calories Out



If you ride a bike for **1 hour and 25 minutes**,
you will burn approximately **500 calories**.*



*Based on 160-pound person





Portion Distortion







Thank you for participating in
Portion Distortion!


For more information about Maintaining a Healthy Weight
visit www.nhlbi.nih.gov

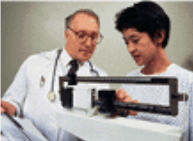
NATIONAL INSTITUTES OF HEALTH

National Heart, Lung, and Blood Institute

 Home  BMI Calculator  Menu Planner  OEI Home Page

Aim For A Healthy Weight

 *Information for Patients and the Public*

 *Information for Health Professionals*





U.S. Department of
Health and Human
Services



National Institutes
of Health



National Heart, Lung,
and Blood Institute

Portion Distortion II Interactive Quiz

**Do You Know How Food Portions Have
Changed in 20 Years?**

National Heart, Lung, and Blood Institute
Obesity Education Initiative



COFFEE

20 Years Ago

Coffee
(with whole milk and sugar)



45 calories
8 ounces

Today

Mocha Coffee
(with steamed whole milk and
mocha syrup)



How many calories
are in today's coffee?



COFFEE

20 Years Ago

Coffee
(with whole milk and sugar)



45 calories
8 ounces

Today

Mocha Coffee
(with steamed whole milk and
mocha syrup)



350 calories
16 ounces

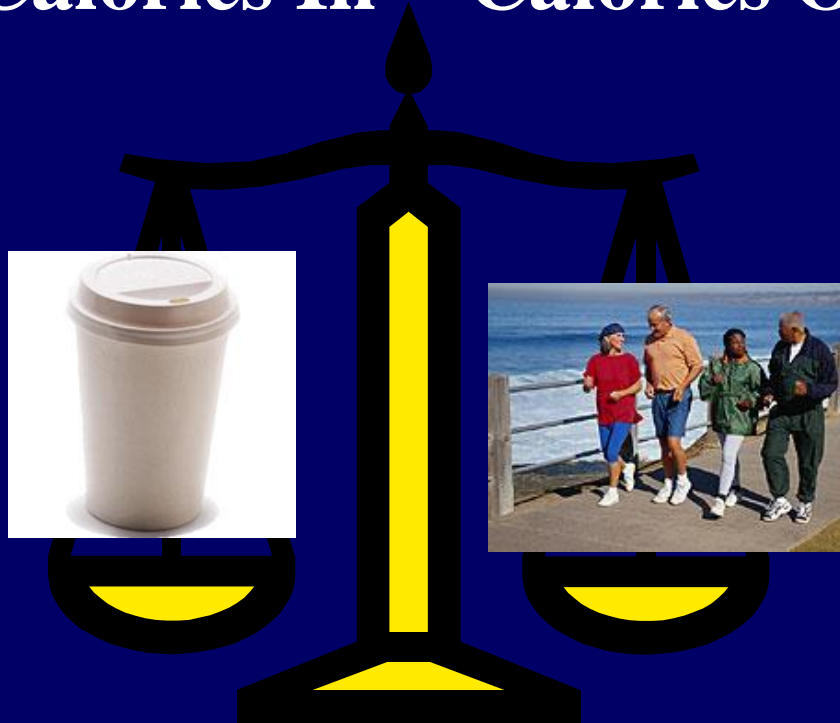
Calorie Difference: 305 calories



Portion Distortion II Interactive Quiz



Maintaining a Healthy Weight is a Balancing Act Calories In = Calories Out



How long will you have to walk in order to burn those extra 305 calories?*

*Based on 130-pound person



Calories In = Calories Out



If you **walk 1 hour and 20 minutes**, you will burn **approximately 305 calories**.*



*Based on 130-pound person



MUFFIN

20 Years Ago



210 calories
1.5 ounces

Today



**How many calories are
in today's muffin?**



MUFFIN

20 Years Ago



210 calories
1.5 ounces

Today



500 calories
4 ounces

Calorie Difference: 290 calories



Portion Distortion II Interactive Quiz



Maintaining a Healthy Weight is a Balancing Act Calories In = Calories Out



How long will you have to vacuum in order to burn those extra 290 calories?*

*Based on 130-pound person



Calories In = Calories Out



If you **vacuum** for **1 hour and 30 minutes** you will burn approximately **290 calories**.*



*Based on 130-pound person



PEPPERONI PIZZA

20 Years Ago



500 calories

Today



How many calories are in two large slices of today's pizza?



