Health Coaching Toolkit

Catherine’s Health Center
2018

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AstraZeneca HealthCare Foundation
Connections for Cardiovascular Health℠
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Purpose of Toolkit

Innovative Practice: Health Coaching

One of the most effective tools of Live Heart Smart is its utilization of health coaches. These individuals work one-on-one with participants to elicit motivation for change, provide education, connect participants with local resources, facilitate the SMART goal-setting process, and provide on-going support to help participants achieve their health goals. This innovative approach is central to achieving the positive health outcomes of hundreds of our participants. This toolkit is centered on our health coaching practice as an innovative practice in order to assist other medical settings with implementing a patient-centered approach to behavior change.
Background

- Problem
- What we did
- Outcomes
- Evaluation
Background

Problem

Catherine’s Health Center, a Federally Qualified Health Center Look Alike in Grand Rapids, Michigan, serves low-income, un- and under-insured individuals and families. People living in poverty face multiple complex barriers to improving or sustaining their health, including inadequate access to quality care, inability to navigate the healthcare system, poor health literacy, and many other social determinants of health. When patients don’t have the necessary resources and support, they experience higher rates of cardiovascular disease and other chronic diseases. The cost burden often falls on emergency departments and the broader community, while these individuals and families experience a powerful reduction in quality and years of life.

What we did

Our aim was to engage participants as active partners in their care rather than simply recipients of services in order to discover their needs, offer community-based solutions, and build an innovative evidence-based approach to improve heart health for the underserved.

Through generous funding from the AstraZeneca HealthCare Foundation’s Connections for Cardiovascular HealthSM program, we built Live Heart Smart. We based the program on Michigan’s WISEWOMAN ProgramSM which is part of the Michigan Department of Health and Human Services, funded by the Centers for Disease Control and Prevention. The program provides low-income women age 40-64 with health education, resources and support to make healthy lifestyle changes and reduce their risks for cardiovascular disease. Being one of the eight WISEWOMAN host sites throughout the state of Michigan, we were thrilled with the outcomes our patients were experiencing, and wanted to see those changes become attainable for our broader population.

Enter Live Heart Smart, our program to improve heart health for the underserved through the following interventions:

- Cross-sector partnerships within the community to bring health education and resources on site in the form of group educational classes and programs
- One-on-one risk reduction counseling, goal setting, and health coaching using motivational interviewing techniques
- Affordable health insurance navigation and enrollment assistance
- Care management to monitor and improve the health of participants with complex needs
- Integrated behavioral health services in order to address underlying mental health comorbidities for those living with chronic disease
Outcomes

As a result, our participants have seen meaningful improvements in health outcomes. For example, 797 participants had been screened in our program at least two times between January 2014 and December 2017. The group experienced the following improvements:

- 78.3% of participants had blood pressure (BP) lower than 140/90
- 69.4% decreased diastolic BP by an average of 11.9
- 67.2% decreased A1C with an average of 0.2 (n=201)
- 54.5% decreased LDL-C by an average of 40.7
- 52.1% decreased systolic BP by an average of 15.2
- 50.1% increased HDL by an average of 10.1
- 50.1% decreased triglycerides by an average of 58.1
- 49.8% decreased total cholesterol by an average of 34.8
- 49.8% decreased glucose by an average of 30.2
- 48.4% decreased weight with an average of 16.5 lbs
- 41.5% decreased BMI with average 3.0
- Participants decreased ER visits by 433 per year

Evaluation

Our evaluation process is comprised of 3-month, 6-month, and annual assessment and reporting. These increments enable us to make mid-course corrections in order to ensure quality and consistency. Using our electronic health record, Microsoft ACCESS, and Microsoft Excel, we conduct quantitative data analysis and test for statistical significance in health outcome changes.

We also collect patient impact stories in order to capture the qualitative impact of the program.

Our team of health coaches meets quarterly to review the health coaching process, learn together, and assess progress. The team checks in with each other informally between quarterly meetings.

Disclosure: The AstraZeneca HealthCare Foundation is a tax-exempt entity organized under section 501(c)(3) of the United States Internal Revenue Code, separate from AstraZeneca Pharmaceuticals.

Connections for Cardiovascular Health™ program data are self-reported to the Foundation and its evaluation partner. The AstraZeneca HealthCare Foundation and its evaluation partner make no claim as to the accuracy of the data nor can they verify the individual outcome data from which aggregate conclusions are drawn. Grammar, style, form, and function are solely the responsibility of the presenting organization.
Theory

- Transtheoretical Model
- Motivational Interviewing
Theory

Transtheoretical Model

The Transtheoretical Model is often referred to as the Stages of Change. This model was developed in 1977 by James Prochaska and Carlo DiClemente and is gaining popularity in the behavior change sphere. The model refers to different stages that an individual can be in when considering behavior change. These stages are as follows:

- **Precontemplation**: the individual hasn’t begun thinking about making a change
- **Contemplation**: the individual has thought about and might want to make a given change, but hasn’t spent much time or energy planning
- **Preparation**: the individual is planning how to make a given change
- **Action**: the individual practices a given change
- **Maintenance**: the individual has been successfully practicing a given change for a while (generally six months) and is confident that it’s becoming a habit
- **Relapse**: the individual stops the change behavior, returning to one of the other former stages

The role of the health coach is to identify which stage of change a patient is in, and help the patient move to the next stage of change.

Further in-depth information related to stages of change can be found in Appendix A.

Motivational Interviewing

Motivational Interviewing (MI) was developed by William Miller and Stephen Rollnick in the early 1990s as a method to build rapport with clients and discuss behavior change in a non-confrontational way.

MI is a person-centered counseling method that enables collaboration between the health coach and participant in order to explore change. It highlights ambivalence, resistance, and the participants’ underlying motivation to make a change.

MI recognizes that behavior change is a complicated process, and if the idea of change were entirely positive, it would be easy for the participant to make a change. By understanding and confronting both the positive and negative aspects of change, a participant is able to fully explore whether and/or how they might make a change.

*Live Heart Smart* uses tools developed by the *WISEWOMAN Program*℠ and annual live MI trainings to provide ongoing practice and competency for health coaches.

Additional information and tools for motivational interviewing can be found in Appendix A.
Recruitment & Training

- Recruitment
- Training
- Health Coaching Training Checklist
- Motivational Interviewing Checklist
Recruitment & Training

Recruitment

While we have 2-3 employee health coaches, most of our health coaches are volunteers. Bringing in volunteer health coaches provides these individuals with meaningful skills and experiences, and enables us to provide health coaching for as many participants as possible.

Our health coach volunteers tend to be students at local colleges and universities, such as Michigan State University’s College of Human Medicine, Calvin College, and Grand Valley State University. Many students are eager to benefit the community, and health coaching is a great opportunity for them to transform their classroom knowledge into practical experience.

AmeriCorps and VISTA (Volunteers In Service to America) can be great programs to assist with getting your health coaching program off the ground as well. AmeriCorps and VISTA members serve a full-time year of service at qualifying non-profits throughout the US. To find out more information about AmeriCorps and VISTA programs, see the Additional Resources section.

When recruiting volunteer health coaches, we specifically look for individuals who:

- Demonstrate an ability to build rapport
- Have an interest in health and wellness
- Are adaptive and willing to learn

As you can see, there aren’t many limitations to who can be a health coach! The key to success, however, lies in the quality of your training.

Training

Training videos

Our volunteer health coaches begin training by watching the WISEWOMAN Motivational Interviewing videos with Mike Stratton at [http://wisewoman.info/motivational_interviewing.html](http://wisewoman.info/motivational_interviewing.html). These videos provide a solid foundation in MI before reviewing written materials.

Training materials

The health coach then meets with Catherine’s lead health coach, the Health Education & Outreach Coordinator. They review the materials included above in the Theory section. Special attention is paid to the Stages of Change model, with the goal being to move the participant forward one stage.
Health education resources

Participants most often choose to work on one of a few areas of health: nutrition, physical activity, and smoking cessation. These habits can make the biggest impact on reducing a participant’s risk for developing cardiovascular disease. The health coach has access to a broad spectrum of materials to educate participants on the area of health they are interested in working on. Reviewing these resources provides the health coach with the ability to best advise a participant towards a realistic goal. Health coaches also become familiar with blood pressure, cholesterol, diabetes, and weight loss and management to better understand how to assist participants with specific health needs.

Community resources

Catherine’s maintains an extensive community scan filled with resources from Kent County, Michigan. This resource bank enables health coaches to remain experts in the technique without memorizing the abundance of resources in the community. During training, the health coach reviews the community resources and becomes familiar with where to find different categories of resources, including transportation, food assistance, housing, and more.

*Catherine’s community scan is not included in this toolkit due to the transitional nature of community resources. If you’d like a copy of the scan, please contact Catherine’s Health Center at (616) 336-8800.*

Role playing

Once the volunteer is familiar with Motivational Interviewing, health education and community resources, the volunteer will begin role playing different participant scenarios with the Health Education & Outreach Coordinator, and potentially other health coaches. By practicing being both the coach and the participant, the volunteer gets a better sense of the utility of the model. Coaches will role play with the volunteer multiple times, depending on the volunteer’s skill and comfort level.

Appointment and phone call shadowing

After role playing, a volunteer is ready to see the practice in action. The volunteer will shadow a health coach for 3-4 in-person appointments or phone call follow-ups. Following the interaction, the volunteer and health coach will be able to review how the process went. Once the volunteer has shadowed at least three sessions, the volunteer will then take the lead with the next participant, and the health coach will be present to provide assistance. Depending on the volunteer’s skill and comfort level, the health coach will sit in on one or more sessions.
Health Coaching Training Checklist

☐ WISEWOMAN Motivational Interviewing videos

☐ Motivational Interviewing materials

☐ Health Education resources
  ☐ Nutrition
  ☐ Physical activity
  ☐ Smoking cessation
  ☐ Blood pressure
  ☐ Cholesterol
  ☐ Diabetes
  ☐ Weight loss and management

☐ Community resources

☐ Role playing
  ☐ Volunteer as health coach
  ☐ Volunteer as participant

☐ In-person appointment and phone call follow-up shadowing
  ☐ Session 1
  ☐ Session 2
  ☐ Session 3
  ☐ Additional sessions: _____
Motivational Interviewing Checklist

☐ Reflective listening

☐ Asking Permission

☐ Open Ended Questions

☐ Scaling

☐ Assessing Stage of Change

☐ Expressing Empathy

☐ Avoiding Argument

☐ Roll with Resistance

☐ Develop Discrepancy

☐ Support Self Efficacy
Participant Recruiting & Health Coaching Process

- Participant Recruiting
- Health Coaching Process
Participant Recruitment & Health Coaching Process

At Catherine’s we recruit participants through two major methods:

1. Participant Self-Identification
2. Medical Referral

Participant Self-Identification

Every patient at Catherine’s receives the Live Heart Smart Intake Survey once a year. If a patient identifies on the form that he or she is interested in health coaching, we add that person to our caseload. These tend to be participants who are already ready to make a change, and are looking for guidance through the Preparation and Action stages.

Medical Referral

Patients are often referred to health coaching from other medical staff at Catherine’s. Whether a patient mentions wanting to work on a health goal or a medical provider believes they could benefit from the service, participants come to us in any of the six stages of change.

Health Coaching Process

Once patients are referred to health coaching, the first appointment is generally in person. The participant chooses a health goal, refines it into a SMART goal with the assistance of the health coach, and they agree to work together. Most subsequent contacts are made via phone, unless the participant prefers to come in person or is already on-site. After at least three contacts, the health coach guides the participant through the Outcome Evaluation Contact Form in order to generate reflection on progress and capture quantitative and qualitative outcomes.
Forms

- Live Heart Smart Intake Survey
- Readiness and Confidence to Change Ruler
- Participant Agreement
- Follow-up Contact Form
- Outcome Evaluation Contact Form
Health Questionnaire

1. How many cups of fruit do you eat in an average day?
   Includes fresh, canned, or frozen. (Examples: apples, oranges, bananas, peaches)
   □ 0 □ 1-2 cups □ 3-4 cups □ 5-6 cups □ 7-8 cups □ More than 8 cups

2. How many cups of vegetables do you eat in an average day?
   Includes fresh, canned, or frozen. (Examples: carrots, potatoes, broccoli, squash)
   □ 0 □ 1-2 cups □ 3-4 cups □ 5-6 cups □ 7-8 cups □ More than 8 cups

3. How many minutes of moderate physical activity do you get in a week?
   With moderate physical activity, you can talk, but not sing, during the activity.
   □ 0 □ 1-30 mins □ 31-60 mins □ 61-90 mins □ 91-120 mins
   □ 121-150 mins □ More than 150 mins

4. How many minutes of vigorous physical activity do you get in a week?
   With vigorous physical activity, you won’t be able to say more than a few words without pausing for a breath.
   □ 0 □ 1-30 mins □ 31-60 mins □ 61-90 mins □ 91-120 mins
   □ 121-150 mins □ More than 150 mins

5. Do you smoke?
   Includes cigarettes, pipes, or cigars (smoked tobacco in any form.)
   □ Current smoker (everyday) □ Current smoker (some days) □ Never smoked
   □ Quit (1-12 months ago) □ Quit (more than 12 months ago)

6. Do you want to quit smoking
   □ No □ I’m thinking about quitting □ Yes, I want to quit recently □ I quit smoking

7. About how many hours a day, on average, are you in the same room or vehicle as another person who is smoking?
   □ 0 □ 1 □ 2 □ 3 □ 4 □ 5 □ More than 5

8. In the past year, have you changed:
   Tobacco use?
   □ Increased □ Decreased □ No Change □ I don’t smoke
   Fruit and vegetable intake?
   □ Increased □ Decreased □ No Change
   Physical activity?
   □ Increased □ Decreased □ No Change

9. In the past year, how many times have you used the ER?
   □ 0 □ 1-2 □ 3-4 □ 5-6 □ 7-8 □ More than 8 times

10. I am interested in the following health interventions:
    □ Educational Materials □ One-on-One Health Coaching □ Peer support groups □ Group classes □ Healthy Living Events

11. If interested in group classes, please circle which topics are of interest:
    Cooking Gardening Smoking Cessation Canning Nutrition Diabetes Management Diabetes Prevention Health Coverage Exercise Group Walking Program Parenting Yoga Stress Management Anger Management

Program funding provided by:

[AstraZeneca HealthCare Foundation] [Catherine’s Health Center]
How Ready Are You?

