Behavioral Health & Wellness Program

University of Colorado Anschutz Medical Campus
School of Medicine

DIMENSIONS: Well Body Toolkit for Healthcare Providers

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The DIMENSIONS: Well Body Toolkit for Healthcare Providers was developed by the University of Colorado Anschutz Medical Campus, School of Medicine, Behavioral Health and Wellness Program

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Why is a Well Body Toolkit Needed?

Health and well-being are shaped by many different factors. Among these factors are health-related behaviors, such as, nutrition, physical activity, sleep, social support and stress. These behaviors affect our sense of well-being and significantly influence our risk of many common chronic diseases. Maintaining a healthy weight is an important part of good health.[1,2] Research indicates that being either underweight or overweight is associated with poor health outcomes and increased risk of death.[3] Obesity contributes to many health problems, including heart disease, diabetes, stroke, and some types of cancer, which are some of the leading causes of death in the United States.[4] Obesity can also contribute to lower quality of life, difficulty being active, mental health conditions, and costly medical care. However, obesity and other physical health issues can be prevented or managed by healthy lifestyle choices.

Why Focus on Overweight and Obesity?

While underweight, overweight and obesity are all serious health problems, overweight and obesity are much more prevalent in the United States, and rates are increasing around the world.[5] It is vital that healthcare providers understand why people are overweight and obese, the health effects of excess weight, and how to promote healthy weight and lifestyles for those they serve. Healthcare providers are on the front lines for weight management interventions. They can play a key role in reversing the adverse health effects of obesity across the nation as well as reducing health disparities seen in priority populations.

U.S. Rates of Overweight and Obesity

- Approximately 69% of adults in the U.S. are overweight or obese.[6]
- Approximately 17% of youth are overweight or obese.[7]
- More than 1/3 of older adults are obese.[8]
- Over the past three decades, the percentage of persons who are overweight or obese has increased by approximately 40%.[9]
- Today, the states with the lowest rates of obesity show prevalence rates that are higher than the highest rates 20 years ago.[10]
- If current trends continue, 86% of adults in the U.S., and nearly 30% of U.S. children or adolescents, will be overweight or obese by 2030.[11]

Economics of Obesity

Overweight and obesity have a significant economic effect on individuals, employers, health services and the nation. This can include direct medical costs such as preventive, diagnostic and treatment services, and indirect costs related to morbidity and mortality.

- Across the U.S., medical costs related to obesity are estimated at $147 billion in 2008.[12]
- Obesity accounts for 10-21% of all medical spending.[13,14]
- Per capita medical spending for persons who are obese may be $2,741 higher for obese individuals than for those who are not obese.[15]

Weight Management Saves Lives

- Overweight and obesity continue to be a leading cause of preventable death across the nation. According to the Centers for Disease Control and Prevention (CDC), around 365,000 adults across the U.S. die from obesity-related illnesses each year.[16]
- Overweight and obesity are risk factors for many serious chronic conditions, including cardiovascular disease, diabetes, stroke, respiratory illness, and many forms of cancer.[17]
- Reducing weight by even 5-10% significantly reduces obesity-related health risks.[18]

About This Toolkit

Who is this toolkit for?
This toolkit is designed for a broad range of healthcare providers. Materials are intended for direct providers as well as administrators and healthcare organizations.

How do I use this toolkit?
This toolkit contains a variety of information and step-by-step instructions about:

- Education about the importance of maintaining a healthy weight;
- Developing skills for engaging individuals in weight management conversations;
- Low burden means of assessing readiness to change related to increasing healthy behaviors;
- Evidence-based treatment options.

People Who are Overweight or Obese Want to be a Healthy Weight

Research indicates that many people who are overweight or obese would like to lose weight. A 2006 Gallup Poll showed that 56% of Americans say they want to lose weight, including 18% who want to lose "a lot" of weight. Another 39% say they want to stay at their current level, while just 4% are trying to gain weight. Women were more likely to want to lose weight than men, 63% vs. 49%, respectively.[19]

Healthcare Providers Have an Important Role to Play

Although healthcare providers are aware of the negative effects of overweight and obesity on health, they do not always view themselves as the agent of change to assist with weight management. However, healthcare settings, especially primary care, can have a significant effect on assisting individuals avoid or reduce chronic illness through increased attention to nutrition, physical activity and healthy lifestyle.

Obesity is a chronic condition, and like other chronic conditions, every affected person should be offered treatment. Identifying individuals who are obese can be easy and treatment cost-effective. As healthcare reimbursements change, now is the time to support weight management services in primary care and other healthcare settings.

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Weight and Health

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Consequences of Overweight and Obesity

The increase in prevalence rates of overweight and obesity is a serious public health concern. Overweight and obesity can have many serious consequences for health and overall quality of life. These consequences include an increased risk for many conditions, such as cardiovascular disease, hypertension, stroke, Type 2 diabetes, respiratory disorders and osteoarthritis. Excess weight is a risk factor for at least 6 of the 10 leading causes of death in the United States today. It accounts for about 365,000 preventable deaths each year.[1]

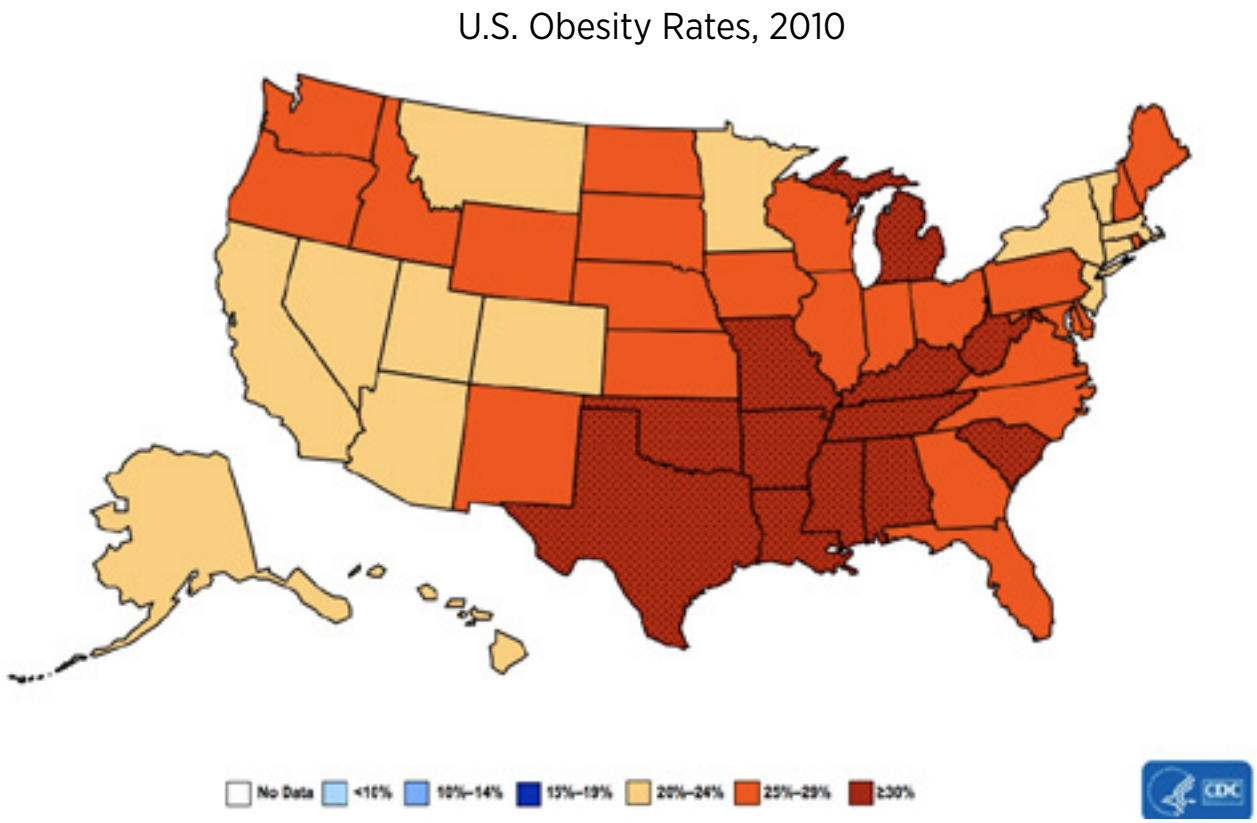

Figure 1. Prevalence of obesity across the United States in 2010. Note that no state has obesity rates of less than 20%.[2]

How healthy is your county? Find out at: www.countyhealthrankings.org.

Increased Risk for Many Serious Medical Conditions

Cardiovascular disease. Research indicates that obesity (BMI>30) increases risk of death from any form of cardiovascular disease by approximately 53%.[3] More specifically, excess weight increases risk of coronary artery disease risk by 81%,[4] and risk of ischemic stroke by 22% - 64%.[5] These risks may be related to increases in blood pressure, low-density lipoprotein (LDL) cholesterol, triglycerides, blood glucose, and inflammation that are common results of excess weight.

