



# ADULT OBESITY PROVIDER TOOLKIT

What clinicians should  
consider in the prevention,  
assessment and  
treatment of adult  
overweight patients.



2008

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## Dear Colleagues,

Former Surgeon General Richard Carmona, MD has called obesity “the fastest-growing, most threatening disease in America today.” It is no surprise that many physicians feel overwhelmed and frustrated by the daunting task of addressing weight issues with their patients given the physical, emotional, social, and environmental factors associated with obesity and weight management. Providers hear a variety of messages about the prevention, treatment and management of obesity that make it increasingly difficult to determine the best plan of action to take with patients.

In an effort to address these issues and to improve patient care and outcomes, the California Medical Association (CMA) Foundation and California Association of Health Plans (CAHP) convened expert panels of physicians and other health care providers to study and discuss published materials and best practices to help clinicians determine the most effective ways to prevent, assess and treat overweight and obesity in their practice.

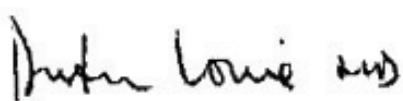
The expert panel divided into three work groups that identified practical information and approaches for health care providers. The result is a set of toolkits that address the prevention and effective management of overweight children and adolescents, overweight and obese adults, and pre/post bariatric surgery patients. The toolkits include:

- Effective communication techniques
- Resources for the office
- Strategies for managing overweight patients
- Patient education resources
- Billing and procedure codes
- Clinical guideline abstracts

Please join the efforts of the CMA Foundation and CAHP to reverse obesity trends by utilizing these resources developed by health care providers for health care providers. The toolkits and additional resources are available on the CMA Foundation and CAHP websites and through participating health plans. For more information visit:

<http://www.calmedfoundation.org/projects/obesityProject.aspx>.

Sincerely,



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## Toolkit Purpose

In 2006, The California Medical Association (CMA) Foundation and the California Association of Health Plans (CAHP) collaborated with commercial and Medi-Cal managed care health plans, practicing physicians and other health provider organizations to complete a provider toolkit addressing the prevention, early identification, weight management education and pre/post-bariatric surgery care of overweight and obese individuals. This collaboration brought together leaders from health plans, academic medical centers, physician practices as well as other health care providers to share their daily experiences of working to address the growing obesity epidemic in their practice and community.

Through the collaborative efforts and interest of our expert panel, individual toolkits have been developed addressing overweight and obesity prevention and management in adult, child and adolescent and pre/post-bariatric surgery patients.

The objective of the Adult Obesity Provider Toolkit is to supply health care providers with information to consider when assessing, discussing and treating overweight and obese patients.

## Disclaimer

This toolkit is intended for physicians and health care professionals to consider in managing the care of their patients for overweight and obesity. While the toolkit describes recommended courses of prevention, assessment, and treatment, it is not intended as a substitute for the advice of a physician or other knowledgeable health care professional. This toolkit represents best clinical practice at the time of publication, but practice standards may change as more knowledge is gained

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# ORGANIZING THE OFFICE

1



- *The Waiting Area*
- *The Nurses' Station*
- *Exam Rooms*
- *Leading by Example*
- *Involving Staff*
- *Chart Prompts*

# ORGANIZING THE OFFICE

Primary care providers are on the front lines addressing the obesity epidemic facing patients in their offices. The office environment and visit provide opportunities to communicate preventive care messages focusing on healthy weight throughout the visit. What follows are some suggestions on ways to display preventive health messages addressing healthy eating and physical activity throughout the office.

## The Waiting Area

- Posters can be placed in the waiting rooms. These are most effective when placed in areas where visitors are not otherwise engaged in communication with their health provider. Many of us tend to notice our surroundings when there is nothing else to do. These posters can reinforce the health care provider's verbal advice given during the visit.
- The waiting area can have corners or sections addressing topics. There can be a nutrition corner with recipes for healthy foods, handouts and a resource list of programs for overweight patients.
- Provide health focused magazines.
- Place a brochure rack in the waiting area providing handouts focusing on healthy eating, eating out and making healthy choices. Also include physical activity tips for adults and families.
- Post a list of community sports and physical activity programs patients can sign up for.
- Consider having some open-arm chairs that can support a larger weight patient.

## The Nurses' Station

- Have a good scale for weighing people who are over 300 lbs.
  - Many providers prefer using digital scales for overweight and obese patients.
- Keep a measuring tape at hand to document waist circumference.

## Exam Rooms

**E**xam rooms present the opportunity to continue health messaging for patients. Posters can be placed in the room in locations that are in the patient's line of sight. A brochure or pamphlet rack can be placed in each room as well. Rooms might also have themes where one room has more information on healthy eating and another on physical activity.

Have handouts ready to provide to patients on the key topics associated with their preventive visit on healthy eating or physical activity and provide these at the end of the visit.

Obese and super obese patients may require special exam accommodations as part of the routine office encounter. Providing appropriately sized gowns, accommodating furniture in the exam and waiting room, longer measuring tape and scales with a wide base that can handle weights over 300 pounds will make these patients feel more welcome in the medical setting and hopefully lead to less delays in their seeking medical attention.<sup>1</sup>

## Leading by Example

**B**e sure that the habits of the staff reflect a healthy environment. Encourage healthy snacks and lunches for staff. Keep food in the staff lunchroom and not at the reception desk.

- If the office or clinic operates vending machines, supply them with water, fruit juices and other healthy snacks, not candy, chips or sodas.
- Consider setting up office programs to show a personal commitment toward maintaining a healthy lifestyle to staff and patients, examples include:
  - “Walk With Your Doctor” program or a walking club for staff and patients
  - Healthy foods in staff break room vending machines

## Involving Staff

**A**team approach can be used in the office to maximize the impact of each patient encounter by training staff to obtain patient measurements, calculate BMI, and ask questions about the patient's lifestyle including diet, physical activity, and sedentary habits. When available, a registered dietitian can be used for conducting patient dietary assessments and providing lifestyle counseling. When appropriate, staff can be trained to assist with providing healthy lifestyle and weight management counseling to patients. Patient information and measurements should be documented in the patient's medical record. Front office staff typically has good rapport with patients – use them to reinforce messages and goals.

## Chart Prompts

Offices will vary in the types of prompts used to trigger a focus for the visit. It is important that staff get in the habit of recording the patient's BMI. If a paper chart is being used, the receptionist can place a chart sticker or prompt to remind the medical assistant to calculate the patient's BMI. Make it easy to calculate BMI by using a BMI wheel or programmed calculator. Chart stickers can include the BMI and where the adult patient fits in the continuum from healthy weight to overweight, for example:

<b>BMI:</b> _____	<b>Height:</b> _____
<b>Height:</b> _____	<b>Weight:</b> _____
<b>Weight:</b> _____	<b>BMI:</b> _____ $\text{BMI} = \frac{\text{Weight (lbs)}}{\text{Height (in}^2\text{)}} \times 703$
<b>Waist Circumference:</b> _____ cm	<b>Waist Circumference:</b> _____ cm
<b>± Underweight</b>	
<b>± Normal</b>	
<b>± Overweight</b>	
<b>± Obese</b>	
<b>± Extremely Obese</b>	
<b>Waist Circumference:</b> _____ cm	
<b>± Normal</b>	
• Men: < 102 cm (< 40 in.)	
• Women: < 88 cm (< 35 in.)	
<b>± Abnormal</b>	
• Men: > 102 cm (> 40 in.)	
• Women: > 88 cm (> 35 in.)	

# PATIENT/PROVIDER COMMUNICATIONS

2



- ***Brief Negotiation & Assessing Readiness to Change***
- ***Brief Negotiations Reference Card***
- ***Sample Dialogue of a Brief Negotiations Encounter***
- ***Talking with Patients About Weight Loss: Tips for Primary Care Professionals*** (USDHHS)

## Brief Negotiations and Assessing Readiness to Change<sup>2</sup>

Determining your patients' readiness for change is essential for success. Discussing changes when a patient is not ready often leads to resistance, denial of problems, and frustration which may hamper future efforts. The following tool provides a basis for starting discussions with patients. Using questionnaires may also provide valuable insight while saving valuable office visit time.

### Brief Negotiation Skills

- Ask opened ended questions
- Listen
- Summarize
- Clinician Style: Empathetic, accepting and collaborative

### Open the Encounter

#### Ask Permission

- Would you be willing to spend a few minutes discussing your weight? / Are you interested in discussing ways to stay healthy and energized?

#### Ask an Open-Ended Question – Listen – Summarize

- What do you think/How do you feel about your weight? / What have you tried so far to work toward a healthier weight?

#### Share BMI / Weight (optional)

- Your current weight puts you at risk for developing heart disease and diabetes.
- Your BMI is \_\_\_\_  
A BMI of < 25 is considered healthy.
- Ask for the patient's interpretation: "What do make of this?"
- Add your own interpretation or advice as needed AFTER eliciting the patient's / parent's response.

### Negotiate the Agenda

Here are some examples of ways to achieve a healthy weight including:

- Eat at least 5 servings of fruits and vegetables a day.
- Cut back on TV and computer time.
- Participate in at least 1 hour or more of physical activity every day.
- Avoid soda and sweetened drinks; limit fruit juice to one cup or less per day.
  - Instead, encourage water and 3-4 servings/day of fat-free milk.
- Is there any health topic you would like to discuss further today?

### Assess Readiness

- On a scale from 0 to 10, how ready are you to consider lifestyle changes?
- Straight question: Why a 5?
- Backward question: Why a 5 and not a 3?
- Forward question: What would it take to move you from a 5 to a 7?

### Explore Ambivalence

Step 1: Ask a pair of questions to help the patient explore the pros and cons of the issue.

- What are the things you like about \_\_\_\_? **AND** What are the things you don't like about \_\_\_\_? **OR**
- What are the advantages of keeping things the same? **AND** What are the advantages of making a change?

Step 2: Summarize ambivalence.

- Let me see if I understand what you've told me so far.... (begin with reasons for maintaining the status quo, end with reasons for making a change)
- Ask: Did I get it all? / Did I get it right?

## Tailor the Intervention

Stage of Readiness	Key Questions
<b>Not Ready 0 - 3</b> <ul style="list-style-type: none"> <li>• Raise Awareness</li> <li>• Elicit Change Talk</li> <li>• Advise and Encourage</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Would you be interested in knowing more about reaching a healthy weight?</i></li> <li>• <i>How can I help?</i></li> <li>• <i>What might need to be different for you to consider a change in the future?</i></li> </ul>
<b>Unsure 4 – 6</b> <ul style="list-style-type: none"> <li>• Evaluate Ambivalence</li> <li>• Elicit Change Talk</li> <li>• Build Readiness</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Where does that leave you now?</i></li> <li>• <i>What do you see as your next steps?</i></li> <li>• <i>What are you thinking / feeling at this point?</i></li> <li>• <i>Where does _____ fit into your future?</i></li> <li>• <i>How does being overweight affect you?</i></li> </ul>
<b>Ready 7 – 10</b> <ul style="list-style-type: none"> <li>• Strengthen Commitment</li> <li>• Elicit Change Talk</li> <li>• Facilitate Action Planning</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Why is this important to you now?</i></li> <li>• <i>What are your ideas for making this work?</i></li> <li>• <i>What is hard about managing your weight?</i></li> <li>• <i>What might get in the way? How might you work around the barriers?</i></li> <li>• <i>How might you reward yourself along the way?</i></li> </ul>

## Cognitive Behavior Skills – For Patients Ready to Makes Changes

- Develop awareness of eating habits, activity and lifestyle behaviors
- Identify problem behaviors
- Problem solving and modify behaviors
- Set weekly weight, dietary, physical activity goals
- Use a goal achievement reward system
- Track diet, weight loss and physical activities using a journal or worksheet
- Routinely check weight

## Close the Encounter

- Summarize: *Our time is almost up. Let's take a look at what you've worked through today...*
- Show Appreciation / Acknowledge willingness to discuss change: *Thank you for being willing to discuss your weight.*
- Offer advice; emphasize choice, and express confidence: *I strongly encourage you to be more physically active. The choice to increase your activity, or course, is entirely yours. I am confident that if you decide to be more active you can be successful.*
- Confirm next steps and arrange for follow up: *Are you able to come back in 1 month so we can continue to work together?*

Adapted from the Permanente Medical Group, Inc.  
Northern California Regional Health

## Brief Negotiations Pocket Reference Card (2 sided)

For quick communication tips to assist in discussing weight, physical activity and proper nutrition with your patients, carry this Brief Negotiations reference card during exams to make the most of the discussion.

### Reference Card: Brief Focused Advice

#### Step #1: Engage the Patient/ Parent

- Can we take a few minutes together to discuss your health and weight?
- What do you feel about your health and weight?

#### Step #2: Assess Readiness

- On a scale of 0-10, how ready are you to consider a change \_\_\_\_?
- Why a \_\_\_\_? Why \_\_\_\_ and not a \_\_\_\_?
- What would it take to move you from a \_\_\_\_ to a \_\_\_\_?
- What might your next steps be?

#### Step #3: Share Information (Optional)

- Your weight puts you at risk for developing heart disease and diabetes. What do you make of this?
- Some ideas for staying healthy include ... (use examples)
- What are your ideas for working toward a healthy weight?

#### Step #4: Make a Key Advice Statement

- I strongly encourage you to...
  - Get up and exercise , 30-60 minutes a day
  - Limit TV and computer time to 60 minutes or less a day
  - Eat 5 or more servings of fruits and vegetables each day
  - Limit sodas & juice drinks to 1 cup or less per day.

#### Step #5: Arrange For Follow-up

- Would you be interested in more information on ways to reach a healthy weight?
- Let's set up an appointment in \_\_\_\_ weeks to discuss this further.

Source: Regional Health Education. Kaiser Permanente. 2004.

### Sensitive Word Substitutions

Some patients may be sensitive about discussing weight and lifestyle issues the following are word substitutes that may help to promote open discussions about healthy lifestyle change and weight management:

Obesity	→ Overweight
Ideal Weight	→ Healthier Weight
Personal Improvement	→ Family Improvement
Focus on Weight	→ Focus on Lifestyle
Diets or "Bad Foods"	→ Healthier Food Choices
Exercise	→ Physical Activity

## Sample Dialogue of a Brief Negotiations Encounter

Before entering the exam room you note the patient's age, gender, BMI, waist circumference, blood pressure, and pulse which have been taken by your medical assistant.

### Patient Info:

Name	Charles
Gender	Male
Age	40 years
Ethnicity	Latino
Height	70 inches
Weight	210 lbs
BMI	30.1
Waist Circumference	41 inches

**MD: Good morning! I see you are in for your annual physical. Do you have any concerns about your health?**

Charles: No, I'm feeling pretty good.

**MD: Would you be willing to take a few minutes together to talk about your health and weight?**

Charles: I guess so.

**MD: How do you feel about your weight?**

Charles: I know I could stand to lose a few pounds. My wife nags me about it every day!.

**MD: She is probably just concerned about your health. Right now your body mass index, or BMI, is 30.1. A healthy BMI is below 25. Also, your waist circumference is 41 inches. We consider a healthy waist circumference something less than 40 inches. Your current BMI and waist circumference put you at risk to develop conditions that I see run in your family, like diabetes and heart disease. What do you think about this?**

Charles: It sounds like I have some work to do. I've watched my brother deal with diabetes and it doesn't look like much fun. How much weight do I need to lose?

**MD: Any weight you lose will get you closer to a healthy weight. Have you ever tried anything to get to a healthier weight?**

Charles: My wife tries to get me to eat salad and vegetables, but I'm more of a meat and potatoes guy.

(continued)

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**MD:** : OK, well let's see if we can find a way to help you be healthy. Here are some ideas that my patients usually find helpful: eating at least 5 fruits and vegetables per day, cutting back on the number of sodas they drink, being physically active for 60 minutes or more, and reducing the amount of time they spend watching TV or on the computer. Do you want to talk about any of these, or do you have any other ideas?

*Charles: I could try cutting back on sodas or switching to diet.*

**MD:** Alright, that sounds like a good first step. On a scale from 1 to 10, how ready do you think you are to cut back on sodas?

*Charles: Probably a 3.*

**MD:** Why a 3?

*Charles: I like my sodas! I don't drink coffee and I don't like the taste of water, so I drink soda.*

**MD:** What do you think an advantage of cutting back on soda would be?

*Charles: I guess it's a pretty easy way to get rid of a lot of calories.*

**MD:** Are you interested in knowing more information on the nutritional value of soda?

*Charles: It wouldn't hurt to know more.*

*(MD gives patient a brochure on portion size and calories.)*

**MD:** What do you think your next step is?

*Charles: I'll try to cut back on the sodas. I don't know if I can do it, but I'll try.*

**MD:** : Great – start with cutting back on one soda a day and I think you'll see that it can be easier than you think. This is a very healthy choice for yourself – your family will be happy. Thank you for being so willing to discuss this with me. When you come back for your next appointment I want to hear how things are going.

# Talking With Patients About Weight Loss: Tips for Primary Care Professionals

U.S. Department of Health and Human Services

NATIONAL INSTITUTES OF HEALTH

NIDDK | NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES

## WIN *Weight-control Information Network*

As a primary care professional, you are in an ideal position to offer weight-loss guidance to patients who are overweight or obese. You need not be an expert in weight management or take a lot of time to make a difference. This fact sheet offers tips that can help you talk with patients about this sensitive subject.

### What role can primary care professionals play in patient weight control?

Studies show that short 3- to 5-minute conversations during routine visits can contribute to patient behavior change. In one study, patients who were obese and were advised by their health care professionals to lose weight were three times more likely to try to lose weight than patients not advised. Research has also shown that patients who were counseled in a primary care setting about the benefits of healthy eating and physical activity lost weight, consumed less fat, and exercised more than patients who did not receive counseling. Unfortunately, the majority of primary care professionals do not talk with their patients about weight.

Most people who are overweight or obese want assistance in setting and achieving weight-loss goals, but may hesitate to broach the topic during office visits. Talk with your patients about their weight-related goals, acknowledging that weight management is a challenging process. Explain that you want to help them lose weight, reduce their health risks, and make them feel better, but assure patients that your interest in their health is not dependent on their success in losing weight.

### What do patients want from health care professionals regarding weight?

- **Talk.** Many patients want to talk about weight with health care professionals who offer respect and empathy for their struggles with weight control. However, before starting a conversation about weight control with your patients, allow them to discuss other issues that may be affecting their physical or emotional well-being.

Research has shown that patients who were counseled in a primary care setting about the benefits of healthy eating and physical activity lost weight, consumed less fat, and exercised more than patients who did not receive counseling.

Patients do not want health care professionals to place blame or attribute all of their health problems to weight.

- **Nonoffensive terms.** Patients prefer the terms “weight” or “excess weight,” and dislike the terms “obesity,” “fatness,” and “excess fat.” You may wish to ask your patients what terms they prefer when discussing weight.

### Which patients might benefit from a discussion about weight?

Approach the subject of weight loss if your patient has:

- A body mass index (BMI)\* of 30 or above.
- A BMI between 25 and 30 and two or more weight-related health problems, such as a family history of coronary heart disease or diabetes.
- A waist measurement over 35 inches (women) or 40 inches (men)—even if BMI is less than 25—and two or more weight-related health problems, such as a family history of coronary heart disease or diabetes.

Patients who are overweight (BMI between 25 and 30) and have one or no other risk factors may benefit from a discussion about preventing weight gain instead of weight loss.

\*BMI = weight (in pounds) x 703 ÷ height (in inches) squared. A fact sheet called *Weight and Waist Measurement: Tools for Adults* from the Weight-control Information Network (WIN) provides instructions for measuring waist circumference and BMI.

- **Advice they can use.** There is an abundance of weight-loss advice in the media, and messages may be contradictory or inaccurate. Patients may benefit from straightforward advice from their physician. Many patients want help setting realistic goals. They may want to know what and how much to eat, and what and how much physical activity they should do. For example, some patients will want to know how to become more physically active without causing injury or aggravating problems such as joint pain. Others will want advice on choosing appropriate weight-loss products and services.

## Tips for Talking About Weight Control

**1. Address your patient's chief health concerns or complaints first, independent of weight.** Patients do not want health care professionals to place blame or attribute all of their health problems to weight.

**2. Open the discussion.** Open the conversation by finding out if your patient is willing to talk about weight, or expressing your concerns about how his or her weight affects health. Next, you might ask your patient to describe his or her weight. Here are some sample discussion openers:

*“Mr. Lopez, could we talk about your weight? What are your thoughts about your weight right now?”*

*“Mrs. Brown, I’m concerned about your weight because I think it is causing health problems for you. What do you think about your weight?”*

Be sensitive to cultural differences that your patients may bring to the discussion regarding weight, food preferences, social norms and practices, and related issues. Patients may be more open when they feel respected.

**3. Decide if your patient is ready to control weight.** Ask more questions to assess a patient’s readiness to control weight. Some sample questions are below.

