

Lesson Plan D

Course: Practical Nutrition

Module I: The Challenge of Nutrition Guidelines

Lesson D: Achieving a Healthy Weight: Winning the Weight Game with Healthful Eating and Physical Activity

Lesson Length: 60 minutes

Lesson Equipment and Materials

Equipment

Computer and LCD Projector
Flip chart and Markers

Visual Aids

PowerPoint Slides 1-39

Supplies

2 colors of Balloons for balloon toss game (Slide 37)

Participant Materials

H-D1 *Figure 2: Adult BMI Chart, Dietary Guidelines for Americans, 2005*

H-D2 *Give Yourself a Grade*

H-D3 *Envisioning a Personal Change*

H-D4 *My Personal Plan*

H-D5 *Lifestyle Tips: Small Changes Add Up*

Lesson Preparation

1. Read the entire **Lesson Plan D**.
2. Reproduce all **Participant Materials** for Lesson D.
3. Gather balloons for balloon toss. Blow them up if you wish and store in a garbage bag.
4. Post Performance Standards for participants.

Lesson Outcome

On completion of this course, the learner will demonstrate knowledge and skills needed to incorporate the principles of sound nutrition into their personal lives based on the following **performance standards**:

- Learn how to evaluate an adult's weight status.
- Explore values and concepts for healthy eating and activity.
- Learn about behaviors that lead to energy imbalance.
- Learn to apply eating and activity strategies that help us maintain or achieve healthier lifestyles.

Lesson Instruction

◆ **Setting the Stage**

Focus learner's attention.

- ▶ To open this session, ask participants to share a bit about how many of them have had a period of time in their lives during which weight has been an issue or a concern to them.
- ▶ You needn't ask whether they have tried to gain or lose weight—perhaps only ask them to give to think about it rather than raise a hand.

◆ **Relate to past experience.**

- ▶ Nearly everyone has been unhappy about their weight at some point in time. Most Americans these days struggle with preventing weight gain. Our lifestyles of working long hours, eating out often and getting less and less physical activity make it hard to avoid gaining weight.
- ▶ How many of you relate to this or are concerned about someone you care about?
- ▶ Have you tried to diet and be more active in the past?
- ▶ How did it work for you?
- ▶ Follow this up by asking whether they felt they had the information they need to be able to make good decisions that help them get closer to their goals for weight and health.

◆ **In today's lesson...**

- ▶ You will learn the importance of getting to and maintaining a healthy weight.

◆ **You will be able to...**

- ▶ Learn how to evaluate an adult's weight status.
- ▶ Explore values and concepts for healthy eating and activity.
- ▶ Learn about behaviors that lead to energy imbalance.
- ▶ Learn to apply eating and activity strategies that help us maintain or achieve healthier lifestyles.

◆ **Identify the Purpose**

- ▶ Maintaining a healthy weight can improve your health and reduce your risk of developing a chronic disease like heart disease, diabetes, blood pressure, high cholesterol, stroke, cancer, etc. Most adults are keenly aware of their body weight and shapes, and realize that what they eat and what they do or don't do can make a difference. Those who are most successful at preventing weight gain or maintaining weight loss seem to have fully incorporated healthful eating and physical activity into their daily lives.

Performance Standard

The learner will:

- Learn how to evaluate an adult's weight status.
- Explore values and concepts for healthy eating and activity.
- Learn about behaviors that lead to energy imbalance.
- Learn to apply eating and activity strategies that help us maintain or achieve healthier lifestyles.

LESSON CONTENT

Slide 1: Winning the Weight Game

- ▶ Title Page
- ▶ Setting the Stage
Focus learner's attention.
- ▶ To open this session, ask participants to share a bit about how many of them have had a period of time in their lives during which weight has been an issue or a concern to them.
- ▶ You needn't ask whether they have tried to gain or lose weight—perhaps only ask them to give to think about it rather than raise a hand.
- ▶ **Relate to past experience.**
 - Nearly everyone has been unhappy about their weight at some point in time. Most Americans these days struggle with

preventing weight gain. Our lifestyles of working long hours, eating out often and getting less and less physical activity make it hard to avoid gaining weight.