Below, mark where you are on this line that measures how ready you are to make a healthy lifestyle change.

0 = not ready to change
5 = might be willing to change
10 = really ready to change

Use at rescreen only for participants who indicate an increase in their readiness to change

What has changed in your life that makes you more ready to make a healthy behavior change?

How Confident Are You?

Below, mark where you are on this line that measures how confident you are that you can make the healthy lifestyle choice you chose.

0 = not confident at all
5 = somewhat confident
10 = really confident
Participant Agreement

Name: _________________________ Phone: _________________________

My Health Coach is: _________________________ Phone: _________________________

My healthy behavior goal is:

______________________________________________________________________________

______________________________________________________________________________

My plan is:

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

My healthy behavior goal is related to:

- Medication Adherence
- Diabetes Prevention
- Quitting Smoking
- Weight Management
- Nutrition Programming
- Physical Activity
- Other: _________________________

I want to speak with a health coach _____ times a month.

Participant signature____________________________________________ Date____________________________

Health Coach signature__________________________________________ Date____________________________
Follow-up Contact Form

Name:
Date:

Type: · Face to Face · Telephone · E-mail

Length of Session: ___________ (minutes)

Content: (Ask open-ended questions, use reflective listening, roll with resistance, express empathy)
Progress made, goal changes (Listen and reflect)
· met goal
· did not meet goal
· adapted goal
· other ________________________________

Barriers (Listen and reflect. Develop discrepancy)
· spouse and/or family
· caregiving responsibilities
· work
· other ________________________________

Support systems (Listen and reflect)
· spouse and/or family · community program
· people at work · other __________________________
· friends __________________________
· church

Identify solutions (Listen and ask permission to make suggestions)
· redefined goal
· attend community programming
· other ________________________________

Other Topics Covered:
· Medication adherence · Educational materials · Referrals to free/low cost community resources · Other ________________________________

Notes:
Outcome Evaluation Contact Form

Date _________________

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Middle Initial</th>
<th>Patient ID</th>
</tr>
</thead>
</table>

1. On a scale of 0 – 10, how successful were you at meeting your goal? (0 = not at all successful and 10 = more successful than I ever imagined.) ___________

2. What helped you be successful or kept you from being successful? ______________________________
________________________________________________________________________________________

3. In which program(s) did you participate?
   - Health Coaching: _____ contacts
   - DPP: Attended _____ of 16 core sessions (9 is complete)
   - TOPS: Participated in _____ weekly meetings (12 is complete)
   - Quitline: [ ] Completed  [ ] Partially Completed  [ ] Withdrew when reached  [ ] Unable to reach

4. What community resources did you use (if any)? [ ] None
   - Walking Club
   - SNAP-Ed
   - Local gym
   - Farmer’s Market

5. What helped you complete your program or kept you from completing it? ___________________________
________________________________________________________________________________________

6. What changes did you make or have you noticed? [ ] None
   - I lost weight: ________ pounds
   - I am eating better: __________________________
   - I am more physically active: ________ minutes/week
   - I quit smoking (Quit Date: _____________)
   - I am taking my medication as prescribed
   - My blood pressure is lower
   - Other __________________________

7. What do you think helped you make that change? ______________________________________________
________________________________________________________________________________________

8. On a scale of 0 – 10, how confident are you today that you can continue the healthy behavior change(s) you made? (0 = not confident at all and 10 = really confident) ___________

9. What did you learn about yourself from setting a goal? _________________________________________
________________________________________________________________________________________
References
References


How Do I Follow a Healthy Diet? (n.d.). *American Heart Association.*


Appendix A.
Additional Resources

- Facilitating Behavior Change
- Motivational Interviewing
- Prochaska and DiClemente’s Stage of Change Model
- Stages of Change: A Model for Nutrition Counseling
- Examples of Motivational Interviewing Techniques
- Motivational Interviewing Worksheet
- Change and Sustain Talk
Facilitating Behavior Change

*This section contains the following subjects:*

- Readiness to Change
- Motivational Interviewing
ASSESSING AND INCREASING MOTIVATION

Adherence and nonadherence are behaviors, and adherence to medication regimens requires behavior change. Motivation is a key factor in successful behavior change and has been shown to promote adherence to chronic therapies (World Health Organization, 2003). This appendix presents techniques that will be useful in assessing motivation and helping older adults increase their intrinsic motivation to adhere to medication regimens and other chronic therapies. Two models are introduced: Readiness to Change and Motivational Interviewing. These techniques and the concepts behind them are discussed primarily in the context of medication adherence, but they can also be applied to such lifestyle modifications as diet and exercise.

REACHINESS TO CHANGE

Behavior change is rarely a discrete, single event. During the past decade, behavior change has come to be understood as a process of identifiable stages through which people pass (Zimmerman et al., 2000). The Stages of Change model describes five stages of readiness (Figure 5)—precontemplation, contemplation, preparation, action, and maintenance—and provides a framework for understanding behavior change (DiClemente and Prochaska, 1998).

FIGURE 5. THE STAGES OF CHANGE CONTINUUM

Source: Adapted from DiClemente and Prochaska, 1998
For most people behavior change occurs gradually over time, with the person progressing from being uninterested, unaware, or unwilling to make a change (precontemplation), to considering a change (contemplation), to deciding and preparing to make a change (preparation). This is followed by definitive action, and attempts to maintain the new behavior over time (maintenance). People can progress in both directions in the stages of change. Most people will “recycle” through the stages of change several times before the change becomes fully established (Zimmerman et al., 2000).

The Stages of Change model is useful for identifying appropriate interventions to foster positive behavior change (Table 6); by identifying where a person is in the change process, interventions can be tailored to the person’s “readiness” to change (Zimmerman et al., 2000). Anything that moves a person along the continuum towards making a positive change should be viewed as a success. Once the person reaches the contemplation stage, additional strategies can be employed to help the person move along the stages of change.

It is important to evaluate a person’s readiness to change for any proposed intervention (Zimmerman et al., 2000). Interventions that are not staged to the readiness of the individual will be less likely to succeed. Also, interventions that try to move a person too quickly through the stages of change are more likely to create resistance that will impede behavior change.

For example, if trying to get a person to quit smoking, it is essential to know where the person is in his or her readiness to stop. A person who is not even thinking about quitting smoking (precontemplation) is generally not ready to receive information about specific smoking cessation aids. In this case, focusing the intervention on smoking cessation aids sends the message that the health care provider is not really listening. This may not only damage rapport but can also make the person even more resistant to quitting smoking. A more stage-specific intervention with this person would be to try to get the person to think about quitting (contemplation). Once the person reaches the contemplation stages, additional strategies can be employed to continue to move the person through the stages of behavioral change.

 Anything that moves a person along the continuum toward making a positive change should be viewed as a success. Employing stage-specific interventions will decrease provider frustration by lessening the unrealistic expectation that change will occur with a single intervention.
TABLE 6. STAGES-OF-CHANGE CHARACTERISTICS AND STRATEGIES

<table>
<thead>
<tr>
<th>STAGE</th>
<th>CHARACTERISTICS</th>
<th>STRATEGIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation</td>
<td>The person is not even considering changing. They may be “in denial” about their health problem, or not consider it serious. They may have tried unsuccessfully to change so many times that they have given up.</td>
<td>Educate on risks versus benefits and positive outcomes related to change</td>
</tr>
<tr>
<td>Contemplation</td>
<td>The person is ambivalent about changing. During this stage, the person weighs benefits versus costs or barriers (e.g., time, expense, bother, fear).</td>
<td>Identify barriers and misconceptions Address concerns Identify support systems</td>
</tr>
<tr>
<td>Preparation</td>
<td>The person is prepared to experiment with small changes.</td>
<td>Develop realistic goals and timeline for change Provide positive reinforcement</td>
</tr>
<tr>
<td>Action</td>
<td>The person takes definitive action to change behavior.</td>
<td>Provide positive reinforcement</td>
</tr>
<tr>
<td>Maintenance and Relapse Prevention</td>
<td>The person strives to maintain the new behavior over the long term.</td>
<td>Provide encouragement and support</td>
</tr>
</tbody>
</table>

Source: Zimmerman et al., 2000; Tabor and Lopez, 2004

A question that can be put to individuals to help evaluate their readiness to change can be as simple as: “Are you willing to take a medication to treat your condition?” Readiness to change can also be evaluated using a more quantitative scale: “How ready are you on a scale from 1 to 10 to initiate this therapy (medication, diet, exercises) to treat your condition?”

Two major factors that have been found to affect a person’s readiness to change are “importance” and “self efficacy”. Importance is determined by what value a person places on making the change. Self efficacy is a person’s belief or confidence in their ability to succeed at making the change. Depending on the health scenario, people may exhibit different levels of importance and self efficacy (Rollnick et al., 1999). A person who is overweight may be convinced of the importance of losing weight but have a low level of confidence based on previous failure to lose weight or keep weight off. A person who is newly diagnosed with hypertension may be confident that they can take a pill to lower blood pressure but are not convinced of the importance of this action. A deficiency in either importance or self efficacy can lead to a person’s unwillingness to commit to change.

The Readiness-to-Change Ruler is used to assess a person’s willingness or readiness to change, determine where they are on the continuum between “not prepared to change” and “already changing”, and promote identification and discussion of perceived barriers to change (See Readiness-to-Change in
Motivational interviewing is an approach, first reported in the addiction literature, to improve adherence (Miller & Rollnick, 2002); it is both an assessment strategy and an intervention. Motivational interviewing is used to determine a person’s readiness to engage in a target behavior—such as taking a medication as prescribed—and then applying specific skills and strategies based on the person’s level of readiness to create a favorable climate for change.

Motivational interviewing is a person-centered, directive method of communicating with the goal of enhancing a person’s intrinsic motivation to change by exploring and resolving ambivalence and resistance (Miller & Rollnick, 2002). Motivational interviewing techniques try to avoid simply telling a person what they need to do. People can easily dismiss such suggestions or come up with a number of reasons why the suggested change is not possible.

The essence of motivational interviewing is in its collaborative nature, communicating in a partner-like relationship, where the interviewer seeks to create a positive interpersonal atmosphere. In motivational interviewing, responsibility for change is left to the person; the overall goal is to increase the person’s intrinsic motivation, so that change arises from within rather than being imposed.

It must be recognized that it is the person, not the health care provider, who will ultimately need to make changes that will affect their health. Thus, change must be negotiated, not dictated. Consistent with the collaborative model, the health care provider functions not to motivate the person, but to draw out intrinsic motivation based on the person’s own personal goals and values.

Motivational interviewing uses a number of person-centered techniques to create a favorable climate for change. There are five general principles that underlie motivational interviewing (Miller & Rollnick, 2002). The key principles are arranged to form the acronym READS, to help providers remember these key concepts (Table 7). These principles are not necessarily applied in this particular order, and all of these techniques should be used throughout the interaction.
TABLE 7. READS Principles of Motivational Interviewing

1. Roll with resistance
2. Express empathy
3. Avoid argumentation
4. Develop discrepancy
5. Support self-efficacy

Source: Miller & Rollnick, 2002

**Roll with Resistance**

Resistance can take several forms, such as negating, blaming, excusing, minimizing, arguing, challenging, interrupting, and ignoring. In motivational interviewing one does not directly oppose resistance but, rather, rolls or flows with it. Direct confrontation will create additional barriers that will make change more difficult. A person’s resistance during motivational interviewing is expected and should not be viewed as a negative outcome. In fact, a person who resists is providing information about factors that foster or reduce motivation to adhere to behavioral change. Rolling with resistance, then, includes involving the person actively in the process of problem solving.

Resistant behavior may be a signal that the person does not believe or accept information that has been presented. The health care provider should provide information and alternatives, and explore possible solutions. Exploring the reasons behind the resistant behavior can lead the person to seriously consider possibilities for change.

**Express Empathy**

Because motivational interviewing relies to a great extent on establishing and maintaining rapport with the person, the ability to express empathy is critical to this process. This requires skillful, reflective listening to understand a person’s feelings and perspectives without judging, criticizing, or blaming. An attitude of acceptance and respect contributes to the development of an effective, helping relationship and enhances the person’s self-esteem. Empathic responses demonstrate that the health care provider understands the person’s point of view and provides an important basis for engaging the person in a process of change.