PEPPERONI PIZZA

20 Years Ago



500 calories

Today



850 calories

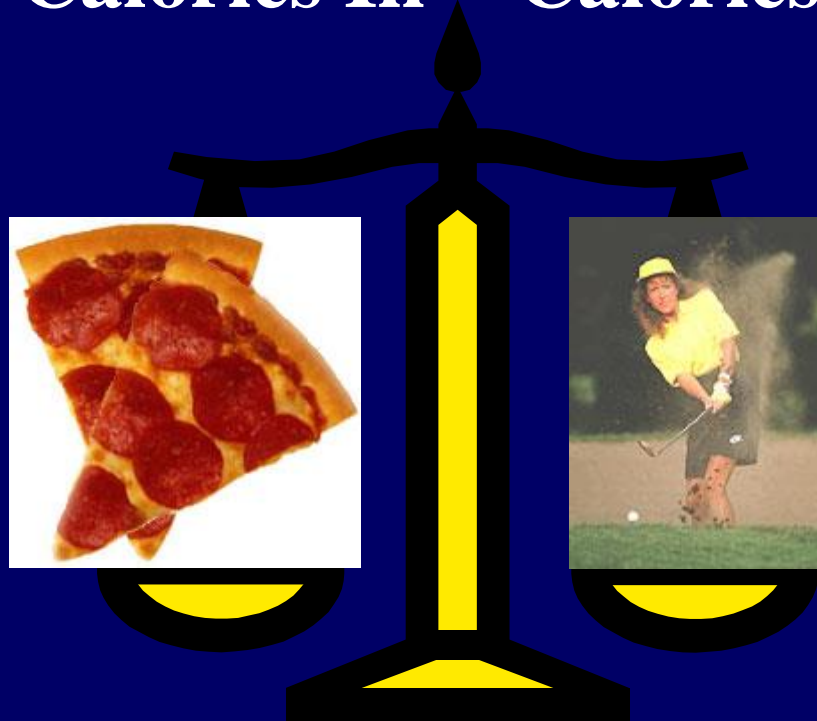
Calorie Difference: 350 calories



Portion Distortion II Interactive Quiz



Maintaining a Healthy Weight is a Balancing Act Calories In = Calories Out



How long will you have to play golf (while walking and carrying your clubs) in order to burn those extra 350 calories?*

*Based on 160-pound person



Calories In = Calories Out



If you **play golf** (while walking and carrying your clubs) for **1 hour** you will burn approximately **350 calories**.*



*Based on 160-pound person



CHICKEN CAESAR SALAD

20 Years Ago



390 calories
1 ½ cups

Today



How many calories are in today's chicken Caesar salad?



CHICKEN CAESAR SALAD

20 Years Ago



390 calories
1 ½ cups

Today



790 calories
3 ½ cups

Calorie Difference: 400 calories



Portion Distortion II Interactive Quiz



Maintaining a Healthy Weight is a Balancing Act Calories In = Calories Out



How long will you have to walk the dog in order to burn those extra 400 calories?*

*Based on 160-pound person



Calories In = Calories Out



If you **walk the dog for 1 hour and 20 minutes**, you will burn approximately **400 calories**.*



*Based on 160-pound person



POPCORN

20 Years Ago



270 calories
5 cups

Today



How many calories
are in today's large
popcorn?



POPCORN

20 Years Ago



270 calories
5 cups

Today



630 calories
11 cups

Calorie Difference: 360 calories



Portion Distortion II Interactive Quiz



Maintaining a Healthy Weight is a Balancing Act Calories In = Calories Out



How long will you have to do water aerobics in order to burn the extra 360 calories?*

*Based on 160-pound person



Calories In = Calories Out



If you **do water aerobics for 1 hour and 15 minutes** you will burn approximately **360 calories.***



*Based on 160-pound person



CHEESECAKE

20 Years Ago



260 calories
3 ounces

Today



How many calories are in today's large portion of cheesecake?



