

*DREAM CHW Intervention*

**DREAM Project Session Two: Nutrition**

***Welcome***

Welcome participants.

*CHW Says:*   
*“I know it has been a while since we have last met as a group. However, I have met with each of you on a one-on-one session and I know that you are all doing a great job in incorporating many of the things we have covered so far! I am very impressed with all the steps you are taking to control your diabetes and I’m confident that you are all on your way to lead healthier lifestyles.”*

**INTRODUCTIONS**

*CHW Says*

*“Let us go around the room and do the following:*

* *Say your name*
* *One thing that you have done differently to control your diabetes since you started these sessions (e.g., eating healthier, walking more)*
* *Have you been in touch with your buddy? If so, how did it go?*

**Group Agreement and Discussion**

*CHW Says:*

*“Before going any further, I want to just quickly go over the group agreement we decided in our first session. I especially want to stress the part about confidentiality and respect. I also want to request you all to now put your phones on silent or turn them off for the rest of the class. If you get a phone call during the class, please feel free to leave the room to respond to the call. Do we agree on this? Also, does anyone else have anything to add to the group agreement? (If no, continue, if yes, write up the new agreement on the board)*

*CHW Says:*

*“Today we are going to discuss something that you have all mentioned as being both a risk factor for diabetes as well as a solution to control it. Can anyone guess what it might be?”*

After hearing some of the answers,

*CHW says*

*“We are going to talk about nutrition and healthy eating today. Unhealthy eating can lead to diabetes where as healthy eating can control and help manage it. This is a really important topic for us as Bangladeshis since food plays such a major part of our daily lives and in our socializing with each other.”*

**Physical Activity**

CHW conducts physical activity with participants.

**Session Overview[[1]](#footnote-1)**

*Say: “At the end of this session, you will be able to understand:*

* *What a balanced meal is?*
* What is Myplate?
* Easy tips of healthy cooking

*Nutrition (30 minutes)*

*CHW Say: “Healthy eating helps give you energy to learn, play, and live. It also helps keep your blood sugar level in balance. More importantly, healthy eating can help you control long-term, chronic illnesses such as diabetes and heart disease. To help you prevent diabetes, it is critical that you incorporate healthy food choices into what you eat every day. If you have diabetes, these healthy food choices will help you control your blood sugar.”*

*I am not going to lecture to you about what is nutrition and healthy food. In fact, you are going to tell me what it is! I know that all of you have a lot of knowledge about this. I am going to break you into pairs and you will tell me the answer to some questions. Please discuss this with your partner for five minutes and write down any answers you have on this flip chart paper (CHW/intern passes out flipchart paper)*

*At this point, the CHW will break up the group into pairs and give each pair a question to respond to.*

**Discussion Questions:**

1. Why is it important for people with diabetes to eat healthy food?
2. What do you think is Healthy Food? How would you describe nutrition?
3. Does everyone need the same kind of foods? For example, do men and women need to eat the same amount of food? What about people who have diabetes?
4. What is MyPlate? What do you know about Myplate?

CHW gives the pairs 5-10 minutes to discuss and write down the answers after which he/she asks the participants to present their answers to the large group.

CHW should ensure that the following topics are covered when discussing the questions:

* **Why is it important for people with diabetes to eat healthy food?**

Making wise food choices can help you

* Helps keep your diabetes in your target range
* Lose weight if you need to
* Lower your risk for heart disease, stroke, and other problems caused by diabetes
* Feel good every day

Healthful eating helps keep your blood glucose, also called blood sugar, in your target range. Physical activity and, if needed, diabetes medicines also help. The diabetes target range is the blood glucose level suggested by diabetes experts for good health. You can help prevent health problems by keeping your blood glucose levels on target[[2]](#footnote-2).

**Healthy Eating**

*CHW says* [REFER TO HANDOUT A – HEALTHY EATING]

*Healthy eating refers to eating a variety of foods for a balanced diet, and includes making healthy food choices, understanding the ideal portion sizes, and meal frequency. Healthy eating helps manage blood sugar and reduce other risks for diabetes-related complications. The key to health eating is moderation and making smart choices in your daily diet. Following these healthy eating tips will helps you to control your blood sugar level, also offers ways to incorporate your favorite food into a healthy diet. Please take out the Handout A- Healthy Eating while we are talking about this section*

1. Limit portion size and frequency- You don’t have to cut out the food you love to eat, just cut down portion size and treat yourself with these foods on special occasions.
   * + - *Serve food on a plate rather than as buffet style which tend to serve too much food on a plate. When you make dinner at home, you can serve the food on plates before you bring them to the table.*
       - *Make sure to serve the right portion of foods from each food groups on your plate*
       - *Drink water with meals*
2. Go skinny on fats- Limit your consumption to two to three tablespoons of unsaturated fat each day including cooking, salad dressings, margarine and mayonnaise.
   * + - *try to make chapattis with less oil/ghee and make them with boiling water or some warm low fat milk instead of oil*
       - *try to avoid adding butter ghee/margarine when cooking rice, dhal and other foods*
       - *When making curries add less oil and improve the taste by adding more ginger, garlic and other spices*