**Avoid Argumentation**

Resistance to change is strongly affected by the health care provider’s response; therefore, arguments should be avoided. Direct confrontations usually result in defensive reactions and increased resistance to change. Resistance is an indication that the health care provider should change strategies rather than argue. The emphasis should focus on helping the person with self-recognition of problem areas rather than coerced admission.
Develop Discrepancy

The principle of developing discrepancy is based on the understanding that motivation for change is created when the person perceives a discrepancy between their present behavior and important personal goals (Miller & Rollnick, 2002). This often involves identifying and clarifying the person’s own goals. The goals need to be those of the person and not those of the health care provider, otherwise the person will feel as though they are being coerced and may become more resistant to change. An important objective of motivational interviewing is to help a person recognize or amplify the discrepancy between their behavior and their personal goals.

There are a number of techniques that can be used to help develop discrepancy. One technique is to ask the person what is good or positive about a particular behavior and what is bad or not so good about that same behavior. Reflecting back and examining the positive and negative will help discrepancy emerge. When skillfully done, motivational interviewing changes the person’s perceptions of discrepancy without creating a sense of being pressured or coerced.

Support Self-Efficacy

Self-efficacy is a person’s belief or confidence in their ability to carry out a target behavior successfully. A general goal of motivational interviewing is to enhance the person’s confidence in their ability to overcome barriers and succeed in change.

Health care providers can support self-efficacy by recognizing small positive steps that the person is taking to change their behavior. Even when the person is simply contemplating a change, there is an opportunity to provide recognition and support. Supportive statements can be as simple as “It’s great to hear that you are interested in getting more information about your diabetes.”

Setting reasonable and reachable goals that the person can actually accomplish will also help build confidence. It is important that the person be involved in setting the goal. For an overweight person that is physically inactive, even getting them to exercise five to 10 minutes twice a week is a move in the right direction. Seeing that they can accomplish this will give them additional motivation to continue to exercise.

Lastly, it is important that the health care provider believes that the person can achieve the goal. This belief in the person can have a powerful positive effect on the outcome.

Elicit, Provide, Elicit

The person, not the health care provider, is the primary source of solutions for dealing with their medical problems. In order for the person to take responsibility for their own health, they need to become an active participant in sessions with their health care providers.

Motivational interviewing uses the general concept of elicit, provide, elicit, which is a continuous process. Information is elicited from the person so the health care provider can better understand
their attitudes, beliefs, values, and readiness to change. The health care provider can check for understanding of what the person is saying by using reflective listening skills and asking for additional clarification when required; this will help establish a collaborative relationship and build empathy. Information elicited can also be used to help develop discrepancy.

After eliciting information, the health care provider can then provide information to address any knowledge gaps identified. It may be appropriate at times to ask permission from the person to provide them with additional information. This may increase acceptance of the information, as the person will not feel that information is simply being imposed on them.

Lastly, whenever the person is presented with new information, the health care provider should elicit information on the person’s understanding of the new information and their feelings about it. This can identify concerns or questions that the person may have regarding the information presented.

FOR MORE INFORMATION

Training is required to develop the skills for successful motivational interviewing. The reader is referred to the following sources for additional information.

  *This is the classic text that reviews the background and theory of motivational interviewing.*

  *This practical text is aimed at helping health care professionals assess readiness to change, provides suggestions for incorporating motivational interviewing in clinical practice, and presents examples for handling challenging situations that are likely to confront health care providers.*

  *This publication provides a good introduction to health behavior change techniques. The California Healthcare Foundation developed a brochure, “Helping Patients Manage Chronic Conditions”, which can be download from its web site ([www.chcf.org](http://www.chcf.org)) free of charge.*

The following two articles discuss the application of motivational interviewing and health behavior change to medication management:


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<tr>
<th>Stage of Change</th>
<th>Characteristics</th>
<th>Techniques</th>
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<td>Not currently considering change: &quot;Ignorance is bliss&quot;</td>
<td>Validate lack of readiness</td>
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<td></td>
<td></td>
<td>Clarify: decision is theirs</td>
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<tr>
<td></td>
<td></td>
<td>Encourage re-evaluation of current behavior</td>
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<td></td>
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<td>Encourage self-exploration, not action</td>
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<tr>
<td>Contemplation</td>
<td>Ambivalent about change: &quot;Sitting on the fence&quot;</td>
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<td></td>
<td>Not considering change within the next month</td>
<td>Clarify: decision is theirs</td>
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<td></td>
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<td>Encourage evaluation of pros and cons of behavior change</td>
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<td>Identify and promote new, positive outcome expectations</td>
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<td>Preparation</td>
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<td>Planning to act within 1 month</td>
<td>Help patient identify social support</td>
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<td>Verify that patient has underlying skills for behavior change</td>
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<td>Encourage small initial steps</td>
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<td>Action</td>
<td>Practicing new behavior for 3-6 months</td>
<td>Focus on restructuring cues and social support</td>
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<td>Bolster self-efficacy for dealing with obstacles</td>
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<td>Combat feelings of loss and reiterate long-term benefits</td>
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<td>Continued commitment to sustaining new behavior Post-6 months to 5 years</td>
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<td>Reinforce internal rewards</td>
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<td>Discuss coping with relapse</td>
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<td>Relapse</td>
<td>Resumption of old behaviors: &quot;Fall from grace&quot;</td>
<td>Evaluate trigger for relapse</td>
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<td>Reassess motivation and barriers</td>
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<td>Stage</td>
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<tr>
<td>Precontemplation</td>
<td><em>I am not interested in change</em></td>
<td>• Increase awareness of need for change.</td>
</tr>
<tr>
<td></td>
<td>• Is unaware of problem and hasn’t thought about change, or not interested in change.</td>
<td>• Personalize information on risks and benefits.</td>
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<tr>
<td></td>
<td>• Has no intention of taking action within the next 6 months.</td>
<td>• Reduce fears associated with having to change behavior (costs are too high, etc.).</td>
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<tr>
<td>Contemplation</td>
<td><em>Someday I will change</em></td>
<td>• Increase motivation and confidence to perform the new behavior.</td>
</tr>
<tr>
<td></td>
<td>• Is interested in taking action, but not yet able to commit to it.</td>
<td>• Reduce fears associated with having to change behavior.</td>
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<td></td>
<td>• Intends to take action soon and has taken some behavioral steps in this direction.</td>
<td>• Resolution of ambivalence</td>
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<tr>
<td></td>
<td>• Lacks self-efficacy to take steps necessary for long lasting change.</td>
<td>• Firm commitment</td>
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<tr>
<td></td>
<td>• Needs skills for long-term adherence.</td>
<td>• Initiate change</td>
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<tr>
<td></td>
<td>• Commit to change</td>
<td>• Increase self-efficacy through gradually increasing more difficult tasks.</td>
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<tr>
<td>Action</td>
<td><em>I am ready to change.</em></td>
<td>• Reinforce decision.</td>
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<td></td>
<td>• Has changed overt behavior for less than 6 months.</td>
<td>• Reinforce self-confidence.</td>
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<tr>
<td>Maintenance</td>
<td><em>I am in the process of changing.</em></td>
<td>• Assist with self-monitoring, feedback, problem solving, social support, and reinforcement.</td>
</tr>
<tr>
<td></td>
<td>• Has changed overt behavior for more than 6 months.</td>
<td>• Discuss relapse and coping strategies.</td>
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Source:
Examples of motivational interviewing techniques

I: When the patient is in a pre-contemplation stage
(e.g., when the patient is not considering change—“Weight is not a concern for me”)

Goals:
1. Help patient develop a reason for changing
2. Validate the patient’s experience
3. Encourage further self-exploration
4. Leave the door open for future conversations

1. Validate the patient’s experience:
   “I can understand why you feel that way”

2. Acknowledge the patient’s control of the decision:
   “It’s up to you to decide if and when you are ready to make lifestyle changes.”

3. Repeat a simple, direct statement about your stand on the medical benefits of weight loss for this patient:
   “I believe that your extra weight is putting you at risk for heart disease. Making some lifestyle changes could help you lose weight, and improve your health substantially.”

4. Explore potential concerns:
   “Has your weight created difficulties in your life?” “Can you imagine how your weight might cause problems in the future?”

5. Acknowledge possible feelings of being pressured:
   “It can be hard to initiate changes in your life when you feel pressured by others. I want to thank you for talking with me about this today.”

6. Validate that they are not ready:
   “I hear you saying that you are not ready to lose weight right now.”

7. Restate your position that it is up to them:
   “It’s totally up to you to decide if this is right for you right now.”

8. Encourage reframing of current state of change—the potential beginning of a change rather than a decision never to change:
   “Everyone who’s ever lost weight starts right where you are now; they start by seeing the reasons where they might want to lose weight. And that’s what I’ve been talking to you about.”

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1These scripts were developed by the UCLA Center for Human Nutrition, and are available at http://www.cellinteractive.com/ucla/physician_ed/scripts_for_change.html
Examples of motivational interviewing techniques

II: When the patient is in a contemplation stage
(e.g., when the patient is ambivalent about change - "Yes my weight is a concern for me, but I'm not willing or able to begin losing weight within the next month.")

Goals:
1. Validate the patient’s experience
2. Clarify the patient’s perceptions of the pros and cons of attempted weight loss
3. Encourage further self-exploration
4. Leave the door open for moving to preparation

1. Validate the patient’s experience:
   “I’m hearing that you are thinking about losing weight but you’re definitely not ready to take action right now.”

2. Acknowledge patient’s control of the decision:
   “It’s up to you to decide if and when you are ready to make lifestyle changes.”

3. Clarify patient’s perceptions of the pros and cons of attempted weight loss:
   “Using this worksheet, what is one benefit of losing weight? What is one drawback of losing weight?”

4. Encourage further self-exploration:
   “These questions are very important to beginning a successful weight loss program. Would you be willing to finish this at home and talk to me about it at our next visit?”

5. Restate your position that it is up to them:
   “It’s totally up to you to decide if this is right for you right now. Whatever you choose, I’m here to support you.”

6. Leave the door open for moving to preparation:
   “After talking about this, and doing the exercise, if you feel you would like to make some changes, the next step won’t be jumping into action – we can begin with some preparation work.”

These scripts were developed by the UCLA Center for Human Nutrition, and are available at http://www.cellinteractive.com/ucla/physician_ed/scripts_for_change.html
Examples of motivational interviewing techniques

III: When the patient is in a preparation stage
(e.g., when the patient is preparing to change and begins making small changes to prepare for a larger life change – “My weight is a concern for me; I’m clear that the benefits of attempting weight loss outweigh the drawbacks, and I’m planning to start within the next month.”)

Goals:
1. Reinforce the decision to change behavior
2. Prioritize behavior change opportunities
3. Identify and assist in problem solving re: obstacles
4. Encourage small initial steps
5. Encourage identification of social supports

1. Reinforce the decision to change behavior:
   “It’s great that you feel good about your decision to make some lifestyle changes; you are taking important steps to improve your health.”

2. Prioritize behavior change opportunities:
   “Looking at your eating habits, I think the biggest benefits would come from switching from whole milk dairy products to fat-free dairy products. What do you think?”

3. Identify and assist in problem solving re: obstacles:
   “Have you ever attempted weight loss before? What was helpful? What kinds of problems would you expect in making those changes now? How do you think you could deal with them?”

4. Encourage small, initial steps:
   “So, the initial goal is to try nonfat milk instead of whole milk every time you have cereal this week.”

5. Assist patient in identifying social support:
   “Which family members or friends could support you as you make this change? How could they support you? Is there anything else I can do to help?”

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1 These scripts were developed by the UCLA Center for Human Nutrition, and are available at http://www.cellinteractive.com/ucla/physician_ed/scripts_for_change.html
Motivational Interviewing or Not?

For each statement below, decide whether it follows the guidelines of ‘MI’ or ‘Not’.

1. Yes, you really should start some sort of regular walking routine.  
   _____

2. Well, I have some ideas about what might help, but first let me hear what you’ve already considered.  
   _____

3. If you want to eat out less often, you’ll really need to start going to the grocery store and planning out your meals.  
   _____

4. Your blood sugars are really high. You really need to start watching your diet. Why don’t you start going to our diabetes class?  
   _____

5. Have you tried eating more slowly? That really works for me. I tend to not overeat when I slow it down.  
   _____

6. Some people like to add structured physical activity into their days, while others prefer to just walk more and take the stairs, squeezing in little bouts of activity throughout the day. What do you prefer?  
   _____

7. You’re quite committed to making this change.  
   _____

8. It sounds like you’re really adamant about starting the low carb diet your friend is on. I really don’t think you should.  
   _____

9. It sounds like you aren’t completely convinced that you’d like to start making changes. Whether you decide to try making some changes to your eating habits is completely up to you. What do you think you will do?  
   _____

Dawn Clifford and Laura Curtis
For each statement below, circle the ‘change talk’ and underline the ‘sustain talk’. Create a response that identifies the change talk to the client.

Ex. I feel sick after I eat fried chicken. I don’t know why I eat it. It just tastes so good.
Response: You don’t like the way you feel when you eat fried chicken.

