# ***Promoting Healthier Weight***
## *in Adult Primary Care*

UNIVERSITY OF VERMONT
COLLEGE OF MEDICINE
AHEC
AREA HEALTH EDUCATION CENTERS PROGRAM

VERMONT
DEPARTMENT OF HEALTH

fit & healthy
vermonters

**Acknowledgements**

This toolkit was designed for primary care practitioners, with extensive input from the primary care community, to support the promotion of healthier weight with patients. The toolkit includes recommendations for the prevention, identification, assessment and management of overweight and obese adult patients in primary care. We thank all the primary care practitioners in Vermont who assisted with this effort – by responding to survey questions, participating in pilot studies, or contacting us with suggestions. We also thank the advisory committee members and all others who participated in this project. We would like to especially thank Richard Pratley, MD, who served as medical advisor to this project and Richard Pinckney, MD, MPH, who adapted motivational interviewing principles to the topic of promoting healthier weight, both from the University of Vermont College of Medicine.

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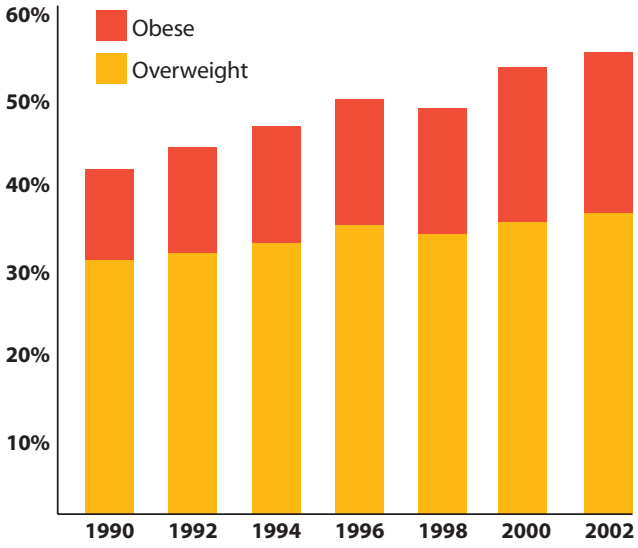
# *Promoting* ***Healthier Weight***

Overweight and obesity have become epidemic in our modern society. In Vermont, over half of all adults are overweight or obese. Moreover, the number of adults classified as obese has increased at an alarming rate during the last 15 years and this segment now comprises 20% of the population.

Obesity increases risk for many chronic diseases, including type 2 diabetes, atherosclerosis, gynecologic abnormalities, arthritis, respiratory disorders and certain types of cancer. In addition to the impact on Vermonters' quality of life, the direct medical costs attributable to obesity exceed $141 million annually. Thus, obesity is a significant public health challenge in Vermont.

**PERCENT OF OVERWEIGHT & OBESE ADULTS IN VERMONT**




Source: http://apps.nccd.cdc.gov/brfss

Although the health and functional consequences of obesity are well known, most overweight and obese patients experience significant challenges managing their weight, eating a healthy diet and getting enough physical activity. Even among highly motivated patients, relapse is common. It is clear that our health care system and, indeed, our society must find new and better ways to prevent and treat overweight and obesity. This toolkit is designed for primary care practitioners to assist in promoting healthier weight with adult patients.

## What can you do?

- **Talk to your patients** about achieving and maintaining a healthy weight. In 2000, only 12% of overweight patients and 33% of obese patients said they were advised by their doctor, nurse or other health care professional, to lose weight; yet, 76% of adult patients who said they were advised to lose weight were trying to do so.

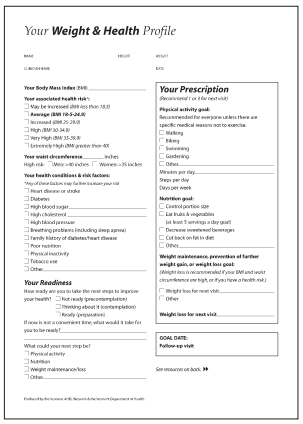
- **Identify** overweight and obese patients by calculating the body mass index (BMI) and **assess associated conditions and risk factors**.
- Regardless of weight, **encourage** patients to to set achievable goals and take the small steps toward the targets of controlling portion size, eating at least five fruits and vegetables daily, being physically active (at least 30 minutes on most days of the week) and maintaining or losing weight, as appropriate.
- **Provide** patients with resources, such as medical nutrition therapy, weight maintenance/loss and physical activity programs in your area.
- **Schedule a follow-up visit**

This kit contains tools for prevention, as well as tools to help assess overweight and obesity, and set nutrition, physical activity, and weight goals with your patients. It also provides sources of support for patients and additional background resources to help you and your patients manage their weight.

**When health care practitioners talk, patients listen!**

# *Promoting Healthier Weight* **Algorithm**

**Patient Encounter**
Review, measure, assess, agree on next steps and set-follow-up date


Your **Weight & Health** Profile

**Review** chart for BMI and past weight, height, nutrition, and physical activity goals/steps

**Measure** weight, height, calculate BMI and **assess** associated health risk

**BMI≥ 25**
Waist >35" for women
Waist >40" for men

**no**

**Brief reinforcement**
• weight maintenance
• nutrition
• physical activity

**yes**

**Assess** associated conditions and risk

**Build motivation and support**
Briefly reinforce with praise for even small improvements based on past goals

**Assess**
readiness for change

**Precontemplation**
Not ready, not aware, not interested

**Contemplation**
Thinking about it, aware of problem

**Preparation/Ready**
Planning for change

**Agree on next steps**
Steps will vary with stage, may include:
• schedule a follow-up visit
• provide educational materials
• provide community resources
• patient commitment to a physical activity or nutrition goal

**Set follow-up visit date**

# ***Using the Weight & Health Profile*** *and Applying Motivational Interviewing Skills*

The *Weight & Health Profile* (page 7) follows the Promoting Healthier Weight Algorithm and is intended to help guide discussions with patients regarding their weight, nutrition and physical activity habits. The tool is also provided as a 2-part NCR form. One sheet can be given to the patient as a reminder of your discussion. It includes a "prescription" for change (on the front) and resources (on the back). A copy can be retained in the chart for tracking purposes. The tool is also available at www.vtahec.org or http://healthvermont.gov. You may choose to customize it for your practice.

## *Patient encounter*

### Review chart

Any interaction between a health care practitioner and a patient can provide the opportunity to assess a patient's weight status and provide advice, counseling or treatment. You can use these opportunities to review past weight, nutrition, and physical activity goals.