Type 2 diabetes mellitus. Rates of Type 2 diabetes are significantly higher among persons who are overweight or obese. Being obese (BMI>30) increases the risk of Type 2 diabetes sevenfold for men and twelvefold for women.[6]

Reproductive disorders. Excess weight is associated with reduced fertility in women and may account for up to 25% of infertility in the U.S.[7] Obesity increases the risk of miscarriage, preeclampsia, gestational diabetes and complications of labor.[8] Obesity can also affect male sexual function[9,10] and fertility.[11,12]

Cancer. Obesity is associated with increased risk of many forms of cancer, including cancers of the breast, ovary, endometrium, esophagus, pancreas, colon, rectum, and kidney.[13,14]

The good news is that weight loss of even just 5-10% can reduce many obesity-related risks.[15-19]

Sleep apnea. Sleep apnea is a condition of disordered breathing during sleep. Between 50-75% of individuals with obstructive sleep apnea are obese.[20]

Asthma. Obesity has been found to increase risk of developing asthma by about 50%.[21]

Gallbladder disease. Obesity is a known risk factor for gallstones.[22,23]

Gout. Gout is a form of arthritis characterized by sudden attacks of severe pain and redness in the joints. Obesity is associated with increased risk of gout in women[24] and men.[25]

Chronic kidney disease. Obesity contributes to risk of chronic kidney disease.[26]

Osteoarthritis. Obesity is associated with increased rates of osteoarthritis of the knee and hip and may contribute to the need for joint replacements.[27]

Cognitive decline and dementia. Growing evidence suggests a link between excess weight in midlife and risk of cognitive decline and dementia, including Alzheimer's disease, later in life.[28,29]

Mortality. Increased weight is associated with increased mortality rates from all causes.[30-32] **When compared to other behavioral causes of death, obesity causes more deaths each year than AIDS, alcohol, firearms, homicide, motor vehicle accidents, poisoning, and suicide combined.**[33]

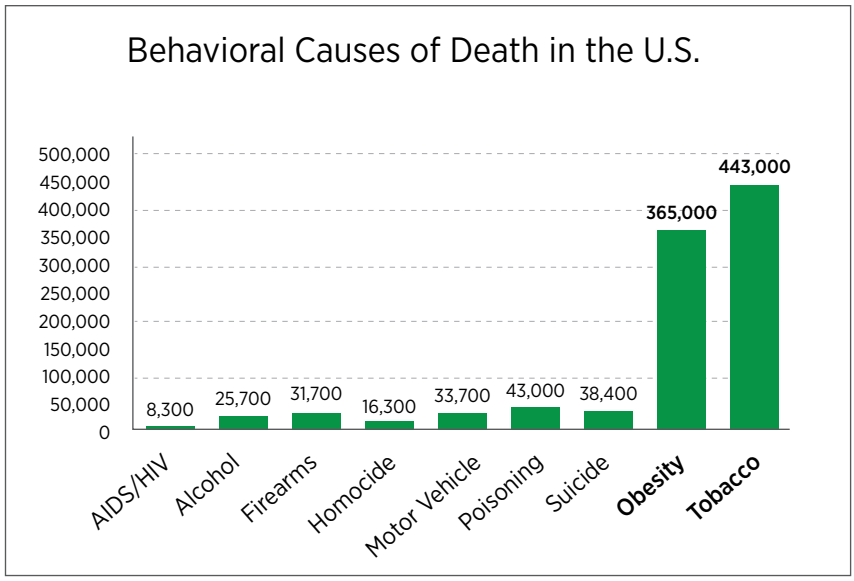

Figure 2.
Behavioral causes of death in the United States. This figure shows the annual number of deaths for different behavioral causes of death.[34]

Psychological Effects of Obesity

- **Depression.** Obesity and depression often occur together. Depression is more common among people who are obese than those who have a healthy weight.[35] Research indicates that obesity may increase risk of depression by as much as 55%, but that depression also increases risk of obesity by 58%.[36]
- **Quality of life.** Obesity has been associated with reduced emotional, physical, social and subjective feelings of well-being.[37,38]
- **Self-esteem.** Obesity can affect self-esteem and self-confidence, possibly related to the stigma and discrimination experienced by those who are overweight or obese.

Stigma and Discrimination

People who are overweight and obese are more likely to experience discrimination due to their weight.[39-41] This occurs in employment, education, and even healthcare. Healthcare providers are not immune to the culturally pervasive anti-fat bias.[42,43] Many healthcare providers believe that weight management is a matter of self-control and that people who are overweight or obese are lazy, non-compliant or difficult to treat.[44-46]

Discrimination against people who are overweight or obese remains prevalent today and may have increased over recent years,[47] possibly due to beliefs that obesity is a matter of personal responsibility and lack of willpower. Discrimination may lead to social isolation and shame, lower pay and fewer promotions[48] as well as decreased availability of health insurance.

However, research indicates that most people who are overweight or obese want to lose weight or be a healthy weight. If it was easy to lose weight, they would. **As healthcare providers, it is important to have empathy for people who are overweight or obese and constructively support their efforts to lose weight.**

Understanding why people gain weight, and why it may be hard to lose weight, is an important step towards empathy and to helping people achieve and sustain a healthy weight.

Factors Contributing to Weight Gain

Successful weight management requires some understanding of the factors that contribute to weight gain and to difficulty losing weight.

At its simplest level, weight is a matter of energy balance. Weight gain occurs when energy consumed in the diet is greater than the energy used. Dietary intake and physical activity are individual behaviors. However, these behaviors occur in the context of interpersonal relationships, community norms, organizational or occupational practices, public policy and realities of the physical environment. The Social Ecological model shown in Figure 3 represents the interaction of these factors using concentric circles, or spheres of influence.

When the individual is seen in this context, there are many different factors that contribute to obesity. The reasons for weight gain differ from person to person—so it is important to individually tailor our response.

Figure 3. Social Ecological Model

Genetic Risk Factors

Research suggests that genes account for 20-60% of variability in BMI.[49,50] However, genetic factors cannot explain the rapid increases in rates of obesity over the last 20 years. Instead, obesity is the result of complex interactions between genes and environment.

Medical Conditions

Some physical health conditions may slow metabolism or prevent individuals from being as active as they want, including hypothyroidism, chronic pain, and arthritis, to name a few. Medical conditions that cause chronic pain, muscle weakness, unsteady gait, dizziness, lethargy or otherwise restrict movement can also contribute to weight gain.

Medications

Many medications can lead to weight gain. Antipsychotics, antidepressants, and other mood stabilizers are particularly well-known for these effects. Oral contraceptives, corticosteroids, diabetes medications (insulin, sulfonylureas), beta-blockers, and even antihistamines can also lead to weight gain.[51-54]

Behavioral Health Conditions

People with behavioral health conditions—a term that includes those with serious mental illness and substance abuse disorders—have higher rates of overweight and obesity compared to the general population.[55]

- **Severe and persistent mental illness.** Some research suggests that 29% of men and 60% of women with severe and persistent mental illness are obese, compared to 18% of men and 28% of women in the general population (Figure 4).[56,57] These statistics do not include people who are overweight.
- **Depression.** Obesity and depression often occur together. Depression is more common among people who are obese than those who have a healthy weight.[59] Research indicates that obesity may increase risk of depression by as much as 55% but that depression also increases risk of obesity by 58%.[60]

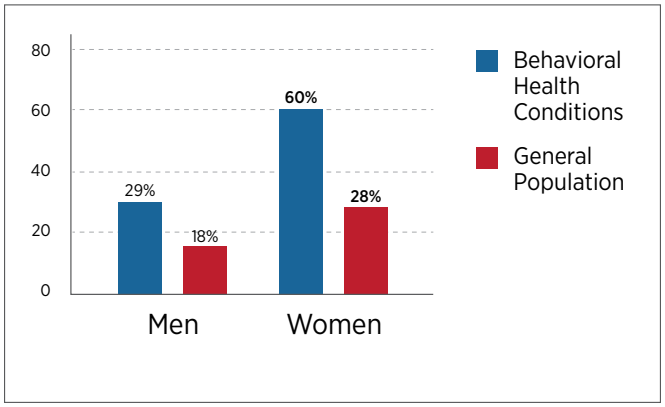

Figure 4. Obesity Rates for People with Behavioral Health Conditions as compared to the General Population Rates.[58]

- **Substance abuse.** Drug and alcohol use can affect weight. While some stimulant drugs reduce appetite and may cause weight loss, others may increase appetite. Marijuana is one example of a drug that can lead to increases in food consumption in some people. Alcohol use can also lead to weight gain due to its caloric content and its tendency to reduce self-monitoring of behavior.[61]

Psychological Factors

Even in the absence of behavioral health conditions, there are many psychological factors that can contribute to weight gain.

Positive food associations occur when people connect positive events to certain foods. These foods cause people to think of a happy time and/or create feelings of love or comfort. This is a form of emotional eating, which can lead to overeating.

Food can be used to temporarily relieve psychological distress or negative mood states such as feelings of sadness, loneliness, boredom, tension or anxiety. When eating is used as a way to cope with increased stress or other negative emotions, it is called emotional eating. Eating can serve as a distraction or escape from difficult emotions. Often, individuals are unaware they are engaging in emotional eating.[62]

Other emotional factors that contribute to difficulties with weight management are feelings of hopelessness or helplessness, which can lead to overeating or emotional eating as well. Everyone struggles with feelings of hopelessness, and these feelings are more prevalent among persons with behavioral health conditions.[63-65]

Please see the supplement to this toolkit, Priority Populations: Behavioral Health for further information on addressing weight issues in people with behavioral health conditions.

http://www.bhwellness.org/toolkits/WB-Toolkit-Supp-Behavioral-Health.pdf

Environmental Factors

Neighborhood environments have a significant effect on individual dietary intake and physical activity. Research shows there are more fast food restaurants in low-income neighborhoods. These areas are referred to as *food deserts*. *Food deserts* are neighborhoods or cities that lack access to affordable fruits, vegetables, whole grains, low-fat milk, and other foods that make up the full range of a healthy diet. Researchers find that individuals who live in *food deserts* eat less healthy and experience more health problems related to being overweight or obese.[66,67] Individuals living in low-income neighborhoods often lack access to walking trails, sidewalks, and parks. Often lighting is poor or non-existent, and sidewalks are in need of repair, making them dangerous to walk, especially for people with physical disabilities. Furthermore, the areas near their homes may be unsafe.[68]

The workplace environment can have a significant effect on weight. Long work hours, busy schedules and working through breaks are common features of many workplaces.[69] With a busy work schedule, it can be difficult to find time to prepare healthful foods or to fit physical activity into a day that is already full and very tiring. This work culture has helped to create the demand for prepackaged and fast food.[70] Other factors at work, such as stress and perceived control over workload, can also affect weight.[71]

Financial Factors

It is a reality that for most of us, our financial resources limit, or at least influence, our choices. Not only can the stress of managing a budget contribute to difficulty maintaining health, finances can also affect food and exercise decisions in many ways. In the United States today, healthful food can sometimes be more expensive than processed foods that are high in fat or sugar. Even within the supermarket, some processed foods can be cheaper than fresh food.