*“What are your goals concerning your weight?”*

*“What changes are you willing to make to your eating and physical activity habits right now?”*

*“What kind of help would you like from me regarding your weight?”*

A patient who is not yet ready to attempt weight control may still benefit from a discussion about healthy eating and regular physical activity, even if he or she is not ready to make behavioral changes. A talk focusing on the ways weight may affect health may also be appropriate because it may help bring weight loss to the forefront of your patient’s mind. You can reassess the patient’s readiness to control weight at the next office visit. A patient who is ready to control weight will benefit from setting a weight-loss goal, receiving advice about healthy eating and regular physical activity, and follow-up.

A patient who is not yet ready to attempt weight control may still benefit from a discussion about healthy eating and regular physical activity.

A patient who is ready to control weight will benefit from setting a weight-loss goal, receiving advice about healthy eating and regular physical activity, and follow-up.

**4. Set a weight goal.** A 5 to 10 percent reduction in body weight over 6 months is a sensible weight-loss goal. One-half to 2 pounds per week is a safe rate of weight loss. A goal of maintaining current weight and preventing weight gain may be appropriate for some patients.

It may be beneficial to focus on improving other diet- and exercise-related risk factors too. Some patients may lose weight very slowly, which can be discouraging. Improving risk factors such as cholesterol levels may motivate patients, especially if changes are achieved in the face of slow weight loss.

**5. Prescribe healthy eating and physical activity behaviors.** Give your patient concrete actions to take to meet his or her weight goal over the next 6 months. Write a prescription for healthier eating and increased physical activity (see sample prescription). You can also direct your patients to print WIN's online resources about weight, healthy eating, and physical activity.

Another option is to refer patients to a weight-loss program, a registered dietitian who specializes in weight control, or a certified fitness professional. The American Dietetic Association (<http://www.eatright.org>) offers referrals to registered dietitians throughout the United States, and the American College of Sports Medicine (<http://www.acsm.org>) offers a search engine for certified fitness professionals. In addition, the online WIN document *Choosing a Safe and Successful Weight-loss Program* can help your patients during this process. This publication offers a list of questions patients may ask their health care providers before deciding on a weight-loss plan, as well as various tips on what to look for in such programs.

Some patients may benefit from weight-loss medication or obesity surgery. The fact sheets *Prescription Medications for the Treatment of Obesity* and *Bariatric Surgery for Severe Obesity* from WIN offer more information about these two treatments. Also, note that some people try herbal treatments to improve their health. Ask your patients if they are taking herbal supplements and provide advice on the use of these products. For more information, contact the National Center for Complementary and Alternative Medicine, which serves as a resource on herbs for professionals and the public (<http://www.nccam.nih.gov>).

# RX Prescription for Healthy Eating and Regular Physical Activity

Try these ideas to support your weight-loss efforts:

- ✓ Eat a variety of nutritious foods from the basic food groups and limit your intake of saturated and *trans* fats, added sugars, salt, and alcohol.
- ✓ Be physically active for at least 30 minutes on most or all days of the week. This level of exercise helps reduce your risk for chronic diseases such as diabetes. Set goals for moderate-intensity physical activities, such as walking at a brisk pace, and chart your progress as you increase your activity level.
- ✓ If you are trying to lose weight or sustain weight loss, be physically active for 60 to 90 minutes a day. Chart your progress as you increase your activity level.
- ✓ Take stairs instead of elevators, park further from entrances, or go for a walk instead of watching TV after dinner. Make sure that you are in a safe and well-lit location when engaging in these activities.
- ✓ Keep a food diary. Write down all of the food you eat in a day, what time you eat, and your feelings at the time. Review your diary to find ways to improve your eating habits.
- ✓ Dish up smaller amounts of high-calorie foods, and larger amounts of low-calorie foods such as vegetables and fruits. Compare your portions to the serving size listed on food packaging for a few days so you know how much you are eating. Learn more from the *2005 Dietary Guidelines for Americans*, which is available online at <http://www.healthierus.gov/dietaryguidelines>
- ✓ At restaurants, eat only half of your meal and take the rest home.

Improving risk factors such as cholesterol levels may motivate patients, especially if changes are achieved in the face of slow weight loss.

If your patient makes healthy behavior changes, offer praise to boost self-esteem and keep him or her motivated.

**6. Follow up.** When you see your patient again, note progress made on behavior changes, such as walking at least 5 days a week. If your patient has made healthy behavior changes, offer praise to boost self-esteem and keep him or her motivated. Likewise, discuss setbacks to help your patient overcome challenges and be more successful. Set a new weight goal with your patient. This may be for weight loss or prevention of weight gain. Discuss eating and physical activity habits to change or maintain to meet the new weight goal.

## What resources are available for patients?

### Organizations

#### **American College of Sports Medicine**

P.O. Box 1440  
Indianapolis, IN 46206–1440  
Phone: (317) 637–9200  
Internet: <http://www.acsm.org>

#### **American Dietetic Association**

120 South Riverside Plaza, Suite 2000  
Chicago, IL 60606–6995  
Toll-free number: 1–800–877–1600  
Internet: <http://www.eatright.org>

### Publications and Websites

**Active at Any Size** is a brochure from WIN that helps very large people become more physically active. National Institutes of Health (NIH) Publication No. 04–4352.

**Better Health and You: Tips for Adults** is a brochure from WIN on healthy eating and physical activity. It is part of the series *Healthy Eating and Physical Activity Across Your Lifespan*. NIH Publication No. 07–4992.

**Finding Your Way to a Healthier You: Based on the Dietary Guidelines for Americans** is a brochure from the U.S. Department of Health and Human Services (DHHS) and the U.S. Department of Agriculture. It is available online at <http://www.health.gov/dietaryguidelines/dga2005/document/pdf/brochure.pdf>. DHHS Publication No. HHS–ODPHP–2005–01–DGA–B.

**SmallStep.Gov** is a website from DHHS that helps users take small steps toward a healthy weight. You can find it online at <http://www.smallstep.gov>.

**Walking: A Step in the Right Direction** is a pamphlet from WIN about beginning a walking program. NIH Publication No. 07-4155.

**Weight Loss for Life** is a brochure from WIN offering sensible weight-control advice. NIH Publication No. 04-3700.

## What resources are available for health professionals?

**Aim for a Healthy Weight Education Kit** is a patient education kit from the National Heart, Lung, and Blood Institute (NHLBI) that helps health care providers develop effective weight-management programs in their offices or clinics. It is available at [http://www.nhlbi.nih.gov/health/prof/heart/obesity/aim\\_kit](http://www.nhlbi.nih.gov/health/prof/heart/obesity/aim_kit). NIH Publication No. 02-5212. 2002.

**BMI Calculator** is a free tool for Palm® hand-held computers from NHLBI. It is available online at [http://hin.nhlbi.nih.gov/bmi\\_palm.htm](http://hin.nhlbi.nih.gov/bmi_palm.htm).

**Medical Care for Obese Patients** is a fact sheet from WIN to help health care providers offer optional medical care to patients who are obese. This publication features a complete BMI table. NIH Publication No. 03-5335.

**The Practical Guide: Identification, Evaluation, and Treatment of Overweight and Obesity in Adults** is an 88-page guide from NHLBI for health care providers about helping patients control weight. Includes tools for patients. It is available at <http://www.nhlbi.nih.gov/guidelines/obesity/practgde.htm>. NIH Publication No. 00-4084.

**Weight and Waist Measurement: Tools for Adults** is a WIN fact sheet that describes how to accurately take these two measures and explains the health risks associated with excess weight. NIH Publication No. 04-5283.

# Weight-control Information Network

1 WIN Way  
Bethesda, MD 20892-3665  
Phone: (202) 828-1025  
Toll-free number:  
1-877-946-4627  
Fax: (202) 828-1028  
E-mail:  
*WIN@info.niddk.nih.gov*  
Internet:  
*http://www.win.niddk.nih.gov*

The Weight-control Information Network (WIN) is a service of the National Institute of Diabetes and Digestive and Kidney Diseases of the National Institutes of Health, which is the Federal Government's lead agency responsible for biomedical research on nutrition and obesity. Authorized by Congress (Public Law 103-43), WIN provides the general public, health professionals, the media, and Congress with up-to-date, science-based health information on weight control, obesity, physical activity, and related nutritional issues.

This fact sheet was also reviewed by Benjamin Caballero, M.D., Ph.D., Professor of International Health and Pediatrics, Director of the Center for Human Nutrition, Johns Hopkins University. A review was also conducted by Shiriki K. Kumanyika, Ph.D., M.P.H., Associate Dean for Health Promotion and Disease Prevention, Director of the Graduate Program in Public Health Studies, Professor of Epidemiology, Department of Biostatistics and Epidemiology, University of Pennsylvania School of Medicine.

# ASSESSMENT OF THE OVERWEIGHT ADULT PATIENT



- ***Assessing the Adult Overweight Patient***
- ***Vital Signs***
- ***Body Composition***
- ***Body Mass Index (BMI)***
- ***Waist Circumference***
- ***Weight History***
- ***Medical Examination***
- ***Labs***
- ***Patient Encounter Algorithm***

# ASSESSMENT OF THE ADULT OVERWEIGHT PATIENT

## Assessing the Overweight Adult Patient

Obesity is a chronic disease requiring a lifelong effort to maintain a healthy body weight and lifestyle. The primary care provider has a key role in the assessment and promotion of change toward a healthier lifestyle<sup>3</sup>. Disease management requires a multidisciplinary approach that includes using evidence based clinical guidelines to open discussions about weight management with patients, setting individual patient goals, providing information and resources (i.e. handouts and referrals), and follow-up<sup>4</sup>. The process includes assessment, discussion, and recommendations. The assessment should include utilizing vital signs, medical history, physical examination and laboratories to determine whether the patient is overweight or obese, and whether there are associated health risks such as type 2 diabetes, hypertension, and dyslipidemias.

### Assessment of Risk Status

The patient's risk status should be assessed by determining the degree of overweight or obesity, based on BMI, presence of abdominal obesity (using waist circumference when indicated), and the presence of concomitant cardiovascular disease risk factors and/or co-morbidities. Obesity increases the risk for a variety of chronic diseases and excess body weight increases the risk of death from many causes<sup>5,6</sup>.

Patients can be considered at high absolute risk for obesity related disorders if they have three or more of the following risk factors<sup>7,8</sup>:

- established coronary heart disease
- presence of other atherosclerotic heart disease
- type 2 diabetes
- sleep apnea

Other associated health risks include:

- Certain forms of cancer,
- respiratory disease,
- gynecologic abnormalities,
- osteoarthritis,
- gall stones, and
- stress incontinence.

## Vital Signs

**O**btaining accurate measurement of a patient's vital signs is the first step to assessing an overweight patient. At each visit the following measures should be taken:

- Blood pressure
- Pulse
- Respiratory rate
- Temperature
- Height
- Weight

Also, additional assessments are necessary to determine a patient's level of overweight or obesity:

- Body Mass Index (BMI)
- Waist Circumference

## Body Composition

**A**lthough the evaluation of body composition can involve advanced technologies such as dual energy x-ray absorptiometry, hydrostatic weighing and magnetic resonance imaging, more practical office-based methods using anthropometry are considered adequate in the primary care office setting.

For routine clinical use, anthropometric measurements utilizing height and weight have been preferred because of low cost and ease of measurement. Anthropometry is the study of systematic collection and correlation of body measurements. The National Institutes of Health and the World Health Organization have adopted similar body weight (adjusted for height) guidelines for defining overweight, obesity, and body mass index (BMI) criteria, and the U.S. Preventive Services Task Force found good evidence that BMI, calculated as a weight in kilograms, divided by height in meters squared, is reliable and valid for identifying adults at increased risk for mortality and morbidity due to overweight and obesity<sup>9,10</sup>.

## Body Mass Index

**A**n individual's degree of obesity can be assessed by calculating BMI. Physicians are encouraged to track a patient's BMI in the medical records for monitoring progress, and during patient discussions about weight management, promoting healthy lifestyles and necessary behavior changes. Body mass index does not account for individual proportions of muscle, bone/cartilage, and water weight and is not a direct measure of body fat. However it can be used as an indirect measure of body fat. Accuracy varies according age, race, and level of fitness. When necessary a more accurate measure of body fat can be determined using various methods including underwater weighing, bioelectrical impedance analysis, and body fat meters<sup>11</sup>.

There are a number of methods available to assist clinicians with determining a patient's BMI including long hand formulas, tables<sup>12</sup>, commercially available wheels and computer based calculators including PDA software, online websites and desktop software. See the BMI Resource Links and Calculators section for an expanded Adult BMI Table, sample calculation, additional resources and informational website links. \*

\* See Resources section for an expanded BMI table up to 450 lbs.

**Adult Body Mass Index (BMI) Table**

Height	Weight in Pounds																						
	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
4'0"	24	27	31	34	37	40	43	46	49	52	55	58	61	64	67	70	73	76	79	82	85	88	92
4'2"	22	25	28	31	34	37	39	42	45	48	51	53	56	59	62	65	67	70	73	76	79	82	84
4'4"	21	23	26	29	31	34	36	39	42	44	47	49	52	55	57	60	62	65	68	70	73	75	78
4'6"	19	22	24	27	29	31	34	36	39	41	43	46	48	51	53	55	58	60	63	65	68	70	72
4'8"	18	20	22	25	27	29	31	34	36	38	40	43	45	47	49	52	54	56	58	61	63	65	67
4'10"	17	19	21	23	25	27	29	31	33	36	38	40	42	44	46	48	50	52	54	56	59	61	63
5'0"	16	18	20	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	53	55	57	59
5'2"	15	16	18	20	22	24	26	27	29	31	33	35	37	38	40	42	44	46	48	49	51	53	55
5'4"	14	15	17	19	21	22	24	26	27	29	31	33	34	36	38	39	41	43	45	46	48	50	51
5'6"	13	15	16	18	19	21	23	24	26	27	29	31	32	34	36	37	39	40	42	44	45	47	48
5'8"	12	14	15	17	18	20	21	23	24	26	27	29	30	32	33	35	36	38	40	41	43	44	46
5'10"	11	13	14	16	17	19	20	22	23	24	26	27	29	30	32	33	34	36	37	39	40	42	43
6'0"	11	12	14	15	16	18	19	20	22	23	24	26	27	28	30	31	33	34	35	37	38	39	41
6'2"	10	12	13	14	15	17	18	19	21	22	23	24	26	27	28	30	31	32	33	35	36	37	39
6'4"	10	11	12	13	15	16	17	18	19	21	22	23	24	26	27	28	29	30	32	33	34	35	37
6'6"	9	10	12	13	14	15	16	17	18	20	21	22	23	24	25	27	28	29	30	31	32	34	35
6'8"	9	10	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	27	29	30	31	32	33

**Key****Healthy Weight****Overweight****Obese**

## Waist Circumference<sup>13</sup>

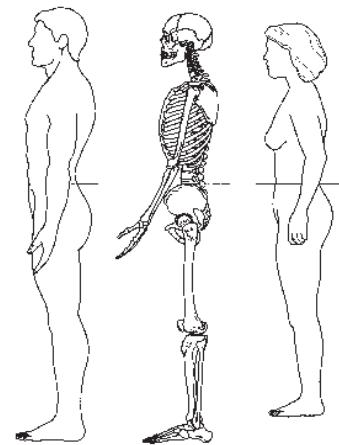
Measurement of waist circumference is a second obesity assessment tool used by some practices to determine an individual's degree of excess abdominal fat. Abdominal fat poses a greater health risk than peripheral fat, and waist circumference may be more predictive of disease risk than BMI in normal or overweight patients. It is important to note that waist circumference is measured at the level of the iliac crest, not the umbilicus ("natural" waist). It may be necessary for clinical staff to explain the importance of waist circumference measurements as part of the medical assessment:

### When to measure waist circumference<sup>14</sup>:

- As part of an initial patient assessment
- To monitor weight loss therapy in patients with a BMI <35

### To measure patient waist circumference:

1. Locate the upper hip bone and top of the iliac crest when patient is standing.
2. Place a measure tape in a horizontal plane at the level of the iliac crest around the abdomen ensuring the tape is snug and parallel with the floor.
3. The patient should be asked to breathe normally while the measurement is taken. The measurement should be read at the end of patient exhalation.



### Abnormal Waist Circumferences

- Greater than 40 inches (102 cm) for men
- Greater than 35 inches (88 cm) for women

*Guidelines on Overweight and Obesity: Electronic Textbook". National Heart, Lung, and Blood Institute. Retrieved May, 2007.*

## BMI and Waist Circumference Classifications of Disease Risk\*

Body mass index (BMI)		Disease Risk Relative to Normal Weight and Waist Circumference		
Category	BMI (kg/m <sup>2</sup> )	Obesity Class	Men ≤ 40 inches Women ≤ 35 inches	Men > 40 inches Women > 35 inches
Underweight	< 18.5			
Normal	18.5 – 24.9			
Overweight	25.0 – 29.9		Increased	High
Obesity	30.0 – 34.9	I	High	Very High
	35.0 – 39.9	II	Very High	Very High
Extreme Obesity	≥ 40	III	Extremely High	Extremely High

\*Disease risk for type 2 diabetes, hypertension and cardiovascular disease

Source: "The Practical Guide: Identification, Evaluation, and Treatment of Overweight and Obesity in Adults". National Heart, Lung, and Blood Institute. October 2000.

## Weight History

Once a diagnosis of overweight or obesity has been made providers should integrate a weight history within the medical history or refer the patient to a qualified weight management program. A comprehensive weight history should include questions about birth weight, early childhood weight and a chronology of weights over the lifecycle, including such milestones as lowest adult weight and maximum adult weight. It should also explore precipitating factors such as pregnancy, surgeries, and adverse life events, along with any indications of eating disorders, such as frequent binge eating, vomiting or use of laxatives. Another important component of the weight history is determining if there have been past attempts at weight loss, which types of programs, and whether they resulted in maintained weight loss. Providers should also identify relevant family and social history events that may be relevant, such as family members with a history of obesity, cardiovascular disease, or diabetes; or low socioeconomic status. Nutritional status, eating habits and physical activity patterns should be routinely evaluated, along with identifying risk factors for obesity within the family. Providers should also address preventing further weight gain, reasons for weight gain, and the benefits of weight loss.

It is important to ask open-ended questions. A question to open the discussion might be:

**How do you feel about us talking about your physical activity, TV viewing, and eating today?**

Next, follow up with more focused questions addressing both physical activity and nutrition. Some questions to consider include:

### Weight History Questions

- When were you at your lowest weight? (Provide triggers such as: wedding, college)
- How long were you at that weight?
- When were you at your highest weight? What was happening in your life at that point?
- Have you ever tried a weight loss program before? What program(s)?
- How much did you lose and how long did you maintain that weight?

### Physical Activity Questions

- How many hours of television do you watch each day?
- How many hours do you spend on the computer each day?
- How often do you get outside for physical activity? Is it safe to do so in your neighborhood?
- How often does your family do something active together? What might that include?
- How easy is it to exercise during your work day?

## **Eating & Nutrition Questions**

- What did you eat yesterday? Is this representative of a normal day?
- Do you eat breakfast?
- When eating at home, does your family routinely eat while watching the TV?
- How often do you eat out each week?
- How often do you eat fruits and vegetables as part of a meal?
- What sort of snacks do you keep around the house?
- How many sodas or sweetened beverages do you drink each day
- Do you know how to read nutrition labels?

## **Focused Family History**

Does anyone in your family have a history of...

- Overweight or obesity?
- Diabetes?
- Coronary heart disease?
- Hypertension?
- Dyslipidemia?
- Cancers?
- Genetic disorders?

## **The Medical Examination**

When a patient is diagnosed as overweight or obese a more detailed medical evaluation should be performed to determine co-morbid conditions and the cause(s) of overweight/obesity. Certain populations including pregnant women, seniors, etc. require special considerations and more individualized weight management programs outside the scope of these general guidelines.

After assessing a patient's weight management status by documenting baseline measures, be sure to note any medications or psychiatric conditions that could be contributing to weight gain. In addition, monitor any co-morbid conditions.

## Labs

The following screening labs are suggested to determine health conditions associated with a patient's weight. Please note that ranges and values will vary by lab and measurement tool

Test	Healthy Range for Results
HDL (High Density Lipoprotein)	Women >40 mg/dL Men > 50 mg/dL
LDL (Low Density Lipoprotein)	<100 mg/dL
Total cholesterol	<200 mg/dL
Triglycerides	<150 mg/dL
Fasting Blood Glucose	<110 mg/dL * 90-130 mg/dL **
Fasting Insulin	< 110 mg/dL
Albumin/Creatinine Ratio	Normal: 0-30 µg/mg creatinine Microalbuminuria: 30-300 µg/mg creatinine Clinical albuminuria: >300 µg/mg creatinine <sup>3</sup>
Total Protein	6.0 to 8.3 gm/dL
BUN (Blood Urea Nitrogen)	Adult: 7-20 mg/100 mL
ALP (Alkaline Phosphatase)	20 to 140 IU/L (international units per liter)
ALT (Alanine Amino Transferase)	167 to 667 nkat/L (10 to 40 U/L)
AST (Aspartate Amino Transferase)	8 to 35 U/L (units per liter) or 5 to 40 IU/L
Bilirubin	Bilirubin, direct ,0.3 mg/dL Bilirubin, total 0.2-1.3 mg/dL <sup>9</sup>
Thyroid Stimulating Hormone	0.4 to 4.0 mIU/L

\*American Association of Clinical Endocrinologists

\*\* American Diabetes Association

## Weight Assessment Questionnaire

Overweight and obese patients should be given a weight assessment questionnaire to determine their eating and physical activity behaviors. A sample weight assessment questionnaire is located in the Provider Resources section of this toolkit for your reference.