1. I know I need to start eating breakfast, but I don’t feel that hungry in the morning and I’m always rushing out the door.
Response: ________________________________

2. I do enjoy fruits and vegetables. It’s not that I don’t like them. What I don’t like is cleaning the dishes afterwards.
Response: ________________________________

3. I know I need to cut back on soda. My doctor told me my blood sugars have been a little high. But I need that caffeine fix in the afternoon.
Response: ________________________________

4. I get home at night and I’m exhausted. The last thing I feel like doing is exercise. I just want to relax and hang out.
Response: ________________________________
Appendix B.
Health Education

- Physical Activity
- Nutrition and Eating Habits
- Smoking Cessation
- Weight Loss and Management
- Blood Pressure
- Cholesterol
- Diabetes
**EXERCISE TIPS**

**Why Is Exercise Important?**

*There are many reasons we should exercise*

- Helps your heart
- Makes your muscles strong
- Makes you flexible
- Gives you energy and makes you feel GOOD!

**How much exercise do I need in a day?**

Everyone should have at least 60 minutes of physical activity on most or all days of the week. Establish a routine and set aside time each day.

**Do I have to do all 60 minutes at once?**

No. Break it up into different activities throughout the day.

- Walk, hike or bike (with a helmet)
- Play an outdoor game
- Jump rope
- Shoot hoops
- Take the stairs, not the elevator
- Dance to your favorite tunes
- Walk the dog
- Help with housework or yard work

**Helpful Tips to Make Any Workout Fun**

*Exercising doesn’t have to be boring. If you are bored, chances are you will not work out. Try these tips.*

- Work out with a friend or family member. Each week, take turns picking out an activity to do.
- Go outside. Try bike riding, rollerblading, baseball, football, basketball and walking.
- Mix up your workouts. Do different exercises that work different muscles. For example: run one day and play basketball on another day.

**Move It!**

- Too much TV and video games could be making you unhealthy. Limit screen time to no more than 2 hours a day.
- Get up and move during commercials. Get some physical activity in like crunches, running in place or jumping jacks.

**Set Up a Home Gym**

- Use household items, such as canned foods, as weights
- Use a milk jug and add different amounts of water to it to get various weights
- Stairs can be used like a cardio machine
Every workout should have a warm-up, stretching, activity, and then a cool down.

**Warm-up** is any light aerobic or cardiovascular activity done for about 3-5 minutes. It prepares the muscles for physical activity.

- Slow walk or jog
- Jumping jacks
- Running in place
- Biking

**Stretching** is done after you warm up. Make sure to stretch all your muscles. NEVER bounce when stretching. Stretch both right and left sides of the body. Stop if it hurts. Only stretch to the point where it feels good.

**Activity**—there are many types of activities. Below are a few examples:

- Aerobic/Cardio
- Strength Training
- Sports

**Cool down** is done after the workout for 5-10 minutes. This will allow your body and breathing to relax and get back to normal. This can be done by walking and stretching.

**Rules for Any Activities**

1. Check with your doctor before you start an exercise program. Ask him or her to discuss nutrition and physical activity with you.
2. Ask your doctor to check your Body Mass Index (BMI).
3. Use the right safety gear for your activity.

**Take Care of Your Body and It Will Take Care of You**
Everyday Ideas to Move More

Help your family move more each day and have fun with it. Think about what your family can do to be active together. Here are some ideas.

Make Time

- Identify free times. Keep track of your daily activities for one week. Pick two 30-minute time slots you could use for family activity time.
- Add physical activity to your daily routine. For example, walk or ride your bike to work or a friend's house, walk the dog with your children, exercise while you watch TV, or park farther away from your destination.
- Try to walk, jog, or swim during your lunch hour, or take fitness breaks instead of coffee breaks. Try doing something active after dinner with your family, or on weekends.
- Check out activities requiring little time. Try walking, jogging, or stair climbing.

Bring Others Into It

- Ask friends and family to support your efforts.
- Invite them to be active with you.
  - Set up a party or other social event with activities that get people moving, like dancing or having a jump rope contest.
  - Exercise with friends.
  - Play with your kids or ask them to join you for an exercise video or fitness game.
- Develop new friendships with physically active people. Join a group, such as the YMCA or a hiking club.

Energize Yourself

- Plan to be active at times in the day or week when you feel you have a lot of energy.
- Convince yourself that if you give it a chance, physical activity will increase your energy level—then try it.

Stay Motivated

- Plan ahead. Make physical activity a regular part of your family's schedule. Write it on a family activity calendar.
- Join an exercise group or class. Sign your children up for community sports teams or lessons.
• Pick activities requiring no new skills, such as walking or climbing stairs.
• Exercise with friends who are at the same skill level as you are. Create opportunities for your children to be active with friends.

**Build New Skills**

• Find a friend who can teach you new skills.
• Take a class to develop new skills and enroll your children in classes too, such as swimming, dancing, or tennis.

**Use Available Resources**

• Select activities that don't need costly sports gear, such as walking, jogging, jumping rope, or doing push-ups.
• Identify cheap, local resources in your area, such as programs through your community center, park or recreation group, or worksite.

**Make the Most of All Conditions**

• Develop a set of activities for you and your family that are always available regardless of weather, such as indoor cycling, indoor swimming, stair climbing, rope skipping, mall walking, dancing, and active games that you can play indoors.
• When the weather is nice, try outdoor swimming, jogging, walking, or tennis.

10 tips to help you stretch your food dollars

Get the most for your food budget! There are many ways to save money on the foods that you eat. The three main steps are planning before you shop, purchasing the items at the best price, and preparing meals that stretch your food dollars.

1. plan, plan, plan!
Before you head to the grocery store, plan your meals for the week. Include meals like stews, casseroles, or stir-fries, which “stretch” expensive items into more portions. Check to see what foods you already have and make a list for what you need to buy.

2. get the best price
Check the local newspaper, online, and at the store for sales and coupons. Ask about a loyalty card for extra savings at stores where you shop. Look for specials or sales on meat and seafood—often the most expensive items on your list.

3. compare and contrast
Locate the “Unit Price” on the shelf directly below the product. Use it to compare different brands and different sizes of the same brand to determine which is more economical.

4. buy in bulk
It is almost always cheaper to buy foods in bulk. Smart choices are family packs of chicken, steak, or fish and larger bags of potatoes and frozen vegetables. Before you shop, remember to check if you have enough freezer space.

5. buy in season
Buying fruits and vegetables in season can lower the cost and add to the freshness! If you are not going to use them all right away, buy some that still need time to ripen.

6. convenience costs...
go back to the basics
Convenience foods like frozen dinners, pre-cut vegetables, and instant rice, oatmeal, or grits will cost you more than if you were to make them from scratch. Take the time to prepare your own—and save!

7. easy on your wallet
Certain foods are typically low-cost options all year round. Try beans for a less expensive protein food. For vegetables, buy carrots, greens, or potatoes. As for fruits, apples and bananas are good choices.

8. cook once...eat all week!
Prepare a large batch of favorite recipes on your day off (double or triple the recipe). Freeze in individual containers. Use them throughout the week and you won’t have to spend money on take-out meals.

9. get your creative juices flowing
Spice up your leftovers—use them in new ways. For example, try leftover chicken in a stir-fry or over a garden salad, or to make chicken chili. Remember, throwing away food is throwing away your money!

10. eating out
Restaurants can be expensive. Save money by getting the early bird special, going out for lunch instead of dinner, or looking for “2 for 1” deals. Stick to water instead of ordering other beverages, which add to the bill.

Go to www.ChooseMyPlate.gov for more information.
It is possible to fit vegetables and fruits into any budget. Making nutritious choices does not have to hurt your wallet. Getting enough of these foods promotes health and can reduce your risk of certain diseases. There are many low-cost ways to meet your fruit and vegetable needs.

1. **celebrate the season**
   Use fresh vegetables and fruits that are in season. They are easy to get, have more flavor, and are usually less expensive. Your local farmer’s market is a great source of seasonal produce.

2. **why pay full price?**
   Check the local newspaper, online, and at the store for sales, coupons, and specials that will cut food costs. Often, you can get more for less by visiting larger grocery stores (discount grocers if available).

3. **stick to your list**
   Plan out your meals ahead of time and make a grocery list. You will save money by buying only what you need. Don’t shop when you’re hungry. Shopping after eating will make it easier to pass on the tempting snack foods. You’ll have more of your food budget for vegetables and fruits.

4. **try canned or frozen**
   Compare the price and the number of servings from fresh, canned, and frozen forms of the same veggie or fruit. Canned and frozen items may be less expensive than fresh. For canned items, choose fruit canned in 100% fruit juice and vegetables with “low sodium” or “no salt added” on the label.

5. **buy small amounts frequently**
   Some fresh vegetables and fruits don’t last long. Buy small amounts more often to ensure you can eat the foods without throwing any away.

6. **buy in bulk when items are on sale**
   For fresh vegetables or fruits you use often, a large size bag is the better buy. Canned or frozen fruits or vegetables can be bought in large quantities when they are on sale, since they last much longer.

7. **store brands = savings**
   Opt for store brands when possible. You will get the same or similar product for a cheaper price. If your grocery store has a membership card, sign up for even more savings.

8. **keep it simple**
   Buy vegetables and fruits in their simplest form. Pre-cut, pre-washed, ready-to-eat, and processed foods are convenient, but often cost much more than when purchased in their basic forms.

9. **plant your own**
   Start a garden—in the yard or a pot on the deck—for fresh, inexpensive, flavorful additions to meals. Herbs, cucumbers, peppers, or tomatoes are good options for beginners. Browse through a local library or online for more information on starting a garden.

10. **plan and cook smart**
    Prepare and freeze vegetable soups, stews, or other dishes in advance. This saves time and money. Add leftover vegetables to casseroles or blend them to make soup. Overripe fruit is great for smoothies or baking.

Go to www.ChooseMyPlate.gov for more information.
It’s clear that Americans have a taste for salt, but salt plays a role in high blood pressure. Everyone, including kids, should reduce their sodium intake to less than 2,300 milligrams of sodium a day (about 1 teaspoon of salt). Adults age 51 and older, African Americans of any age, and individuals with high blood pressure, diabetes, or chronic kidney disease should further reduce their sodium intake to 1,500 mg a day.

1. **think fresh**
Most of the sodium Americans eat is found in processed foods. Eat highly processed foods less often and in smaller portions—especially cheesy foods, such as pizza; cured meats, such as bacon, sausage, hot dogs, and deli/luncheon meats; and ready-to-eat foods, like canned chili, ravioli, and soups. Fresh foods are generally lower in sodium.

2. **enjoy home-prepared foods**
Cook more often at home—where you are in control of what’s in your food. Preparing your own foods allows you to limit the amount of salt in them.

3. **fill up on veggies and fruits—they are naturally low in sodium**
Eat plenty of vegetables and fruits—fresh or frozen. Eat a vegetable or fruit at every meal.

4. **choose dairy and protein foods that are lower in sodium**
Choose more fat-free or low-fat milk and yogurt in place of cheese, which is higher in sodium. Choose fresh beef, pork, poultry, and seafood, rather than those with salt added. Deli or luncheon meats, sausages, and canned products like corned beef are higher in sodium. Choose unsalted nuts and seeds.

5. **adjust your taste buds**
Cut back on salt little by little—and pay attention to the natural tastes of various foods. Your taste for salt will lessen over time.

6. **skip the salt**
Skip adding salt when cooking. Keep salt off the kitchen counter and the dinner table. Use spices, herbs, garlic, vinegar, or lemon juice to season foods or use no-salt seasoning mixes. Try black or red pepper, basil, curry, ginger, or rosemary.

7. **read the label**
Read the Nutrition Facts label and the ingredients statement to find packaged and canned foods lower in sodium. Look for foods labeled “low sodium,” “reduced sodium,” or “no salt added.”

8. **ask for low-sodium foods when you eat out**
Restaurants may prepare lower sodium foods at your request and will serve sauces and salad dressings on the side so you can use less.

9. **pay attention to condiments**
Foods like soy sauce, ketchup, pickles, olives, salad dressings, and seasoning packets are high in sodium. Choose low-sodium soy sauce and ketchup. Have a carrot or celery stick instead of olives or pickles. Use only a sprinkling of flavoring packets instead of the entire packet.

10. **boost your potassium intake**
Choose foods with potassium, which may help to lower your blood pressure. Potassium is found in vegetables and fruits, such as potatoes, beet greens, tomato juice and sauce, sweet potatoes, beans (white, lima, kidney), and bananas. Other sources of potassium include yogurt, clams, halibut, orange juice, and milk.

Go to www.ChooseMyPlate.gov for more information.
What Happens When You Quit Using Tobacco

Reap the benefits of quitting:

- Your skin will be healthier.
- Your breath will be fresher.
- Your teeth will be whiter and healthier.
- Your clothes and hair will smell better.
- Your sense of taste and smell will improve.
- You will save money.

Here are more details about changes in your body and your health after quitting:

20 minutes after quitting: Your blood pressure drops to a level close to that before the last cigarette. The temperature of your hands and feet increases to normal.

8 hours after quitting: The carbon monoxide level in your blood drops to normal.

24 hours after quitting: Your chance of a heart attack decreases.

2 weeks to 3 months after quitting: Your circulation and lung function improve.

1 to 9 months after quitting: Coughing, sinus congestion, fatigue, and shortness of breath decrease; cilia (tiny hair-like structures that move mucus out of the lungs) regain normal function in the lungs, increasing the ability to handle mucus, clean the lungs, and reduce infection.

1 year after quitting: The excess risk of coronary heart disease is half that of a tobacco user.

5 years after quitting: Your stroke risk is reduced to that of a nonsmoker 5-15 years after quitting.