CHEESECAKE

20 Years Ago



260 calories

3 ounces

Today



640 calories

7 ounces

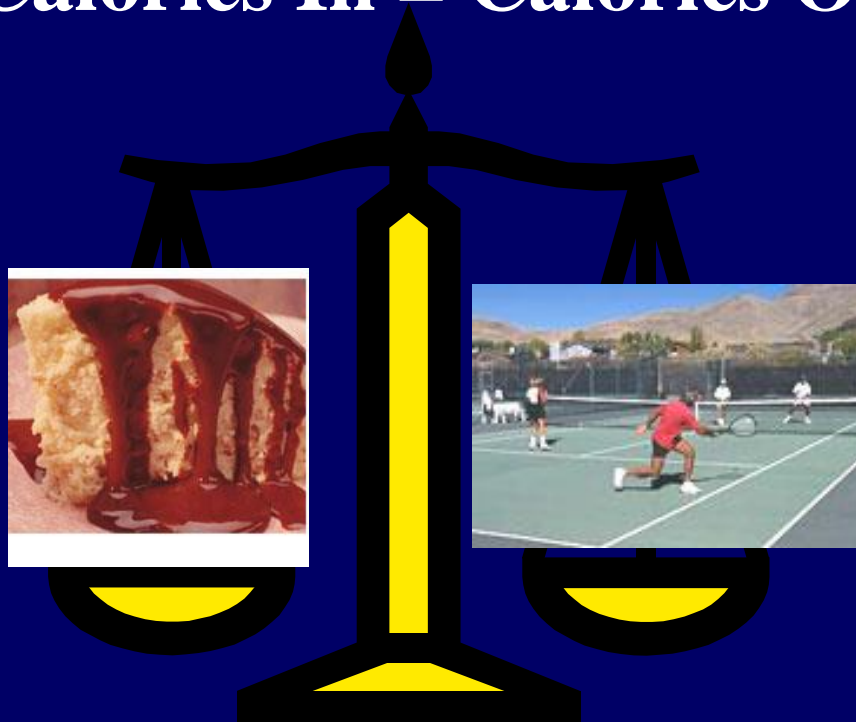
Calorie Difference: 380 calories



Portion Distortion II Interactive Quiz



Maintaining a Healthy Weight is a Balancing Act Calories In = Calories Out



How long will you have to play tennis in order to burn those extra 380 calories?*

*Based on 130-pound person



Calories In = Calories Out



If you **play tennis for 55 minutes** you will burn approximately **380 calories.***



*Based on 130-pound person



CHOCOLATE CHIP COOKIE

20 Years Ago



55 calories
1.5 inch diameter

Today



**How many calories are
in today's large cookie?**



CHOCOLATE CHIP COOKIE

20 Years Ago



55 calories
1.5 inch diameter

Today



275 calories
3.5 inch diameter

Calorie Difference: 220 calories

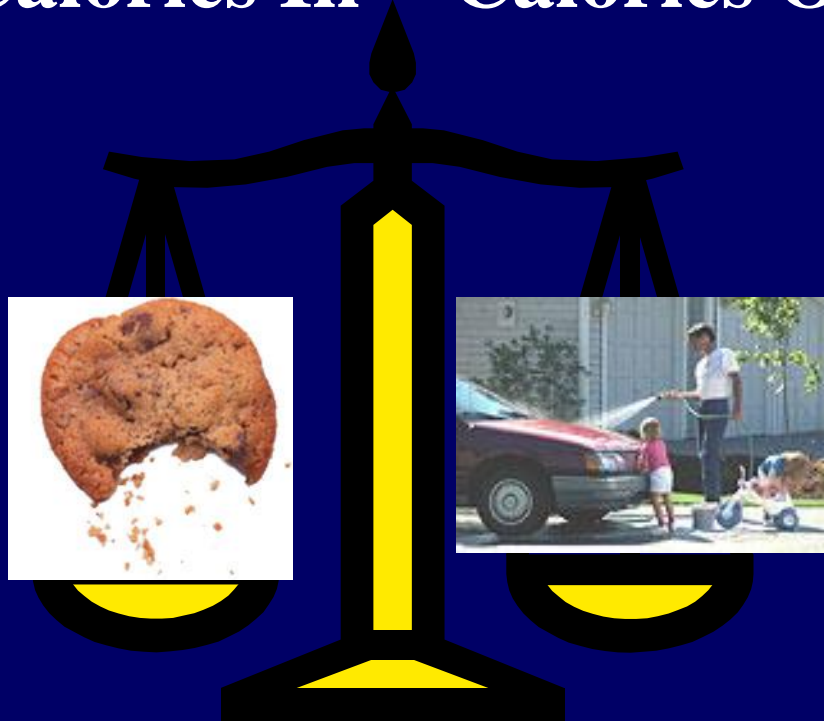


Portion Distortion II Interactive Quiz



Maintaining a Healthy Weight is a Balancing Act

Calories In = Calories Out



How long will you have to wash the car to burn those extra 220 calories?*

*Based on 130-pound person



Calories In = Calories Out



If you **wash the car for 1 hour and 15 minutes** you will burn approximately **220 calories**.*