Cooking healthful, balanced meals can be time-consuming. People who are working long hours or multiple jobs or who are exhausted by the demands of their daily work may find that they have little time or energy to prepare a balanced meal and home. They may be more likely to choose convenient foods that are already processed and pre-prepared. These foods are often high in salt, fat and carbohydrates.

While physical activities, such as walking outdoors, can be free, for many people this is limited by the safety of their neighborhood or the climate. If it is 110°F outside and humid, it may be easier to exercise in an indoor, air-conditioned recreation center. Fitness centers, gyms, pools or sports groups often have fees. As such, finances and financial priorities can play a role in shaping people's physical activity behaviors.

USDA Food Access Research Atlas:

A tool for mapping food deserts and exploring access to healthy and affordable foods nationwide.

http://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas.aspx#.

Social Factors

Cultural and social influences teach a person how and what to eat. Researchers find it is often the cultural eating behaviors of the family, rather than genetics, that largely contributes to weight management problems.[72-75]

Social and cultural factors also influence perceptions of what a healthy, or normal, body weight should be. For example, research indicates that overweight and obese youth are more likely to underestimate their own weight problems when they are surrounded by people who are overweight or obese.[76]

Social isolation can affect an individual's ability to take action. People who live alone and have limited cooking experience will frequently choose frozen or processed foods, rather than cook for themselves. Frozen and processed foods are high in sodium and sugar. Additionally, although people tend to eat greater quantities when eating with others, binge eating usually occurs when alone.[77]

Policy

Public policy at the local, state and national level can have effects on diet, obesity and chronic disease. For example, taxes and subsidies can influence consumption, body weight and disease incidence.[78] Research on the effects of agricultural subsidies through farm bill programs and trade barriers in the U.S. is not conclusive. Legislation on nutrition labels on packaged foods and limitations on food claims may also affect food choices if consumers use and understand food labels to guide their choices.[79,80]

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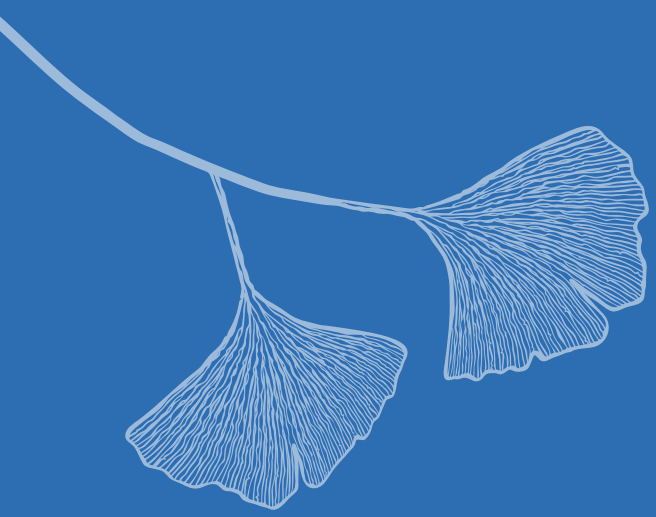

Assessment and Planning for Change

1. Stages of Change
2. Readiness for Change and Motivational Interviewing
3. How Can Motivational Interviewing Encourage and Support Change?
   - Four Principles of Motivational Interviewing
   - Listen for Change Talk
4. Planning for Change
   - The 5 A's: Ask, Advise, Assess, Assist, and Arrange
5. Cultural Considerations
   - Race/Ethnicity
   - Focus on Youth—Now is the Time to Engage Youth
   - Recommendations for Tailoring Interventions to Meet Cultural Needs
6. Decisional Worksheet

Stages of Change

As you prepare to talk with patients about maintaining a healthy weight, it is important to know where they are at in terms of their readiness for change. You will need to adjust your approach and intervention based upon the patient's readiness for change.

The Stages of Change Model (also known as the Transtheoretical Model)[1,2] is a known and researched model of the process of change. The stages applied to weight management include:

Stage	Definition	Intervention
Pre-contemplation	No change is intended in the foreseeable future. The individual is not considering engaging in behaviors to maintain a healthy weight.	Educate/Inform
Contemplation	The individual is not currently prepared to take action towards maintaining a healthy weight, but is considering taking action and has the intention to do so in the next six months.	Encourage/Motivate
Preparation	The individual is actively exploring engaging in activities that support a healthy weight in the immediate future or within the next month.	Assist with goal setting
Action	The individual is engaging in behaviors that support maintaining a healthy weight. However, they have not been engaged in these activities for longer than six months.	Provide support, assist as needed to overcome barriers
Maintenance	The individual is at a healthy weight or engaging in behaviors to achieve a healthy weight for longer than six months.	Continued support, set new goals when ready

Stages of Change

As a patient's readiness to change shifts through these five stages, you will want to adjust your intervention. When your intervention matches the person's readiness for change, you are more likely to increase that individual's readiness for change (See Figure 1). When your intervention does not match the person's readiness for change, the patient may not engage with you in the change process.

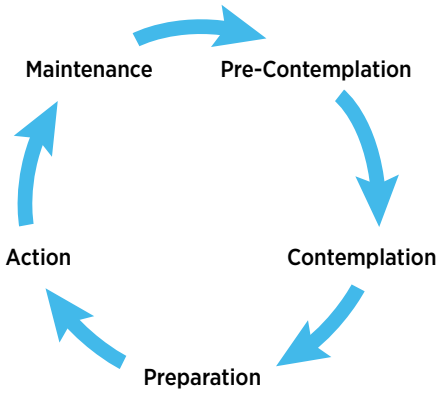

Figure 1

Often the way in which people move through these stages is less linear and more organic or fluid than Figure 1 indicates. Individuals may need to cycle and re-cycle through specific stages and they may skip stages or very briefly move through a stage. Figure 2 depicts a more fluid process with the general progression of the stages of change in blue arrows and the organic process in red arrows.

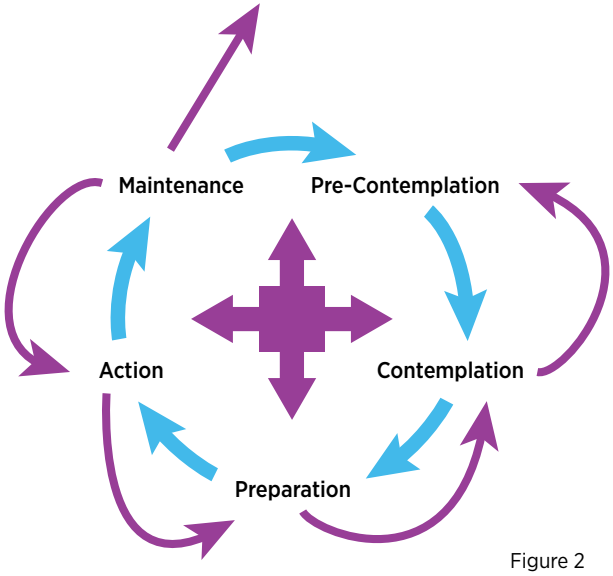

Figure 2

In addition, individuals may be in different stages of change for different aspects of their lives. For example, a person may be in contemplation regarding changing the amount of money they spend eating out while still in pre-contemplation regarding engaging in behaviors to maintain a healthy weight.

Understanding where individuals are within the process of change for specific aspects of their health is an essential part of quality care and to helping individuals become healthier.

Readiness for Change and Motivational Interviewing

Once a person has been identified as someone who is overweight or obese, their readiness to change can be determined. In order to identify an individual's readiness to change, providers need to listen and ask detailed questions to explore their patient's motivation.

Individuals in the Pre-contemplation stage (not considering change) can be moved to the Contemplation stage (considering change) by asking them to consider the negative consequences of being overweight or obese as well as the advantages of maintaining a healthy weight (this information has to be personalized).

Questions:

"How do you feel about your current weight?"

"Do you consider making changes in your health behaviors to maintain a healthy weight?"

"Are you experiencing any negative effects due to your weight?"

Since people may experience strong negative emotions about their weight, including shame and self-loathing, it is particularly important to be sensitive about how you ask your questions. Some people may be more receptive to talking about their patterns of eating and physical activity rather than directly about weight loss.

TIP: It is useful to think of weight management as a process rather than an event.

Providers need to be careful about how they ask questions. Research has shown that the more people hear themselves talk about the disadvantages of changing, the more committed they become to the status quo.[3]

As a healthcare provider, you are in a uniquely powerful position in terms of supporting positive health behavior change. Your patients may be more open to talking with you about their concerns and listening to your response, given your knowledge, training and expertise.