Activity

- How many of you relate to this or are concerned about someone you care about?
- Have you tried to diet and be more active in the past?
- How did it work for you?
- Follow this up by asking whether they felt they had the information they need to be able to make good decisions that help them get closer to their goals for weight and health.

Slide 2: Winning the Weight Game

- ▶ Quickly review the objectives for this session as outlined on the slide

Slide 3: What's Everyone Talking About?

- ▶ The National Center for Health Statistics, a part of the Centers for Disease Control and Prevention, reports that the percentage of obese people 20 years of age and older was 32.2% in 2003-04.
- ▶ That's up from a rate of 22.9% during 1988-94. If adults who are overweight are added in, the total of adults who are now overweight or obese jumps to 66.3 percent.

Slide 4: Overweight and Obesity

- ▶ Results from the 1999-2002 National Health and Nutrition Examination Survey indicate that about 16% of children and adolescents ages 6-19 years are overweight. This is a substantial increase from the 11 percent estimated in 1988-94.
- ▶ One of the national health objectives for 2010 is to reduce the prevalence of overweight. However, the more recent overweight estimates suggest that overweight in youths has not leveled off or decreased, and is increasing to even higher levels.

Slide 5: Adults Aren't the Only Ones

- ▶ Rates of childhood obesity have doubled over the last two decades. The data for adolescents are concerning because overweight adolescents are at increased risk to become overweight adults. The 1999-2002 findings for children and adolescents suggest that it is very likely that we will have another generation of overweight adults who will be at risk for health conditions like diabetes that are related to being overweight.
- ▶ Being overweight is a growing trend both for adults and children.

- ▶ Approximately 18% of children aged 6-19 are above the cutoff for being overweight, or the 95th percentile for the Body Mass Index.

Slide 6: How Can you Tell?

- ▶ Obesity is officially defined as having a Body Mass Index of 30 or over.
- ▶ Body Mass Index (BMI=kg/m²) is the commonly used calculation that looks at weight in proportion to height. It classifies overweight and obesity among adults, and is also recommended to identify children who are overweight or at risk of becoming overweight.
- ▶ In adults it is a reliable indicator of body fat.

Slide 7: Using the BMI Chart

- ▶ Have participants determine the BMI of the case study on this slide using **H-D1 Figure 2: Adult BMI Chart** (which is the same as the BMI Chart provided in Lesson A).

Slide 8: Using the BMI Chart

- ▶ Practice the formula with the participants to determine BMI
- ▶ 150 pounds/(65")² X 703= 25 BMI

Slide 9: Interpreting BMI

<u>BMI</u>	<u>Weight Status</u>
Below 18.5	Underweight
18.5 – 24.9	Normal
25.0 – 29.9	Overweight
Above 30.0	Obese

- ▶ As you can see, the BMI that we just calculated goes in the overweight category. This person could benefit by increasing their activity and reducing the calorie intake to prevent further weight gain. Ideally, they could lose a few pounds to improve their risk status and their health.

Slide 10: Pears or Apples?

- ▶ Another way to estimate your risk for chronic disease is to take a look at a person's fat distribution. Many people are said to be shaped like pears or like apples.

Slide 11: Are you a Pear or an Apple?

- ▶ A better way to tell if the fat you have is "ok" is to look at how it is distributed. The Apple shape: the majority of the fat is in the abdominal area – this means greater risk of coronary artery disease, stroke, high blood pressure, and diabetes than those with pear shape. The Pear

shape: the majority of fat is in the hips, buttocks, and thighs.

- ▶ A tape measure can be used to measure waist circumference and hip circumference.
- ▶ Another way to think about it is that having a waist circumference of greater than 88 centimeters (35 inches) puts you in the category of greater risk for chronic disease.

Slide 12: Interpreting Children's BMI

- ▶ BMI is also the measure of choice for children over 2 but must be interpreted with care.
- ▶ Children's BMIs change with age so that what is normal for a 6-year-old is quite different than for a 12-year-old.
- ▶ See www.cdc.gov/growthcharts for more information.

