Course Objectives:
Know risk factors and causes of heart disease, stroke, and cancer
Work with communities and community members to prevent heart disease, stroke, and reduce risk of cancer by encouraging healthy eating, physical activity, tobacco control, and stress reduction at the individual, family, and community level.
Show people how to take greater control over their health.

Class/Learning Objectives: By the end of this session, students will be able to:
1. Discuss why weight control is important to good health.
2. Describe how to help people lose weight.
3. Assist others with making healthy food choices.
4. Read a food label and find calorie, fat, saturated fat, cholesterol, sodium, carbohydrates, fiber, sugar, protein content.
5. Describe the DASH Eating Plan.

Participants:
Instructor(s)
Students

Materials/Resources Needed:
Flipchart, markers, tape, blackboard, chalk and eraser

Handouts:
- 15-1 Protect Your Heart. Watch Your Weight
- 15-2 The Energy Balance
- 15-3 Daily Servings by Calorie Need
- 15-4 Sodium in Foods
- 15-5 Tips to Eat Less Salt and Sodium
- 15-6 Be Good to Your Heart
- 15-7 How to Read Food Labels
- 15-8 Read the Food Label for Sodium
- 15-9 Read the Food Label to Choose Foods Lower in Fat, Saturated Fat and Cholesterol
- 15-10 The DASH Eating Plan
- 15-11 What can CHWs Do To Help People Make Healthier Food Choices?

Training Aids
Plan for the Class:

I. Overview
In this module and the next two, we’ll talk about the 3 things that, when made a part of your lifestyle, are your best protection against heart disease and stroke. These 3 things are:
- Healthy eating
- Being physically active
- Living tobacco free

In this module, we’ll discuss healthy eating and how important it is to keep your weight within a range that is appropriate for your height. Weight control involves a balance between the amount of food you eat and your level of physical activity. This module and the next one on physical activity include tips for controlling your weight.

Being overweight puts you at greater risk for diabetes and high blood pressure – major risk factors for heart disease and stroke.

So before we begin our discussion on healthy eating, let’s talk about weight control first so you’ll have a better understanding of the importance of eating a healthy diet and being physically active.

Weight control has become a major problem in the U.S. Sixty-one percent – more than half – of the people in America weigh more than they should. This is not just a problem for adults. More children and teenagers are overweight than ever before.

III. Lesson
A. How Do You Know if You Are Overweight?
Many of us have different ideas about who is overweight and how is not.

We’ve begun to hear a lot about obesity. Is being overweight and being obese the same thing?

Many people use the words obese or obesity to describe being overweight, but doctors consider the two terms to mean different things. Normal weight, overweight, and obese are determined by the amount of body fat you have.

One way of measuring body fat is by Body Mass Index or BMI. It can be used by both men and women but it does have some limits. It may overestimate body fat in people who have a muscular build. It may underestimate fat in older people and others who have lost muscle mass.

A BMI of 25-29.9 is considered overweight. A person with a BMI of 30 or higher is considered obese.

Your BMI is calculated using a somewhat complicated formula, so using a BMI chart is probably the best means for finding your BMI.

**Handout 15-1: Protect Your Heart. Watch Your Weight**

Review the handout with the CHWs. Explain that the numbers in the left-hand column are a person’s height in inches. The number in the columns to the right of the height numbers are a person’s weight.

Ask the CHWs to find their own BMI. First they should determine what their height in inches is and find that number in the left-hand column. Follow that row to the right until they find the number closest to their own weight. Follow this column to the top of the page to the BMI number.

Remember, a normal BMI is 19-24. Overweight is 25-29. Obese is over 30.

Another important way to tell your risk of overweight is by placing a measuring tape snugly around your waist. This will tell you how much belly fat you have. The risk for heart disease and stroke increases with a waist measurement of over 40 inches in men and over 35 inches in women. A person with a BMI 25-29 and a large waist size is at high risk. A person with a BMI 30-39 and a large waist is at very high risk. A person with a BMI of 40 or over and a large waist is at extremely high risk. All of them need to lose weight.