* + - * *Limit the consumption of foods high in saturated fat like parathas, red meat, fried foods and Briyanis*
      * *Choose fish and lean meat and curry poultry without the skin*
      * *Try using low fat or skim milk with chai, yogurt and cheese*

1. Go easy with salt- Most of us eat more salt than we need. A high intake of salt can raise blood pressure, particularly if you are overweight or if it runs in your family.
   * + - *Try to reduce salt in cooking, i.e. in curry, rice, salad, lassi*
       - *Use different flavors as an alternative to salt, e.g. black pepper, mixed spices, lemon juice, garlic*
       - *Eat fresh foods and decrease pickles and canned foods. For example, most types of achar have a lot of salt.*
2. Include foods high in fiber daily

*Whole grain foods such as whole wheat chapattis, breads, crackers, cereals, brown rice, oatmeal, and barley*

* + - * *Include a variety of colorful fruits and vegetables*
      * *Since most Bangalis consume dal daily, try to choose the one with high in fiber content for examples: Chana dal, Mung bean, Masoor Dals are high in fiber.*

1. Be active- 30 minutes of physical activity five days a week and lose a modest amount of weight
   * + - *Walking is a great way to be active*
       - *Walk around the house while you talk on the phone*
       - *Dancing is also fun way to be active. Get off the couch, turn on the music, and move*
2. Plan ahead- People living with diabetes can include desserts in their meals plans, just plan ahead and make other meal adjustments to compensate for the dessert, like cutting back on other foods with carbohydrates at the same meal.
   * + - *Limit sweets and desserts like Kheer, when you have it have small serving at the end of a healthy meal and not every day*
       - *Share your dessert and large portions when eating out*
       - *Eat breakfast every day but make it a healthy one. Instead of eating paratha, ruti and curry, switch to eating brown bread and a vegetable or eat oatmeal with fresh fruit.*

**Take Control of Your Blood Sugar and Take Control of Your Life…**

*CHW says:*

***How do you describe try to incorporate healthy food choices into what you eat every day?”***

CHW/intern/Volunteer Writes their responses on a flipchart. Make sure that the following points are mentioned:

* Eat a variety of foods.
* Eat a variety of fruits and vegetables each day
* use portion sizes, and avoid eating oversized portions.
* Choose healthful snacks such as fruit over higher fat and higher calorie foods such as candy bars.
* Try not to skip meals. Doing so can lead you to overeat later.
* Balance your meals with physical activity.
* Drink water instead of sugar-sweetened juice or soda.

Continue to eat the foods you love—but in smaller amounts, and perhaps not every day.

**HOW much should I be eating?: calorie counting**

* *CHW Says:*  
  *“****Does everyone need the same kind of foods? For example, do men and women need to eat the same amount of food? What about people who have diabetes?***

CHW allows participants to answer this question for a few minutes and writes answers on flipchart.

*You should talk to your doctor or nutritionist to see what you should specifically be eating. However, in general your caloric food consumption varies by your height and weight range and also your gender.”*

Have about 1,200 to 1,600 calories a day if you are a[[3]](#footnote-3)

* small woman who exercises i.e if you are ~5ft 2inches and weigh ~121lbs. with small or medium frame)
* small or medium-sized woman who wants to lose weight
* medium-sized woman who does not exercise much

|  |  |
| --- | --- |
| Choose this many servings from these food groups to have 1,200 to 1,600 calories a day: | |
| 6 starches/carbohydrates  1cup of rice gives you 3 starches or carbohydrate  one 7” chapatti,  1slice of bread, or 1 small potatoes,  1/2cup of cooked cereal (oatmeal) | 2 milks  1 cup (8 ounces) of low fat/skim milk  1cup, 227gms by weight (~8ounces) of low fat yogurt |
| 3 vegetables  1 cup of raw leafy vegetables  1/2 cup of cooked beans, cauliflower, cabbage,tomateos, spinach, eggplant, squash, bitter guard, long beans  1/2 cup of vegetable juice | 4 to 6 ounces meat and meat substitutes  2-3 ounces cooked lean beef, veal, pork, lamb, chicken, turkey, or fish  1/2 cup of cooked masoor dal or dry beans  1/2 cup canned tuna (packed in water)  1 egg |
| 2 fruits  1/2banana,  1 small apple, OR  1 Small orange, 1 pear  ½ cup (4 ounce) of fruit juice | up to 3 fats  1 samosa, 1 kulfi  1 small cupcake or muffin or 2 small cookies. |

Talk with your CHW or doctor about how to make a meal plan that fits the way you usually eat, your daily routine, and your diabetes medicines. Then make your own plan.