### Measure weight, height, and waist circumference and calculate BMI

1. BMI can be calculated using the formulas:
   BMI = weight (kg) ÷ height (meters)$^2$ or
   BMI = weight (lbs) x 703 ÷ height (inches)$^2$
2. BMI can also be determined from a chart in this toolkit or with a calculator tool.

### Assess Associated Conditions and Risk

Based on BMI, what is the patient's risk? Is the BMI ≥25 or is the waist circumference >35 inches (women) or >40 inches (men)? If yes, continue assessment. If no, brief reinforcement and encouragement to maintain weight and healthy nutrition and physical activity is appropriate.

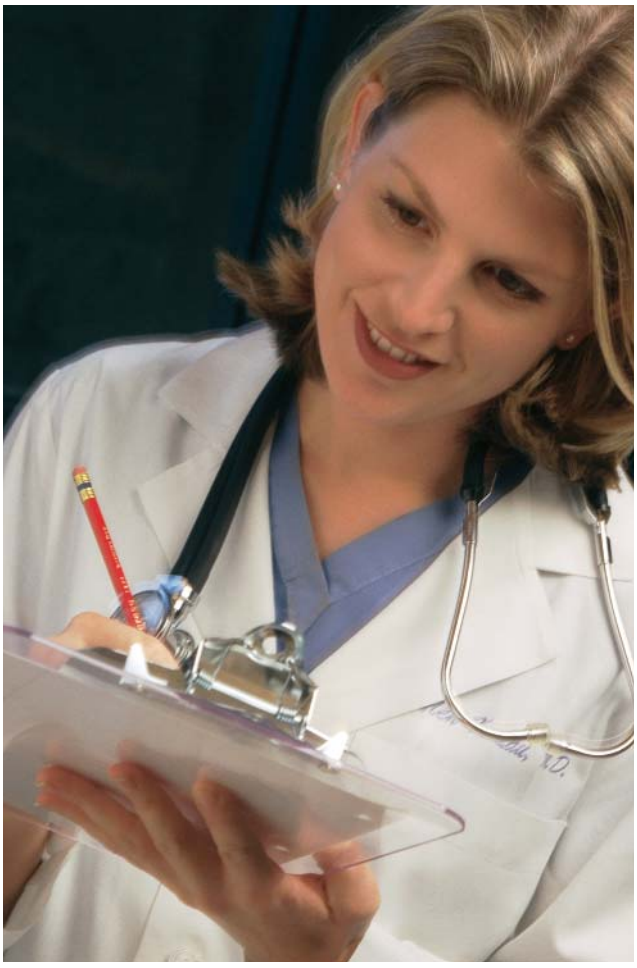
Assess for presence of psychiatric issues. You can explore psychiatric issues with patients using some of the following questions:

- What is your mood like most of the time? Do you feel you have the needed energy to lose weight? (may need to assess for depression)
- Do you feel that you eat what most people would consider a large amount of food in a short period of time? Do you feel out of control during this time? (may need to assess for binge eating disorders)
- Do you ever forcibly vomit, use laxatives, or engage in excessive physical activity as a means of controlling weight? (may need to assess for bulimia nervosa)

## *Build motivation and support*

### Praise improvements

Congratulate patients for improvements, even small ones, since the last visit, if this was discussed. If there has been no progress, continue with the assessment for readiness. Many patients will make multiple attempts before successfully initiating behavioral change.



## Assess readiness for change

Most patients are not ready to make major lifestyle changes when they visit a clinician's office. Determining how ready a patient is to make changes can be very useful for selecting the appropriate strategy for discussing physical activity, nutrition, or weight loss. The **stages of change** model is a tool for categorizing patient readiness.

The verbal cues provided on the chart below are one way to determine what stage patients are in. Other methods include asking how soon it will be, before they will be ready to make a change. Patients not interested in making changes in six months are in **precontemplation**. Those intending to make a change in six months are in **contemplatation**. Those intending to make a change in one month are in **preparation**.

For patients in precontemplation, contemplation, and preparation, assisting their motivation can enhance adherence to the goals that are developed. Research has shown that an approach that supports patients' motivation to change works much better than simply giving advice or putting pressure on patients by confronting them with the dangers of their current lifestyle. Using the method of motivational interviewing and the technique of reflective listening means that:

- the clinician takes an empathetic stance
- motivation comes from within the patient; the clinician evokes it
- the patient is the expert in his/her life, and
- the patient is in charge of change

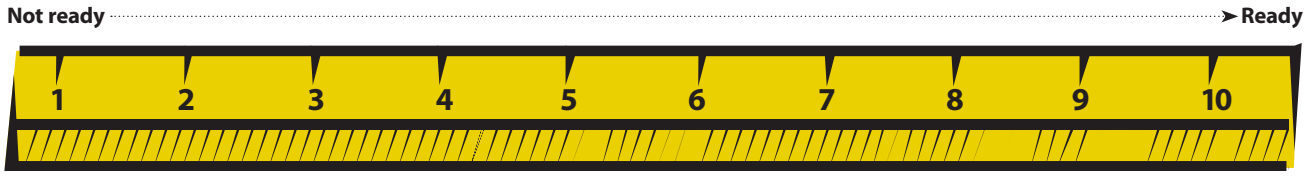
## Reflective listening – how does it work?

- the patient is encouraged to speak about nutrition, physical activity or weight loss. The clinician can initiate this by asking permission, "Could we talk a little about exercise and nutrition right now?"
- the clinician reflects back to the patient his/her words and their potential meaning to encourage the patient to continue speaking. "It sounds like you have tried several diets, and you are frustrated that they didn't give you long term results."
- the direction the clinician takes depends on the patient's readiness.
- the clinician avoids "you should" type statements in this process.

**STAGES OF CHANGE**

| | CHARACTERISTIC | PATIENT VERBAL CUE | APPROPRIATE INTERVENTION | SAMPLE DIALOGUE |
|---|---|---|---|---|
| Precontemplation | Unaware of problem. No interest in change. | I'm not really interested in weight loss. It's not a problem. | Roll with resistance. Explore barriers to change. | It sounds like you're not ready for weight loss right now. Maybe we can talk about it at your next visit. |
| Contemplation | Aware of problem. | I know I need to lose weight, but with all that's going on in my life right now, I'm not sure I can. | Review pros and cons of change, discuss barriers. | Taking steps to lose weight can be challenging. What would make you more ready? |
| Preparation | Realizes benefits of making changes and thinking about how to change. | I have to lose weight, and I'm planning to do that. | Develop a plan together. | It's great that you're considering losing weight. What might be your next step? |
| Action | Actively taking steps toward change. | I'm doing my best. This is harder than I thought. | Praise, encourage, reinforce – revise plan. | It's terrific that you're working so hard. What is your plan to stay on track? |
| Maintenance | Initial treatment goals reached. | I've learned a lot through this process. | Provide support and guidance, with a focus on the long term relapse control. | What situations continue to tempt you to overeat? What can be helpful for the next time you face such a situation? |

**HOW READY ARE YOU TO TAKE THE NEXT STEP?**




*What would make you more ready?* *What might your next steps be?* *What is your plan?*

## Not ready (Precontemplation)

Patients who are in precontemplation can be highly resistant to change. Clinicians need to be able to "roll with the patient resistance" rather than confront it. Explore the patient's thoughts using reflective listening so that the patient knows that he/she has been heard, believed, and respected. "It sounds like a good meal is something you look forward to at the end of the day."