Measure weight, height, and waist circumference. Calculate body mass index (BMI)

## Patient Encounter Decision Tree

Educate / Reinforce

BMI  $\geq$  25 OR  
waist  $>$  35 in  
(88cm)(F)  
 $>$  40 in (102 cm)  
(M)

Assess Risk factors

BMI  $\geq$  30 OR [BMI  
25 to 29.9 OR  
waist  $>$  35 in (f)  
 $>$  40 in (M) AND  $\geq$  2  
risk factors]

Does patient  
want to lose  
weight?

Progress  
being  
made/goal  
achieved?

Yes

Clinician and patient  
devise goals and  
treatment strategy for  
weight loss and risk factor  
control

Assess reasons for  
failure to lose  
weight

Maintenance  
Counseling

A

B

C

BMI 25-29.9  
and  $\geq$  2 risk  
factors or BMI  
 $\geq$  30  
Lifestyle  
Therapy

BMI  $\geq$  27 and  $\geq$  2 risk  
factors or BMI  $\geq$  30  
Pharmacotherapy

BMI  $\geq$  35 and  $\geq$   
2 risk factors or  
BMI  $\geq$  40  
Weight Loss  
Surgery

Periodic weight,  
BMI, and waist  
circumference  
check

Yes

Adapted from the NHLBI Obesity Education Initiative Expert Panel on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults, (2002). "A Quick Reference Tool ACT." National Institutes of Health, 79-80.

# WEIGHT MANAGEMENT

4



- ***Weight Loss and Maintenance***
- ***Weight Loss Goals***
- ***Patient Goal Setting***
- ***Weight Maintenance Program Components***
- ***Treatment Considerations***
- ***Dietary Therapy***
  - *Role of Registered Dietitian*
  - *Medical Nutrition Therapy (MNT)*
- ***Physical Activity***
- ***Behavior Management***
- ***Pharmacotherapy***
- ***Bariatric Surgery***

## Weight Loss and Maintenance

The NHBLI recommends treatment for patients with a BMI of 25.0 to 29.9 kg/m<sup>2</sup> or a waist circumference greater than 88 cm for females or greater than 102 cm for males AND two risk factors or more. Treatment is also recommended for patients with a BMI of 30 or more, regardless of risk factors. (Please refer to the Patient Encounter Decision Tree on page 25 for further details). The provider and patient should then set goals for weight loss and risk factor control. Realistic short and long-term goals should be encouraged by a discussion about healthy weight versus ideal body weight<sup>15</sup>. Weight loss and maintenance programs that include combination therapy consisting of dietary, physical activity, and behavioral therapy have been found to be more effective than one component alone. Frequent clinical encounters with professional counselors during the first six months may promote weight loss and maintenance. Patients should also be aware that weight management will be an ongoing commitment that may require participation in a long-term weight maintenance program.

Nearly 80 percent of patients who lose weight will gradually regain it if they are not supported by a weight maintenance program. The keys to a successful weight maintenance program are patient motivation and team support from health care providers. Effective management of overweight and obesity can be delivered by a variety of health care professionals including primary care providers, registered dietitians, nutritionists, exercise physiologists, nurses and psychologists.

Achieving and maintaining an appropriate body weight requires daily effort, good dietary/nutritional behaviors and adequate physical activity. Combined management approaches (diet, exercise and behavior modification) are likely to produce better results than any single approach.

Clinicians should encourage patients to consult their health plan for weight loss/maintenance programs that may be covered by their policy.

### Exclusion from Weight Loss Therapy

Weight loss therapy is not appropriate for:

- most pregnant and lactating women
- those with serious psychiatric illness
- patients with a variety of serious illnesses in whom caloric restriction might exacerbate the illness

### Weight Loss Goals

An initial weight loss goal of 10 percent of body weight over a six-month period is realistic for most patients.

Starting BMI	Daily Calorie Reduction	Estimated Weekly Weight Loss
27 – 35	300 – 500 k/cal	½ - 1 pound
>35	500 – 1000 k/cal	1 – 2 pounds

## Patient Goal Setting<sup>16</sup>

There are three key weight management stages that should be considered when determining an approach and discussing realistic patient goals<sup>17</sup>:

1. Prevention of further weight gain.
2. A reduction in body weight.
3. Maintaining long term weight loss.

Patient should be encouraged to set realistic weight loss and behavior changing goals to promote healthy lifestyles including the following:

- My goal will be to lose \_\_\_\_\_ pounds.
- My goal is to consume \_\_\_\_\_ calories
- My goal is to consume \_\_\_\_\_ fat grams per day.
- My physical activity goal is \_\_\_\_\_ minutes \_\_\_\_\_ days of the week for the next \_\_\_\_\_ weeks. I plan to do the following physical activities (ex. walking, bike riding, etc.).

## Weight Management Program Components

A comprehensive weight maintenance program must be followed to sustain weight loss. Each of the following components should be adapted accordingly to fit the needs of specific social or cultural groups.

- Dietary therapy
- Physical activity
- Behavior therapy
- Pharmacotherapy\*
- Bariatric surgery\*

\*A combined therapy of diet, physical activity and behavior therapy should be maintained for 6 months before considering these options.

## Treatment Considerations<sup>18</sup>

- Has the patient had prior weight loss attempts? Consider any successes, failures, and/or barriers.
- Assessment of past weight loss attempts should include questions or a questionnaire that identifies the following:
  - Type of weight loss program including dates and duration
  - Amount of weight lost over a period of how long
  - How long was weight loss maintained
  - What made keeping the weight off difficult
- Is the patient motivated to make the behavior and lifestyle changes necessary for successful weight loss?
- Does the patient have any lifestyle, relationship or work stresses that will prevent successful weight loss including time availability?
- Does the patient have any eating disorders or psychological disorders that may be contributing to their obesity and/or weight management issues?
- Is the patient capable of following recommendations?
- How much weight does the patient want/expect to lose? Is the goal realistic?
- Are there medical conditions contributing to the obesity?
- Are any over-the-counter or prescribed medications contributing to the obesity? (i.e. herbs or dietary supplements)

## Dietary Therapy<sup>19, 20, 21, 22, 23, 24, 25</sup>

**S**ensible eating, in combination with realistic physical activity goals can play an important part in helping obese patients achieve a healthy weight. Physicians should be aware that overly restrictive approaches towards eating or extreme dieting can sometimes be detrimental to a healthy eating plan and may lead patients to weight cycle. Ideally dietary therapy should be provided by a registered dietitian (RD), as part of a comprehensive weight management plan. A proper dietary assessment should be conducted prior to making recommendations.

### ***Role of Registered Dietitian***

Some health care providers and offices employ the services of registered dietitians, for assistance in educating patients about nutrition and healthy diets. Dietitians can provide guidance about diet options, discuss behavioral motivations and promote healthy eating in conjunction with physical activity by separating 'fads' from facts.

### ***Medical Nutrition Therapy (MNT)<sup>26</sup>***

Medical nutrition therapy (MNT) services involve a nutrition assessment, specific diet planning, and counseling services to prevent or treat an illness or conditions including overweight and obesity. MNT counseling services are typically provided by a RD focusing on behavior and lifestyle changes with the goal of addressing nutrition problems and associated medical conditions/diseases. During each counseling session the RD works with patients to assess individual needs, determine goals, develop a care plan and identify interventions.

Coverage for and access to MNT services vary by health insurance program or carrier. Consult with your health insurance Evidence of Coverage booklet or call your health plan regarding coverage for MNT services.

Medicare currently covers MNT services for people with diabetes or renal disease as a means of helping to manage the condition covering 3 hours of one on one counseling the first year, and 2 hours each subsequent year. Beneficiaries may be able to receive more hours of treatment with a physician's referral if the condition, course of treatment or diagnosis changes. Physicians must prescribe MNT services for Medicare recipients and renew the referral annually as necessary<sup>27</sup>.

- Recommended Strategies
  - Tell patients to eat more healthy foods including fruits and vegetables, whole grains, and lean meats
  - Emphasize the importance of regular meals
  - Recommend dietary substitutions
  - Discuss portion control
  - Encourage eating trigger awareness
  - Review and discuss weekly food and activity diaries (when available)
  - Provide patient with dietary information and handouts (as appropriate)

- Commercial Options
  - Meal Replacements (MR) are pre-packaged food items that provide calorie and portion controlled meals
  - Commercial weight loss programs – some health plans provide member incentives to enroll in commercial programs including reimbursement and discounts
  - Internet based programs and resources
  - Counseling by registered dietitians or nutritionists
- General Dietary Recommendations
  - Low Calorie Diet Recommendations - Appropriate caloric intake will vary by gender, age, and daily levels of physical activity.
    - Women: 1000 – 1200 kcal/day for most women
    - Men: 1200 – 1600 kcal/day
    - Patients experiencing hunger can vary kcal/day by 100 to 200 per day.
  - Low carbohydrate, high protein diets
    - Weight loss results from this type of diet may not be sustained over time.
  - Very Low-Calorie Diets (VLCD) are a medically-supervised diet that typically use commercially prepared formulas and foods to promote rapid weight loss in obese patients. Such diets typically involve the consumption of liquid shakes or bars to replace all food intake for several weeks or months. Other VLCD methods involve diets composed almost entirely of lean protein foods, such as fish and chicken. People on VLCD consume about 800 calories per day or less and require supplemental vitamins and micronutrients to ensure daily nutritional requirements are met<sup>28</sup>.

### ***Diet Education Efforts***

Patients should be educated to pay particular attention to the following:

- Calorie value of different foods
- How to read food nutrition labels and food composition (fats, carbohydrates, and proteins)
- Developing new purchasing habits in favor of low-calorie foods
- Using healthier food preparation methods (i.e. broiling, baking, steaming)
- Avoiding consumption of high calorie foods
- The importance of drinking water
- Reducing portion sizes
- Limiting alcohol consumption

### ***Food Proportion Tips<sup>29</sup>***

- Serve meals on smaller plates
- Share a meal when eating out
- Avoid second helpings
- Gradually cut back on portion sizes
- Avoid filling extra plate space with additional helpings

**Better Eating Habit Tips<sup>30</sup>**

- Eat 3 balanced meals daily with planned snacks
- Plan family meals together at a table.
- Do not eat in front of the TV.
- Keep healthy food within easy reach and junk foods out of the house.
- Eat slowly and stop when full or satisfied.
- Eat fruits and vegetables for snacks
- Choose lower fat, lower calorie foods
- Prepare food by broiling, baking, and barbecue instead of frying
- Eat lean meats without skin including beef, fish and poultry.
- Limit fast food consumption – especially “super-sized” meals.
- Drink six to eight glasses of water each day
- Limit drinks high in calories, sugar and fructose corn syrup such as soda and juices.
- Limit alcoholic beverages

## Physical Activity

Patients should make physical activity part of everyday life by planning enjoyable activities. Physical activity has been shown to prevent weight regain when initiated slowly and increased gradually. The following section provides basic information about the importance of being active.

***Patients should be encouraged to get 30 - 60 minutes of moderate physical activity most or all days of the week.***

To assess patient physical activity levels and attitudes try the following methods<sup>31</sup>:

- Ask patients to complete a physical activity questionnaire (What questionnaire?)
- Ask opened end questions during the patient interview/exam.
  - What types of activities do you enjoy?
  - How often are you physically activity or exercise?
  - Have you thought about increasing your physical activity participation
  - Do you think physical activity will benefit you? How?
  - What prevents you from being physically active or exercising? For example: work, lack of free time, etc.
  - How active are you during an average workday?
  - Are you willing or interested in changing your current level of physical activity?

### Physical Activity Risk Assessment

Most healthy adults can pursue a regimen of moderate physical activity if they are appropriately screened and provided exercise that is progressed in a reasonable manner. For most patients, a risk assessment prior to providing a physical activity prescription can be done quickly and effectively. The Patient-centered Assessment and Counseling for Exercise and Nutrition (PACE) manual provides quick and easy to use physical activity screening protocols and recommendations. The PACE Physical Activity Readiness Questionnaire (PAR-Q)<sup>®</sup> can be completed, while the patient is in the waiting room, in 1-2 minutes before seeing the provider. PACE materials are available for a fee, a link is included in this toolkit.

The PACE form is a modified version of the Health Canada “PAR-Q and You”<sup>®</sup> form, which is a validated and proven tool for screening individuals prior to commencing a physical activity program. The form includes screening questions about whether patients experience pain or problems when being physically active, and whether the patient is taking any prescription medications. The PAR-Q and You, plus additional screening forms, are available at: <http://www.csep.ca/main.cfm?cid=574&nid=5110>.

The American College of Sports Medicine has established more extensive guidelines when medical screening and exercise testing are necessary. This type of screening is usually necessary when there are additional risk factors or medical conditions such as degenerative joint disease, heart disease and diabetes when the potential risk of a cardiovascular event or musculoskeletal injury is increased.

### ***Potential Benefits of Physical Activity***

- Reduced risk of the following:
  - Coronary heart disease
  - Type 2 diabetes
  - Certain cancers
  - Depression
  - Premature mortality
- Improved blood pressure
- Reduced cholesterol
- Improved energy and stamina
- Increase fitness levels
- Helps build and maintain bones, muscles, and joints
- Increases flexibility
- Helps manage weight

### ***The Physical Activity Prescription***

- Inform patient of their target heart rate for physical activity and teach them how to take their own pulse.  
$$(220 - \text{Age}) \times (\% \text{ Intensity, 70-80\%}) = \text{Standard Target Heart Rate}^{32}$$
- Discuss appropriate physical activities with individual patients. Recommend physical activities to match the patient's abilities and health status.
- Patient activity goals should be realistic and accompanied by an action plan.
- Patients should be advised to progressively increase intensity and duration.
- Physical activities can be divided into short periods of activity to accommodate barriers.
- Patients should engage in activities they enjoy.
- Recommendations should address overcoming any barriers.
- Patients should be encouraged to enlist a workout buddy as part of the activity.
- The goal should be to make physical activity part of the daily routine.
- Patients should be encouraged to decrease sedentary behaviors including watching televisions, sitting at a desk, etc.

### ***Physical Activity Tips***

- Set reasonable exercise goals
- Start slow building up your level and duration of activity gradually.
- Warm up by stretching before any physical activities
- Wear comfortable shoes and dress appropriately and comfortably.

- Breathe in and out, taking deep breathes while exercising
- Drink plenty of water before and after physical activities
- Try substituting the stairs instead of taking the elevator
- Try parking further away and walking
- Take your pulse to set and monitor intensity of activity.

***Physical Activity Ideas\****

Bicycling	Gardening	Jump Rope	Push Mow the Lawn
Dancing	Golfing	Hiking	Raking Leaves
Swimming	Water Aerobics <sup>^</sup>	Team Sports	Frisbee/Catch
Tennis	Jogging	Walking	Weight Lifting

\* Patient's should consult with their primary care provider before engaging in physical activities due to individual physical limitations and/or health status.

<sup>^</sup> Recommended by the Arthritis Foundation for patients with arthritis or mobility limitations.

***Example Calorie Use Chart***

The following chart is drawn from the American Heart Association Inc.'s Physical Activity Calorie Use Chart, which shows the approximate calories spent per hour by a 100-, 150-, and 200- pound person doing a particular activity.

Calories burned per hour of activity by weight range			
Activity	100 lb	150 lb	200 lb
Bicycling, 6 mph	160	240	312
Bicycling, 12 mph	270	410	534
Jumping rope	500	750	1,000
Running, 5.5 mph	440	660	962
Running, 7 mph	610	920	1,230
Running, 10 mph	850	1,280	1,664
Swimming, 25 yds/min	185	275	358
Swimming, 50 yds/min	325	500	650
Tennis Singles	265	400	535
Walking, 2 mph	160	240	312
Walking, 3 mph	210	320	416
Walking, 4.5 mph	295	440	572

American Heart Association, Inc. 1999/2002. Retrieved from <http://www.justmove.org/fitnessnews/hfbodyframe.cfm?Target=caloriechart.html>

## Behavior Management<sup>33</sup>

**B**ehavior therapy focuses on approaches to overcoming barriers to compliance necessary for the management of overweight and obesity. Including behavioral therapy helps with compliance and promotes the adoption of changes in diet and physical activity. Common behavior therapies include:

- **Self Monitoring** - involves observing and recording behavior aspects including calorie intake, exercise/physical activity, medication use, and changes in body weight.
- **Rewards** – Can be used to encourage attainment of goal. Effective rewards can be both tangible (e.g. a movie, music CD, etc.) and intangible (e.g. time off from working or quiet time away from the family)
- **Stimulus Control** – involves learning social or environmental cues that trigger undesirable eating habits and/or sedentary behaviors.
- **Stress Management** – involves using a variety of approaches to identify, reduce or eliminate individual stressors. Such therapies also include changing how the individual reacts to stressful situations and events.
- **Social Support** – involves including family and friends in the obesity treatment process, participating in community support groups or involvement in social activities or clubs. Peer support is often useful in helping patients become more self-accepting, manage stress, and successfully maintain weight loss<sup>34</sup>.
- **Cognitive Behavior Therapy** - a short-term, focused psychotherapy used to treat a wide range of problems including eating disorders. The therapy focuses on present thinking, behavior, and communication rather than on past experiences with an orientation toward problem solving. Patients are taught practical and rational self help skills used to change thoughts, feelings and behaviors<sup>35</sup>.
- **Psychological Aspects of Obesity** – More serious cases should lead to referral and treatment by a mental health professional.

## Pharmacotherapy Overview<sup>36</sup>

The cornerstone of obesity treatment is lifestyle management that incorporates dietary management, physical activity, and behavioral modifications. However some patients find difficulty in adopting and maintaining lifestyle changes. Pharmacological treatment of overweight and obesity should be reserved for patients who have failed at least 6 months of dietary and behavioral modifications resulting in suboptimal weight loss. Regardless of medication, all pharmacological treatments should be prescribed in combination with dietary and behavioral regimens that sustain weight loss.

Classification of medications available for treating obesity<sup>37</sup>

1. Sympathomimetics, approved for short-term and/or long-term use, suppress appetite by activating the hypothalamic centers of the brain.
2. Gastrointestinal (GI) lipase inhibitors reduce the body's ability to absorb dietary fat by blocking the enzyme lipase.

Approved Agents for Treating Obesity				
Mechanism of Action	Generic Name	DEA Schedule	Indication	Notes
Suppress appetite by activating the hypothalamic feeding center	Amphetamine/ Dextroamphetamine	II	Short-term treatment of obesity, ADHD*, narcolepsy	Not recommended due to high abuse potential
	Methamphetamine	II	Short-term treatment of obesity, ADHD*, narcolepsy	Not recommended due to high abuse potential
	Benzphetamine hydrochloride	III	Short-term adjunct treatment of obesity	Lower incidence of CNS side effects
	Diethylpropion	IV	Short-term adjunct treatment of obesity	Lower incidence of CNS side effects
	Phendimetrazine	III	Short-term adjunct treatment of obesity	Lower incidence of CNS side effects
	Phentermine	IV	Short-term adjunct treatment of obesity	Lower incidence of CNS side effects
Serotonin and norepinephrine reuptake inhibitor	Sibutramine	IV	Long-term adjunct treatment of obesity	Efficacy observed with long-term treatment (at least 2 years)

\*ADHD=attention-deficit hyperactivity disorder

Gastrointestinal Lipase Inhibitors				
Mechanism of Action	Generic Name	DEA Schedule	Indication	Notes
Inhibitor of gastrointestinal and pancreatic lipase activity	Orlistat	None*	Long-term treatment of obesity (weight loss and maintenance)	Most effective when combined with low fat and calorie diet; fat soluble vitamin supplementation required. Gastrointestinal side effects may include: intestinal flatulence, borborygmi, abdominal cramps, fecal incontinence, oily spotting and flatus with discharge. <sup>38</sup>

\*Available as prescription and over-the-counter products.

Pending FDA Approval:

- There are more than 350 medications in varying stages of research – please refer to FDA website for more information. [www.fda.gov/cder/index.html](http://www.fda.gov/cder/index.html)

## Bariatric Surgery Overview

**B**ariatric surgery is a treatment option for patients with clinical obesity (BMI  $\geq 40$  or a BMI  $\geq 35$  with obesity related co-morbid conditions) when less invasive methods of weight loss such as diet, exercise, pharmacotherapy, and behavior modification have failed or the patient is at high risk for obesity related morbidity or mortality<sup>39</sup>. Many common obesity related health consequences resolve or decrease in severity with post bariatric surgery weight loss.

Patients considering bariatric surgery as a treatment option may need referral to a bariatric surgeon for further consultation and evaluation.