Have about 1,600 to 2,000 calories a day if you are a

* large woman who wants to lose weight (i.e. if you are ~5ft 2inches and weigh ~121lbs. with small or medium frame)
* small man at a healthy weight
* medium-sized man who does not exercise much
* medium-sized or large man who wants to lose weight

|  |  |
| --- | --- |
| Choose this many servings from these food groups to have 1,600 to 2,000 calories a day: | |
| 8 starches | 2 milks |
| 4 vegetables | 4 to 6 ounces meat and meat substitutes |
| 3 fruits | up to 4 fats |

Talk with your CHW or doctor about how to make a meal plan that fits the way you usually eat, your daily routine, and your diabetes medicines. Then make your own plan.

Have about 2,000 to 2,400 calories a day if you are a

* medium-sized or large man who exercises a lot or has a physically active job (i.e. ~ 5 feet 9 inches and weigh ~ 176 – 185lbs)
* large man at a healthy weight
* medium-sized or large woman who exercises a lot or has a physically active job

|  |  |
| --- | --- |
| Choose this many servings from these food groups to have 2,000 to 2,400 calories a day: | |
| 10 starches | 2 milks |
| 4 vegetables | 5 to 7 ounces meat and meat substitutes |
| 4 fruits | up to 5 fats |

CHW says;

*“Talk with your CHW or doctor about how to make a meal plan that fits the way you usually eat, your daily routine, and your diabetes medicines. Then make your own plan.”*

**Portion Size and Control**

*CHW Says,*

*“A regular pattern of meals is important. A regular pattern will keep you from getting too hungry and losing control.*

*Eat slowly. If you eat slowly, you will:*

*✏ Digest your food better.*

*✏ Be more aware of what you’re eating.*

*✏ Be more aware of when you’re full.*

* *Show them measuring utensils to get a sense how is 1, ½, 1/3 cup looks like.*
* *Meat products the ideal portion is 2 oz, that is size of one’s palm.*
* *Encourage to drink water with meals to avoid over food consumption.*

*Try pausing between bites. Put down your utensils. Enjoy the taste of your food.*

*Don’t worry about finishing all of the food on your plate.*

*Serve yourself smaller portions to begin with.”*

CHW Asks participants,

*“Do you have any personal strategies/tips that you use for portion control? If so, please share it with us!”*

Volunteer writes down tips on flipchart paper

CHW says,

*“You have given some great suggestions for tips on portion control. Here are some that we have for you:”*

# Portion Control

# How much you eat can be as important as what you eat, especially when you are diabetic or trying to lose weight. What can we do about large portions? The answer may seem obvious – eat less! But that’s easier said than done. Because we all think that bigger the portion sizes worth well for our money, and we have a hard time keeping portion sizes down.

# Here are some tricks that can make things easier for you:

# 1. First, educate yourself about what and how much you’re eating now. This means keeping a food record for at least a few days. Why? You might not realize where the extra calories are sneaking in.

# 2. Get measuring cups and spoons. Take the time to measure out your rice, cereals and other food items. You don’t need to do this forever, but being aware of what and how much you’re eating can help you pinpoint “problem areas.”

# .3. Visualize the portion sizes. Use your Use your hand as a guide. A fist is about 1 cup; your palm is about 3 ounces of protein and the tip of your thumb is a teaspoon of oil, butter1; one handful is about 1 ounce of Bay, Bhuja; Of course, hand sizes vary, so if you have large hands, cut back a bit.

# 4. Try not to serve foods “family style or Buffet Style” when eating at home. Bowls and platters of food left on the table are just calling out to you to have second (or third!) helpings.

# 5. Fill up on green salad, vegetables, or soup before eating your main course of food.

# 6. Picture your plate. Half your plate should be filled with non-starchy vegetables (like broccoli, carrots, cucumbers, salad, tomatoes, and cauliflower), a quarter with a carbohydrate food, such as rice or chapatti, and a quarter with lean protein. While you’re at it, use smaller plates when eating at home.

# 7. When eating from outside try to choose healthy food (like grilled chicken, vegetables, salads, etc...) than larger portions of low nutrient foods just because it’s a better deal. It’s not a better deal if you end up gaining weight and running high blood glucose levels later on.

# 8. Don’t go to a party or buffet hungry. Have a small snack before you go to take the edge off your appetite.

# 9. Resist eating from the box or bag. Portion out individual serving sizes of chips, mixtures, or any kind of snack foods.