Once patients have an opportunity to discuss their frustrations regarding change, they may be more interested in discussing the pros and cons of change which signals a transition to the contemplation stage. Or, the patient may not be ready. "If now is not a convenient time for weight loss, what would it take to be ready?" Scheduling another appointment to discuss this further is an appropriate next step.

## Thinking about it (Contemplation)

Clinicians can help patients **explore ambivalence**, as they wrestle with the pros and cons of their current diet and activities and consider changes. One technique clinicians can use is to ask patients how ready they are: "On a scale of 1 to 10, where 10 is Ready, how ready are you to increase your daily intake of fruits and vegetables?" or "increase your walking to 10 minutes per day?" Explore the patient's responses. If a patient says "2", ask why not "4"; or "What it would take to move to 4?" This encourages patients to discuss the advantages of increasing fruits and vegetables, or increasing daily walking.

## Planning/ready for change (Preparation)

Patients may become motivated and move into the **preparation** stage and commit to a plan. Or the patient may commit to scheduling another appointment to continue the dialogue.

## Patient commitment to change – when and how

"**AIM** for commitment" is a mnemonic to help you remember the keys steps in developing and maintaining a plan with patients:

- **A**sk permission to discuss a plan
- **I**nformation you provide is stated in the 3rd person
- **M**enu of options should be offered

**Asking permission** to discuss the plan keeps the patient empowered and serves as validation that the patient is in a preparation stage – it is easy to guess wrong.

Putting **information about treatment options in the 3rd** person helps to keep your preferences out of the decision making. "Research suggests that" or "experts recommend" are good ways to begin discussing plan options. Using this techniques, you will find that if patients reacts negatively, they are less likely to focus their frustration at you.

Offering patients a **menu of options** can empower patients to take charge of their health. (See *Your Prescription* on *Your Weight & Health Profile*, page 7, for examples.) Small or "baby" steps can be useful options for patients in preparation, or even contemplation, to prompt them to move in the direction of change. Continued over the long term, small steps will have more impact than dramatic behavioral changes that are not sustained.

**Commitment** comes in the form of a specific statement from patients including when and how they will make this change. For patients in the precontemplative and contemplative stages, the only specific commitment may be to come to the next visit.

Research shows that patients who make commitment statements are the most likely to make the lifestyle change. Encouraging patients to specifically state their plans (when and how) will help identify any other barriers to change and solidify their intentions.

### *Agree on next steps with all patients*

The next step may be to schedule a follow-up appointment to discuss physical activity, nutrition, or weight loss further. However, some patients may be ready to begin discussing a plan. Motivational interviewing continues to be a good method to use with patients in the preparation stage to further enhance the chances that they will adhere to the plan that is developed.

The *Profile/Prescription* can guide you and your patient through these steps from review, measurement, assessment, building motivation and making a plan. For those in the **preparation** or in the **action** stages, keep the focus on one or two behaviors. How much walking is the patient ready to do? Or will the patient swim? How many days per week? What nutritional goal is the patient ready to commit to? What weight loss goal (a reasonable amount is 1-2 pounds per week)?

### *Set a follow-up visit*

Schedule a follow-up visit so that the goal date is clear. If appropriate, encourage patients to come into the office for regular weigh-ins. At the next patient encounter, continue this process of review, measurement, assessment, and building motivation and support toward the goal of healthier weight. Keeping a copy of the *Profile/Prescription* in the patient chart should facilitate this process.

# *Your* **Weight & Health** *Profile*

NAME _____ HEIGHT _____ WEIGHT _____

CLINICIAN NAME _____ DATE _____

**Your Body Mass Index** (BMI) _____

**Your associated health risk*:**

- ☐ May be increased *(BMI less than 18.5)*
- ☐ **Average *(BMI 18-5-24.9)***
- ☐ Increased *(BMI 25-29.9)*
- ☐ High *(BMI 30-34.9)*
- ☐ Very High *(BMI 35-39.9)*
- ☐ Extremely High *(BMI greater than 40)*

**Your waist circumference** _____ inches

High risk: ☐ Men: >40 inches
☐ Women: >35 inches

**Your health conditions & risk factors:**

**Any of these factors may further increase your risk*

- ☐ Heart disease or stroke
- ☐ Diabetes _____
- ☐ High blood sugar _____
- ☐ High cholesterol _____
- ☐ High blood pressure _____
- ☐ Breathing problems (including sleep apnea)
- ☐ Family history of diabetes/heart disease
- ☐ Poor nutrition
- ☐ Physical inactivity
- ☐ Tobacco use
- ☐ Other _____

## *Your Readiness*

How ready are you to take the next steps to improve your health?

- ☐ Not ready (precontemplation)
- ☐ Thinking about it (contemplation)
- ☐ Ready (preparation)

If now is not a convenient time, what would it take for you to be ready? _____

_____

What could your next step be?

- ☐ Physical activity
- ☐ Nutrition
- ☐ Weight maintenance/loss
- ☐ Other _____

## *Your Prescription*

*(Recommend 1 to 3 small steps for next visit)*

**Physical activity goal:**

Recommended for everyone unless there are specific medical reasons not to exercise.

- ☐ Walking
- ☐ Biking
- ☐ Swimming
- ☐ Gardening
- ☐ Other _____

Minutes per day _____

Steps per day _____

Days per week _____

**Nutrition goal:**

- ☐ Control portion size
- ☐ Eat fruits & vegetables
- ☐ Decrease sweetened beverages
- ☐ Cut back on fat in diet
- ☐ Other _____

**Weight maintenance, prevention of further weight gain, or weight loss goal:**

*(Weight loss is recommended if your BMI or waist circumference are high, or if you have a health risk.)*

- ☐ Weight loss for next visit _____
- ☐ Other _____

**GOAL DATE:**

**Follow-up visit** _____

*See resources on back.* ▶▶

Produced by the Vermont AHEC Network & the Vermont Department of Health, 2007.