**B. What Causes People to be Overweight or Obese?**
Obesity is caused by over eating and not enough physical activity, but there are other factors that can put you at risk for being overweight.

**Family History:** Obesity tends to run in families. This could be, in part, due to genes, but families also share eating and lifestyle habits so it can be hard to separate these causes. Even so, studies do show a link between the genes you inherit from your parents and obesity.

**Lifestyle:** A family history of obesity means you may be more likely to be overweight, not that you are “doomed” to be overweight. Your lifestyle and habits play an important role. As Americans, we tend to eat a lot of high-fat foods, and we are more likely to eat food that is quick and easy than we are to eat food that is good for us.

Also, we are not active enough.

You can’t choose your parents, but you can choose to change your eating habits and level of activity.

**Mental and emotional factors:** Many people eat because they are bored or sad, or even angry. Some deal with stress by eating.

**Illness and medicines:** Some illnesses can lead to obesity or a tendency to gain weight. Also, drugs such as steroids and some antidepressants may cause you to gain weight.

**C. Why is it Unhealthy to be Overweight?**

Many serious health problems and diseases are related to obesity.

- Heart disease
- Type 2 diabetes
- High blood pressure
- Stroke

Certain types of cancers are also linked to obesity. Obese men are more likely to die from cancer of the:

- Colon
- Rectum
- Prostate

Obese women are more likely to die from cancer of the:

- Gallbladder
- Breast
- Uterus
- Cervix
- Ovaries

Other health problems and diseases linked to obesity are:

- Gallbladder disease and gallstones
- Liver disease
- Osteoarthritis (a type of arthritis that affects the joints)
- Gout (another disease affecting the joints)
- Breathing problems (including sleep apnea)
- Reproductive problems in women

The more obese a person is, the more likely he or she is to develop health problems.

But the way a person feels about herself or himself may be the most painful part of being obese. In our society, overweight people are often seen as lazy, unattractive and undisciplined – even though this is not true.

However, obese people often face prejudice or discrimination in the workplace, at school, and in social situations. Feelings of rejection, shame, or depression are common.

However, people can do something about their weight.

Many people are not sure how much weight they should lose. Weight loss of only 5 – 10 percent of body weight may improve many of the health problems associated with overweight, such as high blood pressure and diabetes. So, if you weigh 200 pounds, losing 10 to 20 pounds can improve your health.

Even a small weight loss can make a difference. If you are trying to lose weight, do so slowly and steadily. A generally safe rate is ½ to 1 pound a week until you reach your goal. Avoid crash weight-loss diets that severely limit calories or the variety of foods. Extreme approaches to weight loss can be dangerous to your health and unlikely to last.

Even if you don’t need to lose weight, eating a healthy diet is still very important for reducing your risk for heart disease and stroke.

**D. How Can I Lose Weight?**

One of the best ways to lose weight is to burn more calories than you consume.

As we’ve already learned, food provides the energy or fuel that the body needs to function. A calorie is a way to measure the energy a food item provides for the body. The more active a person is the more food the person’s body needs.

But it’s easy to give your body more food than it needs. When that happens, the body stores the extra fuel in its fat cells which expand to make room for the extra fuel or it makes more fat cells.
To keep from becoming overweight we must always balance the amount of food we consume with the amount of energy we use. The amount of energy we use is based, in large part, on how physically active we are. This balance is known as the Energy Balance.

**Handout 15-2: The Energy Balance**
Review the handout with the CHWs. Ask questions to ensure they understand how physical activity must be balanced with the amount of calories to maintain weight. To lose weight, fewer calories are consumed than needed for the amount of physical activity.

In the next module we’ll talk more about physical activity and ways to increase your physical activity during the day. Physical activity is important because, together with caloric reduction, it helps people lose weight, decrease belly fat, increase fitness, and maintain a healthy weight.