It is worthwhile to actively encourage patients to engage in behaviors that support physical wellness and maintaining a healthy weight. You can also offer information about weight management strategies and treatment as well as convey the message that individuals can successfully achieve their Well Body goals. These messages need to be communicated with empathy and in a tone that guides individuals rather than lectures them.

Motivational interviewing is aligned with Self-Determination Theory (SDT), which suggests that providers can assist patients in becoming autonomously motivated and competent to make the change they want.[4] This approach stands in contrast to strategies focused on pressure through threats of negative health consequences, shame, or guilt.[5] It may be helpful to use the handout in the back of this section entitled, "Decisional Worksheet," with patients to understand unique advantages and disadvantages of changing their behaviors.

How Can Motivational Interviewing Encourage and Support Change?

It is vital that healthcare providers think about their role in helping those they serve in making changes in their lives. In that role, providers need to have a stance of collaboration, empathy, and genuine partnership with the individual.

Motivational Interviewing Definition:

Client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence. A way of being versus doing.[6]

Four Principles of Motivational Interviewing[7]

Express empathy	• Unconditional acceptance • Reflective listening • Ambivalence is normal
Develop discrepancy	• Patient presents arguments for change • Create a change in perception without coercion
Roll with resistance	• Avoid arguing for change • Resistance is not directly opposed • Change perception through reframing/insight • Resistance is a signal to respond differently
Support self-efficacy (person's belief in their ability to carry out and succeed with a specific task)	• Belief that change is possible • Patient carries out change • Provider's belief in the person's ability to change becomes a self-fulfilling prophecy

Providers can **inform** individuals about negative consequences, treatment options, and choices. Providers can **guide** individuals towards making changes that make sense for their unique circumstances and personality. Providers can **empower** individuals to make changes, take small steps, and to be creative about how to manage the barriers to change that they face.[8]

Most importantly, providers need to LISTEN to individuals and hear about their motivation to change, their fears regarding change, and their current willingness to change.

R **Resist** the righting reflex.
"How do you feel about your weight?"

U **Understand** your patient's motivation.
"Why do you want to change?"

L **Listen** to your patient.
"What is important to you?"

E **Empower** your patient.
"What do you want to do?"[9]

TIP: Use the Motivational Interviewing Acronym WAIT to help you listen: **W**HY **A**M **I** **T**ALKING?

As Rollnick et al (2008) suggest, healthcare providers need to **resist the righting reflex**.[10] The righting reflex occurs when healthcare professionals have strong drives to fix things for people. As a result, these providers can jump to *telling* patients what to do or not to do. This tendency to jump to persuasion becomes a reflex—automatic and compelling. This can lead to lecturing people in this reflexive stance from a sense of urgency and desire to help or prevent further illness. Unfortunately, lecturing tends to make individuals resist persuasion and focus on the disadvantages of changing.

Instead, we need to LISTEN.

Does your advice equal action for your patients?

Listen for Change Talk[11]

Change talk is the use of certain words that suggest a willingness or contemplation of change. Healthcare providers need to listen for these terms and hear where the individual is in the process of change and also what the person views as barriers to change.

Desire to Change: "I **wish**" "I **want**" "I **like** the idea."

Ability to Change: "I **could** probably keep track of my eating and drinking in a food diary." "I think I **can** come next week for group." "I **might** be able to decrease the amount of soda I drink each day."

Reasons for Change: "I'm sure I'd **feel better** if I was more physically active." "Being overweight **keeps me** from hiking, which I love."

Need to Change: "I **must** get healthier for my kids." "I've **got** to get back to work."

Commitment to Change: "I **will** eat more fruits and vegetables." "I **promised** myself that I would exercise more often." "I **plan** to take walks during my lunch breaks."

Commitment at **lower level**: "I **will** think about what you said." "I'll **consider** ways to be healthier." "I **hope** I can be more active."

Motivational Interviewing Resources:

- *Motivational interviewing in healthcare: Helping patients change behavior*. Rollnick, Miller and Butler (2008).
- *Motivational interviewing, second edition: Preparing people for change*. Miller & Rollnick (2002).
- *In search of how people change: Applications to addictive behaviors.* Prochaska et al (1992).

Planning for Change

Once you have assessed a person's readiness to change, you can start developing a plan of care. However, much of this planning involves continuing to assess an individual's motivation and potential barriers to change. In addition, the plan needs to be individualized. Motivational interviewing techniques will be vital to assisting individuals to take the next step.

The 5 A's: Ask, Advise, Assess, Assist and Arrange

The *U.S. Public Health Service Clinical Practice Guideline: Treating Tobacco Use and Dependence* provides healthcare clinicians an onsite strategy for smoking cessation treatment that is built around the "5 A's" (Ask, Advise, Assess, Assist and Arrange). This strategy has been adapted for weight management. Knowing that providers have many competing demands, the 5 A's were created to keep steps simple.

The 5 A's for Weight Management: Ask, Advise, Assess, Assist and Arrange

Step	Action
ASK	Obtain permission to address the issue of weight.
ADVISE	Excess weight can negatively affect health.
ASSESS	BMI, nutrition, physical activity, medical conditions, medications, readiness to change.
ASSIST	Setting realistic goals. Developing practical strategies for weight loss. Include steps to manage challenges.
ARRANGE	Referral and follow-up.

Regardless of the patient's stage of readiness to change their health behaviors, the 5 A's are essential for every patient visit.

The full 5 A's model is most appropriate for organizations that have the time and resources to provide interventions. In particular, integrated care (primary care and behavioral health services) settings are ideal as they have the expertise necessary to provide treatment from both medical and behavioral health approaches. For agencies and organizations that do not have weight management services readily available, we recommend the use of the first two A's (**ask** and **advise**) and then the agency can **refer** to available community services (this is referred to as the 2 A's + R model).

The following is adapted from *Treating Tobacco Use and Dependence. Quick Reference Guide for Clinicians, October 2000. U.S. Public Health Service*. www.ahrq.gov/professionals/clinicians-providers/guidelines-recommendations/tobacco/clinicians/treating_tobacco_use08.pdf)

The 5 A's for Weight Management: Ask, Advise, Assess, Assist and Arrange

Action	Strategies for Implementation
Step 1: Ask Ask overweight and obese patients at EVERY visit for their permission to talk about the subject of weight.	Establish an office system to consistently identify individuals who are overweight or obese at every visit. Explore the issue of weight by asking open-ended questions, such as, "How do you feel about your weight?" or "Do you have concerns about your weight?" or "Do you mind if we spend a few minutes talking about your weight?"
Step 2: Advise In a clear, strong and personalized manner, advise every overweight and obese patient to maintain a healthy weight. Be mindful to advise in a non-judgmental manner. Guide them towards physical wellness by providing options and use empathy.	**Clear:** "I want to encourage you to make some changes in your health behaviors so that you can maintain a healthy weight." **Strong:** "I need you to know that maintaining a healthy weight through good nutrition and physical activity is the best thing you can do to protect your health now and in the future." **Personalized:** Connect their weight to current medical issues, examine their motivation level/ readiness to change, or the effect of their weight on current functioning.

Action	Strategies for Implementation
Step 3: Assess Explore willingness to make changes in their nutrition or physical activity within the next 30 days. Determine with the patient the costs and benefits of changing their behaviors. Determine where the patient is in terms of the readiness to change model. Assess ways in which the patient has taken steps towards maintaining a healthy weight.	Assess readiness for change using motivational interviewing strategies. Calculate BMI. Measure weight at every visit and check height. Use the patient's weight and height to calculate their BMI. Measure % body fat if possible. **Body Mass Index (BMI) Weight Ranges**[12] BMI 18.5 - 24.9 = Normal, maintain a healthy weight and avoid weight gain BMI ≥25 - 29.9 = Overweight, avoid weight gain and consider weight loss (BMI ≥27 with comorbidity: consider medications) BMI ≥30 = Obese, support weight loss and consider medications BMI ≥40 or ≥35 with co-morbidity = Support weight loss and consider medical weight loss options Assess current weight-related risk factors like dietary intake and physical activity. Assess history of weight loss attempts. Obtain a focused history of gain and loss patterns. If the individual is ready to change their health behaviors, proceed to Assist (below). If the person is not yet ready to take action, don't give up. Engage patients with effective motivational interventions that keep a patient thinking about how they can maintain a healthy weight. Conduct a motivational intervention to make maintaining a healthy weight personally relevant. Repeat motivational interventions at **every** visit.

Sample Questions:

"What do you want to know about weight management?"

"What concerns do you have about maintaining a healthy weight?"

"What do you think about taking action towards maintaining a healthy weight?"

"What would be a first step for you?"'

"There are several options for weight management treatment. Do you want to hear about them?"

"If you maintain a healthy weight, what would be some of the benefits?"

"What would it take for you to make a decision to take action?"

"Suppose you stay at your current weight or gain weight. What do you think could happen in 5 years?"

"When you tried to lose weight in the past, what were the challenges you experienced?"

"What are your fears about taking action to improve your health behaviors?"

"What are your concerns about not taking action to improve your health behaviors?"