# *Resources for* ***Patients***

## Chronic Conditions

American Heart Association provides fitness and exercise tips, an online tool to help you begin or continue an exercise program, shopping tips and recipes
..... **www.americanheart.org/presenter.jhtml?identifier=1200009**

American Diabetes Association provides information on meal planning, fitness, and weight loss
..... **www.diabetes.org**

## Weight Management

Information on weight management..... **http://nutrition.gov**

National Institutes of Health's Aim for a Healthy Weight
..... **www.nhlbi.nih.gov/health/public/heart/obesity/lose_wt/index.htm**

## Nutrition

The USDA's MyPyramid allows you to determine your calorie needs and track your food intake and activity
..... **www.mypyramid.gov**

Produce for Better Health Foundation has tips and recipes for eating more fruits and vegetables
..... **www.5ADay.org** or
..... **www.fruitsandveggiesmorematters.org**

## Physical Activity

For a fun tool to track your activity, log onto America on the Move ..... **http://aom.americaonthemove.org**
American Council on Exercise's "Fit Facts™" offers one-page information sheets covering a range of fitness topics..... **www.acefitness.org/fitfacts/fitfacts_list.aspx**

## Vermont Resources

The Healthier Living Workshop is for people living with chronic conditions. This free workshop helps you learn how to manage physical and emotional symptoms, make action plans for health improvements and much more. Contact the Vermont Department of Health for more information ..... **1-800-464-4343** or
..... **http://healthvermont.gov/prevent/blueprint/selfmanage.aspx**

Vermont Department of Health, Fit and Healthy Vermonters provides links to Eat for Health and Get Moving Vermont – simple tips and resources to support healthy eating and promote physical activity
..... **http://healthvermont.gov/fitandhealthy.aspx**

Vermont's Department of Tourism and Marketing recreation site, includes statewide resources on biking, hiking, snow sports, water sports and more..... **www.vermontvacation.com/recreation/index.asp**

## Local Resources

Vermont 211, run by United Way, links individuals to local resources on a variety of topics including nutrition and physical activity. Dial 211 or search their database .....**www.vermont211.org**

## Other_____



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# *Resources for* ***Clinicians***

**Agency for Healthcare Research and Quality** *Managing Obesity: A Clinician's Aid* ..... **www.ahrq.gov/clinic/obesaid.pdf**

**American College of Physicians** Resources for patients and clinicians on nutrition and physical activity ..... **http://diabetes.acponline.org**

**American Diabetes Association** A wealth of information directed at patients and health professionals in online, print and full textbook formats..... **www.diabetes.org**

**American Dietetic Association** General nutrition information, including brief reviews of popular diets, such as South Beach (2006) and the Supermarket Diet (2007)..... **www.eatright.org**

**American Family Physician** 2001; 63(11):2185-96. *Obesity: Assessment and Management in Primary Care*. Lyznicki, JM, Young, DC, Riggs, JA, and Davis, RM. A good review article.

**American Heart Association** A good source of information regarding dietary fats... **www.americanheart.org**

**American Medical Association** Roadmaps for Clinical Practice Series. *Assessment and Management of Adult Obesity* ..... **www.ama-assn.org/ama/pub/category/10931.html**

**Motivational Interviewing** *Current Research and Training Opportunities in Vermont*..... **www.vtahec.org**

**National Heart, Lung, and Blood Institute** *Clinical Guidelines on the Identification, Evaluation and Treatment of Overweight and Obesity in Adult*..... **www.nhlbi.nih.gov/guidelines/obesity/ob_home.htm**

**North American Association for the Study of Obesity (NAASO)** Resources for health care professionals including latest research, and slides & materials for presentations ..... **www.naaso.org/education**

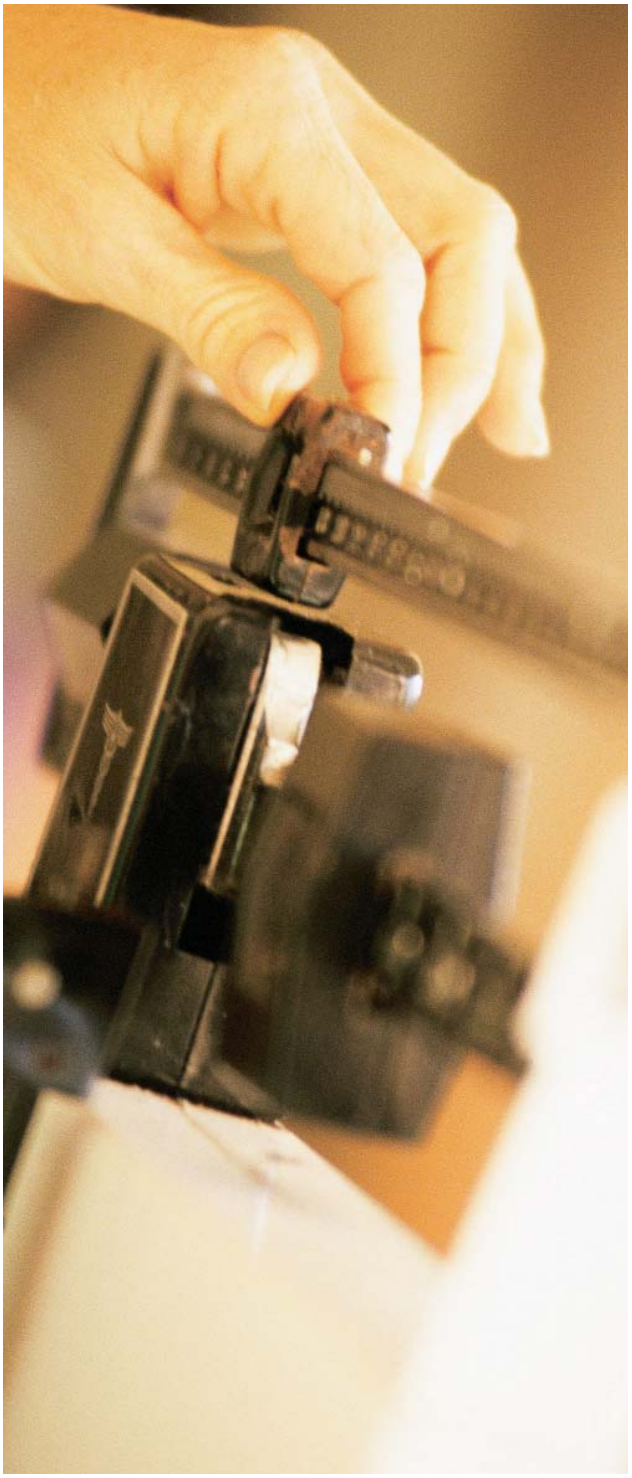
**Vermont Department of Health** *Fit & Healthy Vermonters, Preventing Obesity*. The 2006 state plan including nutrition and physical activity resources ..... **http://healthvermont.gov/family/fit/obesity.aspx**

**Weight Control Information Network** *Talking With Patients*. Resources for primary care professionals. ..... **http://win.niddk.nih.gov/publications/talking.htm**

# *Preparing* **Your Office & Billing**

## Evaluate your office environment.

Does your furniture comfortably accommodate overweight and obese patients? Do you measure height and weight in a way that respects patient privacy? Is your staff sensitive to the concerns that people often have about their weight?