**E. What Should I Eat?**
Even if you do not need to lose weight a healthy diet is still very important for reducing risk for heart disease and stroke.

But what is good nutrition? What is healthy eating? What should you eat if you are trying to lose weight? You can lose weight by healthy eating including controlling how much you eat.

According to the Dietary Guidelines for Americans a healthy diet:

- Emphasize fruits, vegetables, whole grains, and fat-free or low-fat milk and milk products;
- Includes lean meats, poultry, fish, beans, eggs, and nuts; and
- Is low in saturated fats, trans fats, cholesterol, salt (sodium), and added sugar.

First you should eat a variety of foods every day because different foods have different nutrients such as vitamins and minerals that your body needs. No single food can supply all nutrients in the amounts you need. For example, oranges provide vitamin C but no vitamin B12; chicken provides B vitamins but no vitamin C. Do you remember what the food groups are?

**Activity: Food Groups Training Aid 15-1**
Review the food groups and examples of food from each food group with the CHWs. Ask them to think of other examples of foods that aren’t listed. Have the CHWs name their favorite foods from each group. Ask them if they eat foods from each group each day.

While it’s important to eat a variety of foods. It’s especially important to eat at least nine servings of fruits and vegetables each day.
A diet that includes fresh fruits and vegetables may reduce the risk of including heart disease and stroke, cancer and other diseases. Fruits and vegetables provide the vitamins, minerals, and fiber that are important for good health. Most fruits and vegetables are naturally low in fat and calories and are filling.

How much water should you drink?

There is no easy answer to this question. How much water you should drink each day depends on where you live, how active you are, and your current health.

You may have heard that people should drink eight 8 ounce glasses of water a day. This is known as the 8x8 rule. Although the 8x8 rule is not supported by research, many people use it as a guideline for how much water and other fluids to drink.

You don’t have to drink just water to keep yourself from becoming dehydrated and thirsty. You get water from juice, milk, coffee, tea, soda, fruits, vegetables and other foods as well.

But water is a great choice! It’s calorie-free, it doesn’t cost much (when drawn from a faucet or fountain) and it’s almost always available.

You will, most likely, fulfill your daily requirement for water if you:

- Drink a glass of water with each meal and between each meal.
- Take water breaks instead of coffee or tea brakes.
- Substitute sparkling water for alcoholic drinks at parties.

**F. How Much is a Serving?**

Although it’s important to eat a variety of foods, it’s also important to not eat too much.

*Handout 15-3: Daily Servings by Calorie Needs*

*Review the handout with the CHWs. Ask them to write down what they had for breakfast that morning. Based on the serving sizes listed, ask them to write down how many servings of each type of food they had.*

*Ask them to then determine how many they have left to eat from each food group. Ask if some of them had exceeded the recommended amount for a food group (fats, for example).*

**G. What Foods Should I Limit?**

Now we know that it’s important to eat a variety of food and to eat at least five servings of fruits and vegetables, but there is another side to eating healthy.
It’s also important to limit some types of food. Foods high in:

- Sodium,
- Saturated fat,
- Cholesterol, and
- Sugar.

should only be eaten once in awhile. These foods contribute to heart disease and stroke and other diseases such as cancer.

**Sodium**

What is sodium?

Sodium is a part of salt. It is used in mixtures to flavor and preserve many foods we buy in the grocery stores.

Americans eat way too much sodium. The body only needs about 500 milligrams of sodium each day. That’s about a quarter of a teaspoon of salt. But most people eat about 4,000 to 6,000 milligrams of sodium a day. This is 8 to 12 times more sodium than the body needs!

Sodium is important because it brings the right amount of water to our cells. But when food with too much sodium is eaten it cases water to be retained in the blood. The kidneys usually flush extra fluid from the body, but if there is more fluid than the kidneys can handle, it stays in the blood which increases the volume of the blood being pumped through the blood vessels.

As we’ve learned, high blood pressure is a risk factor for heart disease and stroke – and for kidney disease. Eating, drinking, or cooking with too much salt contributes to high blood pressure.