*Based on 130-pound person



CHICKEN STIR FRY

20 Years Ago



435 calories
2 cups

Today



**How many calories are in
today's chicken stir fry?**



CHICKEN STIR FRY

20 Years Ago



435 calories
2 cups

Today



865 calories
4 ½ cups

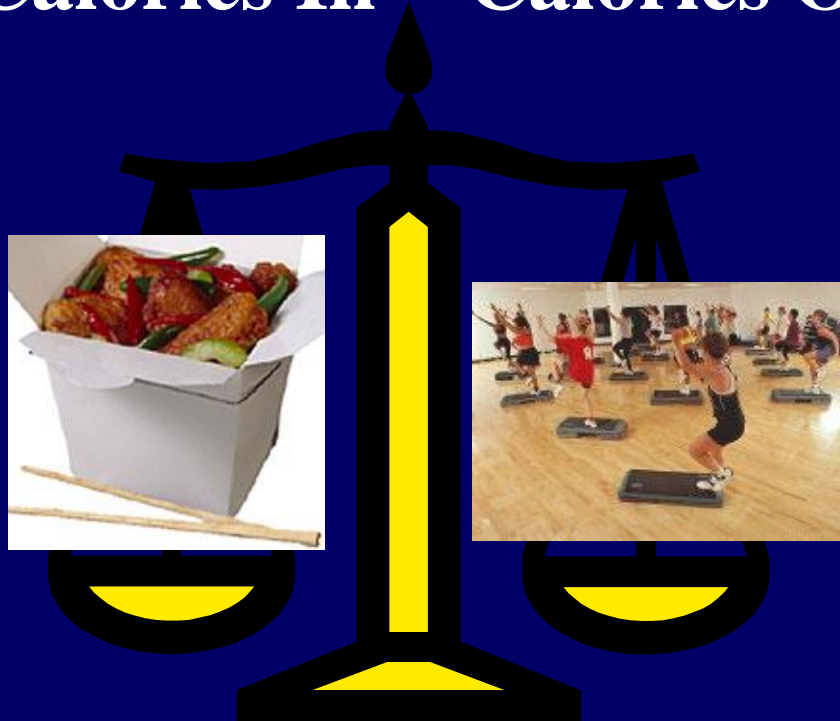
Calorie Difference: 430 calories



Portion Distortion II Interactive Quiz



Maintaining a Healthy Weight is a Balancing Act Calories In = Calories Out



How long will you have to do aerobic dance to burn those extra 430 calories?*

*Based on 130-pound person



Calories In = Calories Out



If you **do aerobic dance for 1 hour and 5 minutes** you will burn approximately **430 calories.***



***Based on 130-pound person**



Portion Distortion II Interactive Quiz




Thank you for participating in
Portion Distortion II!

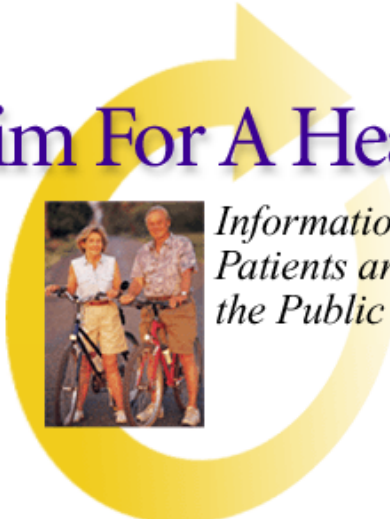
For more information about Maintaining a Healthy Weight
visit www.nhlbi.nih.gov


NATIONAL INSTITUTES OF HEALTH

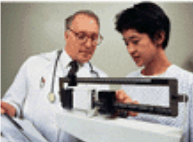
National Heart, Lung, and Blood Institute

 [Home](#) [BMI Calculator](#) [Menu Planner](#) [OEI Home Page](#)

Aim For A Healthy Weight



 *Information for
Patients and
the Public*

 *Information
for Health
Professionals*