# Yes all this small efforts will really pay off. Research shows that people who spend time watching and controlling portions are more likely to lose weight than those who just focus on, say, eating less fat or doing more activity. Even if your goal is not to lose weight but to maintain your weight or control your diabetes, portion control is another tool to help you meet your goal.

# CHW says,

# *For more tips on portion control, please see Handout B*

*REFER TO HANDOUT B*

**Myplate**

What is Myplate? What do you know about Myplate?

* This is a process that helps you and your family to make wise food choices.
* *All you need to have a* ***9”*** *Plate*
* *Remember:*
* *Eat variety types of vegetables*
* *Eat fruits everyday*
* *Ear whole grain types food*
* *Eat protein*
* *Eat food has calcium*

*CHW says,*

“We just discussed the importance of Myplate. Please fill in where you think the appropriate food groups belong and serving for someone with diabetes.”

Show participants what the correct Myplate looks like and discuss each food type and their portion size.

CHW’s Says *As you can see that the Myplate divides food into three groups: Grains and Straches, Vegetables, Fruits, Milk& Diary, Meat & Meat substitutes, Fat, Oil, & Sweets. You may find differences like potatoes and other starchy vegetables like bean, lentils in the grains, instead of the vegetables group, cheese is in the meat group instead of the milk group. Because these foods are carbohydrate rich foods and it affect blood glucose level, which indeed the primary concern to people with Diabetes.*

**The Basics of Eating Healthy**

*CHW says*, “One thing that is often missing from most people’s conception of ‘eating healthy’ is that of incorporating more FIBER in your diet. Who can tell me what fiber is?”

*CHW writes down responses and then says*:

**Dietary Fiber4**

Fruits, vegetables, whole grains, beans, and nuts and seeds are good sources of dietary fiber. Dietary fiber, especially a certain type of fiber called soluble fiber can help lower cholesterol levels by sweeping cholesterol out of the body before it gets to the bloodstream. Especially high in soluble fiber are foods such as oat bran, oatmeal, beans, peas, rice bran, citrus fruits, barley, apple pulp and psyllium seed (the main ingredient in Metamucil, a fiber supplement available at pharmacies and grocery stores)4. [REFER TO HANDOUT C1 and C2]

Whole Grains are a great way to incorporate dietary fiber into your diet.

**Why are whole grains good for you?**

Eating whole grains as part of your meal plan can:

* help you lose weight
* lower “bad” cholesterol
* increase “good” cholesterol
* help you control your blood sugar

**What foods are high in whole grains?**

Oatmeal, whole-grain cereals (Shredded wheat,

Basic 4 Whole Grain, Cheerios, and All Bran etc),

Shabu daana, Whole grain durum wheat chapatti,

Whole wheat and oats are some of the many foods

high in whole grains.

**How much whole grain should I eat?**

Eating at least three servings of whole-grain foods a day is a good

goal for most people. A serving should contain about 16grams

(16g) of whole grain.

Examples of food servings with 16grams of whole grain include:

* ½ cup of cooked oatmeal
* ½ cup of brown rice
* 2, 7inch whole wheat chapattis

CHW Says,

*Refined grains are not whole grains. Foods made with refined grains such as white bread, chapatti and roti made of white flour (Maida) noodles, baked goods like cookies (salty crackers, Rusk, moody, mixtures, pakaros) samosa, pihta, are often high in calories and low in nutritional value. They also raise blood sugar more quickly than whole-grain foods.*

*Read the labels when you shop. Foods high in whole grains usually list “whole grain” as the first item of the contents.*

*Always talk to your doctor or diabetes educator before you make any changes in your meal plan.*

*In order to help you start incorporating Whole Grains into your diet, we at DREAM Project have a small gift for you.*

CHW hands out packets of brown rice and says:

*“I know we all love to eat rice with everything..maccher jhol, bharta, mangsho..and could probably eat it for Breakfast, lunch and dinner if needed…but white rice is not the best for you. As I just told you, brown/whole wheat rice is a much healthier alternative. We are asking you to switch over to brown rice for just this month to see the changes it brings you. You can decide to mix it in half portion of brown and white rice, or just switch to brown rice for one time/day to see if it makes a difference for you. It is not only healthy but it also fills you up more.”*

**How Much Sugar are you Drinking?**

**Note:** this activity will utilize the board with the sugar contents in soda and juices created by Shirley

Activity for Sugar Content in Soft Drinks

CHW asks the group

*Does anyone drinks soft drinks or any other sugary drinks regularly or once in a while?*

**Wait for responses and write down what kinds of drinks they consume. Show them the chart.**

Instructions for CHW:

**Break them into 2-3 groups and each group an empty soft drinks or juice can. And ask them to look at the soft drink or juice label in the back for the “sugar”. Usually it is given in grams; now ask each group to divide the number of grams by 4 (dividing by 4 will gives you the sugar in teaspoon) and write down the number. Now switch the soft drink or juice can among the groups and do the same thing. Once they finish writing down the number pass around a bottle of water.**

**CHW asks participants** *“Is there is any sugar in the water?”*

After listening to responses, CHW Says:

*“We usually think drink juice like orange juice is healthy because it is loaded with vitamin C. But remember to get 4onces of orange juice, they need to squeeze at least 4-5 oranges and throw away the good part – “THE FIBER”. We usually don’t eat 4 or 5 oranges or apples in one sitting, but we are doing it when we sipping on fruit juices.*

*So let make some changes in our eating habits, starting now…..”*

“EAT YOUR FRUIT AND DRINK WATER”

**CARBOHYDRATES**

*Now let’s talk about CHO and the importance of CHO counting. Does anyone know what CHO is? OR tell me some foods that contains CHO*

*CHO are sugars or starchy foods that provide our body with energy. Our body can break CHO down quickly and efficiently.*

*Now can anyone see the relation between carbohydrates and Diabetes (high Blood Sugar)?*

Carbohydrates and Diabetes 2

REFER TO HANDOUT D

CHW Says,

*People with diabetes must pay close attention to their dietary intake, portion sizes, and meal frequency. What you eat, or more specifically the carbohydrates (or carbs) in the food you eat, are the body’s main source of glucose. Foods high in dietary carbohydrates include sugar, starchy foods like potatoes and pasta, and grain-based foods like breads and cereals. Carbohydrates can also be found in dairy products and fruits and vegetables, as well as many beverages. Diabetes does not mean that these carbohydrate-containing foods must be completely cut out of the diet; in fact, many of these foods contain nutrients that are essential to good health3. However, their intake must be carefully controlled and other blood glucose lowering tools such as exercise should be used to balance out their effects. For most people, special treats such as a slice of birthday cake can be an occasional indulgence as long as portions are controlled and they’re figured into the overall daily carbohydrate and calorie allowance. It is good idea to log postprandial (after-meal) blood sugar testing to understand the impact of new foods on blood glucose levels.[[4]](#footnote-4)*

*You may all agree with me that most people with diabetes seem to be on an endless quest for good-tasting food that won’t play havoc with their blood sugar levels. Unfortunately South Asian foods (Chapattis, Dal, Rice and on….) are high in carbohydrate content and the problem is that many foods high in carbohydrates send the blood sugar levels skyrocketing. So how we going to balance it? Any one… “By counting our carbohydrates intake”*

*Carbohydrate counting is preferred by many people with diabetes because it can allow greater freedom of food choice than the dietary exchange system. As the name suggests, carbohydrate counting (also called carb counting or carb gram counting) involves computing the number of carbohydrate grams in a given meal or snack. Total carbs are tallied up on a running basis to ensure that the total doesn’t exceed a predetermined dietary goal for the meal and/or day4.*

*In simple carb counting method, every 15 grams of carbs are counted as one carbohydrate choice, with a predetermined number of choices allotted daily (as determined by a dietitian and based on caloric requirements)4. So Remember The Magic Number 15grams. The simple carb counting is the answer for those who like the simplicity of the dietary exchange system but crave added variety in their diet and at same time control blood sugar level. It also allows diabetic patients to calculate the right amount of insulin to counteract the corresponding blood sugar rise from their meal. It is recommended by the ADA most diabetics eat between 200-240 carbs/day (that is ~ 12-13 servings of carbs daily) or restrict their intake to 2000 calories or less. Most nutrition data will provide you nutrition information in terms of 15 g of carbs or 1 serving. Read the nutritional labels for the carbohydrate content of the foods that you consume. The table below taken from (South Asian Food Diabetes Nutrition Values) provides the information of some commonly consumed South Asian dishes in terms of 15g of carbs.*

Rice and Vegetables Dishes

 Food Name                               Measurment       Carbs (g)

Mixed Vegetables   1/4 Cup 15

Aloo Bharta 1/2 Cup  15

Shaag

Bhindi (Okra) 2/3 Cup 15

Briyani ½ Cup  15

Pi Plain Pitha 1 6” inch 33gms

Boiled Rice 1/3 Cup                     15

Mutter Pulao  1/3 Cup                      15

Khichuri 1/2 Cup                      15

Baingan Ka Bhartha 1/2 Cup                       5

Chole 3/4 Cup 5

Dals

Food Name     Measurement                Carbs (g)

Chana Dal 1/2 Cup 15

Moong Dal            1/4 Cup 15

Mushoor Dal            1/3 Cup                       15

Urad Dal           1/2 Cup 15

Breads

Food Name Measurement              Carbs (g)

1 Chapati/Roti 7'' diameter  1     15

Naan                     1/3                 15

Dal Puri                        5’’ 1                  15

Snacks

Food Name Measurement           Carbs (g)

Aloo Samosa  ½ 15

Aloo chop 2 15

Vegetable, meat, tuna kabab 1 medium size 15

[[5]](#footnote-5)

**Salt and Sodium—How Much Do We Need?**

Note: For this activity, you will need a ¼-teaspoon measuring spoon, a 1-teaspoon measuring spoon, and some salt. Use a colored plate or plastic test tube to show the sodium levels.