The Dietary Guidelines for Americans suggest that we take in less than 2300 milligrams of sodium per day. This is about 1 teaspoon of salt. Choose fresh, plain, or frozen foods. Choose “low sodium” foods that have ≤ 140 mg. sodium per serving.

**Handout 15-4: Sodium in Foods**

Make sure each CHW has a copy of the handout. Say the next paragraph and the bulleted items. Review the handout with the CHWs. Ask them if they can think of other examples of foods with a high salt content or foods with a lower salt content. Write their answers on the flipchart in two columns.

Much of the additional sodium in people’s diet comes form adding salt to food at the table and when cooking. But there are also high amount of sodium in:

- Packaged meats such as bologna, ham, hot dogs, bacon,
- Canned soups and vegetables,
• Cheese,
• Dill pickles,
• Tomato Juice,
• Soy sauce, and
• Frozen dinners.

Fresh fruits and vegetables, fish and lean meats such as chicken and
turkey are low in sodium and a better choice for eating healthy.

**Handout 15-5: Tips to Eat Less Salt and Sodium**

*Review the handout with the CHWs. Let them know that this handout
is a good one to give to people in their community who need to reduce
the amount of salt and sodium in their diets.*

**Fats and Cholesterol**

You’ve been hearing for years that too much fat in your diet is not
good for you. But the truth is some fats are good for you, but others
are not.

There are two main types of fat:
• Saturated fats and
• Unsaturated fats.

Saturated fats are the bad fats. They are found in red meat and dairy
products such as whole milk, butter, cheese, ice cream, lard,
shortening, and chocolate. Saturated fat is also in most margarines,
vegetable shortening, lard, coconut, and palm oil. Saturated vegetable
oils such as coconut and palm oils are used most often at fast food
restaurants to deep fry chicken, French fries, and onion rings. They are
also used in making most potato chips and cakes, muffins, cookies,
pastries, crackers, flour tortillas, fry bread, and donuts you buy at the
store.

Unsaturated fats might actually lower your risk for heart disease and
stroke. Unsaturated fats are found in olives, avocados, most nuts
(peanuts, almonds, cashews, walnuts, and pistachios), fish and oils
such as olive, peanut, canola, corn, soybean, sunflower, and safflower.

Saturated fats are usually solid at room temperature while unsaturated
fats are usually liquid at room temperature. But a few oils (coconut,
palm, and palm kernel) are high in saturated fats.

Unsaturated fats help lower your bad (LDL) cholesterol levels and
increase your good (HDL) cholesterol levels.

Try to substitute unsaturated fats for saturated fats whenever you can.
For example try “light” or “no fat” salad dressing and mayo.
Limit or do not eat foods made with trans fat (partially hydrogenated vegetable oils) which are found in may packaged foods like cookies, crackers, pies, cakes and cake mixes.

Foods containing both saturated fats and trans fats are harmful if eaten too often.

You can, however, have too much of a good thing. All fats are high in calories so you should limit your fat intake to no more than 30 percent of your daily calories. This amount to:

- 53 grams of fat for a 1600 calorie diet,
- 73 grams of fat for a 2200 calorie diet, and
- 93 grams of fat for a 2800 calorie diet.

How does cholesterol food affect your body’s blood cholesterol?

Cholesterol is a fat-like substance found in all animal foods – meat, chicken and turkey, fish, milk, and milk products and eggs. Both the lean and fat of meat and the meat and skin of chicken and turkey contain cholesterol. In milk products, cholesterol is mostly in the fat, so lower fat products contain less cholesterol. Egg yolks and organ meats, like liver, are high in cholesterol. Plant foods do not contain cholesterol.

Low fat meats such as lean cuts of red meat, chicken and turkey (without the skin) and fish are good sources of protein and are better choices than high fat meats such as bacon, sausage, and hot dogs, hamburgers, and lunchmeats which should not be eaten more than once a week.