## Check your equipment.

The two most critical components are accuracy and reliability. Both scales and stadiometers should be checked on a daily basis and calibrated every month.

- Accuracy is defined as the degree to which a measurement of an individual corresponds to his or her actual weight or stature.
- Reliability is defined as the degree to which successive measurements of the same person agree within specified limits.

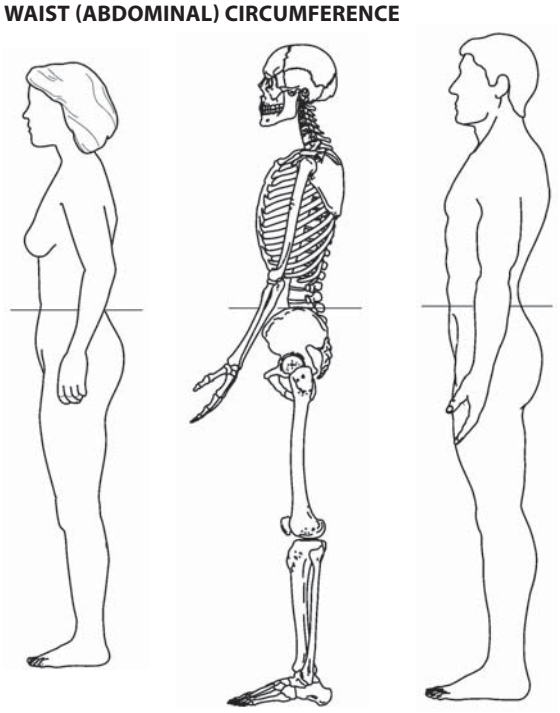
A suitable scale is a quality beam balance or electronic scale that can be easily calibrated. It is desirable that the scale weigh in 100 gram or 1/4 pound increments. Also, it is important that the scale is accurate. The scale should have a function so that it can be 'zeroed'. Standard weights should be available to calibrate the scale. Beam balance scales should have 'screw type' provision for immobilizing the zeroing weight. Spring balance scales such as bathroom scales should not be used to weigh adults.

An appropriate stadiometer for measuring height requires a vertical board with an attached metric rule and a horizontal headpiece that can be brought into contact with the most superior part of the head. The stadiometer should be able to read to 0.1 cm or 1/8 in. Height devices attached to scales are notably inaccurate because they do not have a stable platform.

## Have a tape for measuring waist circumference.

Accurate measurement of waist circumference requires a simple but accurate tool, that is, a non-stretchable, plasticized measuring tape. It is suggested that the tape be 1/4-1/2 inch wide. Circumference measurements should be taken at the level of the iliac crest.

**MEASURING TAPE POSITION FOR WAIST (ABDOMINAL) CIRCUMFERENCE**



www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf

## Develop a list of local resources for patients.

A simple one-page handout can serve most purposes. A resource list has been provided in this toolkit and on the back of *Your Weight & Health Profile*. Local resources, which can be added, could include hospital support groups, weight loss groups, dietitians and nutritionists, behavioral therapists, walking clubs, walking trails, school and community-based programs, and commercial weight loss programs and gyms. The Vermont Department of Health and your local Vermont Area Health Education Center (AHEC) are good sources of information, as well as the www.vermont211.org website.

## Develop/refine your practice processes so that assessment, goal setting, referral and follow-up are integrated in your practice.

Who will be responsible for calculating BMI?
How will you flag patients who have special issues?
Who will provide patients with the resource list?

## Use billing codes.

For patients with diagnosed diabetes or renal disease, reimbursement is available for registered dietitians to provide medical nutrition therapy. Services include nutrition assessment, counseling, education, and monitoring patient progress. Many payers will also selectively cover medical nutrition therapy for obesity.

One of the barriers in primary care is inadequate reimbursement for promoting healthier weight and intervention with overweight/obese patients. However, Medicare has recently released a set of V codes related to care for patients with a range of BMIs.

Medicare also offers limited reimbursement for office visits for the evaluation and management of obesity. As policies are currently in flux, check with other public and private insurers to see about reimbursement using these codes.

For most patients, BMI codes should follow the primary diagnoses. The codes are included below.

**V CODES FOR BILLING BY BODY MASS INDEX (BMI) CATEGORY**

| | BMI | V Code |
|---|---|---|
| **UNDER WEIGHT** | | |
| | <19 | V85.0 |
| **HEALTHY WEIGHT** | | |
| | 19-24 | V85.1 |
| **OVER HEALTHY WEIGHT** | | |
| | 25 | V85.21 |
| | 26 | V85.22 |
| | 27 | V85.23 |
| | 28 | V85.24 |
| | 29 | V85.25 |
| **OBESE** | | |
| | 30 | V85.30 |
| | 31 | V85.31 |
| | 32 | V85.32 |
| | 33 | V85.33 |
| | 34 | V85.34 |
| | 35 | V85.35 |
| | 36 | V85.36 |
| | 37 | V85.37 |
| | 38 | V85.38 |
| | 39 | V85.39 |
| | 40 | V85.40 |

Note: If BMI is not already recorded on the patient chart, it can be easily determined from height and weight using the *Adult BMI Chart* included in the appendix of this toolkit.

# *Your Role in the* **Community**

***What else can you do?***

Health care practitioners are particularly good role models and advocates – people trust them because of their expertise and their focus on health and wellness. These are some ideas for other activities you can do to raise awareness, promote prevention, and improve the care of overweight and obese individuals.