Say:

Eating less salt and sodium can help you prevent or lower high blood pressure. You know what salt is, but you may wonder what sodium is. Sodium is a part of salt. It is also part of mixtures used to flavor and preserve foods.

Say:

Most people are eating much more than 500 milligrams of sodium every day.

Say:■■

You should cut back the amount of sodium you get from all foods and beverages to less than 2,300 milligrams of sodium—or about 1 teaspoon of salt—per day.

Note: Now show 1 teaspoon of salt.

Say:■■

If you have high blood pressure, it would be helpful to decrease your sodium intake to 1,500 milligrams of sodium per day.

Note: Now show 2/3 teaspoons of salt.

Say:■■

Most people in the United States eat about 4,000 to 6,000 milligrams of sodium each day, or about 2½ teaspoons.

Note: Now show 2½ teaspoons of salt.

Say:■■

This is about 8 to 12 times more sodium than the body needs. Eating this much salt and sodium may lead to high blood pressure.

Let’s talk about what foods are high in sodium.

* Most of the sodium that we eat comes from packaged foods, processed foods, restaurants, and fast food.
* When you eat out, most of the food will be high in sodium. If you have high blood pressure, you should eat out less often.
* Sodium also comes from salt added during cooking or at the table.

Say:■■

* Choosing and preparing foods that are lower in salt and sodium may help prevent or lower high blood pressure. Eating more fruits and vegetables, whole-grain breads and cereals, and fat-free or low-fat milk products, or fat-free or low-fat lactose-free products, also may help lower blood pressure.

Practice with participants in picking foods with lower sodium using nutrition labels of various high sodium and low sodium products.

|  |  |
| --- | --- |
| Problems You May Encounter | Solutions |
| Using fewer traditional sauces or seasonings is difficult. | When preparing foods, use a smaller amount of the sauces and seasonings that are high in sodium. Replace some with light versions, such as low salt tomato ketchup sauce, which has less sodium. Also limit condiments such as aachaar which can be high in both salt and sugar (depending on the type of acchar consumed) |
| The food has no flavor. | Use herbs and spices to add flavor to foods. like garlic, ginger, coriander powder, cumin power, bay leaf, green onion, cinnamon stick, cardamom, methi, green, and red chilies, lemons, turmeric, black cumin, coriander leaf |
| Family members will get upset. | Cut back on salt slowly. Use less salt each time you cook, so family members can get used to the taste. |
| Adding salt is a hard habit to break. | Give yourself time to get used to using less salt. Choose brands that are lower in salt. Take the saltshaker off the table. |

**Good Fats, Bad Fats and Cholesterol and Diabetes[[6]](#footnote-6)**

REFER TO HANDOUT E

*Today, we will talk about the different types of fat and how they affect heart health.*

*There are two main types of fat—saturated fat and unsaturated fat. Most foods contain some of both types. The saturated fat plus the unsaturated fat in food make up the total fat found in food.*

*Saturated fat is found in foods that come from animals, such as high-fat meats, cheese, milk, and butter.*

*Another type of fat called trans-fat also raises cholesterol. Trans fat is found in a variety of baked goods (such as cookies, pies, and pastries), fried foods, stick margarine, and vegetable shortening. Choose light margarine (soft tub) instead of stick (hard) margarine, and look for trans-fat-free spreads in the grocery store.*

*Eating too much saturated fat and ••trans-fat will raise your blood cholesterol level more than anything else you eat. This will raise your chances of developing heart disease. Saturated fats and trans fats are the bad fats. And Mono and Polyunsaturated fats are the good fats. Refer the slides and handout.*

Say: ■■

*It is important to limit the amount of saturated fat and trans fat you eat, but you need some dietary fat to be healthy. Fats are necessary because they are used by the body to:*

* *Store and provide energy.*
* *Help carry vitamins A, D, E, and K throughout the body. We talked before about the types of fat. So let’s review.*

Say: ■■

*You want to limit the amount of saturated fat in your diet.*

Say:■■

*Even though vegetables and fruits are low in saturated fat, any plant food prepared with oil high in saturated fat (for example, eggplant or banana that is deep fried in coconut or palm oil) may raise your cholesterol level.*

Show ■■group members a bottle of vegetable oil.