10 years after quitting: The lung cancer death rate is about half that of a continuing tobacco user. The risk decreases for cancer of the mouth, throat, esophagus, bladder, kidney and pancreas.

15 years after quitting: The risk of coronary heart disease falls to that of a nonsmoker's.

Sources: US Surgeon General’s Reports, 1988 and 1990
5-Day Plan to Quit Using Tobacco

Quitting takes hard work and a lot of effort, but you can do it!
Below is some key information to help you quit.

5 Days Until Your Quit Day: Get Ready.

List your reasons for quitting and tell your friends and family about your plan. Think of whom to reach out to when you need help, like a support group or tobacco quitline. 1-800-QUIT-NOW (1-800-784-8669). Stop buying tobacco. Set a quit date. My quit date is: ____________________________

4 Days Until Your Quit Day: Change Your Routine.

Think of routines you may want to change. For example, take walks or work out when you normally smoke or chew. Pay attention to when and why you smoke or chew. Think of new ways to relax or things to hold in your hand instead of a cigarette or chew. List things to do instead of smoking/chewing: ____________________________
________________________________________
________________________________________

3 Days Until Your Quit Day: Plan for More Money.

Make a list of the things you will do with the extra money you will save by not buying tobacco. Things I will do with the money: ____________________________
________________________________________
________________________________________

2 Days Until Your Quit Day: Purchase Medication.

Buy over-the-counter nicotine patches, lozenges or gum, or get a prescription from your doctor for the nicotine inhaler, patch, nasal spray, Zyban or Chantix. Many insurance plans, including Medicaid and Medicare, cover these medications. Medication(s) I will use: ____________________________
________________________________________
5-Day Plan to Quit Using Tobacco (cont.)

1 Day Until Your Quit Day: Think of a Reward.

Think of a reward you will get yourself after you quit. Make an appointment with your dentist to have your teeth cleaned. At the end of the day, throw away all tobacco, matches, or tins. Put away or toss lighters and ashtrays.

My reward for quitting tobacco will be: __________________________

______________________________________________________________

On Your Quit Day

Keep busy. Change your routine when possible, and do things that don’t remind you of smoking/chewing. Remind family, friends, and coworkers that this is your quit day, and ask them to help and support you. Avoid alcohol. Buy yourself a treat, or do something to celebrate. You can do it!

1 Day After Your Quit Day: Congratulations!

Congratulate yourself. When cravings hit, do something that isn’t connected with smoking/chewing like taking a walk, drinking a glass of water, or taking some deep breaths. Call your support network. Find things to snack on like carrots, sugarless gum, or air popped popcorn. Call the Tobacco Quit Line (1-800-QUIT-NOW [1-800-784-8669]).
1. Cut out the charts beneath.

2. For the next few days, after each cigarette, make a note of what you were doing and when you lit up and give it a rating.

3. Be sure to return to BecomeAnEX.org to update your online cigarette tracker.

### Track your cigarettes

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<thead>
<tr>
<th>Date:</th>
<th>Time</th>
<th>Urge Level</th>
<th>Trigger</th>
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<tbody>
<tr>
<td></td>
<td>Time of day</td>
<td>Light</td>
<td>Moderate</td>
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### Trigger

What were you doing at the time? (ex - coffee, work, driving)

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</table>

### Trigger

What were you doing at the time? (ex - coffee, work, driving)
Reaching and keeping a healthy weight has many benefits. Remember change takes time. Make small changes that you can stick to and build from there. Here are some helpful tips to get you started.

**Set healthy, realistic goals.** You are more likely to reach your goals when you make changes step by step. Start with one or two changes at a time.

**Eat at least 3 meals a day and plan your meals ahead of time.** Plan your meals for eating at home and for eating out.

**Balance your plate.** Make your plate ½ fruits and vegetables, ¼ whole grains and ¼ lean meat, chicken or fish. Also have one cup from the dairy group.

**Focus on your food.** Do not eat while doing other things. This may lead to eating more than you think.

**Know when you have had enough to eat.** Quit eating before you feel full or stuffed. It takes about twenty minutes for your brain to get the message that your body is getting food.

**Watch Portion sizes.** Make sure you read food labels and watch how much food you put on your plate. Switch from a larger to a smaller plate. Smaller plate holds less, but looks full.

**Snack Smart.** Include snacks as part of the total amount of calories you can have for the day. Make sure to have only one serving of the snack.

To learn more visit: www.ChooseMyPlate.gov
### How Do I Follow a Healthy Diet?

Healthy food habits can help you reduce three risk factors for heart attack and stroke — high blood cholesterol, high blood pressure and excess body weight.

Here are the basic food groups with the number of servings we recommend. Be sure to choose a variety of foods from each group.

---

#### Breads, cereals, pasta and starchy vegetables (6 or more servings per day)

- One serving equals 1 slice bread; 
  - ½ cup hot cereal, 1 cup flaked cereal; 
  - ½ cup cooked rice or pasta; or ¼ to ½ cup starchy vegetables, like beans, corn or potatoes.
- Include whole-grain products like whole-wheat bread, whole-grain crackers and brown rice, as much as possible.
- Many crackers and snacks are now available in low-fat and low-salt varieties.

#### Vegetables and fruits (8 to 10 servings per day)

- One serving equals a medium-size piece of fruit, ½ cup fruit juice, or ½ to 1 cup cooked or raw vegetables.
- Fruits and vegetables are high in vitamins, minerals and fiber, and low in fat and calories.

#### Lean meat, poultry, fish and beans (no more than 6 cooked ounces per day)

- A 3 oz. portion is about the size of a deck of playing cards, ½ of a chicken breast or ¾ cup of flaked fish.
- Enjoy at least two servings of baked or grilled fish each week.
- Trim fat from meats; remove skin from poultry.
- ½ cup of cooked beans, peas or lentils equals a 1 oz. serving of meat, poultry or fish. A ½ cup of tofu or one egg equals 1 oz. of meat.

#### Fat-free and low-fat milk products (2 to 3 servings per day)

- One serving equals 1 cup milk or yogurt or 1½ oz. fat-free or low-fat cheese.
- Use only milk products with 0% to 1% fat. 2% milk is not low-fat.
- Have only fat-free or low-fat yogurt.
- Use dry-curd, fat-free or low-fat cottage cheese.
- Cheeses should have no more than 3 grams of fat per oz. and no more than 2 grams of saturated fat per oz.
Fats and oils (2 to 3 servings per day)

- One serving equals 1 tsp. vegetable oil or soft margarine, 2 tsp. diet margarine, 1 Tbsp. regular salad dressing, 1 Tbsp. regular mayonnaise or 2 Tbsp. peanut butter.
- One serving equals 2 Tbsp. seeds or 1/3 cup nuts, 1/8 medium-size avocado, 10 small or 5 large olives.
- Choose fats and oils with 2 grams or less saturated fat per tablespoon, such as liquid and tub margarines, and canola, corn, safflower, soy bean and olive oils.
- Be sure to count the fats used in store-bought foods, in cooking and on vegetables and breads.
- Read food labels carefully and try to avoid “hydrogenated” oils and fats.

How can I cut down on saturated fat and calories?

- For your main dish, enjoy pasta, rice, beans and/or vegetables. Or mix these foods with small amounts of lean meat, skinless poultry or fish.
- Boil, broil, grill, bake, roast, poach, steam, sauté, stir-fry or microwave. Don’t fry in oil.
- Trim fat from meat and poultry. Drain fat after browning. Chill soups and stews after cooking to remove hard fat from the top.

How can I cut down on dietary cholesterol?

- Foods from animals (such as meat, poultry, egg yolks, butter, cheese and full-fat milk) are high in cholesterol. Eat less of them.
- Eggs and shellfish are high in cholesterol but low in saturated fat and total fat.

Here are some tips about using eggs in your diet:

- One large, whole egg has about 213 mg of cholesterol. This is about 71% of the daily limit (less than 300 mg). Extra-large and jumbo eggs have even more.

- Use two egg whites, or one egg white plus 2 teaspoons of unsaturated oil, in place of one whole egg in cooking. You can also use egg substitutes.
- If you eat a whole egg, try to avoid or limit other sources of cholesterol on that day

How can I learn more?

1. Talk to your doctor, nurse or other health-care professionals. If you have heart disease or have had a stroke, members of your family also may be at higher risk. It’s very important for them to make changes now to lower their risk.
2. Call 1-800-AHA-USA1 (1-800-242-8721) or visit americanheart.org to learn more about heart disease.
3. For information on stroke, call 1-888-4-STROKE (1-888-478-7653) or visit us online at StrokeAssociation.org.

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

Knowledge is power, so Learn and Live!
Do you have questions or comments for your doctor?

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

What can I eat at fast-food restaurants?

How can I control the portions?
What is Blood Pressure?

The arteries in your body carry blood from your heart to all parts of your body. When your heart beats, it pumps out blood into your arteries. Blood pressure is the force of your blood pushing against the walls of your arteries.

Your blood pressure is highest when your heart beats, pumping blood. This is the top number of your blood pressure reading. It is called your systolic (sis-tä-lik) blood pressure.

When your heart is at rest, between beats, your blood pressure falls. This is the bottom number of your blood pressure reading. It is called your diastolic (dI-uh-stä-lik) blood pressure.

When your doctor or other health care provider talks about your blood pressure, they talk about these two numbers. Both numbers are important.

When the two measurements are written down, the systolic pressure is the first or top number, and the diastolic pressure is the second or bottom number. If your blood pressure is 120/80, you say it is “120 over 80.”

Taking Your Blood Pressure

While you are awake, your blood pressure stays pretty much the same as long as you are sitting or standing still.

Your doctor or health care provider should measure your blood pressure while you are sitting in a chair with both feet on the floor.

To be as healthy as you can be, your systolic blood pressure should be lower than 120, and your diastolic lower than 80.
Why should I care about blood pressure?
When your blood pressure is too high, it makes your heart and arteries work harder. It also raises your chances of having a stroke, a heart attack, and kidney problems.

When your blood pressure is too low, your brain, heart, and kidneys do not get enough oxygen. Over time, they can become permanently damaged.

What is high blood pressure?
When someone has high blood pressure it means their systolic blood pressure is 140 or higher or their diastolic blood pressure is 90 or higher.

If you think you have high blood pressure, you should see a doctor to talk about ways to keep your blood pressure under control.

What is low blood pressure?
Most people worry about their blood pressure being too high. Sometimes it can get too low. Low blood pressure usually means it is 90/60 or lower.

Some people have low blood pressure all the time, and it is not a problem. Low blood pressure may be a problem if it makes you feel dizzy or faint.

If you think your low blood pressure is a problem, you should see a doctor to talk about ways to treat your low blood pressure.

How can I keep my blood pressure normal?
For many people, making changes in the way they eat and becoming more active is all it takes to keep their blood pressure under control. Your WISEWOMAN lifestyle counselor can help you understand the healthy choices that will keep your blood pressure normal.

Some people may also need to take medicine for their blood pressure. A doctor can help you decide what is best for you. If you cannot pay for your blood pressure medicine, there are programs that may help you pay for your medicine. Talk to your lifestyle counselor or your doctor to see if you qualify. Remember, the medicine only works if you take it the way you are supposed to take it.
Today, you were identified with uncontrolled hypertension. That means someone told you that your blood pressure was high in the past, and it is high today. Keeping your blood pressure under control is one of the most important things you can do to keep from having a heart attack or stroke. Here are some ways you can do that.

How are you going to take control of your blood pressure?

☑ Take my medicine the way the doctor prescribed it
  □ Visit my doctor regularly to review my treatment and change medicines if needed
  □ Use a pill reminder
  □ Set up text, email, or phone call reminders
  □ Apply for help paying for my prescriptions
  □ Set up mail delivery of my medicines (if available)
  □ Set up my prescriptions to renew automatically (if available)
  □ Talk to my pharmacist or my doctor about questions or concerns I have

☐ Reduce my stress
  □ Learn and practice deep breathing exercises
  □ Take a yoga class
  □ Meditate regularly

☐ Aim for a healthy weight
  □ Join the TOPS program
  □ Keep my waist measurement below 35 inches

☐ Get more physical activity
  □ Work up to least 30 minutes of physical activity a day at least 5 days a week
  □ Join a walking club or exercise class

☐ Limit alcohol
  □ Drink no more than one alcohol drink per day
  □ Talk to your health coach about substance abuse help

☐ Avoid tobacco
  □ Use the Michigan Tobacco Quitline to quit smoking
  □ Stay away from second-hand smoke

☐ Monitor my blood pressure at home or at the pharmacy
  □ Write down the results
  □ Share the results with my doctor and health coach

☐ Watch what I eat
  □ Cut back on sodium (salt)
  □ Eat less processed foods
  □ Follow the DASH Diet – (Dietary Approach to Stop Hypertension)
  □ Cook more meals at home
CHOLESTEROL AND HEART DISEASE

Almost 30 percent of deaths in the United States each year are the result of coronary artery disease. High blood cholesterol is related to the development of this disease, and changes in diet can help reduce this risk factor.

The coronary arteries supply blood to the heart muscle. Obstruction of these vessels decreases the oxygen supply of the heart, often causing angina (chest pain). A heart attack occurs when the heart muscle is damaged by this lack of oxygen. Atherosclerosis (hardening of the arteries) is a common cause of angina and heart attacks. It results from the buildup of plaque (cholesterol and other substances) in the coronary arteries. Other risk factors for atherosclerosis include high blood pressure, diabetes, cigarette smoking, obesity, and family history of heart disease.