Action	Strategies for Implementation
Step 4: Assist Talk to the person about setting Well Body goals.	Set Well Body goals. Identify first steps towards their goals. Tell family and friends and coworkers about goals and request support. Anticipate challenges to achieving goals. Discuss how the individual will successfully overcome these challenges. Explore new behaviors that support healthy eating and being physically active.
Step 5: Arrange Schedule follow-up contact.	Schedule follow-up contacts as needed. Actions during follow-up contact: 1. Congratulate successes. Provide positive feedback about changes, no matter how small. 2. If the person has not moved towards their Well Body goals, explore the challenges to taking action. Identify problems encountered and anticipate challenges in the immediate future. 3. Consider referral to additional resources and/or treatment.

Cultural Considerations

Research over many decades has demonstrated that some populations experience worse health outcomes than others, or health disparities. Some groups are at greater risk for chronic disease and premature mortality simply due to their economic status or racial/ethnic background. Therefore, addressing weight in these groups is particularly important—and will require sensitivity to cultural considerations

Race/Ethnicity

Rates of obesity are high across all ethnic groups in the U.S. However, obesity is more prevalent among some racial/ethnic groups. Some studies report that obesity is more prevalent among Hispanic adults and black non-Hispanic adults compared to non-Hispanic whites.[14] For example, Truong and Sturm (2005) found that between 1986 and 2002 most population groups showed similar increases in weight, but non-Hispanic blacks tended to gain more weight than other groups.[15] Similarly, the CDC (2009) reported that age-adjusted prevalence of obesity were highest among non-Hispanic blacks (35.7%), followed by Hispanics (28.7%), and non-Hispanic whites (23.7%) in 2006–2008.[16]

Potential reasons for these differences include:[17]

- Groups differ in health-related behaviors such as diet or physical activity;
- Groups differ in attitudes and cultural norms around body weight;
- Groups differ in access to healthy foods and safe places to exercise;
- Differences in the access to treatment and specific weight management services for people of color and/or low socio-economic status.

Focus on Youth—Now is the Time to Engage Youth

- Approximately 17% of children and adolescents are obese.[18]
- Obesity rates among youth have almost tripled since 1980.[19]
- Obesity rates among children vary significantly by race/ethnicity. In 2007-2008, for example, Hispanic boys were more likely to be obese than non-Hispanic white boys, while non-Hispanic black girls were more likely to be obese than non-Hispanic white girls.[20]

Factors That Contribute to Youth Obesity Include:[21]

- Sugary drinks and unhealthy foods at schools;
- Advertising of unhealthy foods;
- Variations in licensure of childcare centers;
- No safe and appealing place for children to play or be active in many communities;
- Limited access to healthy affordable foods for families;
- Easy availability of high calorie foods;
- Increasing portion sizes;
- Lack of breastfeeding support;
- Increased amounts of television and media viewing time.

Youth weight management guidelines, screening tools and action plans in English and Spanish can be found at:

www.healthteamworks.org/guidelines/childhood-obesity.html

Recommendations for Tailoring Interventions to Meet Cultural Needs

Tailoring healthcare initiatives to account for the culture of individual patients can improve the effectiveness of interventions. Recommendations include:[22]

- Screen **all** patients for excess weight. Offer weight management treatments and resources to everyone.
- Screen **all** youth for excess weight and offer weight management services, if needed. If they are not overweight, provide education and support regarding the importance of healthy lifestyle for maintaining a healthy weight.
- Provide information about treatment options. Work with each individual to find treatment choices that fit for the individual's cultural background.
- Ask questions. Avoid making assumptions about someone's culture and beliefs about weight.
- Empower people to make the choices that are needed to maintain a healthy weight.
- Hire culturally competent staff.
- Provide routine staff training in cultural competence and cultural tailoring of treatment approaches. Cultural tailoring refers to anticipating and planning for the needs, preferences, or circumstances of particular cultural groups.

Decisional Worksheet

Things I like about maintaining a Well Body	Things I don't like about maintaining a Well Body
Things I would dislike about changing my health behaviors	Things I would like about changing my health behaviors
Reasons to stay the same	Reasons for making a change

End Notes

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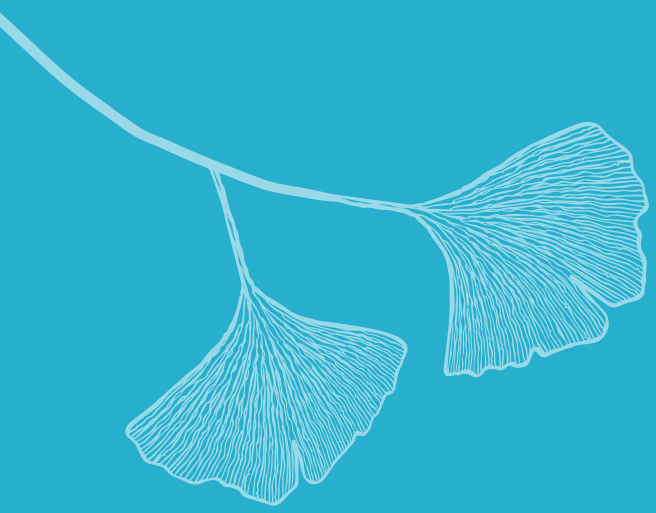

Treatment

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Key Findings

Since obesity is a chronic condition, any treatment for obesity should take a long-term, sustained approach to treatment and monitoring.[1] Healthy weight management requires adopting healthy habits and living a healthy lifestyle. It is not a temporary thing. Though it requires constant attention, weight loss can be achieved and sustained. For persons who are overweight or obese, weight loss of only 5-10% is associated with considerable improvements in risk for hyperlipidemia, hypertension, cardiovascular disease and diabetes.[2]

Interventions can be behavioral, pharmacological or surgical. However, behavior management is a key component of any successful pharmacological or surgical intervention. If patients do not modify their eating and exercise habits after surgery or while using weight loss medications, they will regain any lost weight over time. Therefore, behavior change should play a role in any type of treatment for obesity or overweight.

Components of Successful Interventions

- Treatment and management is individually tailored.
- Patients choose treatments that best match their needs.
- Nutrition, exercise and behavior change strategies are all addressed.
- Treatment goals are realistic.[3]
- Challenges to changing behaviors are addressed.
- Self-efficacy—confidence in their ability to bring about change—is promoted.[4]

Behavior Change is Key

Developing new behaviors such as healthful patterns of eating or engaging in physical activity takes a range of behavior change skills that not all people have. Furthermore, people who use food to cope with stress, boredom or other negative mood states may need to develop new constructive ways of coping.

Therefore, behavior change interventions need to:

- Provide accurate, up-to-date information about nutrition and physical activity;
- Incorporate effective behavior change strategies.

Education or advice about nutrition and physical activity is usually not enough to produce sustained weight loss. However, it is fundamental to successful treatment. The following sections cover some basic information about healthy weight, nutrition and physical activity.

What is Healthy Weight?

Maintaining a healthy weight is an important foundation for good health and can help to prevent many serious health conditions. The weight that is most healthy for any individual varies by height, age, gender, muscle mass and level of physical activity. Healthy weight can be estimated in a number of ways.

Body Mass Index (BMI)

The most widely used indicator of healthy weight is the Body Mass Index or BMI. BMI is an indicator of body fatness, without directly measuring body fat. This tool is used to determine a person's weight category to provide information about potential health problems. Direct measurement of height and weight by a clinician is always preferable to asking patients for self-reported height and weight.

Categories of BMI can be used to estimate whether a person's weight should be considered underweight, healthy, overweight or obese. A BMI below 18.5 is considered underweight, a BMI between 18.5 – 24.9 is healthy, a BMI of 25 – 29.9 is considered overweight, and a BMI greater than 30 is obese. The category of obese is divided further into class 1 (30-34.9), class 2 (35-39.9), or class 3 (>40), also known as morbid obesity.

BMI is a highly useful clinical tool. Yet some limitations should be kept in mind.

- **BMI does not differentiate between fat mass and lean mass** (e.g. muscles, bones). BMI can overestimate body fat. It is possible for a person who is very muscular to seem overweight, even though they may carry relatively little fat. BMI can also underestimate body fat. It is possible for someone with little muscle mass to appear to be a healthy weight even if they are carrying a lot of fat.
- **BMI does not assess fat distribution.** The distribution of fat around the body can make a difference to health outcomes and disease risk. Fat accumulated around the waist is associated with increased disease risk and mortality. This is also known as central obesity or visceral obesity.

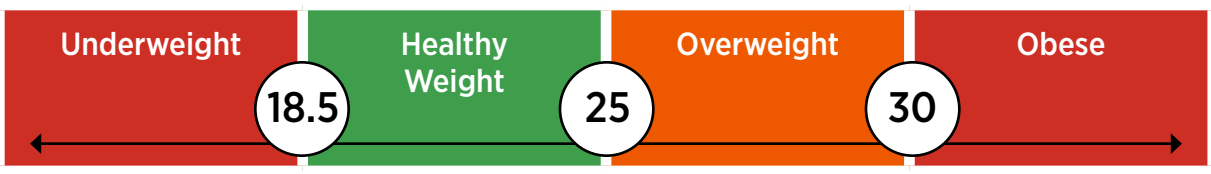
Calculating Your BMI[5]

BMI = weight (lb) / [height (in)]^2 x 703

Example: Weight = 150 lbs, Height = 5'5" (65") Calculation: [150 ÷ (65)^2] x 703 = 24.96

BMI = weight (kg) / [height (m)]^2

Example: Weight = 68 kg, Height = 165 cm (1.65 m) Calculation: 68 ÷ (1.65)^2 = 24.98



Alternatives to BMI

Body composition can be estimated in other ways, though these are not widely used in clinical practice.