Say:■■

*Unsaturated fats are usually liquid at room temperature. As mentioned before, a few oils (coconut, palm, and palm kernel) are high in saturated fat.*

Say:■■

*Foods that come from plants do not contain cholesterol. Foods that do not contain cholesterol include:*

|  |  |  |
| --- | --- | --- |
| Fruits  Vegetables | Beans  Tofu | Rice  Grains  Cereals |

Good Fats and Bad Fats: Avoid, Eat Less, and Enjoy!

*Here are some examples of the different types of fat: REFER TO HANDOUT F*

|  |  |  |
| --- | --- | --- |
| Avoid…Trans Fat | Eat Less…Saturated Fat | Eat…GOOD Fats |
| * Aalu Bhaji * Coconut Oil * Deep Fried Foods such as shingara, samosas, patties * Many fresh baked foods (pies, cookies) * Some packaged snacks such as chanachur mix, motorshuti, nimki, etc) * Candy | * Butter * Whole Milk * Cream * Red Meat * Dessert (payesh, shemai, kulfi, rosher mishti like roshogolla, jalebi, pantua) | * Oily fish like salmon, elish, etc. * Olive Oil * Nuts * Canola Oil * Soybean or Corn Oil |

Helpful Tips:

It is important to know that eating foods high in saturated fat can raise your blood cholesterol level. So it essential to modify your recipes by using healthy choices. Avoid adding butter or oil while making chapatti and other foods like dhal and other curries, make chapatti with boiling water or some warm low fat milk. Now it is low in fat, saturated fat, trans fat and cholesterol, and still taste great.

What meat can I eat with high cholesterol?

Fatty Fish

The fact is fish high in omega 3 fatty acids help lowers bad cholesterol and raise the good cholesterol. Fatty fish include salmon, mackerel, albacore tuna, herring, sardines and lake trout. The American Heart Association (AHA) recommends consuming fatty fish at least twice a week.

Commonly eaten Bengali **fishes high in Omega 3 Fatty Acids include:**

* Salmon
* \*Ayer
* \*Chitol
* Katla
* Rui
* \*Elish
* Rita

Make sure you don’t eat more than 2-3 pieces of small fish per meal.

REFER TO HANDOUT H

**Poultry and Red meat**

When you are trying to lower high cholesterol, select poultry without the skin.

1. Take the skin (skin has a high fat content) off chicken. Cut the chuck of fat off beef and

L amb..

1. Removing the skin from poultry and selecting the white meat will help cut back on fat intake. (Dark meat contains a higher fat content than light meat.)
2. When preparing poultry, do not fry it, but enjoy it baked, grilled or broiled.
3. Cut the chunk of fat off beef and other red meat.

Trimming beef, lamb and pork of fat reduces simply by lowering the amount of fat.

1. Meat, particularly red meat, is commonly identified as a major source of dietary cholesterol2.
2. Chill chicken, beef, and lamb curries in the freezer or refrigerator. The fat will form a hard layer. Take off the hard fat layer and heat it and serve.

**Liver and Eggs**

Generally, foods high in animal fat are also high in cholesterol. Two expectation to this generalization are liver and eggs, which are not high in fat but are high in cholesterol.[[7]](#footnote-7)

* Liver contains large amount of cholesterol because the liver is the body organ that makes cholesterol.
* Eggs contain large amounts of cholesterol because they contain nutrients and other substances to support a growing embryo2 (egg also contain a very high quality of protein and are rich in vitamins and minerals).

**The table below shows the approximate cholesterol content of some common animal-based foods3:**

|  |  |
| --- | --- |
| Foods | Milligrams of cholesterol |
| 3 ounces of liver (3oz is about the size of a cassette tape) 3 ounces of meat is about the size of a cassette tape | 300 |
| one large egg | 215 |
| 3 ounces of lean red meat | 90 |
| 3 ounces skinless poultry | 90 |
| 3 ounces of fish | 50 |
| 3 ounces of shrimp | 133-166 |
| one cup of whole milk | 33 |
| one cup of skim milk | 4 |
| 1 teaspoon of butter  ( a teaspoon is size of a die) 1diceF | 11 |

The AHA recommends that you eat less than 300 milligram of cholesterol. So it is very important to read your food labels for cholesterol and saturated fat content. What counts is your daily average over time, not your exact total each day. If you scrambled eggs for breakfast on Saturday but lean meats poultry, and fish, along with liberal servings of vegetables, fruits and grains the rest of the week, then your average is likely to be below 300 milligrams.