The most common surgical procedures are Gastric Bypass Roux-en-Y (RYGBP), Adjustable Gastric Banding (AGB), and Biliopancreatic Bypass/Diversion with Duodenal Switch.

The **CMA Foundation and CAHP's Pre/Post-Bariatric Surgery Provider Toolkit** contains additional information on the following aspects of Bariatric Surgery:

- An overview of common bariatric surgery procedure types, categories and approaches
- Pre-operative evaluation of patients including selection criteria and referral considerations
- Special populations including over 65 years of age, adolescent, women of child bearing age, and public program beneficiaries
- Post-operative patient care
- Potential surgical complications
- Repeat procedures
- Post operative phases overview
- Appendices containing BMI information, a surgical procedure advantages/disadvantages table, additional bariatric surgery resources and related website links.

Additional resources and information links are available on the Obesity Provider Toolkit website.

# UNDERSTANDING ADULT OVERWEIGHT & OBESITY

5



- *The Dramatic Rise in Overweight & Obesity*
- *Definition of Overweight & Obesity*
- *Risk Factors*
- *Health Consequences of Overweight & Obesity*
- *Metabolic Syndrome*
- *Adult Treatment Panel III (ATP III)*

## The Dramatic Rise in Overweight & Obesity

Obesity is a complex chronic disease affected by environmental (physical, social and cultural), genetic, physiologic, metabolic, behavioral and psychological factors. Approximately 67 percent of adults in the United States are overweight or obese with 34 percent considered obese<sup>40</sup>. The prevalence of obesity poses a significant public health challenge because it is a major contributor to preventable death in the United States<sup>41</sup>. Overweight and obesity in adults has been associated with an increased risk of early mortality and co-morbid health conditions such as diabetes and cardiovascular disease in both adult males and females<sup>42</sup>. There are also significant health disparities, with African American and Latino populations showing significantly higher rates of overweight and obesity<sup>43</sup>.

### Definition of Overweight and Obesity

The body mass index – an individual's ratio of weight to height – is the widely accepted measurement of overweight and obesity. The National Institutes of Health define an adult individual overweight when their BMI is greater than or equal to 25 kg/m<sup>2</sup>. An individual is obese when BMI is greater than or equal to 30 kg/m<sup>2</sup>. Overweight and obesity occur when an individual's calorie absorption exceeds the amount of energy burned by the body. Evidence suggests that a number of risk factors contribute to obesity.

### Risk Factors<sup>44</sup>

<b>Genetic Influences</b>	<ul style="list-style-type: none"> <li>Family history of chronic diseases and genetic diseases.</li> </ul>
<b>Lifestyle</b>	<ul style="list-style-type: none"> <li>Limited physical activity</li> <li>Poor eating habits and/or timing of eating that leads to excessive calorie consumption</li> <li>Smoking, alcohol and narcotic use</li> </ul>
<b>Family Environment</b>	<ul style="list-style-type: none"> <li>Regular fast food consumption</li> <li>More than 2 hours per day of TV or computer use</li> <li>Sedentary lifestyle</li> </ul>
<b>Community &amp; Social Influences</b>	<ul style="list-style-type: none"> <li>Lack of access to healthy foods           <ul style="list-style-type: none"> <li>- Many low income neighborhoods are without full service grocery stores or farmers markets</li> </ul> </li> <li>Unsafe Neighborhoods           <ul style="list-style-type: none"> <li>- No sidewalks for safe walking or biking</li> <li>- Access to safe parks</li> <li>- Crime rates</li> </ul> </li> </ul>
<b>Psychological</b>	<ul style="list-style-type: none"> <li>Depression</li> <li>Patient's readiness to change</li> <li>Eating disorders such as anorexia and bulimia</li> </ul>

## Health Consequences of Overweight & Obesity

Obesity increases the risk for common related health consequences and chronic disease, which can result in poor health and premature death. Even a modest weight loss (5-10% of body weight) is associated with health benefits that include improvement of co-morbid health conditions<sup>45</sup>.

### Common obesity-related health conditions<sup>46, 47</sup>

#### Psychological

- Negative Self-Image
- Depression
- Eating Disorders

#### Endocrine

- Diabetes Mellitus Type 2
- Metabolic Syndrome

#### Pulmonary

- Obstructive Sleep Apnea
- Asthma

#### Orthopedic

- Osteoarthritis
- Gout

#### Oncology

- Gall bladder
- Esophagus
- Kidney
- Pancreas
- Colon
- Breast (post-menopausal)
- Endometrial
- Ovaries

#### Gastrointestinal

- Gastro Esophageal Reflux Disease (GERD)
- Gall Bladder Disease
- Non-Alcoholic Steatohepatitis

#### Cardiovascular

- Heart Disease
- Hypertension
- Atherosclerosis
- Stroke
- Dyslipidemia
- Stasis edema lymphedema

#### Reproductive

- Infertility
- Menstrual Irregularities

#### Dermatologic

- Cellulitis

## Metabolic Syndrome<sup>48, 49</sup>

Overweight and obese individuals are at greater risk of having metabolic syndrome. According to the American Heart Association the syndrome is defined by a combination of conditions that result in a higher risk for coronary artery disease. Other organizations use a slightly different classification system. Conditions include type 2 diabetes, obesity, high blood pressure, and a poor lipid profile with elevated LDL ("bad") cholesterol, low HDL ("good") cholesterol, and elevated triglycerides due to the association with higher blood insulin levels. The fundamental metabolic syndrome defect is increased insulin resistance in both adipose tissue and muscle. While patients with excess body fat who are physically inactive are at greater risk for developing insulin resistance, some individuals have a genetic predisposition to developing the syndrome. Drugs used to decrease insulin resistance usually have the added benefit of lower blood pressure and improved lipid profile. Patients with three or more of the following clinical indications are diagnosed with metabolic syndrome:

Risk Factor	Determinant Level
Abdominal Obesity • Men • Women	Waist Circumference • > 102 cm (>40 in) • > 88 cm (> 35 in)
Triglycerides	≥ 150 mg/dL
HDL Cholesterol • Men • Women	• < 40 mg/dL • < 50 mg/dL
Blood Pressure	≥ 130/≥ 85 mmHg
Fasting Glucose	≥ 100 mg/dL

## Adult Treatment Panel III (ATP III)<sup>50</sup>

The ATP III guidelines are evidence based recommendations for intensive cholesterol-lowering therapy. The ATP III guidelines focus on primary prevention of Coronary Heart Disease (CHD) in persons with multiple risk factors by managing elevated patient cholesterol levels to achieve the following optimal levels:

### Optimal Adult Cholesterol Levels

LDL Cholesterol (Primary Therapy Target)	< 100 mg/dL
HDL Cholesterol	> 40 mg/dL
Triglycerides	< 150 mg/dL
Total Cholesterol	< 200 mg/dL

# PATIENT EDUCATION RESOURCES

6

- *Daily Food and Activity Log*
- *Read It Before You Eat It*
- *Three Simple Steps to Eating More Fruits and Vegetables (English and Spanish)*
- *CDC Fruit and Vegetable Brochures (English and Spanish)*
- *Why Should I Be Physically Active?*
- *How Can Physical Activity Become a Way of Life?*
- *Example Calorie Use Chart*
- *Energize Yourself! Stay Physically Active*

# Daily Food and Activity Log

<b>FOOD &amp; BEVERAGE LOG</b>												
Date:		Weight:	Glasses of Water:	1	2	3	4	5	6	7	8	
Meal	Time	Food/Beverage	Amount	Calories In		Location/Mood						
Snack												
Meal												
Snack												
Meal												
Snack												
Activity Level Throughout Day:				Total Calories In:								
Sedentary	Moderate	Active										
<b>PHYSICAL ACTIVITY LOG</b>												
Time	Physical Activity	Minutes Active	Level of Intensity		Calories Out							
			Low / Moderate / High									
			Low / Moderate / High									
			Low / Moderate / High									
			Low / Moderate / High									
Total Time Active:		Total Calories Out:										

Daily Food and Activity Log adapted from:

Hill, J.O., Wyatt, H. (2002). *Outpatient Management of Obesity: A Primary Care Perspective*. Obesity Research (Vol. 10). Retrieved March 28, 2007 from [http://www.obesityresearch.org/cgi/reprint/10/suppl\\_2/124S.pdf](http://www.obesityresearch.org/cgi/reprint/10/suppl_2/124S.pdf) .

NAASO, The Obesity Society. Self Monitoring: Food Diary. In *The Role of behavior modification in obesity therapy* (Slide 8). Retrieved March 28, 2007 from <http://www.obesityonline.org/slides/slide01.cfm?tk=35&dp=6> .

National Heart, Lung, and Blood Institute. Daily Food and Activity Diary. In *Obesity Education Initiative*. Retrieved March 28, 2007 from [http://www.nhlbi.nih.gov/health/public/heart/obesity/lose\\_wt/diaryint.htm](http://www.nhlbi.nih.gov/health/public/heart/obesity/lose_wt/diaryint.htm) .



# READ IT *before you EAT IT!*

How many servings are you eating?



## Nutrition Facts

Serving Size 1 cup (228g)  
Servings Per Container 2

### Amount Per Serving

**Calories** 250   **Calories from Fat** 110

% Daily Value*	
<b>Total Fat</b> 12g	18%
Saturated Fat 3g	15%
<b>Cholesterol</b> 30mg	10%
<b>Sodium</b> 470mg	20%
<b>Total Carbohydrate</b> 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	

### Protein 5g

Vitamin A	4%	•	Vitamin C	2%
Calcium	20%	•	Iron	4%

\* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

Calories:	2,000	2,500
Total Fat	Less than	65g
Sat Fat	Less than	20g
Cholesterol	Less than	300mg
Sodium	Less than	2,400mg
Total Carbohydrate		300g
Dietary Fiber	25g	30g

What food would have this Nutrition Facts label? *Answer below.\**

## Get What You Need!

**Get LESS**  
5% or less  
is low  
20% or more  
is high

## Get ENOUGH

5% or less  
is low  
20% or more  
is high



# What's the Best Choice for You?

*Use the 5%-20% Guide to Daily Values to choose foods.*

\*Answer:  
Box of macaroni and cheese.

How do your choices stack up? The photos show approximate serving sizes from the five major food groups of the Food Guide Pyramid. This combination of food choices shows the servings from the Pyramid for an older child, a teen girl, an active woman, and most men, for one day. Teen boys and active men may need more servings of food.

[www.fns.usda.gov/tm](http://www.fns.usda.gov/tm)

United States Department of Agriculture • Food and Nutrition Service • October 2002

USDA is an equal opportunity provider and employer.

# Three simple steps to eating more fruits and vegetables.

Eating a variety of fruits and vegetables every day is healthy for you. They have vitamins and minerals that can help protect your health. Most are also lower in calories and higher in fiber than other foods. As part of a healthy diet, eating fruits and vegetables instead of high-fat foods may make it easier to control your weight.

1

Find out how many fruits and vegetables you need to eat every day.

## Women

AGE	FRUITS	VEGETABLES
19-30	2 cups	2½ cups
31-50	1½ cups	2½ cups
51+	1½ cups	2 cups



## Men

AGE	FRUITS	VEGETABLES
19-50	2 cups	3 cups
51+	2 cups	2½ cups



## Girls

AGE	FRUITS	VEGETABLES
2-3	1 cup	1 cup
4-8	1 cup	1½ cups
9-13	1½ cups	2 cups
14-18	1½ cups	2½ cups



## Boys

AGE	FRUITS	VEGETABLES
2-3	1 cup	1 cup
4-8	1½ cups	1½ cups
9-13	1½ cups	2½ cups
14-18	2 cups	3 cups

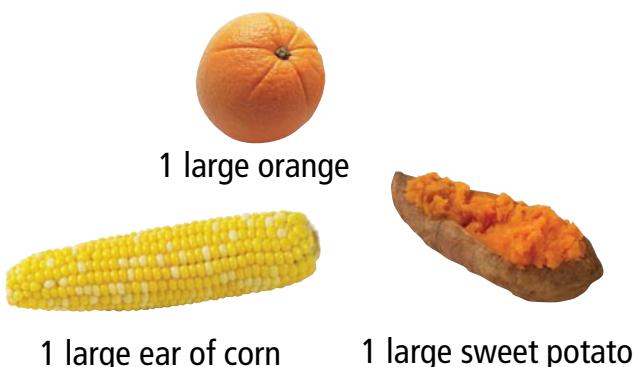


These amounts are for less active people. Visit [www.fruitsandveggiesmatter.gov](http://www.fruitsandveggiesmatter.gov) to see the amounts needed by more active people.

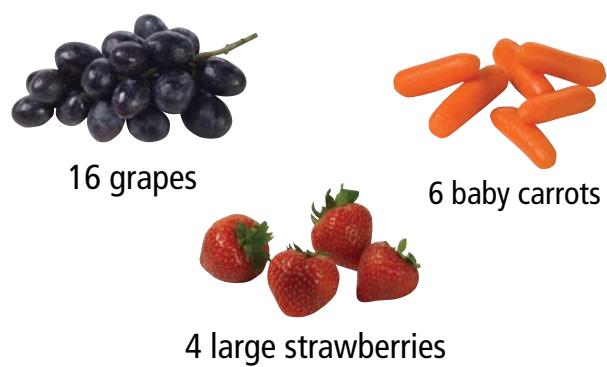
2

Learn what 1 cup and ½ a cup look like.

### EACH COUNTS AS 1 CUP



### EACH COUNTS AS ½ CUP



Visit [www.fruitsandveggiesmatter.gov](http://www.fruitsandveggiesmatter.gov) for more examples.



# 3

See how you can add fruits and vegetables into your day as part of a healthy diet.

BREAKFAST	Add some fruit to your cereal.	
SNACK	Grab a piece of fruit.	
LUNCH	Eat a big salad.	
SNACK	Choose raw vegetables as an afternoon snack.	
DINNER	Have two vegetables with dinner and eat fruit for dessert.	

## TIPS

Enjoy a colorful variety of fruits and vegetables (including beans). Fresh, frozen, canned, and dried all count.

### For breakfast:

- Stir low-fat or fat-free granola into a bowl of low-fat or fat-free yogurt. Top with sliced apples or frozen berries.
- Top toasted whole wheat bread with peanut butter and sliced bananas.
- Add vegetables, such as diced tomatoes and onions, to your egg or egg white omelet.

### For snacks:

- Eat a piece of fruit like an apple, banana, or plum.
- Place a box of raisins in your child's backpack and pack one for yourself, too.
- Put grapes and banana slices on wooden skewers and freeze for "fruit on a stick."

### For lunch and dinner:

- Ask for less cheese and more vegetable toppings on your pizza. Try onions, mushrooms, and bell peppers.
- Spread low-fat cheese and low-fat or fat-free refried beans between two whole wheat tortillas. Brown on both sides in a pan until cheese melts. Top with salsa.
- Eat at least two vegetables with dinner.
- Add frozen vegetables like peas and broccoli to a casserole or pasta.



# Como más frutas y verduras en tres simples pasos.

Comer una variedad de frutas y verduras todos los días es saludable. Tienen vitaminas y minerales que pueden ayudar a proteger tu salud. Muchos de estos alimentos también tienen menos calorías y más fibra que otras comidas. Cuando la parte de una dieta sana, comer frutas y verduras en lugar de comida de alto contenido graso puede ayudarte a controlar tu peso.

1

Entérate cuántas frutas y verduras necesitas comer cada día.

## Mujeres

EDAD	FRUTAS	VERDURAS
19-30	2 tazas	2½ tazas
31-50	1½ tazas	2½ tazas
51+	1½ tazas	2 tazas



## Hombres

EDAD	FRUTAS	VERDURAS
19-50	2 tazas	3 tazas
51+	2 tazas	2½ tazas



## Niñas

EDAD	FRUTAS	VERDURAS
2-3	1 taza	1 taza
4-8	1 taza	1½ tazas
9-13	1½ tazas	2 tazas
14-18	1½ tazas	2½ tazas



## Niños

EDAD	FRUTAS	VERDURAS
2-3	1 taza	1 taza
4-8	1½ tazas	1½ tazas
9-13	1½ tazas	2½ tazas
14-18	2 tazas	3 tazas



Estas cantidades son para la gente menos activa. Visita [www.fruitsandveggiesmatter.gov](http://www.fruitsandveggiesmatter.gov) para ver las cantidades que requiere la gente más activa.

2

Aprende a qué equivale 1 taza y ½ taza.

### CADA UNO CUENTA COMO 1 TAZA



1 naranja grande



1 mazorca de maíz grande



1 camote (batata) grande

### CADA UNO CUENTA COMO ½ TAZA



16 uvas



6 zanahorias  
pequeñas



4 fresas grandes

Visita [www.fruitsandveggiesmatter.gov](http://www.fruitsandveggiesmatter.gov)  
para ver más ejemplos.



# 3

Hay muchas maneras de incorporar frutas y verduras a tu día como parte de una dieta sana.

DESAYUNO	Agrégale fruta a tu cereal.	
ENTRE COMIDAS	Come una fruta.	
ALMUERZO	Come una ensalada grande.	
ENTRE COMIDAS	En la tarde, come verduras crudas.	 
CENA	Come dos verduras con la cena y fruta de postre.	

## CONSEJOS

Disfruta una variedad de frutas y verduras (incluyen los frijoles) de todos los colores. Todas cuentan: frescas, congeladas, enlatadas y disecadas.

### Para el desayuno:

- Incorpora granola de bajo contenido graso o sin grasa a una porción de yogur de bajo contenido graso o sin grasa. Encima ponle rodajas de manzana o moras congeladas.
- A una rebanada de pan integral tostado úntale mantequilla de maní (cacahuate) y rebanadas de banana.
- Cuando准备 un huevo o una omelette con claras de huevo, agrégale verduras, como tomates y cebolla picados.



### Entre comidas:

- Come una fruta, como una manzana, una banana o una ciruela.
- Ponle una cajita de pasitas a tu hijo en la mochila y una para ti en tu bolso.
- Puedes hacer una "paleta de frutas" ensartando uvas y rebanadas de banana en un palito y congelándolas.



### Para el almuerzo y la cena:

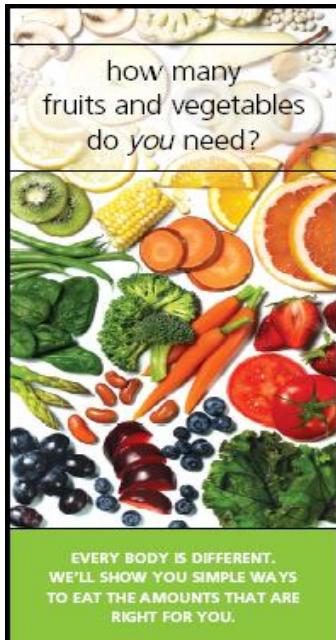
- Cuando comas pizza, pídelas con más verduras y menos queso. Pruébala con cebollas, champiñones y pimientos.
- Úntale queso de bajo contenido graso y frijoles refritos de bajo contenido graso o sin grasa a dos tortillas de harina de trigo integral. Ponlas en un sartén hasta que se doren de ambos lados y el queso se derrita. Adorna con salsa.
- Come por lo menos dos verduras con la cena.
- Puedes agregar verduras congeladas como chícharos (arvejas) y brócoli a un guiso o cualquier platillo de pasta.



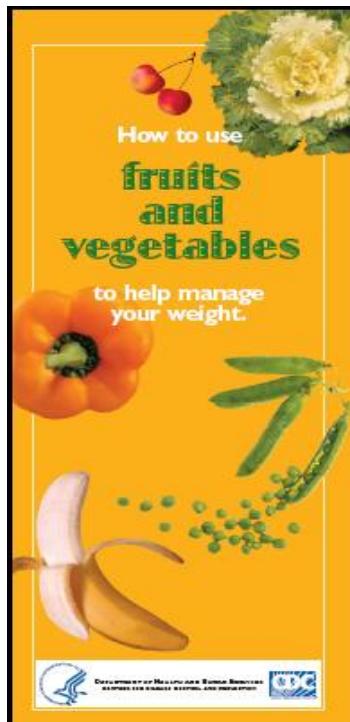
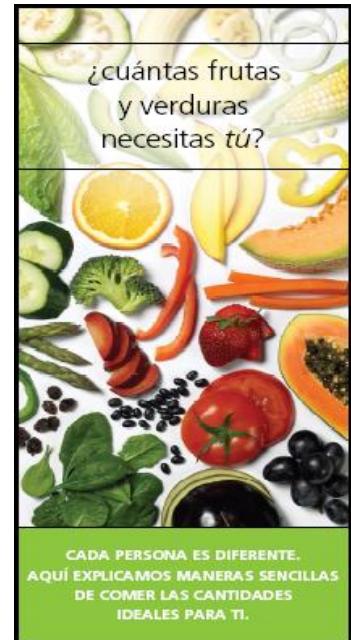
## CDC Publications

These “Fruits & Veggies — More Matters™” education materials, as well as many other brochures for people of all ages, are available for download at:

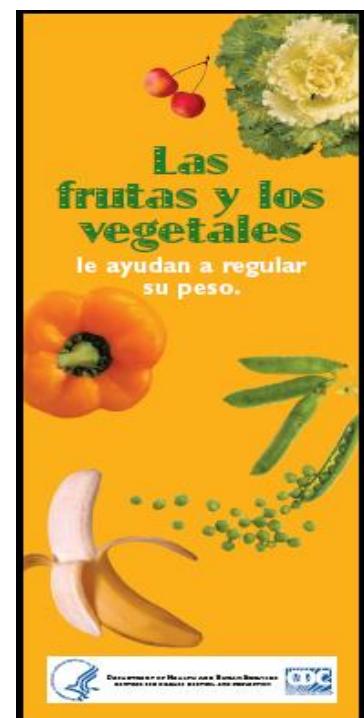
<http://www.fruitsandveggiesmatter.gov/publications/index.html>



The amount of fruits and vegetables you need depends on your age, sex, and level of physical activity. This material shows you simple ways to eat the amounts that are right for you. This brochure was designed for all audiences and is available in both Spanish and English.