BLOOD TESTS FOR CHOLESTEROL

Measuring the level of cholesterol in the blood can help determine risk of heart disease. Another fat often measured is Triglyceride, the storage form of fat in the body. HDL Cholesterol is the "good cholesterol" which carries cholesterol away from body cells for excretion from the body. The higher the level of HDL, the better. LDL Cholesterol is the "bad cholesterol" responsible for depositing cholesterol in artery walls.

<table>
<thead>
<tr>
<th>Typical Lipid Level Goals</th>
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</thead>
<tbody>
<tr>
<td>Total Cholesterol: &lt; 200</td>
</tr>
<tr>
<td>HDL: &gt; 45</td>
</tr>
<tr>
<td>LDL: &lt; 100</td>
</tr>
<tr>
<td>Triglyceride: &lt; 150</td>
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</table>

VALUE OF LOWER CHOLESTEROL

Lowering blood cholesterol levels definitely decreases risk of heart attacks. Risk of heart attack appears to drop 2 percent for each 1 percent reduction in cholesterol. For example, lowering cholesterol from 260 to 240 - a 9 percent drop - decreases risk of heart attack by 18 percent.

METHODS OF LOWERING CHOLESTEROL

Dietary therapy is the cornerstone of management of high cholesterol. Saturated fats are the major dietary substance causing high blood cholesterol - these are the main fats in meat and dairy products. Monounsaturated and Polyunsaturated fats - found in fish, poultry, and most vegetable products - are much more desirable. Exercise and maintenance of ideal body weight tend to increase HDL (the "good" cholesterol) levels. Several medicines have recently become available to decrease cholesterol. However, neither diet nor medicines will "cure" high cholesterol once and for all - both are a life-long treatment.

FOLLOWING A LOW CHOLESTEROL DIET

Everyone has heard about limiting eggs and red meat as part of a healthy diet. Other aspects of the diet are less well-known and harder to follow. Especially important: two vegetable fats (palm oil and coconut oil) are high in saturated fats and should be avoided. Because these oils are inexpensive, many commercially prepared foods contain them. Remember that any "healthy" food (such as fish) will lose its beneficial effect if prepared in a manner which increases fat (fried, sauteed, buttered, etc.). Many tips on following a low cholesterol diet while preparing foods or eating out in restaurants are available in The American Heart Association Cookbook (Ballantine Press).

Revised 08/10
GUIDELINES
FOR LOW-CHOLESTEROL,
LOW-TRIGLYCERIDE DIETS

FOODS TO USE

MEATS, FISH
Choose lean meats (chicken, turkey, veal, and nonfatty cuts of beef with excess fat trimmed; one serving = 3 oz of cooked meat). Also, fresh or frozen fish, canned fish packed in water, and shellfish (lobster, crabs, shrimp, oysters). Limit use to no more than one serving of one of these per week. Shellfish are high in cholesterol but low in saturated fat and should be used sparingly. Meats and fish should be broiled (pan or oven) or baked on a rack.

EGGS
Egg substitutes and egg whites (use freely). Egg yolks (limit two per week).

FRUITS
Eat three servings of fresh fruit per day (1 serving = ¼ cup). Be sure to have at least one citrus fruit daily. Frozen or canned fruit with no sugar or syrup added may be used.

VEGETABLES
Most vegetables are not limited (see reverse side). One dark-green (string beans, escarole) or one deep-yellow (squash) vegetable is recommended daily. Cauliflower, broccoli, and celery, as well as potato skins, are recommended for their fiber content. (Fiber is associated with cholesterol reduction.) It is preferable to steam vegetables, but they may be boiled, strained, or braised with polyunsaturated vegetable oil (see below).

BEANS
Dried peas or beans (1 serving = ½ cup) may be used as a bread substitute.

NUTS
Almonds, walnuts, and peanuts may be used sparingly (1 serving = 1 tablespoonful). Use pumpkin, sesame, or sunflower seeds.

BREADS, GRAINS
One roll or one slice of whole-grain or enriched bread may be used, or three soda crackers or four pieces of melba toast as a substitute. Spaghetti, rice, or noodles (¼ cup) or ½ large ear of corn may be used as a bread substitute. In preparing these foods, do not use butter or shortening; use soft margarine. Also use egg and sugar substitutes. Choose high-fiber grains, such as oats and whole wheat.

CEREALS
Use ⅛ cup of hot cereal or ¼ cup of cold cereal per day. Add a sugar substitute if desired, with 99% fat-free or skim milk.

MILK PRODUCTS
Always use 99% fat-free or skim milk, dairy products such as low-fat cheeses (farmer's, uncreamed diet cottage), low-fat yogurt, and powdered skim milk.

FATS, OILS
Use soft (not stick) margarine; vegetable oils that are high in polyunsaturated fats (such as safflower, sunflower, soybean, corn, and cottonseed). Always refrigerate meat drippings to harden the fat and remove it before preparing gravies.

DESSERTS, SNACKS
Limit to two servings per day; substitute each serving for a bread/cereal serving: ice milk, water sherbet (⅛ cup); unflavored gelatin or gelatin flavored with sugar substitute (⅛ cup); pudding prepared with skim milk (⅛ cup); egg white soufflés; unbuttered popcorn (⅛ cups). Substitute carob for chocolate.

BEVERAGES
Fresh fruit juices (limit 4 oz per day); black coffee, plain or herbal teas; soft drinks with sugar substitutes; club soda, preferably salt-free; cocoa made with skim milk or nonfat dried milk and water (sugar substitute added if desired); clear broth. Alcohol: limit two servings per day (see reverse side).

MISCELLANEOUS
You may use the following freely: vinegar, spices, herbs, nonfat bouillon, mustard, Worcestershire sauce, soy sauce, flavoring essence.

SEE REVERSE SIDE FOR FOODS TO AVOID
GUIDELINES
FOR LOW-CHOLESTEROL, LOW-TRIGLYCERIDE DIETS

FOODS TO AVOID

MEATS, FISH  Marbled beef, pork, bacon, sausage, and other pork products; fatty fowl (duck, goose); skin and fat of turkey and chicken; processed meats; luncheon meats (salami, bologna); frankfurters and fast-food hamburgers (they're loaded with fat); organ meats (kidneys, liver); canned fish packed in oil.

EGGS  Limit egg yolks to two per week.

FRUITS  Coconuts (rich in saturated fats).

VEGETABLES  Avoid avocados. Starchy vegetables (potatoes, corn, lima beans, dried peas, beans) may be used only if substitutes for a serving of bread or cereal. (Baked potato skin, however, is desirable for its fiber content.)

BEANS  Commercial baked beans with sugar and/or pork added.

NUTS  Avoid nuts. Limit peanuts and walnuts to one tablespoonful per day.

BREADS, GRAINS  Any baked goods with shortening and/or sugar. Commercial mixes with dried eggs and whole milk. Avoid sweet rolls, doughnuts, breakfast pastries (Danish), and sweetened packaged cereals (the added sugar converts readily to triglycerides).

MILK PRODUCTS  Whole milk and whole-milk packaged goods; cream; ice cream; whole-milk puddings, yogurt, or cheeses; nondairy cream substitutes.

FATS, OILS  Butter, lard, animal fats, bacon drippings, gravies, cream sauces, as well as palm and coconut oils. All these are high in saturated fats. Examine labels on "cholesterol-free" products for "hydrogenated fats" (These are oils that have been hardened into solids and in the process have become saturated.)

DESSERTS, SNACKS  Fried snack foods like potato chips; chocolate; candies in general; jams, jellies, syrups; whole-milk puddings; ice cream and milk sherbets; hydrogenated peanut butter.

BEVERAGES  Sugared fruit juices and soft drinks; cocoa made with whole milk and/or sugar. When using alcohol (1 oz liquor, 5 oz beer, or 2½ oz dry table wine per serving), one serving must be substituted for one bread or cereal serving (limit, two servings of alcohol per day).

SPECIAL NOTES
1. Remember that even nonlimited foods should be used in moderation.
2. While on a cholesterol-lowering diet, be sure to avoid animal fats and marbled meats.
3. While on a triglyceride-lowering diet, be sure to avoid sweets and to control the amount of carbohydrates you eat (starchy foods such as flour, bread, potatoes).
4. Buy a good low-fat cookbook, such as the one published by the American Heart Association.
5. Consult your physician if you have any questions.

SEE REVERSE SIDE FOR FOODS TO USE
Lowering Your Cholesterol

What is cholesterol and where does it come from?
- Cholesterol is a waxy, fat-like substance found in the blood and cell walls throughout the body.
- It is naturally produced by the body but is also obtained through foods you eat such as:
  - Whole milk dairy products
  - Egg yolks
  - Shrimp
  - Organ meats (liver)
- Cholesterol plays a role in vital day-to-day body functions including the production of:
  - Hormones
  - Bile acids
  - Vitamin D

If cholesterol helps with important body functions, than why is high cholesterol bad?
- Not all cholesterol is good.
- Cholesterol is carried through the blood by 2 different transportation vehicles called lipoproteins.
  1. **Low density lipoproteins (LDL) “Bad”**
     - Too much LDL in the arteries can build up and create plaque formation. This blocks blood flow and can lead to the development of heart disease.
  2. **High density lipoproteins (HDL) “Good”**
     - HDL acts as a scavenger.
     - This decreases the amount of cholesterol in the blood and artery walls which lowers your risk of developing heart disease.

What are triglycerides and where do they come from?
- Most common type of fat in the body
- After you eat, a portion of your calorie consumption is used right away for body functions. The other “unused” portion of your calories is converted into triglycerides.
- These triglycerides are:
  - Stored in fat cells
  - Released for energy in between meals
  - Circulated in the blood
- High triglyceride levels can lead to:
  - Plaque formation within your arterial walls
  - Increased risk of atherosclerosis, stroke and heart disease
- Excessive alcohol, coffee drinks with flavored syrups, soda, and candy can quickly add to the buildup of triglycerides.
Target Lab Values:
The chart below shows the optimal levels for cholesterol

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<tr>
<th>Typical Lipid Level Goals</th>
<th>Total cholesterol: &lt;200 mg/dL</th>
<th>LDL &lt;100 mg/dL</th>
<th>HDL &gt;45 mg/dL</th>
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<td>Your Total Cholesterol:</td>
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<td>HDL:</td>
<td>Triglycerides:</td>
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Ways You Can Improve Your Cholesterol:

- **Eat more vegetables, fruits, whole grains and beans** – these can help lower total cholesterol.

- **Focus on fiber rich foods** - add soluble fiber to your diet found in oats, fruits, vegetables, and legumes. These foods reduce LDL cholesterol and increase HDL cholesterol. For best results, at least two servings a day should be used.

- **Cut out Trans fatty acids** – these fats are present in many of your favorite prepared foods and labeled as "partially hydrogenated vegetable oils" on nutrition labels. Removing them from your diet will result in improved HDLs.

- **Increase the monounsaturated fats in your diet** - monounsaturated fats such as canola oil, avocado oil, or olive oil can increase HDL cholesterol without increasing total cholesterol.

- **Don’t smoke** – smoking lowers your HDL levels and causes damage to vessel walls, contributing to hardening of the arteries, known as atherosclerosis.

- **Get moving and manage stress** - daily exercise is one of the best natural ways to boost your mood and HDL levels. If you’re new to exercise, start slow. Aim for 10 to 15 mins of walking a few times a week. Build up to at least 30 mins of vigorous walking 5 times per week.

- **Manage your weight** - shed some pounds. One of the benefits of exercise could be weight loss. Reducing your weight can help raise HDL and lower LDL levels.

- **Take care of your digestive system** - emerging research finds that your gut flora (microbiome) influences cholesterol levels and heart disease risk. Try adding probiotic-rich foods like yogurt and fermented foods to your diet.

- **Limit your alcohol intake** - drinking too much alcohol can increase your risk for heart disease and stroke, raise blood pressure, contribute to obesity, and increase triglycerides in the blood.

- **Analyze your genetics** - sometimes, despite all your efforts, you’ll still struggle with healthy cholesterol levels. Genetics can play a big role in your cholesterol levels, so speak with your doctor about your personal risks and what you can do to address them.
Blood Sugars: Fasting 80-130 mg/dL, Post Meal <180 mg/dL, A1C <7% or 8% in select individuals

Both high blood sugar (or glucose) and low blood sugar can be a problem for people with diabetes. High blood sugar can damage blood vessels, worsen cholesterol levels and make blood pressure more difficult to manage. When blood sugar falls, the body responds by increasing the heart rate and adrenaline. In people with heart disease, increased heart rate can cause a heart attack.

Daily control of blood sugars should be reviewed with your diabetes care team. Be sure to bring your blood glucose meter or logbook to each visit. A laboratory test called a hemoglobin A1C estimates a 3-month average of your blood sugar. Both the hemoglobin A1C and self-monitored blood sugars are used together for treatment decisions. Below are recommendations from the American Diabetes Association for blood sugar monitoring.