## Create a supportive environment in your clinic

- Staff behavior should be non-judgmental and support change
- The physical environment (chairs, exam tables, etc.) should comfortably accommodate larger patients

## Raise awareness

- Arrange interviews with the local paper and radio station
- Offer to speak to local groups – parents, seniors, community organizations

## Model healthy behaviors

- Maintain a healthy BMI, eating healthy foods and being active
- Participate in local fitness events, such as walks, and fun-runs

## Advocate within your community

***In schools***

- Promote healthy meal and beverage choices and physical education
- Increase access to school facilities for after hours fitness programs

***In the work place***

- Promote healthy meal and beverage choices
- Promote worksite fitness options

***In shops***

- Encourage mall walking programs

***With community agencies***

- Hospitals – encourage nutrition and exercise programs
- Senior centers – encourage healthy meals, activity programs
- Support and participate in your fit and healthy community coalition

***With local government***

- Support establishment of walking trails and parks

## Advocate with your legislators

- Encourage policies that increase access to healthcare
- Encourage policies that promote healthy eating and physical activity

# ***Foundation Resources*** *for this Toolkit*

Tools in this toolkit were adapted from these publicly available resources. We encourage clinicians to go directly to these resources for additional background information and guidance.

## Algorithm & BMI Chart

National Heart, Lung, and Blood Institute (NHLBI). Obesity Education Initiative. *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults. The Evidence Report*.
**www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf**

## Using the Weight & Health Profile and Motivational Interviewing

American Medical Association (AMA). *Roadmaps for Clinical Practice Series: Assessment and Management of Adult Obesity, Booklet 3. Assessing Readiness and Making Treatment Decisions*. Also see Clinical Tools, *Assessment of Patient Readiness* (same webpage)
**www.ama-assn.org/ama1/pub/upload/mm/433/booklet3-1.pdf**

Miller, W.R. and Rollnick, S. *Motivational Interviewing, Second Edition: Preparing People for Change*. New York: The Guilford Press. 2002.

Rollnick, S., Mason, P., and Butler. C. *Health Behavior Change: A Guide for Practitioners*. Edinburgh: Churchill Livingstone. 1999.

## Weight & Health Profile with Prescription

National Heart, Lung, and Blood Institute (NHLBI). Aim for a Healthy Weight Education Kit (for Health Professionals). Tips to Weight Loss Success.
**www.nhlbi.nih.gov/health/prof/heart/obesity/aim_kit/tips.pdf**

## Preparing Your Office

American Medical Association (AMA). Roadmaps for Clinical Practice Series. Assessment and Management of Adult Obesity, Booklet 9. Setting Up the Office Environment. Also see Clinical Tools, The Office Environment (same webpage).
**www.ama-assn.org/ama1/pub/upload/mm/433/booklet9.pdf**

Health Resources and Services Administration (HRSA), *Accurately Weighing & Measuring: Equipment*.
**http://depts.washington.edu/growth/module4/text/page1a.htm**

## Serving Size & Portion Control

American Dietetic Association. *Food & Nutrition Information.*
**www.eatright.org/cps/rde/xchg/ada/hs.xsl/nutrition.html**

United States Department of Agriculture. *Center for Nutrition Policy and Promotion*.
**www.cnpp.usda.gov**

# *About* **Us**

### *Vermont Area Health Education Centers (AHEC) Network*

AHEC is a statewide program working to strengthen Vermont's community health systems and the health of Vermonters; and is a partnership between the Northeastern Vermont AHEC, Champlain Valley AHEC, Southern Vermont AHEC, and the University of Vermont College of Medicine AHEC Program Office.

AHEC works to increase the supply, stability and education of Vermont's healthcare workforce, and provides a link between the UVM College of Medicine and Vermont's communities. This academic-community partnership is responsive to state and local needs to train health care providers. The Vermont AHEC Network is made up of a program office and three regional centers:

**University of Vermont AHEC Program Office**
Burlington
(802) 656-2179
www.vtahec.org

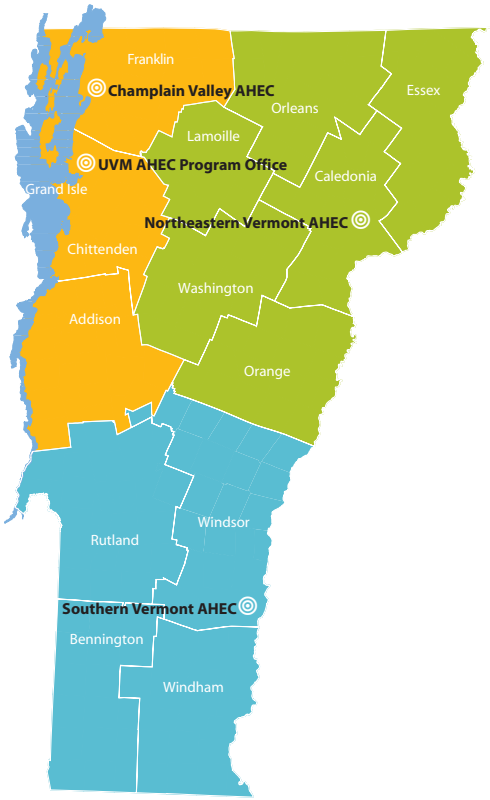
**Champlain Valley AHEC**
St. Albans
(802) 527-1474
www.cvahec.org

**Northeastern Vermont AHEC**
St. Johnsbury
(802) 748-2506
www.nevahec.org

**Southern Vermont AHEC**
Springfield
(802) 885-2126
www.southernvermontahec.org

### *Vermont Department of Health, Fit & Healthy Vermonters*

Fit & Healthy Vermonters provides a framework for increasing physical activity and improving nutrition. It includes actions to be taken by government, social service and health agencies, communities, worksites, schools, early childcare programs, families and individuals. And, it calls for changes in policy to promote and support these actions. For information on Vermont's obesity prevention program, call (802) 863-7330 or visit www.healthvermont.gov/fitandhealthy.aspx.