Information about fruits and vegetables and their role in a weight management plan. Tips to cut calories by substituting fruits and vegetables are included with meal-by-meal examples. You will also find snack ideas that are 100 calories or less. This brochure is available in both Spanish and English.



# Why Should I Be Physically Active?

If your doctor has advised you to begin an activity program, you should follow that advice. People who don't get enough physical activity are much more likely to develop health problems.

Regular, moderate intensity physical activity can lower your risk of...

- Heart disease and heart attack
- High blood pressure
- High total cholesterol, high LDL (bad) cholesterol and low HDL (good) cholesterol
- Overweight or obesity
- Diabetes
- Stroke



If you haven't been active and want to start exercising, first check with your doctor for a program that's right for you. Once you start, you'll find that exercise isn't just good for your health — it's also fun!

## What else can physical activity do for me?

Physical activity also offers these benefits:

- Strengthens your heart, lungs, bones and muscles.
- Gives you more energy and strength.
- Helps control your weight and blood pressure.

- Helps you handle stress.
- Helps you sleep better.
- Helps you look good.
- Helps you feel upbeat.

## What kind of activities should I do?

You don't have to be an athlete to lower your risk of heart disease and stroke! If done on most or all days, you can benefit from moderate activities like these:

- Pleasure walking
- Gardening and yardwork
- Moderate to heavy housework
- Pleasure dancing and home exercise

More vigorous physical activity can further improve the fitness of your heart and lungs. Start slowly, and build up as your heart gets stronger. First, discuss exercise with your doctor or nurse. Then try one or more of these:

- Brisk walking, hiking or jogging
- Stair climbing
- Bicycling, swimming or rowing
- Aerobic dancing or cross-country skiing

## How often should I exercise?

- Work up to 30 to 60 minutes of daily activity.
- Make sure it's regular — most or all days of the week.

## What else can I do?

Look for ways to add more physical activity to your daily routines. Making small changes in your lifestyle can make a big difference in your overall health. Here are some examples:

- Take a walk for 10 or 15 minutes during your lunch break.

- Take stairs instead of escalators and elevators.
- Park farther from the store and walk through the parking lot.

## How can I learn more?

1. Talk to your doctor, nurse or other health-care professionals. If you have heart disease or have had a stroke, members of your family also may be at higher risk. It's very important for them to make changes now to lower their risk.
2. Call 1-800-AHA-USA1 (1-800-242-8721), or visit [americanheart.org](http://americanheart.org) to learn more about heart disease.

3. For information on stroke, call 1-888-4-STROKE (1-888-478-7653) or visit us online at [StrokeAssociation.org](http://StrokeAssociation.org).

We have many other fact sheets and educational booklets to help you make healthier choices to reduce your risk, manage disease or care for a loved one.

Knowledge is power, so *Learn and Live!*

## What are the Warning Signs of Heart Attack and Stroke?

### Warning Signs of Heart Attack:

Some heart attacks are sudden and intense, but most of them start slowly with mild pain or discomfort with one or more of these symptoms:

- Chest discomfort
- Discomfort in other areas of the upper body
- Shortness of breath with or without chest discomfort
- Other signs including breaking out in a cold sweat, nausea or lightheadedness

Call 9-1-1... Get to a hospital immediately if you experience signs of a heart attack or stroke!

### Warning Signs of Stroke:

- Sudden weakness or numbness of the face, arm or leg, especially on one side of the body
- Sudden confusion, trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache with no known cause

Learn to recognize a stroke. Time lost is brain lost.

## Do you have questions or comments for your doctor or nurse?

- Take a few minutes to write your own questions for the next time you see your healthcare provider. For example:

What's the best type of exercise for me?

---

How much should I exercise?

---



# How Can Physical Activity Become a Way of Life?

If you aren't in the habit of being physically active, you're probably being told you should start. That's because regular physical activity reduces your risk of heart disease and stroke. It also helps you reduce or control other risk factors — high blood

pressure, high blood cholesterol, excess body weight and diabetes.

But the benefits don't stop there. You may look and feel better, become stronger and more flexible, have more energy, and reduce stress and tension. The time to start is now!

## How do I start?

- Talk to your doctor about a physical activity plan that's right for you if...
  - you've been inactive a long time or have medical problems,
  - you're middle-aged or older, and
  - you're planning a relatively vigorous exercise program.
- Choose activities you enjoy. Pick a starting date that fits your schedule and gives you enough time to begin your program, like a Saturday.
- Wear comfortable clothes and shoes.
- Start slowly — don't overdo it!
- Try to exercise at the same time each day

so it becomes a regular part of your lifestyle. For example, you might exercise every day (during your lunch hour) from 12:00 to 12:30.

- Drink lots of water before, during and after each exercise session.
- Ask a friend to start a program with you — use the buddy system!
- Note the days you exercise and write down the distance or length of time of your workout and how you feel after each session.
- If you miss a day, plan a make-up day. Don't double your exercise time during your next session.

## What will keep me going?

- Get your family into physical activity! It's great to have a support system, and you'll be getting them into an important health habit.
- Join an exercise group, health club or YMCA.
- Choose an activity you like and make sure it's convenient for you. If you need good weather, have a back-up plan for bad days (e.g., when it rains, walk in the mall instead of the park).

- Learn a new sport you think you might enjoy, or take lessons to improve at one you know.
- Do a variety of activities. Walk one day, take a swim the next time, then go for a bike ride on the weekend!
- Try renting a few exercise videotapes to find the one(s) you like best. Then you can buy one or more and have a good workout in the comfort of your own home!

- Make physical activity a routine so it becomes a habit.
- If you stop for any length of time, don't lose hope! Just get started again — slowly — and work up to your old pace.

## What else should I know?

- Try not to compare yourself with others. Your goal should be personal health and fitness.
- Think about whether you like to exercise alone or with other people, outside or inside, what time of day is best, and what kind of exercise you most enjoy doing.

- If you feel like quitting, remind yourself of all the reasons you started. Also think about how far you've come!
- Don't push yourself too hard. You should be able to talk during exercise. Also, if you don't feel recovered within 10 minutes of stopping exercise, you're working too hard.

## How can I learn more?

1. Talk to your doctor, nurse or other health-care professionals. If you have heart disease or have had a stroke, members of your family also may be at higher risk. It's very important for them to make changes now to lower their risk.
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Call 9-1-1... Get to a hospital immediately if you experience signs of a heart attack or stroke!

## Do you have questions or comments for your doctor or nurse?

- Take a few minutes to write your own questions for the next time you see your healthcare provider. For example:

Should I take my pulse?

---

Can I exercise "too much?"

---

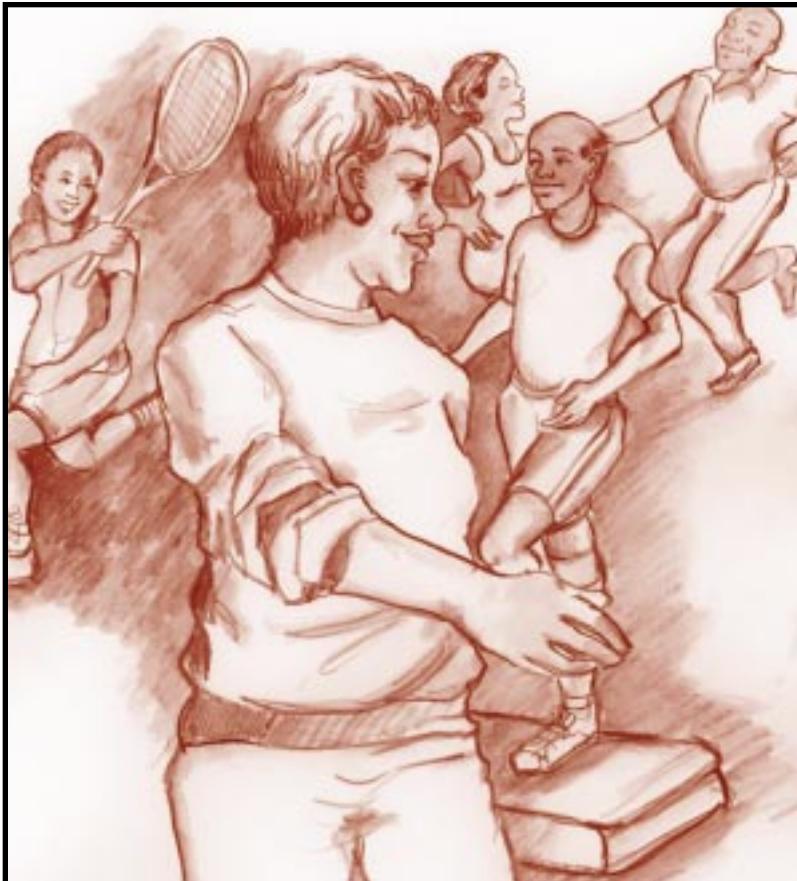
## Example Calorie Use Chart

Calories burned per hour of activity by weight range			
Activity	100 lb	150 lb	200 lb
Bicycling, 6 mph	160	240	312
Bicycling, 12 mph	270	410	534
Jumping rope	500	750	1,000
Running, 5.5 mph	440	660	962
Running, 7 mph	610	920	1,230
Running, 10 mph	850	1,280	1,664
Swimming, 25 yds/min	185	275	358
Swimming, 50 yds/min	325	500	650
Tennis Singles	265	400	535
Walking, 2 mph	160	240	312
Walking, 3 mph	210	320	416
Walking, 4.5	295	440	572

This chart is drawn from the American Heart Association Inc.'s Physical Activity Calorie Use Chart, which shows the approximate calories spent per hour by a 100-, 150-, and 200- pound person doing a particular activity,

# Energize Yourself!

Stay Physically Active

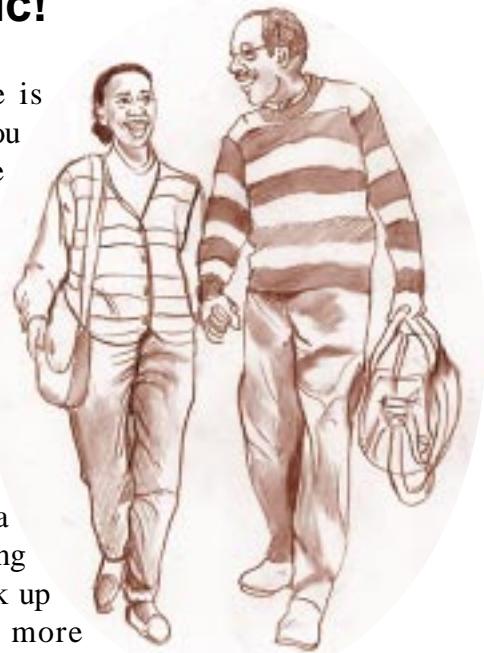


NATIONAL INSTITUTES OF HEALTH  
NATIONAL HEART, LUNG, AND BLOOD INSTITUTE  
AND OFFICE OF RESEARCH ON MINORITY HEALTH



## Add activity to your daily routine and feel more energetic!

**B**eing physically active is important. It can help you feel better and improve your health. There are many fun things that you can do to be active—by yourself or with family or friends. Children and adults should do 30 minutes or more of moderate physical activity each day. You can do 30 minutes all at once or 10 minutes at a time, three times a day. If you are not used to being active, start out slowly and work up to 30 minutes a day. Add more activities for longer periods of time as you begin to feel more fit, or add some vigorous activity.



## Improve your outlook!

Physical activity can be your solution to feeling tired, bored, and out of shape. With more physical activity you may feel less stressed!



## Physical activity can also:

- make you feel more energetic
- help you lose weight and control your appetite
- help you sleep better
- lower your chance for diabetes
- lower your chance for a stroke
- lower your blood pressure
- improve your blood cholesterol levels

## Move your body!

Change your habits by adding activity to your daily routine. Any movement you do burns calories. The more you move, the better. Check out some of these simple activities to get you started today.



### To perk up:

- Get up 15 minutes earlier in the morning and stretch.
- Jog in place.
- Ride your stationary bike while watching TV.
- Workout along with an exercise video.



## To do a quick workout:

- Use the stairs instead of the elevator.
- Walk to the bus or train stop.
- Walk to each end of the mall when you go shopping.
- Park your car a few blocks away and walk.



## To have fun:

- Play your favorite dance music. Do the old steps you love—add some new moves.
- Jump rope or play tag with your kids or grandkids.
- Use hand-held arm weights during a phone conversation with a friend.

## What's the best type of physical activity for you?

The best type is the one or two that you will do! Pick an activity that you enjoy doing and one that will fit into your daily routine. Start with moderate levels of activity and work your way up!



## Moderate level of activity

Here's a good place to start. Moderate activities such as walking and climbing stairs for 10 minutes, three times a day can improve your health. Pick a few things to try from the list below.

### Moderate Activities

walking	gardening
dancing	vacuuming
raking leaves	climbing stairs
bowling	



## Vigorous level of activity

You can increase to this higher level as you become more fit. You get additional health benefits from doing vigorous activity. If you are already at this level, keep up the good work!

### Vigorous Activities

bicycling	jogging/running
swimming	marching in place
doing aerobics	playing sports (basketball, football, soccer, baseball)





## **Make staying physically active a lifelong habit!**

### **Make it a family thing.**

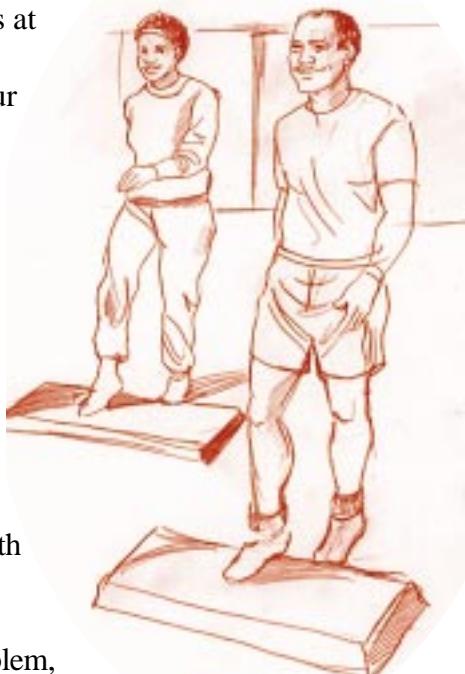
Work out with your family, friends, or neighbors. Teaming up with a partner keeps you both motivated.

### **Make it a religious thing.**

Start a physical activity group at your church.

### **Make it a work thing.**

Keep a pair of walking shoes at your job. Hook up with a coworker and use part of your lunch time or breaks to be active. Challenge each other to better health.



## **Are you ready to get active?**

- You can start being physically active slowly if you do not have a health problem.
- If you have a health problem, check with your doctor before starting a vigorous exercise program.



## Create a healthier you!

Choose one activity from the list of moderate or vigorous activities above and get started for a healthier you! Get a pencil and write your answer below.

My goal is to \_\_\_\_\_ for at least  
(write one favorite activity here)

\_\_\_\_\_ minutes \_\_\_\_\_ times each week.  
(minutes per day) (number of times)



# Make Physical Activity A Habit

Track your daily progress. Start out slowly. Soon you will reach 30 minutes or more a day!

**Write in the log the number of minutes you are active each day:**

	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
Example	10	15	15	20	20	30	30
Week 1							
Example	30	OFF	30	30	OFF	30	30
Week 2							
Example	30	30	OFF	30	30	30	OFF
Week 3							
Week 4							
Week 5							
Week 6							
Week 7							
Week 8							



NATIONAL HEART,  
LUNG, AND BLOOD  
INSTITUTE

**U.S. DEPARTMENT OF HEALTH AND  
HUMAN SERVICES**

Public Health Service

National Institutes of Health

National Heart, Lung, and Blood Institute

NIH Publication No. 97-4059

September 1997



# PROVIDER RESOURCES

7



- ***Adult Weight Questionnaire***
- ***AIM for a Healthy Weight (NHLBI)***
- ***Patient-centered Assessment and Counseling for Exercise and Nutrition (PACE)***
- ***Rx for Health***
- ***MyPyramid Food Intake Patterns***
- ***Low Calorie Meal Plans***

## **DRAFT COVER LETTER FOR ADULT WEIGHT QUESTIONNAIRE**

Welcome!

You have set up an appointment for help with your weight. This is the first step to achieve a healthy weight. You should feel good about taking it.

There are many ways to lose weight. You may have tried things before without success. To best help you this time, we are asking for some information. Your answers to the questions on the enclosed questionnaire will help us find the best way to help you achieve a healthy weight. All people are not the same. What works for one person may not work for another.

You may find that some of the questions are very personal. You may read a question and think to yourself, "this has nothing to do with me!" This is OK. You can skip that question. You can choose to not answer any of the questions. This is a voluntary survey. Just remember your answers help us find the best method for you. The survey may also help you learn more things about yourself. Together we will work out a plan that will help you reach your goal.

Give your survey to your provider or put your completed survey in the prepaid envelope. Check with your medical assistant. Pat yourself on the back for taking this first brave step! See you soon.

Sincerely,

Physician Name

**Organization Logo**  
**CONFIDENTIAL**

## Member Survey

Please fill out this survey so we can best help you. All your answers will be kept private. Your answers will help us find you the best method for you to achieve a healthy weight.

Date: \_\_\_\_\_

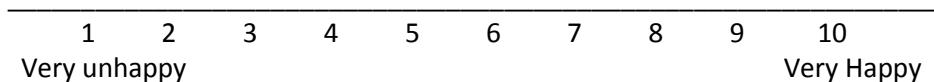
Name

### Medical Record Number

## Personal

1. What do you do for a living? : \_\_\_\_\_ Age: \_\_\_\_\_

2. On a scale of 1 to 10, how happy are you with your current Job?



3. What is the most you have ever weighed? (For women, write in this weight when you were not pregnant.)

\_\_\_\_\_ Lbs. at \_\_\_\_\_ years old

4. What is the lowest weight, you have been at for at least one year? (This should be after 21 years of age.)

year?

\_\_\_\_\_Lbs. at \_\_\_\_\_years old

5. Is there any time in your life for which you have no memory?

Yes       No      When:

6. Please fill in the following as best you can. Most people have tried diets in the past  
Please tell us your answers for the ones you have tried.

Type of Diet/Program	When did you try this program?	How long were you in this program?	How many pounds did you lose?	How long did you keep the weight off?
Low Calorie Diet				
Protein Diet				
Weight Watchers				
Overeaters Anonymous				
Obesity/Diet Center				
Diet Pills				
Herbal Diet Pills				
Physician supervised fast				
Slim-Fast				
Nutrisystem				
Other: _____				
Other: _____				

7. Can you accept compliments about your weight loss?

Yes       No

8. Can you accept compliments from the opposite sex?

Yes       No

9. How do you think your life will change if you lose weight?

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10. Do you smoke cigarettes?  Yes       No

a. How many cigarettes (packs) per day? \_\_\_\_\_

11. Think about how often you drink beer, wine or mixed drinks. Which is true?

*Fill in (□) one answer only.*

- I never drink any alcohol.
- I seldom drink more than 8 drinks per week
- I often drink more than 8 drinks per week.
- I binged in the past three months. (I drank more than three drinks in three hours.)

12. Think about the availability of drugs today. Which is true?

*Fill in (□) one answer only.*

- I never tried any illegal drugs.
- I experimented in the past but no longer use.
- I enjoy drugs only at an occasional party.
- I use drugs often.
- I have a problem with drugs now.

### **Eating Habits**

13. a. After eating, have you ever forced yourself to vomit?

Yes       No

b. Have you ever had a problem with binge eating?

Yes       No

14. Answer this question if you answered yes to question 13a or 13b.

Do you recall the feelings that caused these actions? If so, tell us what you were feeling. Also write down the last time you did vomit or binge.

a. Vomiting \_\_\_\_\_  
\_\_\_\_\_

b. Binge eating \_\_\_\_\_  
\_\_\_\_\_

15. Do you use diuretics or laxatives now to help control your weight?

Yes       No

### **Physical Activity**

16. Do you get any physical activity now (This might be walking, swimming, housework, gardening, exercise classes.)?

Yes       No

16(a). If yes, please write in below the activities you do. Also write down the number of minutes and the number of times each week for each one.