Slide 13: For Children, BMI Changes with Age

- ▶ After about 1 year of age, BMI-for-age begins to go down and it continues falling during the preschool years until it reaches a minimum around 4 to 6 years of age.
- ▶ After that, BMI starts to go up with age.
- ▶ If you look at the graph, you see lots of lines that curve upward. These are the percentiles for children's growth that are established from several large national samples of children. The dark line in the middle is the 50th percentile. If a child's BMI is on the 50th percentile, it means that 50% of children are growing more slowly than that child and that 50% of children are growing faster than that child. In other words, this child's growth is average.

Slide 14: BMI-for-Age Cutoffs

- ▶ The experts' recommendations are to classify children's BMI-for-age at or above the 95th percentile as being overweight and children's BMI-for-age between the 85th and 95th percentiles as being at risk of overweight.
- ▶ The 85th percentile is included on the BMI-for-age and the weight-for-stature charts to identify those at risk of overweight. (Source: The World Health Organization Expert Committee on Physical Status. The Use and Interpretation of Anthropometry. Physical Status: Report of a WHO Expert Committee: WHO Technical Report Series 854, WHO, Geneva, 1996.)

Slide 15: Is it worth it to maintain healthy weight?

- ▶ Achieving and maintaining a healthy BMI reduces the risk for:
 - *cardiovascular disease*
 - *some forms of cancer*
 - *diabetes*

- *diverticulitis & hemorrhoids*
- *cataracts*
- ▶ All this translates into feeling better and less medical expense when we eat well and are active.

Slide 16: Weight Management Goals in the Dietary Guidelines for Americans

- ▶ In an ideal world, we would hope that everyone could maintain a healthy weight. However, people come in different shapes and sizes and what we most want for people is for them to lead healthy lives.
- ▶ This means that the first goal for healthy weight is to prevent additional weight gain if you are at a healthy weight or if you are overweight.
- ▶ An achievable goal for everyone is to adopt healthier habits and become healthier at any size.

Slide 17: Key Recommendations

- ▶ To try to achieve better health and to manage our weight, the Dietary Guidelines for Americans 2005 specify 2 key recommendations:
 - The first is that we try to balance the amount of calories that we eat with the amount that we burn.
 - This does not necessarily mean counting calories all the time to make sure you are in balance. It does mean learning about foods and their relative calorie content and pairing that information with attention to our own hunger cues.
 - If we choose to eat when hungry, learn to do other things when we are anxious, bored or seeking pleasure AND if we make smart choices by selecting low calorie beverages, and lower fat/calorie snacks, we can prevent slow weight gain that happens as a result of less conscious eating choices.
 - We can achieve this key recommendation by:
 - thoughtfully and carefully choosing foods we eat,
 - eating when we are hungry, and
 - learning to stop eating before feeling “stuffed.”
 - A second key recommendation of the guidelines is to try to make small decreases in you energy intake and small increases in physical activity to prevent weight gain.

- The average weight gain for adults in the US is about 1-3 pounds per year. This amounts to between 3500 – 10500 calories extra each year. If we go on the idea that a pound of fat is about 3500 calories, and that there are 365 days in one year, then this amounts to only about 30 extra calories per day to gain 3 pounds in one year (10500/365).
- By making small changes in eating and physical activity, we can prevent this slow, gradual weight gain that can come from only 30 extra calories a day.

Slide 18: Winning Strategies

- ▶ Choosing to consume nutrient-rich foods: greater amounts of fruits and vegetables daily, whole grains, low fat meats and dairy products. In addition, replacing higher calories beverages and snacks with smart foods like fruits and vegetables can result in those small reductions in energy intake that we were talking about (again the concept of nutrient-rich foods).
- ▶ Some research suggests that consuming low calorie, clear soups also helps to reduce energy intake at a meal and can assist in weight loss.
- ▶ Other strategies for decreasing energy intake include cutting back on foods that are high in added sugars, fat and cutting back on alcohol. The rationale for decreasing these kinds of foods is that they provide a high number of calories but do not provide much in the way of other nutrients.

Slide 19: Watch Out for Large Portions

- ▶ One pitfall to watch for is the portions that are being offered to us.
- ▶ To be responsive to the public and to avoid criticism saying they are promoting obesity, industry is changing its labels—and not necessarily its portions. The change in labeling is aimed at satisfying critics (though industry officials cite “less consumer confusion” as the motivation) and continuing the trend of increasing profitability for fast food.
- ▶ The facts of the research show that the more food we are offered, the more we tend to eat.