<table>
<thead>
<tr>
<th>Monitoring Parameters</th>
<th>Recommended Ranges</th>
<th>When to Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fasting Blood Glucose</td>
<td>80-130 mg/dL</td>
<td>8 hours without food</td>
</tr>
<tr>
<td>Post Meal Blood Glucose</td>
<td>&lt;180 mg/dL</td>
<td>&lt; 2 hours after eating</td>
</tr>
<tr>
<td>A1C Goal – Most Adults</td>
<td>&lt;7%</td>
<td>3 months in uncontrolled</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 months if at goal</td>
</tr>
<tr>
<td>A1C Goal – Less Strict*</td>
<td>&lt;8%</td>
<td>3 months in uncontrolled</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 months if at goal</td>
</tr>
</tbody>
</table>

*Less strict A1C for people who are sensitive to low blood sugar levels (advanced age, history of severe heart disease, long duration of diabetes).
Blood Pressure: <140/90 mmHg or <130/80 mmHg
Uncontrolled blood pressure also damages blood vessels and further increases the risk of stroke, heart attack, and heart failure. For this reason, your blood pressure should be checked at every office visit. Your diabetes care team may recommend a drug called an ACE-inhibitor or ARB in order to reach blood pressure goals. These medications have benefits beyond blood pressure control including kidney and cardiovascular (or heart) protection.

<table>
<thead>
<tr>
<th>Blood Pressure Goal</th>
<th>ADA Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 140/90 mmHg</td>
<td>Most people with diabetes and no additional risk factors</td>
</tr>
<tr>
<td>Less than 130/80 mmHg</td>
<td>People with diabetes and at least one additional risk factor: smoking, high cholesterol, family history of premature heart disease, obesity, and presence of protein in the urine</td>
</tr>
</tbody>
</table>

Weight: 7% sustained weight loss
People who are overweight or obese are at high risk of heart disease especially those with diabetes. Calculation of body mass index (BMI) is a way to compare your weight with your height. People with a healthy weight have a BMI between 18 and 24.9 kg/m² while overweight people have a BMI between 25 and 29.9 kg/m² and obese people have a BMI greater than 30 kg/m². A sustained weight loss of 7% is ideal in people who are overweight. Your diabetes educator or registered dietitian can help create an individualized plan to help you meet your weight loss goals.

Physical Activity: 150 min over 3 days of physical activity and 2 days of resistance training
Physical activity reduces ASCVD risk, improves blood sugar management, and increases weight loss. Activities should involve both physical activity and resistance exercise. Physical activity exercises include swimming, running, biking and anything else that gets your heart rate up. Resistance training exercise is short-lasting and high-intensity and should work all major muscle groups like using resistance bands, weight training or exercises that use your own body weight to work your muscles. Some diabetes medications may require adjustment and additional monitoring during exercise. Before beginning a new physical activity program, talk to your healthcare provider to ensure your body is healthy enough for your new plan.

Cholesterol: Moderate to high statin dose: 30-49% reduction in LDL or High statin dose >50% reduction in LDL
One of the most effective strategies to reduce your risk of heart disease is to manage cholesterol. Excess cholesterol builds up in our arteries and eventually leads to heart attacks and strokes. This process is also known as atherosclerotic cardiovascular disease (ASCVD). Medications called statins reduce LDL cholesterol (or “bad” cholesterol) and ASCVD risk by 20%. You can calculate your risk with the online calculator found at http://tools.acc.org/ASCVD-Risk-Estimator/. People with an estimated ASCVD risk above 7.5% should be started on statin therapy.

Cholesterol Monitoring: Laboratory tests should be ordered every 4 to 12 weeks in people not reaching their LDL goal on statin therapy. Those at their goal only need testing every 6 to 12 months.

Aspirin Therapy: 81 mg daily in people with ASCVD or a 10 year ASCVD risk of 10%
Aspirin 81 mg (also known as baby aspirin) reduces ASCVD risk in people who already have heart disease and those at high risk. It's not safe for everyone to take aspirin, so be sure to talk to your diabetes care team before starting.

Sponsored by: Boehringer Ingelheim, Lilly.
What is Glucose?

Glucose is a simple sugar. It is the main way your body gets energy. Your body makes glucose from the food you eat. Carbohydrates are the easiest for your body to turn into glucose. But eating too many carbohydrates can be harmful. Carbohydrates are found in many of the foods we eat like fruits, sweets, pop, bread, pasta, potatoes, rice, and cereals. If you eat a lot of these foods, your body may make more glucose than it needs.

Why is too much glucose bad?
The amount of glucose in your blood can tell us if you are becoming insulin resistant. Insulin is a hormone that helps your body use the glucose it makes.

When you become insulin resistant, the cells in your body do not take in glucose as easily. Your body has to make more insulin to help your cells take in the glucose. When that happens, you can end up with too much glucose in your blood.

When the glucose in your blood gets too high, it is called prediabetes. Prediabetes is a warning signal from your body telling you to lower your glucose level.

If your blood glucose stays too high, you can get diabetes. If your blood glucose is too high for a long time it can damage your eyes, your kidneys, your blood vessels, and your nerves.

How is my glucose measured?
During your WISEWOMAN visit, we take a small sample of your blood. This sample is placed in a machine that measures how much glucose and cholesterol are in your blood at that moment.

What should my glucose level be?
You want your glucose to be between 70 and 99.
What if my glucose is too high?
If your glucose number is over 99, we will send you for a follow-up blood glucose test. We may also send you to a doctor to talk about your number.

If the number on your follow-up blood glucose test is between 100 and 125, the doctor may talk to you about having prediabetes. If you have prediabetes, it does not mean you will get diabetes. There are things you can do to keep your glucose under control. Keeping your glucose under control may keep you from getting diabetes.

If the number on your follow-up blood glucose test is over 125, the doctor may talk to you about having diabetes. If you have diabetes, there are things you can do to keep your glucose under control and stay healthy.

*If you go for the follow-up blood glucose test, make sure you do not eat anything for at least 8 hours before you get your blood taken.*

How can I keep my glucose under control?

1. **Lose weight**
   If you are overweight, just losing 5% to 7% of your body weight will help you lower your glucose. For a person who weighs 175 pounds, that means losing 9 to 12 pounds.

2. **Be active**
   Being both overweight and not active can lead to insulin resistance. If you are not active now, start out slowly and work up to being active 30 minutes a day at least 5 days a week.

3. **Watch what you eat**
   Talk to your WISEWOMAN Lifestyle Counselor about how you can make healthy food choices.

4. **If you have diabetes, follow your doctor’s instructions**
   If you do not understand your doctor’s instructions, ask questions until you do. Test your blood sugar regularly, follow your food plan, and take your medicine the way your doctor prescribes it.
What is the A1C test?

What is A1c?
The Hemoglobin A-one-c, or just A1C, is a test to find your average blood glucose (sugar) over the past 2-3 months.

This test is only used once a person has been told they have diabetes. It is the best test for you and your health care provider to determine if your diabetes is under control.

When your diabetes is under control, you have a lower risk of developing many complications.

What should my A1C be?
For most people with diabetes, the goal should be less than 7%. If it is less than 7%, then your diabetes treatment plan is probably working, and your diabetes is under good control. Make sure to talk with your health care provider to find the best goal for you.

When should I get this test?
You should get the A1C test at least 2 times per year.

How does this compare to blood sugar?
You can use the thermometer on the right to compare your A1C to your blood glucose (blood sugar). For example, if your A1C is 6%, then your average blood glucose over the past 2-3 months is 120 mg/dl.

Do I still need to test my blood sugar?
Yes! This test will show your average over 2-3 months to see if your blood sugar level has been controlled over a long period. It is still important to test your blood sugar every day the way your health care provider told you.
## Carbohydrate Counting Food List

One serving = 15 grams carbohydrate

### Bread

<table>
<thead>
<tr>
<th>Food Description</th>
<th>Serving Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bagel, small</td>
<td>½ (1 oz.)</td>
</tr>
<tr>
<td>Bread, reduced-calorie</td>
<td>2 slices</td>
</tr>
<tr>
<td>Bread, white, whole-wheat,</td>
<td>1 slice</td>
</tr>
<tr>
<td>pumpernickel, rye</td>
<td>(1 oz.)</td>
</tr>
<tr>
<td>Bread sticks, crisp, 4 inches</td>
<td>2 (3/5 oz.)</td>
</tr>
<tr>
<td>long x ½ inch</td>
<td></td>
</tr>
<tr>
<td>English Muffin</td>
<td>½</td>
</tr>
<tr>
<td>Hot dog or hamburger bun</td>
<td>½ (1 oz.)</td>
</tr>
<tr>
<td>Pita, 6 inches across</td>
<td>½</td>
</tr>
<tr>
<td>Raisin bread, unfrosted</td>
<td>1 slice</td>
</tr>
<tr>
<td>Roll, plain, small</td>
<td>1 (1 oz.)</td>
</tr>
<tr>
<td>Tortilla, corn or flour, 6 inches</td>
<td>1</td>
</tr>
<tr>
<td>Waffle, 4 ½ inch square</td>
<td>1</td>
</tr>
</tbody>
</table>

### Fruit

<table>
<thead>
<tr>
<th>Food Description</th>
<th>Serving Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple, unpeeled, small</td>
<td>1 (4 oz.)</td>
</tr>
<tr>
<td>Applesauce, unsweetened</td>
<td>½ cup</td>
</tr>
<tr>
<td>Apples, dried</td>
<td>4 rings</td>
</tr>
<tr>
<td>Apricots, fresh</td>
<td>4 whole (5 1/2 oz.)</td>
</tr>
<tr>
<td>Apricots, canned</td>
<td>½ cup</td>
</tr>
<tr>
<td>Banana, small</td>
<td>1 (4 oz.)</td>
</tr>
<tr>
<td>Blackberries</td>
<td>¼ cup</td>
</tr>
<tr>
<td>Blueberries</td>
<td>¼ cup</td>
</tr>
<tr>
<td>Cantaloupe, small</td>
<td>½ melon or 1 cup cubes</td>
</tr>
<tr>
<td>Cherries, sweet, fresh</td>
<td>12 (3 oz.)</td>
</tr>
<tr>
<td>Cherries, sweet, canned</td>
<td>½ cup</td>
</tr>
<tr>
<td>Fruit cocktail</td>
<td>½ cup</td>
</tr>
<tr>
<td>Grapefruit, large</td>
<td>½ (11 oz.)</td>
</tr>
<tr>
<td>Grapefruit, sections, canned</td>
<td>¼ cup</td>
</tr>
<tr>
<td>Grapes, small</td>
<td>17 (3 oz.)</td>
</tr>
<tr>
<td>Honeydew melon</td>
<td>1 slice (10 oz.) or 1 cup cubes</td>
</tr>
<tr>
<td>Kiwi</td>
<td>1 (3 1/2 oz.)</td>
</tr>
<tr>
<td>Mandarin oranges, canned</td>
<td>¼ cup</td>
</tr>
<tr>
<td>Mango, small</td>
<td>½ fruit (5 1/2 oz.) or ½ cup</td>
</tr>
<tr>
<td>Nectarine, small</td>
<td>1 (5 oz.)</td>
</tr>
<tr>
<td>Orange, small</td>
<td>1 (6 1/2 oz.)</td>
</tr>
<tr>
<td>Papaya</td>
<td>½ fruit (8 oz.) or 1 cup cubes</td>
</tr>
<tr>
<td>Peach, medium, fresh</td>
<td>1 (6 oz.)</td>
</tr>
<tr>
<td>Peaches, canned</td>
<td>½ cup</td>
</tr>
<tr>
<td>Pear, large, fresh</td>
<td>½ (4 oz.)</td>
</tr>
<tr>
<td>Pears, canned</td>
<td>½ cup</td>
</tr>
<tr>
<td>Pineapple, canned</td>
<td>½ cup</td>
</tr>
<tr>
<td>Pineapple, fresh</td>
<td>¼ cup</td>
</tr>
<tr>
<td>Plums, small</td>
<td>2 (5 oz.)</td>
</tr>
<tr>
<td>Plums, canned</td>
<td>½ cup</td>
</tr>
<tr>
<td>Raisins</td>
<td>2 Tbsp.</td>
</tr>
<tr>
<td>Raspberries</td>
<td>1 cup</td>
</tr>
<tr>
<td>Strawberries</td>
<td>1 ¼ cup whole berries</td>
</tr>
<tr>
<td>Tangerines, small</td>
<td>2 (8 oz.)</td>
</tr>
<tr>
<td>Watermelon</td>
<td>1 slice (13 ½ oz.) or 1 ¼ cup cubes</td>
</tr>
</tbody>
</table>

### Cereals and Grains

<table>
<thead>
<tr>
<th>Food Description</th>
<th>Serving Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bran cereals</td>
<td>½ cup</td>
</tr>
<tr>
<td>Cereals (cooked)</td>
<td>½ cup</td>
</tr>
<tr>
<td>Cereals, unsweetened, ready-to-eat</td>
<td>¾ cup</td>
</tr>
<tr>
<td>Cornmeal (dry)</td>
<td>3 Tbsp.</td>
</tr>
<tr>
<td>Couscous</td>
<td>½ cup</td>
</tr>
<tr>
<td>Flour (dry)</td>
<td>3 Tbsp.</td>
</tr>
<tr>
<td>Granola, low-fat</td>
<td>¾ cup</td>
</tr>
<tr>
<td>Grape-Nuts</td>
<td>¼ cup</td>
</tr>
<tr>
<td>Grits</td>
<td>½ cup</td>
</tr>
<tr>
<td>Oats</td>
<td>½ cup</td>
</tr>
<tr>
<td>Pasta, cooked</td>
<td>½ cup</td>
</tr>
<tr>
<td>Rice, white or brown, cooked</td>
<td>½ cup</td>
</tr>
<tr>
<td>Shredded Wheat</td>
<td>½ cup</td>
</tr>
<tr>
<td>Sugar-frosted cereal</td>
<td>½ cup</td>
</tr>
</tbody>
</table>