Type of Activity \_\_\_\_\_ # minutes \_\_\_\_\_ # times/wk \_\_\_\_\_  
Type of Activity \_\_\_\_\_ # minutes \_\_\_\_\_ # times/wk \_\_\_\_\_  
Type of Activity \_\_\_\_\_ # minutes \_\_\_\_\_ # times/wk \_\_\_\_\_  
Type of Activity \_\_\_\_\_ # minutes \_\_\_\_\_ # times/wk \_\_\_\_\_

16(b). If you are not physically active on a regular basis are you willing to start an exercise program? (please check one)

Yes  No  Maybe

17. What prevents you from exercising more?

*Fill in (□) one answer:*

- I think I **do** get enough exercise.
- I have no time.
- My health is not good (such as asthma, arthritis, etc.).
- The neighborhood is too unsafe to be outside.
- We cannot afford gym memberships.
- I do not have anyone to keep me encouraged.
- I do not think that exercise is important.
- Other \_\_\_\_\_.

#### ***Family and Childhood History***

18. Are any of your family members obese? If yes, please circle those members that are obese.

**Father** **Mother** **Sister(s) (note number) \_\_\_\_\_** **Brother(s)(note number) \_\_\_\_\_**

**Father's side: Grandmother Grandfather Aunts Uncles**

**Mother's side: Grandmother Grandfather Aunts Uncles**

19. How do you describe yourself?

Asian  Black  Caucasian  Hispanic  Native American   
Other  \_\_\_\_\_

20. Who lives with you in your home? Tell us their relationship if it is not obvious.

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---

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21. Who will support your efforts to lose weight? \_\_\_\_\_

22. Who will hinder your efforts to lose weight? \_\_\_\_\_

23. Do you have someone with whom you share your innermost thoughts and feelings?

Yes       No      If yes, who? \_\_\_\_\_

24. Think about the family in which you were raised. Check the words that best describe it.

warm       distant       cruel       battling

destructive       loving       uninterested       rigid

25. How do you think how you were raised affected you?

---

---

26. Were the people who raised you (answer yes or no to each item).

Concerned about your worries?  Yes  No

Interested in how you did in school?  Yes  No

Made you feel wanted?  Yes  No

Often, critical of you?  Yes  No

Interested in who your friends were?  Yes  No

There if you needed help or support?  Yes  No

27. Were you raised by both of your biological parents?

Yes       No

28. How has this affected you?

---

---

29. Have you ever been sexually molested?

Yes       No

30. If yes, how old were you at the time? \_\_\_\_\_.

31. How has this affected you later in life?

---

***Stress in Your Life:***

32. Read each of the items below. Please circle if you are currently experiencing stress in your life related to any of them.

A. work	F. legal/financial trouble
B. health	G. school
C. spouse – friend	H. moving
D. children	I. jealousy or infidelity
E. parents	J. other

33. What do you think is the cause of your weight problem?

---

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34. How much would you like to weigh? \_\_\_\_\_ Lbs.

35. Please use the space below to tell us anything else you think is important in understanding your weight problem or your successful participation in the program.

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---

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Signature \_\_\_\_\_

## **NHLBI**

### **Aim For A Healthy Weight Information and Resources for Health Professionals**

The National Heart Lung and Blood Institute's program, Aim for a Healthy Weight program offers many online resources for both patients and health professionals.

Professional Resources include:

**Guidelines Evidence Report** (The National Heart, Lung, and Blood Institute, in cooperation with the National Institute of Diabetes and Digestive and Kidney Diseases, released the first Federal guidelines on the identification, evaluation, and treatment of overweight and obesity.)

Guidelines Executive Summary (Download for free, hard copy available for cost)

Evidence Table and Model

Press Release

Treatment Guidelines in Palm OS Format (Download, Free)

Aim for a Healthy Weight Education Kit (Hard copy only, for a cost)

Electronic Textbook (Download, free)

Slide Show (Download, Free)

Practical Guide (Download for free, Hard copy available for cost)

BMI Calculator (Online tool, includes links to patient information)

BMI Calculator in Palm OS Format (Download, free)

BMI Table (Download or view online, free)

Continuing Education (For a cost)

Links to the abovementioned resources can be found at:

[http://www.nhlbi.nih.gov/health/public/heart/obesity/lose\\_wt/profmats.htm](http://www.nhlbi.nih.gov/health/public/heart/obesity/lose_wt/profmats.htm)

## **PACE : Patient- Centered Assessment & Counseling for Exercise & Nutrition**

[http://www.sandiegochi.com/pace\\_written\\_materials.html](http://www.sandiegochi.com/pace_written_materials.html)

### **Adult Materials Information**

PACE: Patient-centered Assessment and Counseling for Exercise and Nutrition is a well-organized binder containing crucial background information and detailed guidelines to help primary care providers effectively counsel adult patients about making physical activity and nutrition improvements.

Corresponding PACE forms include:

Physical Activity and Nutrition Assessment Forms: one-page questionnaires which determine the patient's level of physical activity or dietary habits, and their readiness to make improvements in these areas. The score on these assessments determines which of the three counseling protocols the patient receives.

Interactive Counseling Protocols tailor health messages to meet different patient needs:

- Pre-contemplator Protocols motivate those currently uninterested in physical activity or healthy eating habits to seriously consider changing their behaviors.
- Contemplator Protocols design a physical activity or dietary change program for those interested in making changes.
- Active Protocols instruct patients on how to maintain currently active life-styles or healthy eating habits.

Patient Tip Sheets also support the patient's behavior change: Physical Activity Sheet: health/safety information for patients performing moderate or vigorous exercise.

- "The Balancing Act": instructs how to balance caloric intake and expenditure
- "Trimming the Fat": provides tips on decreasing dietary fat intake
- "Focus on Fiber, Fruit, & Vegetables": Helps patients increase intake of these nutrients

Chart Stickers provide a record of the patient's assessment scores and provider recommendations, for insertion into the patient's medical record.

\*See PACE Materials Price List for cost information.



## RX for Health!

Patient Name: \_\_\_\_\_

Medical Record Number \_\_\_\_\_ Date \_\_\_\_\_

### Physical Activity Agreements:

Walking       Bike riding  
 Dance/       Flexibility/Yoga  
Aerobics  
 Other: \_\_\_\_\_

How long and how often:

\_\_\_\_\_ minutes \_\_\_\_\_ times per week

### 5-A-Day Agreement – Add a serving of:

**Fruit**       **Vegetables**  
 Breakfast       Lunch  
 Lunch       Dinner  
 Snack       Snack  
  
 **Have less**  
 Soft drinks (soda) and sweets  
 Snack foods (fries, chips, etc.)  
 Other: \_\_\_\_\_

### Rx for Health – Description to Providers:

#### Physical Activity Agreement:

Briefly assess patient's interests and current activity. Check one of the choices listed, or identify another physical activity the patient is most motivated to undertake.

*How long/how often:* Using your assessment of the patient's current activity, negotiate with them how much time and how many occasions per week they are motivated to engage in the physical activity identified, and fill in these blanks.

#### 5-A-Day Agreement:

Asses the patient's daily fruit/vegetable consumption practices (e.g. "How many times each day do you usually eat fruit?" "How many different vegetables do you eat most days?") and whether they're interested in making a change. If they express motivation to eat more fruit and/or vegetables, complete this section with the patient. Depending on the patient's health conditions and motivation to change, you may also want to negotiate reducing soda, sweets, or other foods (try to identify specific foods with the patient).

**Agreement to:** This section is for action *other* than physical activity or nutrition (e.g. negotiate joining a support group, seeing the R.D., daily meditation, blood sugar monitoring, etc.)

**Ask about follow-up:** Ask the patient if they are willing to have CCHA nutrition staff call them, and if YES, get a phone number.

# MyPyramid

## Food Intake Patterns

The suggested amounts of food to consume from the basic food groups, subgroups, and oils to meet recommended nutrient intakes at 12 different calorie levels. Nutrient and energy contributions from each group are calculated according to the nutrient-dense forms of foods in each group (e.g., lean meats and fat-free milk). The table also shows the discretionary calorie allowance that can be accommodated within each calorie level, in addition to the suggested amounts of nutrient-dense forms of foods in each group.

Calorie Level <sup>1</sup>	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200
<b>Fruits<sup>2</sup></b>	1 cup	1 cup	1.5 cups	1.5 cups	1.5 cups	2 cups	2 cups	2 cups	2 cups	2.5 cups	2.5 cups	2.5 cups
<b>Vegetables<sup>3</sup></b>	1 cup	1.5 cups	1.5 cups	2 cups	2.5 cups	2.5 cups	3 cups	3 cups	3.5 cups	3.5 cups	4 cups	4 cups
<b>Grains<sup>4</sup></b>	3 oz-eq	4 oz-eq	5 oz-eq	5 oz-eq	6 oz-eq	6 oz-eq	7 oz-eq	8 oz-eq	9 oz-eq	10 oz-eq	10 oz-eq	10 oz-eq
<b>Meat and Beans<sup>5</sup></b>	2 oz-eq	3 oz-eq	4 oz-eq	5 oz-eq	5 oz-eq	5.5 oz-eq	6 oz-eq	6.5 oz-eq	6.5 oz-eq	7 oz-eq	7 oz-eq	7 oz-eq
<b>Milk<sup>6</sup></b>	2 cups	2 cups	2 cups	3 cups	3 cups	3 cups	3 cups	3 cups	3 cups	3 cups	3 cups	3 cups
<b>Oils<sup>7</sup></b>	3 tsp	4 tsp	4 tsp	5 tsp	5 tsp	6 tsp	6 tsp	7 tsp	8 tsp	8 tsp	10 tsp	11 tsp
<b>Discretionary calorie allowance<sup>8</sup></b>	165	171	171	132	195	267	290	362	410	426	512	648

**1 Calorie Levels** are set across a wide range to accommodate the needs of different individuals. The attached table "Estimated Daily Calorie Needs" can be used to help assign individuals to the food intake pattern at a particular calorie level.

**2 Fruit Group** includes all fresh, frozen, canned, and dried fruits and fruit juices. In general, 1 cup of fruit or 100% fruit juice, or 1/2 cup of dried fruit can be considered as 1 cup from the fruit group.

**3 Vegetable Group** includes all fresh, frozen, canned, and dried vegetables and vegetable juices. In general, 1 cup of raw or cooked vegetables or vegetable juice, or 2 cups of raw leafy greens can be considered as 1 cup from the vegetable group.

### Vegetable Subgroup Amounts are Per Week

Calorie Level	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200
Dark green veg.	1 c/wk	1.5 c/wk	1.5 c/wk	2 c/wk	3 c/wk	3 c/wk	3 c/wk	3 c/wk	3 c/wk	3 c/wk	3 c/wk	3 c/wk
Orange veg.	.5 c/wk	1 c/wk	1 c/wk	1.5 c/wk	2 c/wk	2 c/wk	2 c/wk	2.5 c/wk				
Legumes	.5 c/wk	1 c/wk	1 c/wk	2.5 c/wk	3 c/wk	3 c/wk	3 c/wk	3.5 c/wk				
Starchy veg.	1.5 c/wk	2.5 c/wk	2.5 c/wk	2.5 c/wk	3 c/wk	3 c/wk	6 c/wk	6 c/wk	7 c/wk	7 c/wk	9 c/wk	9 c/wk
Other veg.	3.5 c/wk	4.5 c/wk	4.5 c/wk	5.5 c/wk	6.5 c/wk	6.5 c/wk	7 c/wk	7 c/wk	8.5 c/wk	8.5 c/wk	10 c/wk	10 c/wk

**4 Grains Group** includes all foods made from wheat, rice, oats, cornmeal, barley, such as bread, pasta, oatmeal, breakfast cereals, tortillas, and grits. In general, 1 slice of bread, 1 cup of ready-to-eat cereal, or 1/2 cup of cooked rice, pasta, or cooked cereal can be considered as 1 ounce equivalent from the grains group. **At least half of all grains consumed should be whole grains.**

**5 Meat & Beans Group** in general, 1 ounce of lean meat, poultry, or fish, 1 egg, 1 Tbsp. peanut butter, 1/4 cup cooked dry beans, or 1/2 ounce of nuts or seeds can be considered as 1 ounce equivalent from the meat and beans group.

**6 Milk Group** includes all fluid milk products and foods made from milk that retain their calcium content, such as yogurt and cheese. Foods made from milk that have little to no calcium, such as cream cheese, cream, and butter, are not part of the group. Most milk group choices should be fat-free or low-fat. In general, 1 cup of milk or yogurt, 1 1/2 ounces of natural cheese, or 2 ounces of processed cheese can be considered as 1 cup from the milk group.

**7 Oils** include fats from many different plants and from fish that are liquid at room temperature, such as canola, corn, olive, soybean, and sunflower oil. Some foods are naturally high in oils, like nuts, olives, some fish, and avocados. Foods that are mainly oil include mayonnaise, certain salad dressings, and soft margarine.

**8 Discretionary Calorie Allowance** is the remaining amount of calories in a food intake pattern after accounting for the calories needed for all food groups—using forms of foods that are fat-free or low-fat and with no added sugars.

## Estimated Daily Calorie Needs

To determine which food intake pattern to use for an individual, the following chart gives an estimate of individual calorie needs. The calorie range for each age/sex group is based on physical activity level, from sedentary to active.

Calorie Range			
Children	Sedentary	→	Active
2–3 years	1,000	→	1,400
<b>Females</b>			
4–8 years	1,200	→	1,800
9–13	1,600	→	2,200
14–18	1,800	→	2,400
19–30	2,000	→	2,400
31–50	1,800	→	2,200
51+	1,600	→	2,200
<b>Males</b>			
4–8 years	1,400	→	2,000
9–13	1,800	→	2,600
14–18	2,200	→	3,200
19–30	2,400	→	3,000
31–50	2,200	→	3,000
51+	2,000	→	2,800

**Sedentary** means a lifestyle that includes only the light physical activity associated with typical day-to-day life.

**Active** means a lifestyle that includes physical activity equivalent to walking more than 3 miles per day at 3 to 4 miles per hour, in addition to the light physical activity associated with typical day-to-day life.

# 7 Day DASH\* Menu Plan

1,600 Calories 1,500 mg Sodium

DAY ONE

## Breakfast

### Puffed Wheat Breakfast

- Puffed wheat cereal (2 cups) topped with low-fat milk (1 cup) and 1 sliced medium banana
- Orange juice (½ cup)

## Lunch

### Chicken Noodle Soup & Salad Lunch

- Campbell's® Chunky™ Healthy Request® Chicken Noodle soup (1 cup)
- Salad: Mix 2 cups leafy salad greens, 2 oz. cooked chicken breast, 2 tbsp. shredded Cheddar cheese, ½ cup sliced raw vegetables such as tomatoes, cucumbers, bell peppers, or carrots. Mix 2 tsp. olive oil and 2 tsp. balsamic vinegar. Pour over salad and toss. Serve with 2 tbsp. unsalted sunflower seeds.
- 1 medium tangerine

## Dinner

### Fish, Couscous & Asparagus Dinner

- Baked cod (3 oz.)
- Steamed couscous (1 cup)
- Steamed asparagus (½ cup)
- 1 small whole-grain roll (1 oz.)

## Snacks

- 1 container plain, low-fat yogurt (6 oz.) mixed with raspberries (½ cup)
- Unsalted pretzels (3 oz. - about 14 twists)

**Calculated Daily Nutrition:** Calories 1680, Total Fat 38g, Saturated Fat 11g, Cholesterol 152mg, Sodium 1329mg, Total Carbohydrates 248g, Dietary Fiber 24g, Protein 96g

**DASH Food Group Servings:** Grains 6, Vegetables 4, Fruits 4, Milk Products 2, Meats, Fish, and Poultry 5, Nuts, Seeds, and Legumes 1, Fats and Oils 2, Sweets and Added Sugars 0

DAY TWO

## Breakfast

### Oatmeal Breakfast

- Cooked oatmeal (1 cup) with raisins (¼ cup) and walnuts (2 tbsp.)
- Low-fat milk (1 cup)
- Orange juice (½ cup)

## Lunch

### Vegetable Soup & Turkey Burger Lunch

- Campbell's® Chunky™ Healthy Request® Vegetable soup (1 cup)
- Turkey Burger: Place a cooked turkey burger (2 oz.) on a toasted hamburger bun spread with 1 tsp. yellow mustard. Top with 1 thick slice onion, 1 thick slice tomato and hamburger bun top.
- Canned fruit cocktail packed in juice (½ cup)

## Dinner

### Beef, Potatoes & Broccoli Dinner

- Cooked lean beef (3 oz.)
- Cooked, quartered red potatoes (1 cup) tossed with soft light margarine (1 tsp.) and chopped fresh parsley (1 tsp.)
- Steamed broccoli (1 cup) tossed with soft unsalted margarine (1 tsp.)
- 1 whole grain roll (1 oz.)

## Snacks

- Fat-free frozen yogurt (1 cup) topped with sliced strawberries (½ cup) & low-fat granola (½ cup)

**Calculated Daily Nutrition:** Calories 1617, Total Fat 43g, Saturated Fat 10g, Cholesterol 144mg, Sodium 1313mg, Total Carbohydrates 236g, Dietary Fiber 25g, Protein 86g

**DASH Food Group Servings:** Grains 6, Vegetables 5, Fruits 4, Milk Products 2, Meats, Fish, and Poultry 5, Nuts, Seeds, and Legumes 0.5, Fats and Oils 2, Sweets and Added Sugars 0

DAY THREE

## Breakfast

### Cereal Bar Breakfast

- 1 whole-grain fruit and cereal bar
- 1 container plain, low-fat yogurt (6 oz.) mixed with blueberries (1 cup)
- 1 can Low Sodium V8® vegetable juice (5.5 oz.)

## Lunch

### Tomato Soup & Grilled Cheese Sandwich Lunch

- Campbell's® Healthy Request® condensed Tomato soup (1 cup prepared)
- Grilled Cheese Sandwich: Spread 1 slice Pepperidge Farm® Whole Grain bread with 1 tsp. soft unsalted margarine. Place margarine-side down in a nonstick skillet over medium heat. Add 2 slices (¾ oz. each) Swiss cheese and 2 tomato slices; top with another slice of bread spread with 1 tsp. soft unsalted margarine. Turn sandwich over and cook until golden brown and cheese is melted.
- Cantaloupe (½ cup cubed)

## Dinner

### Pasta with Chicken & Veggies Dinner

- Spray a nonstick skillet with vegetable cooking spray. Add ¼ cup sliced onion, ½ cup sliced mushrooms, and ½ cup broccoli flowerets. Cook and stir until vegetables are tender. Stir in ¼ tsp. crushed red pepper. Add ½ cup low sodium tomato sauce and heat through. Pour sauce mixture over 1 cup cooked pasta and top with 3 oz. cooked skinless chicken breast and 2 tbsp. grated Parmesan cheese.
- 1 whole grain roll (1 oz.)