Slide 20 – Slide 31: Portion Distortion II Interactive Quiz

Activity

- ▶ Complete the Portion Distortion interactive quiz with participants.

Slide 32: Smart Rules to Live By

- ▶ Here are smart rules to live by when trying to choose a healthy lifestyle:
 - Get healthy *AND* satisfied: choose variety and color. The more color in your fruits and vegetables the more nutrients they contain. Trying new foods and getting out of eating ruts leads to learning, discovery, better nutrition and enjoyment. If you are eating 1-2 vegetables each day, start by adding one more at dinner or lunch. If you want to eat more fruit, add a piece in at breakfast or for a snack.
 - By reading the labels you can watch out for added sugars. If they contain sugar, corn syrup, molasses and other sweeteners at the front of the ingredient list, think about choosing another food or watching your portion.
 - Calories from beverages add up—add up yours and see how much you get from drinks. Juice drinks, carbonated beverages, sport drinks, alcoholic beverages, and “entertainment drinks” (like those found in coffee houses) all add extra calories without adding much in the way of nutrients.
 - Whole grains are those which contain all parts of the grain. They are higher in fiber and are therefore more filling both at meals and at snacks.
 - Change how you think about snacks. Many new products make it easy and convenient to munch on fruit and vegetables for snacks. Grab a healthy snack pack. Fill in the gaps in your pyramid with vegetables, fruit and lower fat protein snacks. They will give you more nutrition for the calories.
 - Think of high energy, low nutrition snacks as “sometimes snacks” instead of “everyday snacks.”
 - Start thinking about physical activity as something you do in 10-15 minute time periods. Research demonstrates that 2 bouts of activity for 15 minutes each is just as effective in improving your risk profile as one 30 minute bout.
 - Enjoy all foods—just not all the time. There is a time and a place for most every food. Make your choices with balance in mind so that good nutrition, fun and satisfaction are all a part of your eating habits.

Slide 33: Tips for keeping things in balance

- ▶ One way to learn what you need to know about making smart food

- choices is to read the food labels
- ▶ Once you become aware of this information, you can gauge whether the food is giving you the most nutrition for the calories. A good way to evaluate foods is with the 5/20 rule. The rule of thumb is that if a food supplies less than 5% of a nutrient in one serving, it is low in that nutrient. On the other hand, if it supplies >20% of that nutrient in one serving, it is considered high in that nutrient. This holds true for nutrients that you want to get a lot of (like vitamins and minerals) and those you might want to limit (like fat and calories). You don't have to count calories but knowing them by reading the label can help you make smart choices.
 - ▶ A second way to keep things in balance is to try to be active on most days. Being active can be accomplished in many different ways.
 - ▶ Traditionally we think of going to the gym or to a class to get more activity in our lives—and many of us groan (at least mentally) when we think of this. However, there are many ways to increase your physical activity level without joining a gym. The newest research reveals that there are many health benefits to be gained from “lifestyle” physical activities.
 - ▶ What are “lifestyle” activities?
 - Lifestyle activities include small changes in the ways we live each day. They can include going for a 15 minute walk after a meal, taking the stairs instead of escalators and elevators, parking a little farther away from the store or riding your bike to work or the store some days of the week. Really, anything that helps you be a little more active is a lifestyle activity.

Slide 34: Leisure-time physical activity 18+Years, 2003

- ▶ This slide shows the percentage of adults who report getting regular leisure-time activity and compares it to their income level. First, it suggests that relatively few people regularly get physical activity (somewhere between 30 – 40%). It also suggests that individuals who earn less income are less likely to be active (>55% of individuals in low income strata are inactive).
- ▶ It's true that some forms of physical activity cost more money than others do. However, walking, biking, and dancing are relatively low cost activities that can be enjoyed most anywhere and that are great physical activities for health and well-being.

Slide 35: How much activity to prevent weight gain?