# *Adult* **Body Mass Index (BMI)** *Chart*

UNIVERSITY OF VERMONT COLLEGE OF MEDICINE AHEC AREA HEALTH EDUCATION CENTERS PROGRAM

VERMONT DEPARTMENT OF HEALTH

fit & healthy vermonters

| WEIGHT | 95 | 100 | 105 | 110 | 115 | 120 | 125 | 130 | 135 | 140 | 145 | 150 | 155 | 160 | 165 | 170 | 175 | 180 | 185 | 190 | 195 | 200 | 205 | 210 | 215 | 220 | 225 | 230 | 235 | 240 | 245 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **5′0″** | 19 | 20 | 21 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| **5′1″** | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 43 | 44 | 45 | 46 |
| **5′2″** | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| **5′3″** | 17 | 18 | 19 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 43 |
| **5′4″** | 16 | 17 | 18 | 19 | 20 | 21 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 39 | 40 | 41 | 42 |
| **5′5″** | 16 | 17 | 17 | 18 | 19 | 20 | 21 | 22 | 22 | 23 | 24 | 25 | 26 | 27 | 27 | 28 | 29 | 30 | 31 | 32 | 32 | 33 | 34 | 35 | 36 | 37 | 37 | 38 | 39 | 40 | 41 |
| **5′6″** | 15 | 16 | 17 | 18 | 19 | 19 | 20 | 21 | 22 | 23 | 23 | 24 | 25 | 26 | 27 | 27 | 28 | 29 | 30 | 31 | 31 | 32 | 33 | 34 | 35 | 36 | 36 | 37 | 38 | 39 | 40 |
| **5′7″** | 15 | 16 | 16 | 17 | 18 | 19 | 20 | 20 | 21 | 22 | 23 | 23 | 24 | 25 | 26 | 27 | 27 | 28 | 29 | 30 | 31 | 31 | 32 | 33 | 34 | 34 | 35 | 36 | 37 | 38 | 38 |
| **5′8″** | 14 | 15 | 16 | 17 | 17 | 18 | 19 | 20 | 21 | 21 | 22 | 23 | 24 | 24 | 25 | 26 | 27 | 27 | 28 | 29 | 30 | 30 | 31 | 32 | 33 | 33 | 34 | 35 | 36 | 36 | 37 |
| **5′9″** | 14 | 15 | 16 | 16 | 17 | 18 | 18 | 19 | 20 | 21 | 21 | 22 | 23 | 24 | 24 | 25 | 26 | 27 | 27 | 28 | 29 | 30 | 30 | 31 | 32 | 32 | 33 | 34 | 35 | 35 | 36 |
| **5′10″** | 14 | 14 | 15 | 16 | 16 | 17 | 18 | 19 | 19 | 20 | 21 | 22 | 22 | 23 | 24 | 24 | 25 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 |
| **5′11″** | 13 | 14 | 15 | 15 | 16 | 17 | 17 | 18 | 19 | 20 | 20 | 21 | 22 | 22 | 23 | 24 | 24 | 25 | 26 | 26 | 27 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 33 | 33 | 34 |
| **6′0″** | 13 | 14 | 14 | 15 | 16 | 16 | 17 | 18 | 18 | 19 | 20 | 20 | 21 | 22 | 22 | 23 | 24 | 24 | 25 | 26 | 26 | 27 | 28 | 28 | 29 | 30 | 31 | 31 | 32 | 33 | 33 |
| **6′1″** | 13 | 13 | 14 | 15 | 15 | 16 | 16 | 17 | 18 | 18 | 19 | 20 | 20 | 21 | 22 | 22 | 23 | 24 | 24 | 25 | 26 | 26 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 32 | 32 |
| **6′2″** | 12 | 13 | 13 | 14 | 15 | 15 | 16 | 17 | 17 | 18 | 19 | 19 | 20 | 21 | 21 | 22 | 22 | 23 | 24 | 24 | 25 | 26 | 26 | 27 | 28 | 28 | 29 | 30 | 30 | 31 | 31 |
| **6′3″** | 12 | 12 | 13 | 14 | 14 | 15 | 16 | 16 | 17 | 17 | 18 | 19 | 19 | 20 | 21 | 21 | 22 | 22 | 23 | 24 | 24 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 | 31 |
| **6′4″** | 12 | 12 | 13 | 13 | 14 | 15 | 15 | 16 | 16 | 17 | 18 | 18 | 19 | 19 | 20 | 21 | 21 | 22 | 23 | 23 | 24 | 24 | 25 | 26 | 26 | 27 | 27 | 28 | 29 | 29 | 30 |
| HEIGHT | Under healthy weight: BMI <18. 5 | | | | | | | | | | | | Healthy weight: BMI 18. 5–24. 9 | | | | | | | | | | Overweight: BMI 25–29. 9 | | | | | | | | |

Obese III: BMI ≥ 40

Obese II: BMI35-39.9

Obese I: BMI 30-34.9

## Weight Loss Recommendations

- For people with a BMI ≥30, weight loss is recommended
- For people with a BMI between 25 and 29. 9, or who have a waist circumference greater than 40″ in men and 35″ in women, and who have additional risk factors, weight loss is recommended
- For people with a BMI between 25 and 29. 9 who have no risk factors and do not want to lose weight, prevention of further weight gain is recommended

## Risk Factors

**Disease conditions:**

- Established CHD, other atherosclerotic diseases
- Type 2 diabetes
- Sleep apnea
- Gynecological abnormalities
- Osteoarthritis
- Gallstones & their complications
- Stress incontinence

**Cardiovascular risk factors:**

- Cigarette smoking
- Hypertension
- High LDL cholesterol (≥160 mg/dl)
- Low HDL cholesterol: Men <40 mg/dl; Women <50 mg/dl
- Impaired fasting glucose (100–125 mg/dl)
- Family history of premature CHD
- Men ≥45 years; Women ≥55 years (or postmenopausal)

**Other risk factors:**

- High serum triglycerides (>150 mg/dl)
- Physical inactivity

*BMI is calculated by weight in pounds multiplied by 703 and divided by height in inches squared.*