## Snacks

- 1 medium peach
- Unsalted popcorn (3 cups air-popped)

**Calculated Daily Nutrition:** Calories 1586, Total Fat 40g, Saturated Fat 16g, Cholesterol 131mg, Sodium 1559mg, Total Carbohydrates 232g, Dietary Fiber 27g, Protein 82g

**DASH Food Group Servings:** Grains 7, Vegetables 5, Fruits 4, Milk Products 2, Meats, Fish, and Poultry 3, Nuts, Seeds, and Legumes 0, Fats and Oils 2, Sweets and Added Sugars 0

# DAY FOUR

## Breakfast

### Egg White Scramble Breakfast

- Mix 2 egg whites, 2 tbsp. chopped green onion, 2 tbsp. chopped tomato and 2 tsp. chopped fresh basil. Spray a nonstick skillet with vegetable cooking spray. Pour in egg white mixture; cook over medium heat until done.
- **Pepperidge Farm® Whole Grain bread** (1 slice) toasted and spread with soft unsalted margarine (1 tsp.)
- Sliced strawberries (1 cup)
- Low-fat milk (1 cup)

## Lunch

### Italian Style Wedding Soup & Turkey Sandwich Lunch

- **Campbell's® Select™ Healthy Request® Italian Style Wedding soup** (1 cup)
- Turkey Sandwich: Spread 1 slice **Pepperidge Farm® Thin Sliced whole wheat bread** with 2 tsp. mayonnaise. Add 2 oz. sliced turkey breast, 1 slice Swiss cheese (3/4 oz.), 2 tomato slices and 2 pieces leaf lettuce; top with another slice of Thin Sliced bread.
- Sliced cucumber (1/2 cup)
- 1 medium apple

## Dinner

### Pork Tenderloin, Rice & Spinach Dinner

- Broiled or grilled trimmed pork tenderloin (3 oz.)
- Hot cooked brown or white rice (1 cup)
- Steamed spinach (1 cup)

## Snacks

- 1 container plain, low-fat yogurt (6 oz.) topped with canned pears packed in juice (1/2 cup) and low-fat granola (1/2 cup)

**Calculated Daily Nutrition:** Calories 1573, Total Fat 37g, Saturated Fat 13g, Cholesterol 176mg, Sodium 1543mg, Total Carbohydrates 209g, Dietary Fiber 28g, Protein 104g

**DASH Food Group Servings:** Grains 6, Vegetables 3, Fruits 4, Milk Products 2, Meats, Fish, and Poultry 5, Nuts, Seeds, and Legumes 0, Fats and Oils 2, Sweets and Added Sugars 0

# DAY FIVE

## Breakfast

### Shredded Wheat Breakfast

- Shredded wheat cereal (1 cup) with low-fat milk (1 cup)
- Orange juice (1 cup)

## Lunch

### Chicken Noodle Soup & Salad Lunch

- **Campbell's® Healthy Request® condensed Chicken Noodle soup** (1 cup prepared)
- Salad: Mix 2 cups leafy salad greens, 1/4 cup garbanzo beans, 2 oz. cooked chicken breast, 1/2 cup cooked pasta, 1 small plum tomato cut into wedges, 1/4 cup red or green bell pepper strips, 1/4 cup sliced carrot, 2 tbsp. chopped onion and 2 tbsp. shredded Cheddar cheese. Mix 2 tsp. olive oil and 2 tsp. vinegar; pour over salad and toss.
- 1 whole grain roll (1 oz.)
- Grapes (1/2 cup)

## Dinner

### Salmon, Baked Potato & Broccoli Dinner

- Grilled salmon (3 oz.) with lemon slices and fresh dill
- 1 small baked potato (4 1/2 oz.) topped with fat-free sour cream (2 tbsp.)
- Steamed broccoli (1/2 cup)

## Snacks

- 1 container plain, low-fat yogurt (6 oz.) topped with low-fat granola (1/2 cup) & sliced strawberries (1/2 cup)
- Unsalted popcorn (3 cups air-popped)

**Calculated Daily Nutrition:** Calories 1658, Total Fat 41g, Saturated Fat 12g, Cholesterol 152mg, Sodium 1385mg, Total Carbohydrates 248g, Dietary Fiber 27g, Protein 89g

**DASH Food Group Servings:** Grains 6, Vegetables 5, Fruits 4, Milk Products 2, Meats, Fish, and Poultry 5, Nuts, Seeds, and Legumes 0.5, Fats and Oils 2, Sweets and Added Sugars 0

# DAY SIX

## Breakfast

### English Muffin Breakfast

- **Pepperidge Farm® Whole Wheat English muffin** (1) toasted and spread with sugar-free jelly (2 tbsp.)
- Low-fat milk (1 cup)
- Blueberries (1/2 cup)

## Lunch

### Mexican Style Chicken Tortilla Soup & Tuna Sandwich Lunch

- **Campbell's® Select™ Healthy Request® Mexican Style Chicken Tortilla soup** (1 cup)
- Tuna Sandwich: Mix 2 oz. drained canned low-sodium tuna packed in water with 1 tbsp. minced red onion and 2 tsp. mayonnaise spread on 1 slice **Pepperidge Farm® Thin Sliced Whole Wheat bread**. Top with 2 tomato slices, 2 pieces of leaf lettuce and another slice of Thin Sliced bread.
- Sliced raw veggies (1/2 cup)
- 1 medium orange

## Dinner

### Salad & Hamburger Dinner

- Salad: Mix 1 cup leafy salad greens, 1/2 plum tomato, sliced and 1/4 cup sliced cucumber. Mix 1 tsp. olive oil & 1 tsp. vinegar. Pour over salad and toss.
- Hamburger: Place a 3 oz. cooked lean hamburger patty on a toasted hamburger bun with 2 slices of tomato and 2 slices onion.

## Snacks

- Canned pineapple chunks in light syrup (1/2 cup)
- Low-fat frozen yogurt (1 cup) topped with sliced strawberries (1/2 cup)

**Calculated Daily Nutrition:** Calories 1579, Total Fat 40g, Saturated Fat 12g, Cholesterol 127mg, Sodium 1501mg, Total Carbohydrates 250g, Dietary Fiber 28g, Protein 86g

**DASH Food Group Servings:** Grains 6, Vegetables 3, Fruits 4, Milk Products 2, Meats, Fish, and Poultry 5, Nuts, Seeds, and Legumes 0, Fats and Oils 2, Sweets and Added Sugars 2

## Breakfast

**Cream of Wheat Breakfast**

- Cooked cream of wheat cereal (1 cup) mixed with raisins (2 tbsp.) and low-fat milk (1 cup)
- Apple juice (1 cup)

## Lunch

**Old Fashioned Vegetable Beef Soup & Roast Beef Sandwich Lunch**

- Campbell's® Chunky™ Healthy Request® Old Fashioned Vegetable Beef soup (1 cup)
- Roast Beef Sandwich: Spread 1 slice Pepperidge Farm® Whole Grain bread with 2 tsp. mayonnaise; top with 2 oz. sliced roast beef, 2 tomato slices, 4 cucumber slices, 2 pieces of leaf lettuce and another slice of Whole Grain bread.
- 1 container plain, low-fat yogurt (6 oz.) mixed with cantaloupe and honeydew chunks (½ cup)

## Dinner

**Chinese Chicken & Broccoli Dinner**

- Steamed chicken breast (3 oz.)
- Steamed broccoli (1 cup)
- Peanut or sesame oil (2 tsp.)
- Hot cooked brown or white rice (1 cup)

## Snacks

- 1 container plain, low-fat yogurt (6 oz.) with canned apricots packed in juice (½ cup)

**Calculated Daily Nutrition:** Calories 1631, Total Fat 36g, Saturated Fat 11g, Cholesterol 178mg, Sodium 1457mg, Total Carbohydrates 232g, Dietary Fiber 20g, Protein 100g

**DASH Food Group Servings:** Grains 6, Vegetables 3, Fruits 5, Milk Products 2.5, Meats, Fish, and Poultry 5, Nuts, Seeds, and Legumes 0, Fats and Oils 3, Sweets and Added Sugars 0

\* For more information about the Dietary Approaches to Stop Hypertension (DASH) eating plan visit <http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/>  
Please see your physician before starting any diet. Individual results will vary.

# Asian-American Cuisine

Breakfast	1,600 Calories	1,200 Calories
Banana	1 small	1 small
Whole Wheat Bread	2 slices	1 slice
Margarine	1 tsp	1 tsp
Orange Juice	3/4 cup	3/4 cup
Milk 1%, low fat	3/4 cup	3/4 cup

## Lunch

Beef Noodle Soup, canned, low-sodium	1/2 cup	1/2 cup
<b>Chinese Noodle and Beef Salad</b>		
Beef Roast	3 oz	2 oz
Peanut Oil	1 1/2 tsp	1 tsp
Soy Sauce, low-sodium	1 tsp	1 tsp
Carrots	1/2 cup	1/2 cup
Zucchini	1/2 cup	1/2 cup
Onion	1/4 cup	1/4 cup
Chinese Noodles, soft-type	1/4 cup	1/4 cup
Apple	1 medium	1 medium
Tea, unsweetened	1 cup	1 cup

## Dinner

### Pork Stir-fry with Vegetables

Pork Cutlet	2 oz	2 oz
Peanut Oil	1 tsp	1 tsp
Soy Sauce, low-sodium	1 tsp	1 tsp
Broccoli	1/2 cup	1/2 cup
Carrots	1 cup	1/2 cup
Mushrooms	1/4 cup	1/2 cup
Steamed White Rice	1 cup	1/2 cup
Tea, unsweetened	1 cup	1 cup

## Snack

Almond Cookies	2 cookies	—
Milk 1%, low fat	3/4 cup	3/4 cup

Calories:	1,609	Calories:	1,220
Total Carb, % kcals:	56	Total Carb, % kcals:	55
Total Fat, % kcals:	27	Total Fat, % kcals:	27
*Sodium, mg:	1,296	*Sodium, mg:	1,043
SFA, % kcals:	8	SFA, % kcals:	8
Cholesterol, mg:	148	Cholesterol, mg:	117
Protein, % kcals:	20	Protein, % kcals:	21

1,600: 100% RDA met for all nutrients except : Zinc 95%, Iron 87%, Calcium 93%  
 1,200: 100% RDA met for all nutrients except: Vit E 75%, Calcium 84%, Magnesium 98%, Iron 66%, Zinc 77%

\* No salt added in recipe preparation or as seasoning. Consume at least 32 oz. water.

# Lacto-Ovo Vegetarian Cuisine

	1,600 Calories	1,200 Calories
<b>Breakfast</b>		
Orange	1 medium	1 medium
Pancakes, made with 1% milk, low fat and egg whites	(3) 4" circles	(2) 4" circles
Pancake Syrup	2 T	1 T
Margarine, diet	1 1/2 tsp	1 1/2 tsp
Milk 1%, low fat	1 cup	1/2 cup
Coffee	1 cup	1 cup
Milk 1%, low fat	1 oz	1 oz
<b>Lunch</b>		
Vegetable Soup, low-sodium, canned,	1 cup	1/2 cup
Bagel	1 medium	1/2 medium
Processed American Cheese, low-fat and low-sodium	3/4 oz	
Spinach Salad		
Spinach	1 cup	1 cup
Mushrooms	1/8 cup	1/8 cup
Salad dressing, regular calorie	2 tsp	2 tsp
Apple	1 medium	1 medium
Iced Tea, unsweetened	1 cup	1 cup
<b>Dinner</b>		
Omelette		
Egg Whites	4 large eggs	4 large eggs
Green Pepper	2 T	2 T
Onion	2 T	2 T
Mozzarella Cheese, made from part-skim milk, low-sodium	1 1/2 oz	1 oz
Vegetable Oil	1 T	1/2 T
Brown Rice, seasoned with	1/2 cup	1/2 cup
margarine, diet	1/2 tsp	1/2 tsp
Carrots, seasoned with	1/2 cup	1/2 cup
margarine, diet	1/2 tsp	1/2 tsp
Whole Wheat Bread	1 slice	1 slice
Margarine, diet	1 tsp	1 tsp
Fig Bar Cookie	1 bar	1 bar
Tea	1 cup	1 cup
Honey	1 tsp	1 tsp
<b>Snack</b>		
Milk 1%, low fat	3/4 cup	3/4 cup

# Lacto-Ovo Vegetarian Cuisine

<b>Calories:</b>	<b>1,650</b>	<b>Calories:</b>	<b>1,205</b>
Total Carb, % kcals:	56	Total Carb, % kcals:	60
Total Fat, % kcals:	27	Total Fat, % kcals:	25
*Sodium, mg:	1,829	*Sodium, mg:	1,335
SFA, % kcals:	8	SFA, % kcals:	7
Cholesterol, mg:	82	Cholesterol, mg:	44
Protein, % kcals:	19	Protein, % kcals:	18

1,600: 100% RDA met for all nutrients except: Vit E 92%, Vit B<sub>3</sub> 97%,  
Vit B<sub>6</sub> 67%, Magnesium 98%, Iron 73%, Zinc 68%

1,200: 100% RDA met for all nutrients except: Vit E 75%, Vit B<sub>1</sub> 92%,  
Vit B<sub>3</sub> 69%, Vit B6 59%, Iron 54%, Zinc 46%

\* No salt added in recipe preparation or as seasoning. Consume at least  
32 oz. water.

# Mexican-American Cuisine

<b>Breakfast</b>	<b>1,600 Calories</b>	<b>1,200 Calories</b>
Cantaloupe	1 cup	1/2 cup
Farina, prepared with 1% milk, low fat	1/2 cup	1/2 cup
White Bread	1 slice	1 slice
Margarine	1 tsp	1 tsp
Jelly	1 tsp	1 tsp
Orange Juice	1 1/2 cup	3/4 cup
Milk 1%, low fat	1/2 cup	1/2 cup

<b>Lunch</b>		
Beef Enchilada		
Tortilla, corn	2 tortillas	2 tortillas
Lean Roast Beef	2 1/2 oz	2 oz
Vegetable Oil	2/3 tsp	2/3 tsp
Onion	1 T	1 T
Tomato	4 T	4 T
Lettuce	1/2 cup	1/2 cup
Chili Peppers	2 tsp	2 tsp
Refried Beans, prepared with vegetable oil	1/4 cup	1/4 cup
Carrots	5 sticks	5 sticks
Celery	6 sticks	6 sticks
Milk 1%, low fat	1/2 cup	—

<b>Dinner</b>		
Chicken Taco		
Tortilla, corn	1 tortilla	1 tortilla
Chicken Breast, without skin	2 oz	1 oz
Vegetable Oil	2/3 tsp	2/3 tsp
Cheddar Cheese, low-fat and low-sodium	1 oz	1/2 oz
Guacamole	2 T	1 T
Salsa	1 T	1 T
Corn, seasoned with margarine	1/2 cup	1/2 cup
Spanish Rice without meat, seasoned with margarine	1/2 cup	1/2 cup
Banana	1 large	1/2 large
Coffee	1 cup	1 cup
Milk 1%, low fat	1 oz	1 oz

## Mexican-American Cuisine

<b>Calories:</b>	<b>1,638</b>	<b>Calories:</b>	<b>1,239</b>
Total Carb, % kcals:	56	Total Carb, % kcals:	58
Total Fat, % kcals:	27	Total Fat, % kcals:	26
*Sodium, mg:	1,616	*Sodium, mg:	1,364
SFA, % kcals:	9	SFA, % kcals:	8
Cholesterol, mg:	143	Cholesterol, mg:	91
Protein, % kcals:	20	Protein, % kcals:	19

1,600: 100% RDA met for all nutrients except: Vit E 97%, Zinc 84%  
1,200: 100% RDA met for all nutrients except: Vit E 71%, Vit B<sub>1</sub> & B<sub>3</sub> 91%,  
Vit B<sub>2</sub> and Iron 90%, Calcium 92%, Magnesium 95%, Zinc 64%

\* No salt added in recipe preparation or as seasoning. Consume at least 32 oz. water.

# Southern Cuisine

	1,600 Calories	1,200 Calories
<b>Breakfast</b>		
Oatmeal, prepared with 1% milk, low fat	1/2 cup	1/2 cup
Milk 1%, low fat	1/2 cup	1/2 cup
English Muffin	1 medium	—
Cream Cheese, light, 18% fat	1 T	—
Orange Juice	3/4 cup	1/2 cup
Coffee	1 cup	1 cup
Milk 1%, low fat	1 oz	1 oz
<b>Lunch</b>		
Baked Chicken, without skin	2 oz	2 oz
Vegetable Oil	1 tsp	1/2 tsp
Salad:		
Lettuce	1/2 cup	1/2 cup
Tomato	1/2 cup	1/2 cup
Cucumber	1/2 cup	1/2 cup
Oil and Vinegar Dressing	2 tsp	1 tsp
White Rice, seasoned with margarine, diet	1/3 cup	1/3 cup
Baking Powder Biscuit, prepared with vegetable oil	1 small	1/2 small
Margarine	1/2 tsp	1/2 tsp
Water	1 cup	1 cup
<b>Dinner</b>		
Lean Roast Beef	3 oz	2 oz
Onion	1/4 cup	1/4 cup
Beef Gravy, water-based	1 T	1 T
Turnip Greens, seasoned with margarine, diet	1/2 cup 1/2 tsp	1/2 cup 1/2 tsp
Sweet Potato, baked	1 small	1 small
Margarine, diet	1/2 tsp	1/4 tsp
Ground Cinnamon	1 tsp	1 tsp
Brown Sugar	1 tsp	1 tsp
Cornbread prepared with margarine, diet	1/2 medium slice	1/2 medium slice
Honeydew Melon	1/4 medium	1/8 medium
Iced Tea, sweetened with sugar	1 cup	1 cup
<b>Snack</b>		
Saltine Crackers, unsalted tops	4 crackers	4 crackers
Mozzarella Cheese, part-skim, low-sodium	1 oz	1 oz

## Southern Cuisine

<b>Calories:</b>	<b>1,653</b>	<b>Calories:</b>	<b>1,225</b>
Total Carb, % kcals:	53	Total Carb, % kcals:	50
Total Fat, % kcals:	28	Total Fat, % kcals:	31
*Sodium, mg:	1,231	*Sodium, mg:	867
SFA, % kcals:	8	SFA, % kcals:	9
Cholesterol, mg:	172	Cholesterol, mg:	142
Protein, % kcals:	20	Protein, % kcals:	21

1,600: 100% RDA met for all nutrients except: Vit E 97%, Magnesium 98%, Iron 78%, Zinc 90%

1,200: 100% RDA met for all nutrients except: Vit E 82%, Vit B1 & B2 95%, Vit B3 99%, Vit B6 88%, Magnesium 83%, Iron 56%, Zinc 70%

\* No salt added in recipe preparation or as seasoning. Consume at least 32 oz. water.

# BILLING & PREVENTION PROCEDURE CODES

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- ***ICD-9 Codes***  
- *International Classification of Diseases, 9th Revisions, Clinical Modifications*  
— *V Codes*
- ***CPT-4 – Current Procedural Codes***
- ***Health care Common Procedure Coding System (HCPCS)***  
— *Level I – CPT 4 Procedure Codes*  
— *Level II Procedure, Counseling & Supply Codes*

# BILLING & PREVENTION PROCEDURE CODES

**M**edical coding involves the use of universal alpha-numeric codes to describe medical diagnoses and procedures for the purpose of tracking disease and submission to public and private health insurance carriers for the reimbursement of medical services rendered by medical providers to patients. Appropriate use of coding types for reimbursement will vary by insurance carrier and services rendered.

## **ICD9-CM Codes — International Classification of Diseases, 9th Revisions, Clinical Modifications**

**T**he International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) is based on the World Health Organization's Ninth Revision, International Classification of Diseases (ICD-9). ICD-9-CM is the official system of assigning codes to diagnoses and procedures associated with hospital utilization in the United States<sup>50</sup>.

Diagnosis	ICD-9 Code
Thyroid (Hypothyroidism)	244.8, 244.9
Diabetes Mellitus	250.00 – 250.03
Pituitary, Fröhlich's (adiposogenital dystrophy)	253.8
Adrenal	255.8
Endocrine NEC, Endogenous	259.9
Nutritional deficiencies, unspecified	269.9
Hypercholesterolemia	272.0
Hyperglyceridemia	272.1
Hyperlipidemia	272.4
Metabolic syndrome	277.7
Metabolism disorder	277.9
Obesity(constitutional, exogenous, familial, nutritional, simple)	278.00
Morbid Obesity (BMI over 40, over 35-39 with co-morbid conditions)	278.01
Overweight (BMI 26-29)	278.02
Hyperalimentation, specified	278.8
Chronic depression	296.12
Eating disorder, unspecified	307.50
Bulimia nervosa	307.51
Other and unspecified disorders of eating	307.59
Hypertension	401.0, 401.1
Essential hypertension, unspecified	401.9
Cardiovascular disease	414.9
Chronic venous insufficiency, venous stasis	459.81
Chronic Respiratory Disease	519.9

Gastro-esophageal reflux (GERD)	530.81
Constipation, unspecified	564.00
Pregnancy Related Obesity	646.1
Osteoarthritis	715.9
Sleep Disturbance, unspecified	780.50
Insomnia with sleep apnea, unspecified	780.51
Hypersomnia with sleep apnea, unspecified	780.53
Hypersomnia, unspecified	780.54
Sleep apnea, unspecified	780.57
Abnormal Weight Gain	783.1
Other symptoms concerning nutrition, metabolism, and development	783.9
Urinary stress incontinence	788.32, 625.6
Impaired glucose tolerance test (oral)	790.22
Other abnormal glucose; pre-diabetes	790.29
Hyperglycemia, other abnormal blood chemistry	790.60

## V Codes<sup>51</sup>

In the primary care setting supplemental ICD9-CM V codes can be used to indicate a reason for health screening and health related counseling encounters.

V codes are also used to classify circumstance or problems influencing a person's health status resulting from a current illness or injury. They are not procedure codes and must accompany the corresponding procedure code.

### **Code series (V85) pertaining to Body mass index<sup>52</sup>**

- V85.0 Body mass index less than 19, adult
- V85.1 Body mass index between 19-24, adult
- V85.21 Body mass index 25.0-25.9, adult
- V85.22 Body mass index 26.0-26.9, adult
- V85.23 Body mass index 27.0-27.9, adult
- V85.24 Body mass index 28.0-28.9, adult
- V85.25 Body mass index 29.0-29.9, adult
- V85.30 Body mass index 30.0-30.9, adult
- V85.31 Body mass index 31.0-31.9, adult
- V85.32 Body mass index 32.0-32.9, adult
- V85.33 Body mass index 33.0-33.9, adult
- V85.34 Body mass index 34.0-34.9, adult
- V85.35 Body mass index 35.0-35.9, adult
- V85.36 Body mass index 36.0-36.9, adult
- V85.37 Body mass index 37.0-37.9, adult
- V85.38 Body mass index 38.0-38.9, adult
- V85.39 Body mass index 39.0-39.9, adult
- V85.4 Body mass index 40 and over, adult

### **Bariatric Surgery Related V Codes**

- V45.3 Post-surgical Status of Intestinal bypass

## **Healthcare Common Procedure Coding System (HCPCS) Level I (CPT-4) and Level II Procedure, Counseling and Supply Codes<sup>53</sup>**

### **Level I - CPT-4 Procedure Codes**

The CPT is a uniform coding system consisting of descriptive terms and identifying codes primarily used to identify medical services and procedures for the purposes of billing public or private health insurance programs.