Reducing saturated fats and replacing them, whenever possible, with unsaturated fats will affect your blood cholesterol level more than limiting the amount of cholesterol in your diet.

**Handout 15-6: Be Good to Your Heart**

*Review the handout with the CHWs. Look at the healthier food choices Virginia is making. Ask the CHWs to think of other ways to reduce fats in meals.*

**Sugar**

Most people consume much more sugar than is healthy. Some sugar is found naturally in many foods such as milk and fruits. But this type of sugar is not the problem. It is the sugar added to foods and drinks that is the problem.
Most added sugars in the typical American diet come from soft drinks, candy, jams, jellies, syrups, and table sugar used in coffee and put on cereal.

But sugar is also added to foods such as ice cream, sweetened yogurt, chocolate milk, canned or frozen fruit with heavy syrup, and sweetened bakery products like cakes and cookies.

For healthy eating, go easy on sugars added to foods at the table – sugar, honey, and jelly.

Choose less high calorie foods that have lots of sugar – candy, sweet desserts, and soft drinks and avoid too much snacking. Instead drink water or diet soft drinks. For something sweet, but without sugar, eat a fruit or sugar-free dessert. Choosing lower calorie alternatives to high calorie snacks will help control body weight.

So, now we know we eat five servings of fruit and vegetables a day and choose foods that are high in fiber and low in sodium, fat and sugar.

But when you go grocery shopping, how will you know if an item is low in fat or high in fiber? You need to read the food label or what is often called the nutritional facts label.

**H. Reading Food Labels?**
The food label found on packaged food is one of the best tools you have for choosing foods for a healthy diet. By reading the food label you can choose a food lower in fat, cholesterol, and sodium

*Handout 15-7: How to Read Food Labels*
*Review the handout with the CHWs, explaining each section.*

*Handout 15-8: Read the Food Labels for Sodium*
*Review the handout with the CHWs. Tell that this is a good handout to use to teach community members with high blood pressure how to look for sodium content in packaged foods.*

*Handout 15-9: Read the Food Label to Choose Foods Lower in Fat, Saturated Fat, Trans Fat, and Cholesterol!*
*Review the handout with the CHWs. Tell that this is a good handout to use to teach community members about the fat content of packaged foods.*

**I. The DASH Eating Plan**
The DASH plan is a good plan to follow to ensure you are eating at least five servings of fruits and vegetables a day and limiting sodium, fat, and sugar. DASH stands for Dietary Approaches to Stop
Hypertension. The DASH diet is recommended by the American Heart Association and the National Heart, Lung and Blood Institute and has been proven to lower blood pressure and blood cholesterol levels. It is a good plan for anyone who wants to eat better.

The DASH eating plan includes whole grain products, fish, poultry, nuts, and low-fat dairy foods. It is reduced in red meat, sweets, and sugar-containing beverages. It is rich in magnesium, potassium, and calcium, as well as protein and fiber.

**Handout 15-10: The DASH Eating Plan**

Review the handout with the CHWs. Ask the CHWs if they will feel comfortable talking about the DASH Eating Plan with community members. Ask if they have questions about the plan.

**IV. Summary**

**Handout 15-11: What Can CHWs Do to Help People Make Healthier Food Choices?**

The American Heart Association Handout, “How do I manage my medicine?” is a good overview of what most people need to know about taking medicines. Community Health Workers should be familiar with all the terms on this handout and what their community peers should know.

How do you know if you are overweight?
What causes people to be overweight or obese?
Why is it unhealthy to be overweight?
How much is a serving?
What foods should you limit?

**Resources:**
Center for Disease Control and Prevention (CDC) Overweight and Obesity page [www.cdc.gov/nccdphp/dnpa/obesity/index.htm](http://www.cdc.gov/nccdphp/dnpa/obesity/index.htm)


American Heart Association: [www.americanheart.org](http://www.americanheart.org)


My Pyramid – Steps to a Healthier You [www.mypyramid.gov](http://www.mypyramid.gov)