- ▶ The experts suggest that 60 minutes of leisure time physical activity is necessary in order to prevent weight gain. This can be achieved all in one period or in as many as 4-5 bouts of activity per day. The end result should be that 45-60 minutes total of activity is accrued on most days.
- ▶ The rather daunting news for some is that 60-90 minutes is suggested to keep off weight that has already been lost. Of course, the real key is to achieve energy balance by both changing unhealthy eating habits and by expending more energy in physical activity.

Slide 36: Finding Your Balance with Activity

- ▶ How much activity is enough activity to find your balance? That depends, of course, on your eating.
- ▶ But, aside from you energy balance, what about your *mental and emotional balance*?
- ▶ Not many people have the perspective that they have 60-90 spare minutes in their day when they aren't doing something else. Don't be discouraged! Make goals that are doable for YOU, not for the guideline. Small changes can make a big impact on your health. Start with 10-15 minute time periods and build from there. Think of yourself as *deserving* this time for yourself.
- ▶ This doesn't mean that if you walk around the block that you don't have to worry about portion control or eating lots of high pleasure/low nutrient foods and beverages. What it does mean is that being more active allows you to keep eating a little more pleasurably. And isn't that what most of us want? Health *AND* Satisfaction.
- ▶ Taking just 30 minutes a day to be active can help you feel stronger and less stressed. Just think, feeling better and stronger in 2 bouts of 15 minutes each.
- ▶ Here are some ideas for ways that you can squeeze in 30 minutes of activity.
 - 15 minutes in the morning
 - 15 minutes before or after lunch
 - 15 minutes right after work
 - 15 minutes before or after dinner

Slide 37: Don't you deserve 30 minutes for you?

- ▶ Physical activity is a choice that requires some planning AND most everyone has 30 minutes in their day if they look for them and put themselves FIRST.

Activity

- ▶ Split participants into 2 groups. Distribute one color of balloons to one group and another color to the other group. Have the participants blow up balloons/have their neighbor blow them up or prep the balloons by blowing them up and storing them in a garbage bag. The goal is to get as many of your color balloon on the other teams side. Time for 90 seconds and survey the land...Who wins?
- ▶ Everyone really wins!

Slide 38: Balancing Tools

- ▶ To use the DASH Plan you must focus on consuming fruits, vegetables, low-fat dairy, grains, nuts and seeds, lean cuts of meat & poultry and sensible snacks.
- ▶ MyPyramid, is based upon the premise that one size does **not** fit all. The MyPyramid Plan can help you choose the foods and amounts that are right for you. On the MyPyramid website you can determine what and how much you need to eat, based upon your age, sex, and activity level. Unique to MyPyramid is the opportunity to perform a detailed, personal assessment of your physical activity level on MyPyramid Tracker.
- ▶ It all depends upon your desires—start with a basic plan like DASH and put it to work for you or put in a little more time and effort and get your own personal plan from www.MyPyramid.gov. Both of these tools are available free and online to everyone.

Slide 39: Choosing Health

- ▶ You now know the principles of healthy eating and physical activity. You've learned a lot of the common pitfalls. The last key to healthy living and managing your weight is CHOOSING HEALTH.
 - Here are the facts:
 - You are in charge of your health. Ultimately, no one else can be healthy for you. It really is up to you.
 - The thing to remember is that small changes are far less overwhelming and more likely to be sustained than radical ones. Small steps in eating and physical activity are steps in the right direction to healthier lives.

- Choosing to be healthy by eating better and being more active has impacts on your physical being but also is extremely important for your mental well being. An active body is a less stressed body.

Activities

- Lead participants through **H-D2 Give Yourself a Grade, H-D3 Envisioning Personal Change, H-D4 My Personal Plan, and H-D5 Lifestyle Tips: Small Changes Add Up.**

- ◆ **Closure**

- Emphasis should be made to lifelong changes in eating habits and physical activity to reap the rewards of a healthy lifestyle. If you feel you can't do it alone, contact a health care professional or a Registered Dietitian who is trained to help people achieve long-term dietary changes.

- ◆ **Independent Practice**

- Encourage participants to keep a daily food and activity log to really find out their energy in vs. energy out. Track it using MyPyramid Tracker found at www.MyPyramid.gov.