Procedure	CPT-4 Code
Collection of venous blood by venipuncture	36415
Collection of capillary blood specimen	36416
Oxygen uptake, expired gas analysis (calorimetry)	94690, 94799
Glucose monitoring for up to 72 hours	95250
Health and behavior assessment, initial	96150
Health and behavior assessment, follow-up	96151
Health and behavior intervention, individual	96152
Health and behavior intervention, group (2 or more patients)	96153
Health and behavior intervention, family (with patient present)	96154
Health and behavior intervention, family (without patient present)	96155
Medical Nutrition Therapy; initial assessment and intervention, individual	97802
Medical Nutrition Therapy; follow-up assessment and intervention, individual	97803
Medical Nutrition Therapy; group (2 or more patients)	97804

### **CPT-4 Codes - Surgical Treatment of Obesity**

Procedure	CPT- 4 Code
Laparoscopy, surgical, gastric restrictive procedure; with gastric bypass and Roux-en-Y gastroenterostomy (roux limb 150 cm or less).	43644
With gastric bypass and small intestine reconstruction to limit absorption.	43645
Placement of adjustable gastric band (gastric band and subcutaneous port components)	43770
Revision of adjustable gastric band component only	43771
Removal of adjustable gastric band component only	43772
Removal and replacement of adjustable gastric band component only	43773
Removal of adjustable gastric band and subcutaneous port components	43774
Gastric restrictive procedure, without gastric bypass, for morbid obesity; vertical-banded gastroplasty	43842
Other than vertical-banded gastroplasty	43843
Gastric restrictive procedure with partial gastrectomy, pyloris-preserving duodenoleostomy and ileoileostomy (biliopancreatic diversion with duodenal switch)	43845
Gastric restrictive procedure, with gastric bypass for morbid obesity; with short limb (150 cm or less) Roux-en-Y gastroenterostomy	43846
with small intestine reconstruction to limit absorption	43847

Revision, open, of gastric restrictive procedure for morbid obesity, other than adjustable gastric band	43848
Gastric restrictive procedure, open; revision of subcutaneous port component only	43886
Removal of subcutaneous port component only	43887
Removal and replacement of subcutaneous port component only	43888

### ***HCPCS Level II – Procedure, Counseling and Supply Codes***

HCPCS Level II codes were developed to fill in the CPT-4 procedure code gaps. While they are reported in the same way as a CPT-4 code, they consist of one alphabetic character (A-V) followed by four digits. The following codes are used for weight management related education and counseling services:

#### **Education and Counseling Codes**

Procedure or Supply	HCPCS Code
Patient Education; non-physician provider, individual, per session	S9445
Patient Education; non-physician provider, group, per session	S9446
Weight management class; non-physician provider, per session	S9449
Exercise class; non-physician provider, per session	S9451
Nutrition class; non-physician provider, per session	S9452
Stress management class; non-physician provider, per session	S9454
Diabetic management program; group session	S9455
Diabetic management program; nurse visit	S9460
Diabetic management program; dietitian visit	S9465
Nutritional counseling; dietitian visit	S9470

# COMMUNITY/ENVIRONMENTAL INFORMATION

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- ***Physicians for Healthy Communities***
- ***Speakers Bureau Sign Up***
- ***CMA Foundation Policy Clearinghouse***
- ***CMA Foundation Community Resource Directory***

# PHYSICIANS FOR HEALTHY COMMUNITIES

**An Initiative of the  
California Medical Association Foundation**



***“Engaged communities and engaged physicians are vital to the health of Californians. Please consider joining the CMA Foundation’s efforts to turn the tide on the obesity epidemic in California.”***

— Frank Staggers, MD  
Chair, CMA Foundation Board of Directors

The CMA Foundation is working to prevent obesity related diseases by turning practicing physicians into community educators and advocates for healthy eating, physical activity and policy change in the battle against obesity. Through diverse partnerships with businesses, government, health plans and community organizations, the CMA Foundation will utilize physicians' expertise and credibility to maximize their impact on the obesity epidemic.

**\$28 Billion** – The estimated economic impact of obesity in California in 2005.

**66 percent** of the U.S. adult population is overweight or obese.

**90 percent** of Californians surveyed stated that they wanted physicians to be their primary source of information about nutrition, physical activity and other health issues associated with obesity.

Field Research Poll conducted by The California Endowment (2004)

## ***CMA Foundation Physician Champions will receive:***

- Training with free CME
- Provider, Community Outreach, and Advocacy toolkits
- Connections with school boards, county councils and many other organizations
- Assistance from CMA Foundation staff
- Online resources at [www.calmedfoundation.org](http://www.calmedfoundation.org)

## ***Our Physicians for Healthy Communities toolkit provides:***

- Information on obesity prevention, community outreach and advocacy
- School Presentation Toolkit
- Speaker's Bureau Manual
- Key Messages
- Power Point Presentations
- Research Articles
- Links to other helpful resources
- CD Rom of materials

For more information about the Physicians for Healthy Communities Initiative, please contact Christine Maulhardt, Director of Obesity Prevention, at 916/551.2874 or [cmaulhardt@cmanet.org](mailto:cmaulhardt@cmanet.org), or visit <http://www.calmedfoundation.org/projects/obesityProject.aspx>

# PHYSICIANS FOR HEALTHY COMMUNITIES

An Initiative of the  
California Medical Association Foundation



***Are you ready to help your community become healthy and active?  
Become a part of the Speaker's Bureau!***

**Name:** \_\_\_\_\_

**Street Address:** \_\_\_\_\_

**City:** \_\_\_\_\_ **State:** \_\_\_\_\_ **Zip:** \_\_\_\_\_

**E-mail:** \_\_\_\_\_

**Phone:** \_\_\_\_\_ **Fax:** \_\_\_\_\_

**Preferences:**

**County/City for Presentation:** \_\_\_\_\_

**Time of Day and Week:** \_\_\_\_\_

**Age Group:** Children      Adolescents      Adults      Families

**Setting** (school, community group, church, etc.):  
\_\_\_\_\_  
\_\_\_\_\_

**Do you have any established contacts with groups you'd like to work with?  
(If yes, please detail):**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Advance notice required** (number of days, weeks, etc.): \_\_\_\_\_

**CMA FOUNDATION** CALIFORNIA MEDICAL ASSOCIATION FOUNDATION

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## POLICY CLEARINGHOUSE OBESITY PREVENTION PROJECT

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The CMA Foundation's Obesity Policy Clearinghouse provides support to physician advocates working on issues surrounding obesity, nutrition, and physical activity. The Clearinghouse provides a comprehensive list of recent policies and laws from advocacy organizations and state and local governments.

The Obesity Policy Clearinghouse will support physician's advocacy efforts by connecting them to a wide variety of:

- Policy Statements
- Policy Briefs
- Laws
- Directives

These policies represent:

- National and State Medical Associations
- Specialty Medical Societies
- State and Local Government
- Advocacy Organizations

**Organization:**

African American 5 a Day Campaign Advisory Council  
American Academy of Pediatrics  
American Medical Association  
American Public Health Association

**Policy Topic:**

Advocacy  
Childhood Obesity  
Diabetes  
Ethnic Communities

**Policy Type:**

Directive  
Law  
Policy Brief  
Policy Statement

Search Reset Submit a Policy

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## COMMUNITY RESOURCE DIRECTORY OBESITY PREVENTION PROJECT

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The Community Resource Directory is a collaboration between the California Medical Association Foundation and the Network for a Healthy California to identify programs and resources for individuals at risk for overweight, obesity and type 2 diabetes. The resources currently available cover the Central Valley of California, (including Fresno, Kern, Kings, Madera, Mariposa, Merced, and Tulare counties) the North Coast region, (including Del Norte, Humboldt, Mendocino, Lake, Napa and Sonoma counties) the Desert Sierra region (including Riverside, San Bernardino and Inyo Counties) and some of the counties in the Gold Country region (Including San Joaquin, Sacramento, Stanislaus counties) and the Central Coast region (including Santa Cruz, Monterey, and San Benito counties). There are also entries for Butte and Glenn counties, with the anticipated inclusion of the remaining counties in these regions as well as the Sierra Cascade region (including Modoc, Siskiyou, Trinity, Shasta, Lassen, Tehama, Plumas, Sierra, Nevada, Butte, Glenn, and Colusa counties).



### What's Included

Programs and resources included in the directory include :

- **Clinics:** Medical Clinics providing care and education specifically tailored for diabetic patients.
- **Nutrition Education:** Community education programs addressing healthy eating.
- **Diabetes Counseling & Education:** One on one or small group education and support for individuals with diabetes.
- **Education Materials:** Health education resources on nutrition and healthy eating, physical activity, overweight/obesity and type 2 diabetes.
- **Food Resources:** Supplemental food or food vouchers such as Food Stamps and WIC and Farmer's Markets, Food Banks and congregate meal locations.
- **Physical Activity:** Low cost or free exercise classes and sports teams.
- **State and National Parks:** Recreation Areas and Parks with hiking trails, bike trails, and other facilities for physical activities.

### How to Use the Directory

Resources in your community can be found by completing simple searches using the categories below. You may identify resources by County, Type of Program, Age Group and Language. You do not need to select criteria from each of the categories. To select multiple search criteria in a category, hold down the Ctrl key on your keyboard while you use the mouse to make your selections.

# RESOURCES

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- ***BMI Resource Links and Calculators***
- ***CME Resources***
- ***Culturally Appropriate Resources***
- ***Informational Website Links***

## BMI Resource Links and Calculators

### Sample BMI Calculation

Weight in kilograms (kg) divided by the square of height in meters (m <sup>2</sup> ).	Weight in pounds (lbs) divided by the square of height in inches (in <sup>2</sup> ) multiplied by 703.
BMI = $\frac{\text{Weight (kg)}}{\text{Height squared (m}^2)}$	BMI = $\frac{\text{Weight (lbs)}}{\text{Height squared (in}^2)} \times 703$

### Sample Calculation

Charles is a 40-year-old male who is 5'10" tall and weighs 210 pounds.

What is Charles' BMI?

$$\text{BMI} = (\text{weight [lbs]} / [\text{height (inches)}]^2) \times 703$$

$$\text{BMI} = (210/[70]^2) \times 703$$

$$\text{BMI} = 30.1$$

What does a BMI of 30.1 for Charles represent? According to the CDC, Charles would be considered obese.

### Online BMI Calculators and Information Links

#### Centers for Disease Control and Prevention:

- Information about BMI, online calculators (Adults, Child/Teen), and links to additional BMI resources, and growth charts
- <http://www.cdc.gov/nccdphp/dnpa/bmri/index.htm>

#### National Heart, Lung and Blood Institute – Obesity Education Initiative

- Online BMI calculator and information on assessing risk
- [http://www.nhlbi.nih.gov/health/public/heart/obesity/lose\\_wt/index.htm](http://www.nhlbi.nih.gov/health/public/heart/obesity/lose_wt/index.htm)

#### PDA Software (Free Downloads for use on Palm OS and Pocket PC)

- Body mass index Calculator
- Provides information on BMI, PDA calculators (English and Metric measurements), and adult BMI classification tables. [http://hp2010.nhlbihin.net/bmi\\_palm.htm](http://hp2010.nhlbihin.net/bmi_palm.htm)
- ATP III Cholesterol Management Implementation Tool (Palm OS)
- Interactive guidelines tool designed to assist clinicians in implementing ATP III Cholesterol guidelines at the point of care.
- <http://hp2010.nhlbihin.net/atp3/atp3palm.htm>

**Adult Body Mass Index (BMI) Table**

Height	Weight in Pounds																						
	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
4'0"	24	27	31	34	37	40	43	46	49	52	55	58	61	64	67	70	73	76	79	82	85	88	92
4'2"	22	25	28	31	34	37	39	42	45	48	51	53	56	59	62	65	67	70	73	76	79	82	84
4'4"	21	23	26	29	31	34	36	39	42	44	47	49	52	55	57	60	62	65	68	70	73	75	78
4'6"	19	22	24	27	29	31	34	36	39	41	43	46	48	51	53	55	58	60	63	65	68	70	72
4'8"	18	20	22	25	27	29	31	34	36	38	40	43	45	47	49	52	54	56	58	61	63	65	67
4'10"	17	19	21	23	25	27	29	31	33	36	38	40	42	44	46	48	50	52	54	56	59	61	63
5'0"	16	18	20	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	53	55	57	59
5'2"	15	16	18	20	22	24	26	27	29	31	33	35	37	38	40	42	44	46	48	49	51	53	55
5'4"	14	15	17	19	21	22	24	26	27	29	31	33	34	36	38	39	41	43	45	46	48	50	51
5'6"	13	15	16	18	19	21	23	24	26	27	29	31	32	34	36	37	39	40	42	44	45	47	48
5'8"	12	14	15	17	18	20	21	23	24	26	27	29	30	32	33	35	36	38	40	41	43	44	46
5'10"	11	13	14	16	17	19	20	22	23	24	26	27	29	30	32	33	34	36	37	39	40	42	43
6'0"	11	12	14	15	16	18	19	20	22	23	24	26	27	28	30	31	33	34	35	37	38	39	41
6'2"	10	12	13	14	15	17	18	19	21	22	23	24	26	27	28	30	31	32	33	35	36	37	39
6'4"	10	11	12	13	15	16	17	18	19	21	22	23	24	26	27	28	29	30	32	33	34	35	37
6'6"	9	10	12	13	14	15	16	17	18	20	21	22	23	24	25	27	28	29	30	31	32	34	35
6'8"	9	10	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	27	29	30	31	32	33

**Key**

Healthy Weight

Overweight

Obese

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## CME Resources

### **American Medical Association (AMA)** [www.ama-assn.org](http://www.ama-assn.org)

Roadmaps for Clinical Practice – Assessment and Management of Adult Obesity

#### **10 Booklet CME program**

- Book 1: Introduction and Clinical Considerations
- Book 2: Evaluating Your Pts for Overweight and Obesity:
- Book 3: Assessing Readiness and Making Treatment Decisions
- Book 4: Dietary Management
- Book 5: Physical Activity Management:
- Book 6: Pharmacological Management:
- Book 7: Surgical Management:
- Book 8: Communication and Counseling Strategies
- Book 9: Setting Up the Office Environment
- Book 10: Resources for Physicians and Patients

### **American Diabetes Association (ADA)** [www.diabetes.org](http://www.diabetes.org)

Clinical Management of Obesity: With Special Attention to Type 2 Diabetes

#### **2 hour CME Program**

### **Discovery Health CME** [www.discoveryhealthcme.com](http://www.discoveryhealthcme.com)

Video CME Programs

- Adult Obesity: Reversing the Trend
- Childhood Obesity: Combating the Epidemic
- Type 2 Diabetes: A Case for Cardiovascular Intervention
- Type 2 Diabetes: New Treatment Strategies

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## Culturally Appropriate Resources

### **CDC - Fruits and Veggies Matter**

[www.fruitsandveggiesmatter.gov](http://www.fruitsandveggiesmatter.gov)

### **Body and Soul**

[www.bodyandsoul.nih.gov](http://www.bodyandsoul.nih.gov)

Healthy eating and living campaign developed for African American churches.

The program encourages church members to eat a healthy diet rich in fruits and vegetables every day for better health.

### **California Dairy Council**

[http://www.dairycouncilofca.org/hp/hp\\_asian\\_pcs.htm](http://www.dairycouncilofca.org/hp/hp_asian_pcs.htm)

Booklets with key health information in Spanish, Chinese, Korean and other languages

### **Dietary Guidelines for Americans**

[www.health.gov/dietaryguidelines/](http://www.health.gov/dietaryguidelines/)

The Dietary Guidelines for Americans has been published every 5 years since 1980 by the Department of Health and Human Services (HHS) and the Department of Agriculture (USDA). The Guidelines serve as the basis for Federal food and nutrition education programs and provide authoritative advice on how good dietary habits can promote health.

### **DASH Eating Plan**

[www.nhlbi.nih.gov/health/public/heart/hbp/dash/](http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/)

Dietary Approaches to Stop Hypertension eating plan focuses on reducing the amount of sodium consumed by offering tips, sample menus, and recipes, as a means of lowering blood pressure and reducing the risk of hypertension.

### **Healthy People 2010**

[www.healthypeople.gov/](http://www.healthypeople.gov/)

Healthy People 2010 provides a framework for national prevention through a series of health objectives and goals designed to identify the most significant preventable threats to health, challenging individuals, communities and professionals to take specific steps to achieve good health.

### **MyPyramid**

[www.mypyramid.gov](http://www.mypyramid.gov)

Revised food pyramid plan designed to help individuals choose the right type and amount of foods to balance intake with physical activity levels to support a healthier lifestyle.

### **US Department of Agriculture**

[www.nal.usda.gov/fnic/etext/000010.html](http://www.nal.usda.gov/fnic/etext/000010.html)

Ethnic and cultural resources on disease, food habits, food pyramids and cultural diversity and eating in America.

### **National Heart, Lung, and Blood Institute – Aim for a Healthy Weight**

[http://www.nhlbi.nih.gov/health/public/heart/obesity/lose\\_wt/index.htm](http://www.nhlbi.nih.gov/health/public/heart/obesity/lose_wt/index.htm)

Professional educational materials include: Obesity Clinical Guidelines, Evidence Report and Executive Summary, evidence model and tables, slides, BMI calculators and tables, and much more.

## Informational Website Links

- American Academy of Family Physicians (AAFP)  
<http://familydoctor.org/online/famdocen/home/healthy/food/improve/788.html>  
This section offers a range of practical ideas for dealing with overweight and obesity.
- American Association of Clinical Endocrinologists (ACE)  
[www.aace.com](http://www.aace.com)
- American College of Physicians (ACP)  
[http://www.doctorsforadults.com/topics/dfa\\_obes.htm](http://www.doctorsforadults.com/topics/dfa_obes.htm)  
Health care topics related to overweight/obesity and weight control
- American Diabetes Association (ADA)  
<http://www.diabetes.org/weightloss-and-exercise.jsp>  
Links to resources on weight loss and exercise
- American Dietetic Association  
<http://www.eatright.org/cps/rde/xchg/ada/hs.xsl/nutrition.html>  
Links to resources related to food and nutrition
- American Medical Association (AMA)  
<http://www.ama-assn.org/ama/pub/category/10931.html>  
Roadmaps for Clinical Practice in the assessment and management of adult obesity
- American Obesity Association (AOA)  
<http://obesitycme.nhlbi.nih.gov/>  
Assessment and management of overweight and obese adult patients (Online CME - Requires free one-time registration)
- American Society for Bariatric Surgery (ASBS)  
<http://www.obesityaction.org/home/index.php>  
Link to the Obesity Action Coalition
- California Medical Association Foundation  
[www.calmedfoundation.org](http://www.calmedfoundation.org)
- Center for Disease Control and Prevention  
[http://www.cdc.gov/nccdphp/dnpa/nutrition/nutrition\\_for\\_everyone/healthy\\_weight/index.htm](http://www.cdc.gov/nccdphp/dnpa/nutrition/nutrition_for_everyone/healthy_weight/index.htm) - Nutrition and Healthy Weight
- Center for Medicare & Medicaid Services  
[www.cms.hhs.gov](http://www.cms.hhs.gov)
- My Pyramid (USDA)  
<http://www.mypyramid.gov/steps/stepstohealthierweight.html>  
Steps to a healthier weight
- National Heart Lung and Blood Institute  
[http://www.nhlbi.nih.gov/health/dci/Diseases/obe/obe\\_whatare.html](http://www.nhlbi.nih.gov/health/dci/Diseases/obe/obe_whatare.html)  
Index of topics on overweight and obesity
- National Diabetes Education Program (NDEP)  
<http://ndep.nih.gov/diabetes/diabetes.htm>

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Educational resources on diabetes and pre-diabetes

- National Eating Disorders Organization  
[http://www.nationaleatingdisorders.org/p.asp?WebPage\\_ID=294](http://www.nationaleatingdisorders.org/p.asp?WebPage_ID=294)  
Eating disorders information index
- North American Association for the Study of Obesity (NAASO)  
[http://naaso.org/information/what\\_is\\_obesity.asp](http://naaso.org/information/what_is_obesity.asp)  
Information on obesity
- Obesityhealth.com  
[www.obesityhealth.com](http://www.obesityhealth.com)
- Obesity Help  
[www.obesityhelp.com](http://www.obesityhelp.com)  
Information about Gastric Bypass, LAP BAND and non-surgical weight loss solutions
- US Department of Agriculture (USDA)  
[www.nutrition.gov](http://www.nutrition.gov)
- US Food and Drug Administration (FDA)  
<http://www.cfsan.fda.gov/~dms/wh-wght.html>  
Information about losing weight and maintaining a healthy weight

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## Clinical Guidelines

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## End Notes

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