3/2007

# *Adult* **Body Mass Index (BMI)** *Chart*

UNIVERSITY OF VERMONT COLLEGE OF MEDICINE
AHEC
AREA HEALTH EDUCATION CENTERS PROGRAM

VERMONT
DEPARTMENT OF HEALTH

fit & healthy vermonters

| WEIGHT | 250 | 255 | 260 | 265 | 270 | 275 | 280 | 285 | 290 | 295 | 300 | 305 | 310 | 315 | 320 | 325 | 330 | 335 | 340 | 345 | 350 | 355 | 360 | 365 | 370 | 375 | 380 | 385 | 390 | 395 | 400 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **5′0″** | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 |
| **5′1″** | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 |
| **5′2″** | 46 | 47 | 48 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 69 | 70 | 71 | 72 | 73 |
| **5′3″** | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 66 | 67 | 68 | 69 | 70 | 71 |
| **5′4″** | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 64 | 65 | 66 | 67 | 68 | 69 |
| **5′5″** | 42 | 42 | 43 | 44 | 45 | 46 | 47 | 47 | 48 | 49 | 50 | 51 | 52 | 52 | 53 | 54 | 55 | 56 | 57 | 57 | 58 | 59 | 60 | 61 | 62 | 62 | 63 | 64 | 65 | 66 | 67 |
| **5′6″** | 40 | 41 | 42 | 43 | 44 | 44 | 45 | 46 | 47 | 48 | 48 | 49 | 50 | 51 | 52 | 52 | 53 | 54 | 55 | 56 | 56 | 57 | 58 | 59 | 60 | 61 | 61 | 62 | 63 | 64 | 65 |
| **5′7″** | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 45 | 45 | 46 | 47 | 48 | 49 | 49 | 50 | 51 | 52 | 52 | 53 | 54 | 55 | 56 | 56 | 57 | 58 | 59 | 60 | 60 | 61 | 62 | 63 |
| **5′8″** | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 43 | 44 | 45 | 46 | 46 | 47 | 48 | 49 | 49 | 50 | 51 | 52 | 52 | 53 | 54 | 55 | 55 | 56 | 57 | 58 | 59 | 59 | 60 | 61 |
| **5′9″** | 37 | 38 | 38 | 39 | 40 | 41 | 41 | 42 | 43 | 44 | 44 | 45 | 46 | 47 | 47 | 48 | 49 | 49 | 50 | 51 | 52 | 52 | 53 | 54 | 55 | 55 | 56 | 57 | 58 | 58 | 59 |
| **5′10″** | 36 | 37 | 37 | 38 | 39 | 39 | 40 | 41 | 42 | 42 | 43 | 44 | 44 | 45 | 46 | 47 | 47 | 48 | 49 | 49 | 50 | 51 | 52 | 52 | 53 | 54 | 55 | 55 | 56 | 57 | 57 |
| **5′11″** | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 40 | 41 | 42 | 43 | 43 | 44 | 45 | 45 | 46 | 47 | 47 | 48 | 49 | 50 | 50 | 51 | 52 | 52 | 53 | 54 | 54 | 55 | 56 |
| **6′0″** | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 39 | 40 | 41 | 41 | 42 | 43 | 43 | 44 | 45 | 45 | 46 | 47 | 47 | 48 | 49 | 49 | 50 | 51 | 52 | 52 | 53 | 54 | 54 |
| **6′1″** | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 40 | 40 | 41 | 42 | 42 | 43 | 44 | 44 | 45 | 46 | 46 | 47 | 47 | 48 | 49 | 49 | 50 | 51 | 51 | 52 | 53 |
| **6′2″** | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 39 | 39 | 40 | 40 | 41 | 42 | 42 | 43 | 44 | 44 | 45 | 46 | 46 | 47 | 48 | 48 | 49 | 49 | 50 | 51 | 51 |
| **6′3″** | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 37 | 38 | 39 | 39 | 40 | 41 | 41 | 42 | 42 | 43 | 44 | 44 | 45 | 46 | 46 | 47 | 47 | 48 | 49 | 49 | 50 |
| **6′4″** | 30 | 31 | 32 | 32 | 33 | 33 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 38 | 39 | 40 | 40 | 41 | 41 | 42 | 43 | 43 | 44 | 44 | 45 | 46 | 46 | 47 | 47 | 48 | 49 |
| HEIGHT | Obese I: BMI 30-34.9 | | | | | | | | | | | | | | | Obese II: BMI 35-39.9 | | | | | | | Obese III: BMI ≥ 40 | | | | | | | | |

## V Codes for Billing by Body Mass Index (BMI) Category

| Under Healthy Weight | BMI | V Code |
|---|---|---|
| | <19 | V85.0 |
| **Healthy Weight** | | |
| | 19-24 | V85.1 |

| Overweight | BMI | V Code |
|---|---|---|
| | 25 | V85.21 |
| | 26 | V85.22 |
| | 27 | V85.23 |
| | 28 | V85.24 |
| | 29 | V85.25 |

| Obese I | BMI | V Code |
|---|---|---|
| | 30 | V85.30 |
| | 31 | V85.31 |
| | 32 | V85.32 |
| | 33 | V85.33 |
| | 34 | V85.34 |

| Obese II & III | BMI | V Code |
|---|---|---|
| | 35 | V85.35 |
| | 36 | V85.36 |
| | 37 | V85.37 |
| | 38 | V85.38 |
| | 39 | V85.39 |
| | 40 | V85.40 |

*BMI is calculated by weight in pounds multiplied by 703 and divided by height in inches squared.*

# *Serving Size &* **Portion Control**

## *Helping You Understand Serving Size & Portion Control*

### What Is A Portion?

A "portion" is the amount of a specific food an individual chooses to eats for breakfast, lunch, dinner, or snack. There is no standardized portion size. Portions can be bigger or smaller than the servings size listed on a food label. Portion size and serving size have different meanings.

### What Is A Serving?

A 'serving' is a standard amount used to give advice about how much to eat, or to identify how many calories and nutrients are in a food.

*It's important to remember that the "serving size" is a unit of measure and may not be the "portion" an individual actually eats.*

### Why Do Portion Control?

If you are working hard to make better food choices, but aren't seeing the results you expected, perhaps you need to be a bit more careful in portion control. Overestimating portion sizes can result in extra calories leading to weight gain. Watching portion sizes can help prevent those extra pounds.

**20 years ago, a typical serving of soda was 6.5 oz. and 85 calories. Today, a typical serving of soda is 20 oz. and 250 calories.**

**Visuals & Measures**

Often it is impractical to use measuring cups and spoons or a food scale to determine reasonable portion sizes or serving sizes, therefore using simple visual serving cues and measures can be helpful.

**Visual Comparisons**

| | | |
|---|---|---|
| Medium potato | = | computer mouse |
| 1 cup of ice cream | = | baseball |
| Average bagel | = | hockey puck |
| 3 oz. grilled fish | = | size/thickness of a checkbook |
| 3 oz. meat | = | a deck of cards |
| 1 oz. cheese | = | 4 dice or a domino |
| 1 tsp. peanut butter | = | large grape |

**Measurement Comparisons**

Average-size handful = 1 oz. of chips/pretzels

Average-size index finger = about 1 oz. meat/chicken

Average-size closed fist = 4 oz. skinless chicken breast on the bone

Average-size woman's fist = about 1 cup

Average-size man's fist = about 1 1/2 cups

Average-size last joint of thumb = 1 tsp. of salad dressing, oil, butter, or cream cheese

Find a drinking glass in your cupboard that serves 8 fluid oz.; or take a permanent marker and draw a line at the point that serves 8 oz.

Find a bowl that serves a one-cup portion; or use a permanent marker to draw a portioning line

**20 years ago, a typical bagel was 3" and 140 calories. Today, a typical bagel is 6" and 360 calories. The larger bagel is an extra 200 calories. Eating 22 extra calories a day equals a weight gain of 23 pounds a year.**