- **Skinfold thickness** is commonly used to estimate proportion of body fat but is the least reliable of the body composition measures. This technique uses calipers to measure the thickness of skinfolds in various parts of the body. Accuracy varies between those conducting the measures, and skinfolds may be difficult to measure in some people.
- **Underwater weighing** is the "gold standard" for measuring body composition. However, it is difficult to implement and not widely available for clinical use.
- **Dual-energy X-ray absorptometry (DXA)** is highly accurate and reliable measure of body composition. It uses very low levels of X-rays to image the body and compute body composition. It is becoming more available for clinical use but is chiefly used in research settings.
- **Bioelectric Impedance Analysis (BIA)** is the technique employed by commercially available body composition scales. These pass a low-level current through the body to compute an estimate of body composition. Equipment accuracy varies, but BIA scales are readily available to consumers and can be used to provide easily obtainable estimates of change in body composition over time.
- **Waist circumference, or the waist-to-hip ratio,** may be more predictive of morbidity and mortality than BMI. These techniques are straightforward to use in clinical settings. However, standardized categories for risk assessment have not been developed. Furthermore, standard measurement practices are not established. The waist is usually measured at the level of the umbilicus. Hip is usually measured at the widest circumference.

Achieving A Healthy Weight

At its simplest level, weight management is a matter of energy balance—maintaining a balance between energy intake and energy expenditure.[6] Weight loss occurs when energy expenditure exceeds energy intake. It is therefore useful to understand a patient's baseline energy needs.

Total Calorie Needs

The total calorie intake needed to maintain a stable weight can be estimated using current energy intake guidelines provided below.

Sex and Age	Not Physically Active*	Physically Active**
Females 19-30 years old	2000 Total Calories per Day	2000-2400 Total Calories per Day
Males 19-30 years old	2400 Total Calories per Day	2600-3000 Total Calories per Day
Females 31-50 years old	1800 Total Calories per Day	2000-2200 Total Calories per Day
Males 31-50 years old	2200 Total Calories per Day	2400-3000 Total Calories per Day
Females 51+ years old	1600 Total Calories per Day	1800-2200 Total Calories per Day
Males 51+years old	2000 Total Calories per Day	2200-2800 Total Calories per Day

* These amounts are for people who get less than 30 minutes of moderate physical activity most days.

** These amounts are for people who get at least 30 minutes (lower calorie level) to at least 60 minutes (higher calorie level) of moderate physical activity most days.

Healthy weight management requires adopting healthy habits and living a healthy lifestyle.

"Diets" are temporary.

Nutrition

Eating a healthful, balanced diet is essential for good health. By contrast, "dieting" can promote short-term approaches that are frequently nutritionally inadequate.

Healthy eating:

- Controls hunger;
- Is pleasing and satisfying;
- Meets the body's need for energy and nutrients;
- Minimizes risk of chronic disease.

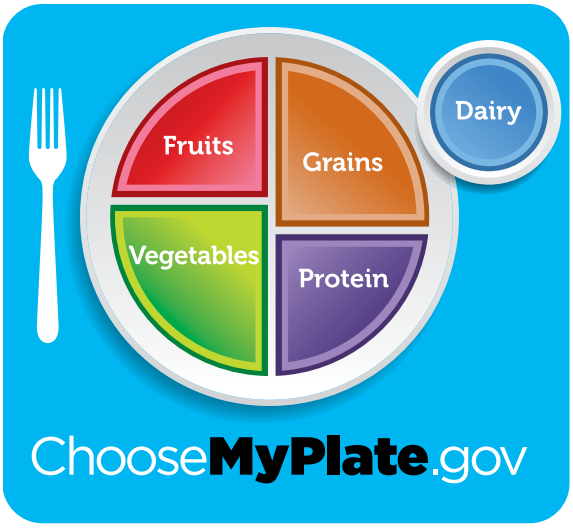
Current nutritional guidelines from the United States Department of Agriculture (USDA) can be found at www.choosemyplate.gov. MyPlate has replaced the food pyramid that was used to illustrate USDA nutritional guidelines for many years.

Recommendations for a healthy diet:

- Eat more whole grains, vegetables, and fruits;
- Reduce sugar consumption;
- Eat lean meat or other sources of protein;
- Moderate fast foods;
- Moderate alcoholic beverages;
- Pay attention to serving size information on nutritional labels.

Many people are not aware of what and how much they eat. Food diaries can be a useful way for a patient to become aware of their dietary intake. Follow this link to the CDC website for a food diary handout to share with patients:

www.cdc.gov/healthyweight/pdf/food_Diary_cdc.pdf



Physical Activity

Physical activity is important for good health, irrespective of a person's weight. It can reduce risk for many diseases, relieve stress, increase energy, improve sleep, and improve mood and memory.[7,8] It is also vital for healthy weight management. Currently, most Americans do not meet the activity levels recommended for health.

Physical Activity Guidelines

Adults need at least 2 hours and 30 minutes (150 minutes) of moderate intensity physical activity every week for health—regardless of their weight loss goals.[10] This should include a combination of aerobic activities, such as walking, swimming or riding a bicycle, and muscle-strengthening activities. Greater health benefits can be achieved by increasing physical activity to 5 hours of moderate intensity aerobic activities and muscle-strengthening activities each week.

When discussing physical activity guidelines with patients, it is useful to let them know:[11]

- **Aerobic activities** include things such as brisk walking, dancing, pushing a lawn mower, swimming or riding a bicycle. In short, any activity that increases breathing and heart rate.
- **Moderate intensity** means working hard enough to raise heart rate and break a sweat. A person may be able to talk, but not sing.
- **Time spent exercising** can be broken down into small, manageable chunks. Exercising for 10 minutes at a time is fine.
- **Muscle-strengthening activities** can include activities such as lifting weights, using a resistance band, doing activities that use body weight for resistance, heavy gardening or yoga.
- **Start where you are.** Encourage patients to set realistic goals and build up the duration or intensity of activities over time.

Research shows that a healthy diet with regular exercise and a tobacco-free life can decrease your risk of heart disease by 80% and some cancers by 70%.[9]

The Physical Activity Guidelines For Americans can be found at:

www.health.gov/paguidelines/guidelines/default.aspx

Useful information and resources on the guidelines for children, adults, and older adults can also be found at:

www.cdc.gov/physicalactivity/everyone/guidelines/index.html

Average Calories Burned In 10 Minutes of Physical Activity

Activity	Calories Burned in 10 Minutes
Cleaning	30-40
Walking (3.5 mph)	40-50
Bicycling (5.5 mph)	70-80
Playing basketball	70-80
Jogging	80-100
Swimming	80-100

Safety and Physical Activity

Some patients have concerns about the safety of exercising. For most people, exercising is safe and highly recommended for health. However, if a patient has not exercised regularly in a long time, if they have significant health conditions, or they have other safety concerns, it is important to ensure that a qualified health care professional evaluates exercise safety. This evaluation could include, but is not limited to, cardiovascular, pulmonary, musculoskeletal and peripheral vascular assessment.

Pre-Exercise Evaluation: Things to consider[12]

- Current and past exercise habits (frequency, intensity, duration)
- Current motivation and barriers to exercise
- Preferred forms of physical activity
- Beliefs about benefits and risks of exercise
- Risk factors for heart disease (hypertension, diabetes mellitus, hyperlipidemia, smoking, or family history of heart disease before 55 years of age)
- Physical limitations precluding certain activities
- Exercise-induced symptoms
- Concurrent disease (cardiac, pulmonary, musculoskeletal, vascular, psychiatric, etc.)
- Social support for exercise participation
- Time and scheduling considerations
- Medication use

Behavior Change Strategies

How Can We Encourage and Support Change?

It is important that healthcare providers give careful thought to their own role in the process of facilitating lifestyle changes for the patients they serve. This is a collaborative role, requiring empathy and genuine partnership with the individual. The negative health consequences of obesity are real, and providers can inform patients about these risks as well as potential treatment options. Beyond this, providers can guide patients towards making changes that make sense for their unique circumstances and personality. Providers can empower individuals to make changes themselves. This may involve encouraging small, realistic, and attainable steps towards their goals, including creative problem-solving about how to manage the barriers to change that they face.[13]

To do this, providers need to listen to patients in order to hear their motivation to change, their fears regarding change, the barriers they face, and their current willingness to change. As caring professionals, we often want to fix things for people.[14] However, our sense of urgency and desire to help can lead to a lecturing approach. Unfortunately, lecturing tends to make individuals resist persuasion and focus on the disadvantages of changing.

LINK: Counseling Overweight and Obese Patients Video

Click on the image below to watch the Colorado Department of Public Health and Environment's Counseling Overweight and Obese Patients video.

www.healthteamworks.biz/guidelines/obesityvideo.asp

Behavior Change is a Learning Process

People can be more successful in achieving a healthy weight if they see developing new health behaviors as a learning process. Everyone had to learn their current dietary and exercise habits. In order to achieve a healthy weight, people need to learn new healthy habits.

People tend to be more successful if they prepare and plan. Many people set a broad goal to lose weight without carefully planning the steps they will take to reach that goal. They try to diet or exercise but quickly discover that willpower alone is not enough, despite the best of intentions. Many people become discouraged and believe they cannot succeed in losing weight, when in reality they need support developing a new set of behavior change skills.

Successful behavior change may involve:

- **Stopping or reducing some behaviors.** This may involve choosing not to buy unhealthy foods at the store or choosing to watch less television.
- **Developing new coping skills.** This may mean learning alternative methods to manage difficult emotions such as boredom or stress.
- **Doing something new.** This may involve eating new foods, such as fruits or vegetables, or starting to exercise regularly.