### Fruit Juice

<table>
<thead>
<tr>
<th>Juice Description</th>
<th>Serving Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple juice/cider</td>
<td>½ cup</td>
</tr>
<tr>
<td>Cranberry juice cocktail</td>
<td>½ cup</td>
</tr>
<tr>
<td>Grape juice</td>
<td>½ cup</td>
</tr>
<tr>
<td>Grapefruit juice</td>
<td>½ cup</td>
</tr>
<tr>
<td>Juice blends, reduced-calorie</td>
<td>1 cup</td>
</tr>
<tr>
<td>Orange juice</td>
<td>½ cup</td>
</tr>
<tr>
<td>Pineapple juice</td>
<td>½ cup</td>
</tr>
</tbody>
</table>
### Beans, Peas, and Lentils

<table>
<thead>
<tr>
<th>Food</th>
<th>Serving Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beans, baked</td>
<td>½ cup</td>
</tr>
<tr>
<td>Beans and peas (cooked)</td>
<td>½ cup</td>
</tr>
<tr>
<td>(garbanzo, pinto, kidney, white, split, black-eyed)</td>
<td></td>
</tr>
<tr>
<td>Lima beans (cooked)</td>
<td>½ cup</td>
</tr>
<tr>
<td>Lentils (cooked)</td>
<td>½ cup</td>
</tr>
</tbody>
</table>

### Starchy Vegetables

<table>
<thead>
<tr>
<th>Food</th>
<th>Serving Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baked beans</td>
<td>½ cup</td>
</tr>
<tr>
<td>Corn</td>
<td>½ cup</td>
</tr>
<tr>
<td>Corn on the cob, medium 3”</td>
<td>1 (5 oz.)</td>
</tr>
<tr>
<td>Mixed vegetables with corn, peas, or pasta</td>
<td>1 cup</td>
</tr>
<tr>
<td>Peas, green</td>
<td>½ cup</td>
</tr>
<tr>
<td>Potato, baked or boiled</td>
<td>1 small (3 oz.)</td>
</tr>
<tr>
<td>Potato, mashed</td>
<td>½ cup</td>
</tr>
<tr>
<td>Squash, winter (acorn, butternut)</td>
<td>1 cup</td>
</tr>
<tr>
<td>Yam, sweet potato, plain</td>
<td>½ cup</td>
</tr>
</tbody>
</table>

### Vegetables

1/2 cup cooked or 1 cup raw = 5 grams carb
1 1/2 cups cooked or 3 cups raw = 15 grams of carb

<table>
<thead>
<tr>
<th>Food</th>
<th>Leeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artichoke</td>
<td>Mixed vegetables (without corn, peas, or pasta)</td>
</tr>
<tr>
<td>Asparagus</td>
<td>Mushrooms</td>
</tr>
<tr>
<td>Beans (green, wax, Italian)</td>
<td></td>
</tr>
<tr>
<td>Bean sprouts</td>
<td>Okra</td>
</tr>
<tr>
<td>Beets</td>
<td>Onions</td>
</tr>
<tr>
<td>Broccoli</td>
<td>Pea pods</td>
</tr>
<tr>
<td>Brussels sprouts</td>
<td>Peppers</td>
</tr>
<tr>
<td>Cabbage</td>
<td>Radishes</td>
</tr>
<tr>
<td>Carrots</td>
<td>Salad greens</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>Sauerkraut</td>
</tr>
<tr>
<td>Celery</td>
<td>Spinach</td>
</tr>
<tr>
<td>Cucumber</td>
<td>Summer squash</td>
</tr>
<tr>
<td>Eggplant</td>
<td>Tomato (canned, sauce, juice)</td>
</tr>
<tr>
<td>Green onions or scallions</td>
<td>Turnips</td>
</tr>
<tr>
<td>Greens (collard, kale, mustard, turnip)</td>
<td>Water chestnuts</td>
</tr>
<tr>
<td>Kohlrabi</td>
<td>Watercress</td>
</tr>
<tr>
<td></td>
<td>Zucchini</td>
</tr>
<tr>
<td>Other Carbohydrates</td>
<td>Other Carbohydrates Cont.</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Angel food cake, unfrosted</td>
<td>Ice cream</td>
</tr>
<tr>
<td>1 1/12” cake</td>
<td>½ cup</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Biscuit</td>
<td>Jam or jelly, regular</td>
</tr>
<tr>
<td>2 ½ in. across</td>
<td>1 Tbsp.</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Brownie, small, unfrosted</td>
<td>Ketchup</td>
</tr>
<tr>
<td>2 inch square</td>
<td>¼ cup (8 packets)</td>
</tr>
<tr>
<td></td>
<td>20 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Burrito, bean, 7”</td>
<td>Lasagna, 3” x 4”</td>
</tr>
<tr>
<td>1 burrito</td>
<td>1 piece</td>
</tr>
<tr>
<td></td>
<td>30 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Burrito, meat, 7”</td>
<td>Macaroni &amp; cheese</td>
</tr>
<tr>
<td>1 burrito</td>
<td>1 cup</td>
</tr>
<tr>
<td></td>
<td>45 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Cake, frosted</td>
<td>Muffin, plain</td>
</tr>
<tr>
<td>2 inch square</td>
<td>1 small</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Cake, unfrosted</td>
<td>Oatmeal, instant, flavored</td>
</tr>
<tr>
<td>2 inch square</td>
<td>1 packet</td>
</tr>
<tr>
<td></td>
<td>30 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Candy bar, chocolate, snack size</td>
<td>Pancake,</td>
</tr>
<tr>
<td>1 bar (1 oz.)</td>
<td>4 inches across</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Casserole or hot dish</td>
<td>Pasta salad</td>
</tr>
<tr>
<td>1 cup</td>
<td>1 cup</td>
</tr>
<tr>
<td></td>
<td>45 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Cereal bar</td>
<td>Pie, fruit, 2 crusts</td>
</tr>
<tr>
<td>1 bar</td>
<td>1/6 pie</td>
</tr>
<tr>
<td></td>
<td>45 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Chicken nuggets</td>
<td>Pie, pumpkin or custard</td>
</tr>
<tr>
<td>6</td>
<td>1/8 pie</td>
</tr>
<tr>
<td></td>
<td>30 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Chili w/beans</td>
<td>Pizza, frozen, thick-crust, medium</td>
</tr>
<tr>
<td>1 cup</td>
<td>1 slice (½ pizza)</td>
</tr>
<tr>
<td></td>
<td>30 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Chow mein noodles</td>
<td>Pizza, frozen, thin-crust, medium</td>
</tr>
<tr>
<td>½ cup</td>
<td>1 slice (½ pizza)</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Cookie</td>
<td>Pudding</td>
</tr>
<tr>
<td>3 inches across</td>
<td>½ cup</td>
</tr>
<tr>
<td></td>
<td>23 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Cookie, sandwich</td>
<td>Pudding, sugar-free</td>
</tr>
<tr>
<td>2 small</td>
<td>½ cup</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Corn bread</td>
<td>Rice Krispie treat</td>
</tr>
<tr>
<td>2 inch cube</td>
<td>2” inch square</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Cranberry sauce, jellied</td>
<td>Salad dressing, fat-free</td>
</tr>
<tr>
<td>¼ cup</td>
<td>¼ cup</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Croutons</td>
<td>Sandwich, meat or cheese</td>
</tr>
<tr>
<td>1 cup</td>
<td>1 sandwich</td>
</tr>
<tr>
<td></td>
<td>30 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Cupcake, frosted</td>
<td>Sandwich, chicken, breaded</td>
</tr>
<tr>
<td>1 small</td>
<td>1 sandwich</td>
</tr>
<tr>
<td></td>
<td>45 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Doughnut, glazed</td>
<td>Sandwich, Peanut butter &amp; Jelly, Reg.</td>
</tr>
<tr>
<td>3 ¾ in. across (2 oz.)</td>
<td>1 sandwich</td>
</tr>
<tr>
<td></td>
<td>45 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Doughnut, plain cake</td>
<td>Sherbet, Sorbet</td>
</tr>
<tr>
<td>1 medium (1 ¼ oz.)</td>
<td>½ cup</td>
</tr>
<tr>
<td></td>
<td>30 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish sticks, breaded</td>
<td>Spaghetti or pasta sauce</td>
</tr>
<tr>
<td>3</td>
<td>½ cup</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>French fries</td>
<td>Sport drink</td>
</tr>
<tr>
<td>10-15</td>
<td>1 cup</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>French toast</td>
<td>Stuffing, bread (prepared)</td>
</tr>
<tr>
<td>1 slice</td>
<td>½ cup</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Frozen yogurt</td>
<td>Sugar</td>
</tr>
<tr>
<td>½ cup</td>
<td>1 Tbsp.</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit juice bars (100% juice)</td>
<td>Sweet roll or Danish</td>
</tr>
<tr>
<td>1 (3 oz.)</td>
<td>1 (2 ½ oz.)</td>
</tr>
<tr>
<td></td>
<td>38 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit snacks, chewy</td>
<td>Syrup, light</td>
</tr>
<tr>
<td>1 roll</td>
<td>2 Tbsp.</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit Spread, 100% fruit</td>
<td>Syrup, regular</td>
</tr>
<tr>
<td>1 Tbsp.</td>
<td>1 Tbsp.</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Fudgesicle</td>
<td>Syrup, regular</td>
</tr>
<tr>
<td>1 stick</td>
<td>¼ cup</td>
</tr>
<tr>
<td></td>
<td>60 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Gelatin, regular</td>
<td>Taco shell, 6 inches across</td>
</tr>
<tr>
<td>½ cup</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Gingersnaps</td>
<td>Toaster pastry, fruit</td>
</tr>
<tr>
<td>3</td>
<td>1 pastry</td>
</tr>
<tr>
<td></td>
<td>30 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Granola</td>
<td>Vanilla wafers</td>
</tr>
<tr>
<td>¼ cup</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Granola bar</td>
<td>Waffle</td>
</tr>
<tr>
<td>1</td>
<td>4 inches</td>
</tr>
<tr>
<td></td>
<td>15 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Honey</td>
<td>Yogurt, low-fat with fruit</td>
</tr>
<tr>
<td>1 Tbsp.</td>
<td>1 cup</td>
</tr>
<tr>
<td></td>
<td>45 grams</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Hot Cocoa, regular (with water)</td>
<td></td>
</tr>
<tr>
<td>1 packet</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Hot Cocoa, Sugar-free (with water)</td>
<td></td>
</tr>
<tr>
<td>1 packet</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Hummus</td>
<td></td>
</tr>
<tr>
<td>½ cup</td>
<td></td>
</tr>
</tbody>
</table>
Low Carbohydrate Foods

Low carbohydrate foods have 5 or fewer grams of carbohydrate. The foods in this list do not have the immediate effect on blood glucose level that carbohydrate-containing foods do, but they still provide calories (in most cases) and, in some cases, fat. For this reason, portion sizes of these foods should be carefully observed. These foods should be limited to the portion size listed below if used for snacks without insulin.

### Unlimited Use

<table>
<thead>
<tr>
<th>Food Item</th>
<th>Carbohydrate Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bouillon and Broth</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Club soda, unsweetened</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Diet soft drinks</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Flavoring extracts</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Garlic</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Herbs</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Horseradish</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Soy sauce</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Spices</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Tabasco or hot sauce</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Taco sauce</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Tea</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Sugar-free drink mixes</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Tonic water, unsweetened</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Tabasco or hot sauce</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Taco sauce</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Tea</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Sugar-free gum</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Vinegar</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Sugar-free Jell-O</td>
<td>Unlimited Use</td>
</tr>
<tr>
<td>Worcestershire sauce</td>
<td>Unlimited Use</td>
</tr>
</tbody>
</table>

### Meats/Meat Substitutes

<table>
<thead>
<tr>
<th>Food Item</th>
<th>Serving Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef, Chicken, Fish, Ham, Lamb, Pork, Seafood, Veal</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Cottage Cheese</td>
<td>½ cup</td>
</tr>
<tr>
<td>Cheese</td>
<td>1 oz.</td>
</tr>
<tr>
<td>Egg (hard-boiled, scrambled, omelet, etc.)</td>
<td>1</td>
</tr>
<tr>
<td>Egg substitute</td>
<td>½ cup</td>
</tr>
<tr>
<td>Egg whites</td>
<td>2</td>
</tr>
<tr>
<td>Peanut butter</td>
<td>1 Tbsp.</td>
</tr>
<tr>
<td>Salmon, water-packed</td>
<td>¼ cup</td>
</tr>
<tr>
<td>Tofu</td>
<td>½ cup</td>
</tr>
<tr>
<td>Tuna, water-packed</td>
<td>¼ cup</td>
</tr>
</tbody>
</table>

### Reading Food Labels

The nutrition facts panel on the food label is the best source of accurate carb information. If a food item has a label, please use the information on the label. The carbohydrate information on a food label is for the portion size listed on the label, found just under NUTRITION FACTS. The following information to the right lists the grams of carb that this food item contains for one serving (ex. 1 cup = 11 grams). Keep in mind that the grams of sugar, dietary fiber, other carbs, and sugar alcohols are included in the Total Carbohydrate.