Healthcare providers should understand that behavioral interventions are key to these changes and they need to:

- Encourage behavioral treatments;
- Refer individuals to behavior change services;
- Support the process and the individual's work long-term.

The following information about behavioral interventions can be used to increase patient understanding about how these interventions can support their process of weight management. This information is an introduction to the various forms of behavioral treatments as a starting point for discussion with patients.

Motivational Interviewing

Motivational interviewing techniques are essential to weight management efforts. Providers should carefully read the Assessment and Planning for Change section of this toolkit to review motivational interviewing techniques. The use of these tools is important not only as you assess an individual's readiness for change, but also throughout the treatment phase of care.

It is essential for providers to support weight management by understanding, enhancing and supporting each patient's unique motivations and commitment to change. Using the four principles of motivational interviewing in all interactions with patients can improve rapport and empower individuals to make changes in their lives. The Four Principles of Motivational Interviewing are Express Empathy, Develop Discrepancy, Roll with Resistance, and Support Self-Efficacy.

> "Mindfulness is the awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to things as they are."[15]

Mindfulness

"Mindfulness is the awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to things as they are."[15] Mindfulness involves deliberately paying attention to the present moment, and developing an awareness of things as they are. With practice, individuals can use mindfulness to focus on the present moment (not the past or the future) and to view thoughts as passing mental events. These skills can be important for individuals changing health behaviors such as eating patterns or physical activity for numerous reasons:

- **Mindfulness can allow an individual to be more aware of the moment and make changes in behavior that may be needed.** For example, mindfulness may assist a person to become aware that they eat when they feel bored rather than due to feelings of hunger.
- **Mindfulness can improve an individual's ability to tolerate an unpleasant mental state, knowing that it will pass.** For example, mindfulness may allow an individual who has lost weight to be aware of a craving for chocolate and resist the urge due to the awareness that the craving will soon end.
- **Mindfulness can improve an individual's ability to live in the present moment.** Being present in the moment can assist individuals who have recently lost weight to avoid thoughts of the past or future that do not support maintaining a healthy weight. The present moment is all that requires focus. This may also assist in enjoying pleasures in the moment and increasing quality of life.

There is preliminary evidence that even brief instruction in mindfulness-based techniques for coping with urges may assist individuals in "urge surfing" and may help change the way in which individuals respond to an urge.[16]

Cognitive Behavioral Therapy (CBT)

Cognitive Behavioral Therapy focuses on developing solutions to current problems, such as overweight or obesity, overeating or unhelpful beliefs about food or physical activity. It is a time-limited therapeutic approach that can be very cost-effective in the long-term.[17] CBT can involve:

- Directly addressing motivation and providing rewards for abstinence;
- Maximizing self-regulation skills including problem-solving;
- Developing alternative activities;
- Other behavior change techniques including building rapport.[18]

Many thought processes have the potential to sabotage attempts to lose weight. A classic example is "I've already cheated on my diet, it doesn't matter if I eat more." In addition, there are many different potential triggers for unhealthy behaviors, such as mental triggers (e.g. thinking about food), emotional triggers (e.g. unpleasant feelings that lead to eating) and social triggers (e.g. people and social situations that involve eating).[19]

Successful weight loss requires realistic goals, and the ability to achieve them.[20] With CBT, the therapist plays an active role in coaching the patient to assess their behavior, set goals, and develop new management skills. They may ask the patient to prepare for weight loss by reviewing past weight loss attempts, identifying difficulties, developing new skills for exercise readiness, or writing a list of reasons for wanting to change.

CBT can include many techniques, ranging from behavioral activation to cognitive distraction skills. These techniques can be used alone or in combination.

Behavior Activation

Behavior activation techniques are designed to promote the experience of positive outcomes of healthy behavior.[21] The more a person experiences the positive effects of these behaviors, the more likely they are to continue to engage in those behaviors.[22] In weight management, the goal is to activate new behaviors that are healthy (e.g., walking, engaging with others, art, etc.) that become reinforcing of continued healthy behavior.

Setting S.M.A.R.T. Goals

S **Specific** What you are going to do and how often?

M **Measurable** How you will know if you have done it each day?

A **Attainable** Can you do it?

R **Realistic** Can you do it given everything going on now?

T **Time Limited** When will you do this by?

Distraction Skills

Distraction skills are techniques developed to assist people in tolerating distress. These skills have been used to assist with pain management, emotional distress, and substance use treatment. Distraction techniques can be as simple as increasing the use of other pleasurable activities (e.g., watching movies, cooking, walking, drawing, etc.) to learning specific ways to distract one's thinking from a specific ruminating thought. In weight management, distraction skills can be vital to coping with negative mood states that might otherwise lead to overeating or unhealthful food choices. They can also help to deal with ruminating fears about weight loss (e.g. "This is going to be terrible," "I won't be able to eat anything good again," or "I'll never be able to lose weight."). Although research is limited regarding distraction skills in weight management, there is evidence that this brief intervention can improve distress tolerance among individuals with drug and alcohol use disorders.[23]

Acceptance and Commitment Therapy (ACT)

As previously noted, many people use food to deal with negative emotions or unpleasant sensations. Acceptance and commitment therapy is designed to help individuals stop using unhelpful strategies to attempt to control or avoid unpleasant sensations or emotions, and instead allow the things that are deeply important to them guide their behavior.[24]

Well Body Group

Another popular and effective behavioral intervention is group therapy. The Behavioral Health and Wellness Program (BHWP) trains program facilitators to run a 6-week group using the DIMENSIONS: Well Body Program at their organization. Groups can be facilitated by providers or trained peer advocates. Often these groups meet weekly (60- to 90-minutes) and participants can join at any time. The group is designed for participants who are interested in learning information about nutrition, weight management and healthy living skills. The topics below cycle through the six weeks:

1. Session A: Creating a Plan
2. Session B: Healthy Behaviors
3. Session C: The Truth about Nutrition
4. Session D: Changing Behaviors
5. Session E: Coping with Cravings
6. Session F: Maintaining Change

To contact the Behavioral Health and Wellness Program regarding training for the Well Body Program, please call 303.724.3713 or email bh.wellness@ucdenver.edu

Pharmacological Interventions

Prescription Weight Loss Drugs

Medications are available for people who are obese or for those who are overweight and have a co-occurring physical condition, such as Type 2 diabetes, hypertension, obstructive sleep apnea or metabolic syndrome. At least six months of unsuccessful lifestyle interventions for weight loss should be tried before any medication use.[25,26] Weight loss medications are most effective when paired with behavioral interventions. Prescription weight loss drugs include:

Fat absorption inhibitors - Orlistat is an FDA-approved medication for weight loss, available over the counter as Alli. It works by blocking around 30% of dietary fat from being absorbed by the body. Most side effects are related to gastrointestinal problems, such as nausea, vomiting, stomach pain, diarrhea, and loose or oily stool or discharge. People should talk with their doctor if considering taking Orlistat. The average weight loss over a year is 6 pounds.

Appetite suppressants - Appetite suppressants work by tricking the body into believing it is not hungry. They can be effective but should not be used for more than a few weeks. Also, weight loss only occurs while taking the medication and will be regained after stopping the medication unless behavioral changes (changes in diet and exercise) also occur.

These medications are available only with a prescription. Most appetite suppressants act in a way similar to speed and can cause similar side effects. They should not be taken by individuals who are also taking other medications that cause increases in serotonin (most antidepressants). Individuals with behavioral health conditions should also be careful as these medications can make symptoms worse. They may cause withdrawal reactions, especially if they have been used regularly for a long time and in high doses. Withdrawal symptoms (depression and severe tiredness) may occur if a person suddenly stops using these medications.

Many appetite suppressants have been removed from the market because of serious cardiac (valvular disease, heart attacks), neurological (stroke), and psychiatric side effects. These include sibutramine, ephedra, a fenfluramine/phentermine combination drug, and other forms of phentermine.

Phentermine combined with Topiramate – This combination medication named Qsymia is FDA-approved for weight loss. This medication generates weight loss by increasing feelings of fullness, making food taste less appealing, and increasing calorie burning. Topiramate is a medication used to treat seizures and migraines. This medication is approved for adults with a BMI equal to or greater than 30 or adults with a BMI of 27 or greater who have at least one weight-related health condition, such as high blood pressure, Type 2 diabetes, or high cholesterol. This medication is designed for long-term use. People should talk with their doctors if considering taking Qsymia.

Serotonin agonist — Lorcaserin is a FDA-approved medication for weight loss. This medication works by controlling the appetite, which it accomplishes by sending signals to the brain that promote the feeling of being full. Some side effects include headache, dizziness, drowsiness, feeling tired, nausea, constipation, dry mouth, cough or back pain. This medication is approved for adults with a BMI equal to or greater than 30 or adults with a BMI of 27 or greater who have at least one weight-related health condition, such as high blood pressure, Type 2 diabetes, or high cholesterol. Although this medication is approved for long-term use, it should be stopped at 12-weeks if the patient has not lost at least 5% of their weight. Use for greater than one year is not associated with further weight loss, although the amount of weight regained is less.

Lorcaserin is a schedule IV controlled substance (this is the same class as benzodiazepines). Individuals with diabetes who use this medication can have hypoglycemic episodes. Caution should be used if the medication is combined with other medications that can increase serotonin, including most antidepressants, due to the risk of serotonin syndrome. This medication can also cause neuropsychiatric side effects, including attentional and memory problems, among others. Prescribing information does confirm that doses at greater than those recommended result in euphoria, hallucinations and dissociation. People should talk with their doctors if considering taking Lorcaserin.

Over the counter appetite suppressants and weight loss supplements are ineffective over the long-term and can be quite dangerous. They are not regulated and some supplements can contain other medications not listed. Analyses have found medications such as prozac, benzodiazepines, different forms of speed, diuretics, and anti-seizure medications in over-the-counter weight loss supplements.

Surgical Interventions

Surgical weight loss procedures are sometimes considered for obese patients with a BMI of ≥40, or those with a BMI of ≥35 with significant medical co-morbidities who have tried other weight loss approaches without significant success achieving weight loss.[27]

Bariatric surgery can produce significant weight loss as well as benefits in metabolic function. Typical weight loss ranges from 40 – 100 pounds.[28] It should be noted that after surgery, a person still has to regulate food intake and maintain a healthy lifestyle to maintain their weight loss. As these are major surgical procedures, the risks of anesthesia and surgery apply, including risk of death, infection, and leaking of food into the abdomen.[29]

There are a number of different types of bariatric surgery. The choice of procedure will depend on the patient. People can undergo gastrointestinal surgery that involves gastric restriction or gastric bypass methods or both. A combination of both types of surgery is associated with greater weight loss. Surgical techniques include:[30]

- **Gastric restriction.** Gastric restriction techniques, such as banding or stapling the stomach, act to make it smaller. This prevents the stomach from stretching to full size but does not affect nutrient absorption. People feel full more quickly, thus reducing the amount of food they eat.
- **Gastric bypass surgery**. Gastric bypass surgery creates a small pouch in the stomach to reduce the amount of food it takes for a person to feel full. The surgery also involves creating a way for food to bypass part of the stomach and small intestine. This reduces the number of calories absorbed from food as well as the secretion of hormones that contribute to the sense of hunger.[31]

End Notes

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Maintaining a Healthy Weight

1. Weight Loss Versus Weight Management
2. Successful Weight Management
3. The Role of Healthcare Providers

Many people report that it is far easier to lose weight than it is to maintain weight loss. Most people who have tried to lose weight (including those who are eventually successful) have tried previously to lose weight and found themselves regaining weight.[1]

So why would someone who has already successfully lost weight find it hard to sustain their weight loss over time? There are many potential reasons. Physiologically, the body has many counter-regulatory systems, which actively work to replenish depleted energy stores. At a psychological and practical level, weight loss attempts are often "behavior change of short duration."[2] People regain weight when they no longer adhere to the new diet and exercise behaviors that helped them to lose the excess weight they were carrying.

Weight Loss Versus Weight Maintenance

There are significant differences between what occurs when a person is in weight loss stage compared to weight maintenance stage.[3]

- Many people view weight loss as active, requiring effort but believe weight maintenance will be passive and effortless.
- Once they have reached their weight loss goal, patients may no longer adhere to the same behavior change strategies that created successful weight loss.
- Patients receive much less reinforcement or encouragement from others for weight maintenance.
- The process of weight maintenance is indefinite, not time limited. It can be harder to set concrete, well-defined goals with clear action steps to reach them.

Successful Weight Maintenance

Research indicates that the longer one has maintained weight loss, the easier it is to maintain weight loss. Weight maintenance of 2-5 years decreases the risk of subsequent weight gain by more than 50%.[4]

A growing body of research describes some key features of people who successfully maintain weight loss over time.[5-10] People who successfully maintain weight loss tend to:

- Have tried unsuccessfully to lose weight in the past;
- Have a significant event that triggered weight loss this time;
- Take a more rigorous approach to nutrition and exercise to maintain their weight loss over time;
- Modify both nutrition and physical activity behaviors to achieve weight loss;
- Exercise daily;
- Count calories;
- Eat breakfast daily;
- Maintain their healthy eating pattern consistently on weekdays, weekends and holidays;
- Recognize the importance of self-monitoring;
- Weigh themselves at least weekly or daily, even during maintenance.

The Role of Healthcare Providers

It is important for healthcare providers to maintain a positive attitude with patients about their ongoing efforts to maintain a healthy weight. Healthcare professionals can provide education and help patients to develop a strong plan for healthy living. This plan may include practical strategies for managing triggers for unhealthy eating, overcoming barriers to physical activity, and obtaining ongoing support. To facilitate these changes, it can be helpful to think in terms of supporting healthy living rather than preventing weight gain.

It is important to remember:

- Prior attempts at weight loss can be valuable learning opportunities upon which to build skills and knowledge for future successes;
- Weight maintenance is an important stage of change. It requires specific supports and behavior change strategies.

Setting short-term goals in the maintenance phase may be more manageable for people than envisioning maintaining change over a lifetime. The level of support needed to maintain weight differs according to individual patient needs. Providers should have different levels of support available.

Everyday support for healthy living

- **Congratulate** patients for making changes that lead to maintaining a healthy weight.
- **Encourage** patients to maintain healthy behaviors by engaging them in discussions about the benefits of maintaining a healthy weight.
- **Use problem-solving** to help patients to handle challenges to maintaining their new health behaviors. As you discuss these challenges, you can use Motivational Interviewing techniques to explore solutions. Remember that the best ideas are usually those that come from the patients themselves.

If a patient does regain weight, remain positive and encourage the efforts already made. Remember that each weight loss attempt can be a valuable opportunity for continued growth for patients learning how to lead a healthy lifestyle. Celebrate the successful weight loss they made and assist in planning for the next weight loss attempt by returning to the assessment of readiness for change and planning next steps.

End Notes

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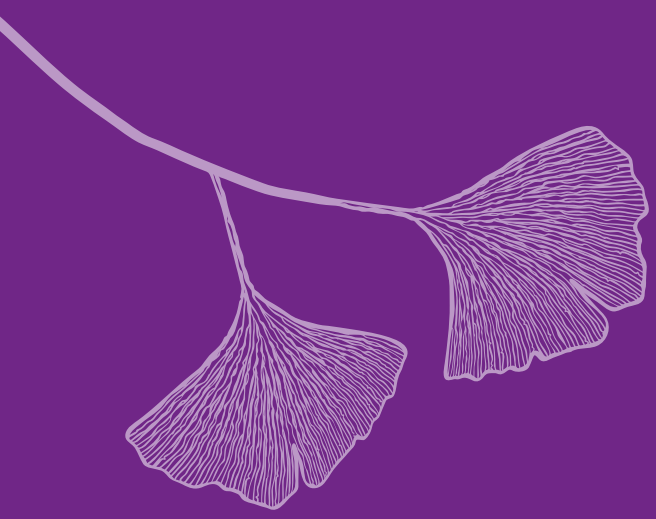

Weight Management Resources

1. Books for Additional Reading
2. Online Resources

Weight Management Resources

Books for Additional Reading

Karasu, S. R. & Karasu, T. B. (2010). The gravity of weight: A clinical guide to weight loss and maintenance. Washington, D.C.: American Psychiatric Publishing Incorporated.

Robinson, P. & Gould, D. (2011). Real behavior change in primary care: Improving patient outcomes and increasing job satisfaction. Oakland, CA: New Harbinger Publications.

Rollnick, S., Miller, W. R. & Butler, C. C. (2008). Motivational interviewing in healthcare: Helping patients change behavior. New York, NY: The Guilford Press.

Online Resources

Obesity Guidelines and Information

Centers for Disease Control and Prevention—Obesity
www.cdc.gov/obesity/

Harvard School of Public Health—The Obesity Prevention Source
www.hsph.harvard.edu/obesity-prevention-source/

Healthy People 2020 Objectives
www.healthypeople.gov/2020/default.aspx

HeatlthTeamWorks—Adult Obesity Guidelines and Adult Obesity Action Plan
www.healthteamworks.org/guidelines/obesity.html

Centers for Disease Control and Prevention—Adult BMI Calculator
www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/english_bmi_calculator/bmi_calculator.html

National Heart, Lung, and Blood Institute—Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults
www.nhlbi.nih.gov/health-pro/guidelines/archive/clinical-guidelines-obesity-adults-evidence-report

Risk Factor Checklists

Framingham Heart Study Risk Score Profiles
www.framinghamheartstudy.org/risk-functions/

American Diabetes Association—Diabetes Risk Test
www.diabetes.org/diabetes-basics/prevention/diabetes-risk-test/risk-test-flyer-2012.pdf

Nutrition Resources and Information

United States Department of Agriculture—Nutrition Guidelines
www.choosemyplate.gov

United States Department of Agriculture—Nutrition Resource Library
http://snap.nal.usda.gov/resource-library-0

United States Department of Agriculture—Nutrition information
www.nutrition.gov

Let's Move—Weight Management
www.letsmove.gov

Center for Disease Control and Prevention—Healthy Living Information
www.cdc.gov/healthyliving

Physical Activity Guidelines and Resources

U.S. Department of Health and Human Services—Physical Activity Guidelines
www.health.gov/paguidelines

Centers for Disease Control and Prevention—Strategies to Increase Physical Activity
www.cdc.gov/physicalactivity/

U.S. Department of Health and Human Services—Be Active Your Way: A Guide for Adults
www.health.gov/paguidelines/pdf/adultguide.pdf

The Behavioral Health and Wellness Program's DIMENSIONS: Well Body Program is designed to train peers and providers to assist people to maintain a healthy lifestyle. The DIMENSIONS: Well Body Program Advanced Techniques training supports individuals to envision and achieve their Well Body goals through motivational engagement strategies, group process, community referrals, and educational activities. Contact the Behavioral Health and Wellness Program at bh.wellness@ucdenver.edu for more information.

Behavioral Health & Wellness Program

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