*Foods that come from plants do not contain cholesterol.* ***Foods that do not contain cholesterol include:***

|  |  |  |
| --- | --- | --- |
| Fruits  Vegetables | Beans  Tofu | Rice  Grains  Cereals |

**HOW CAN YOU MAKE THE SWITCH TO HEART HEALTHY EATING?**

REFER AGAIN TO HANDOUT E

How to switch your family from whole milk to fat free milk:

To switch your family from drinking whole milk to fat free milk, serve them whole milk whole milk mixed with reduced fat milk for a month. During the next month, serve them reduced fat with low fat milk, then low fat mixed with fat free milk, until you and your family were drinking only fat free milk. Soon you couldn’t even taste the difference.

Try some of these simple changes:

**When Shopping**

1. Buy low fat (1percent) or fat free (skim) milk and low fat or fat free yogurt.

2. Buy nonstick cooking spray. Spray it on the skillet or tawa when making chapatti and other foods instead of greasing the pan with butter.

3. Read the food label to help you choose foods lower in saturated fat, trans fat and cholesterol.

*Practice with participants on how to choose low fat items using Nutrition labels from high fat and low fat food products.*

### Using the Nutrition Facts Label

You can also use the [Nutrition Facts Label](http://www.diabetes.org/food-and-fitness/food/what-can-i-eat/nutrient-content-claim-and-percentage.html) on foods to guide you. The first thing to check is the serving size. The second is the total carbohydrate. The total carbohydrate tells you how much carbohydrate is in one serving of the food.

**Label claims**  
Foods labeled as sugar-free, no sugar added, reduced sugar, and dietetic may still contain carbohydrate. Sugar is only one [type of carbohydrate](http://www.diabetes.org/food-and-fitness/food/planning-meals/carb-counting/planning-for-carbs.html) that affects blood glucose levels. To get the complete amount of carbohydrate, look at the Nutrition Facts Panel instead of relying on claims on the front of the box.

**Sugar on the label**  
“*Sugar is listed under the Total Carbohydrate on the Nutrition Facts Label. Keep in mind that it includes both added sugars and naturally occurring sugars, such as the natural sugar in raisins.*

*Sugar listed on the label does not include sugar alcohols that are in the product. It is voluntary for food manufacturers to list sugar alcohols on the label. (Total carbohydrate does include sugar alcohols in the total.) Some manufacturers list sugar alcohols on the label and some do not. If a food doesn’t list sugar alcohols on the label, you can look for it in the ingredient list. Look for ingredients that end in "ol" like maltitol or sorbitol.”*

*Sugar free doesn’t mean you can have that food as much as you want without any change in your blood sugar. Even though it’s sugar free it have carbohydrates that brings the blood sugar high.* ***Refer the sample label in the slide 66 for that.***

**The Most Important Thing to Look For**  
CHW Says: “*If you don't have a lot of time when reading labels, simply look at the total carbohydrate in a food. The total carbohydrate includes starch, fiber, sugar, and sugar alcohols. Using the amount of total carbohydrate will give you a pretty good number to use for carbohydrate counting. It is more helpful to check the total carbohydrate because it includes both sugar and starch. If you only look at the sugar content, you are not accounting for the starch in a food.”*

**Eating Desserts with Diabetes**

## Sweeteners and Desserts

If you have diabetes, it doesn't mean you will never have birthday cake or golab jamun again. With a little planning, you can have a small serving of your favorite dessert. It’s best to save the sweets for special occasions so you don’t miss out on the more nutritious foods your body needs. But don’t worry, you can include sweet treats on special occasions and still mange your diabetes well.

### The Hype About Sugar

CHW Says:

“*The myth that sugar causes diabetes is commonly accepted by many people. Research has shown that it isn't true. Eating sugar has nothing to do with developing type 1 diabetes. The biggest dietary risk factor for developing type 2 diabetes is simply eating too much and being overweight—your body doesn’t care if the extra food comes from cookies or beef, it is gaining weight that is the culprit.*

*In the past, people with diabetes were told to completely avoid sugar. Experts thought that eating sugar would raise blood glucose levels very high. Research around this issue has shown that while the* [*type of carbohydrate*](http://www.diabetes.org/food-and-fitness/food/planning-meals/carb-counting/planning-for-carbs.html) *can affect how quickly blood glucose levels rise, the total amount of carbohydrate you eat affects blood glucose levels more than the type. Now experts agree that you can substitute small amounts of sugar for other carbohydrate containing foods into your meal plan and still keep you blood glucose levels on track.*

*That doesn't mean you can eat all the sugar you may want. Most sweets contain a large amount of carbohydrate in a very small serving. So you need to be sure to have a small serving. Saving sweets for a special occasion is the most healthful way to eat so you focus your meal plan on the most nutrient dense foods such as vegetables, beans, whole grains, fruit, non-fat dairy, fish and lean meats.*

*If you tend to overeat on sweets, don't buy them. Instead, plan to have dessert when you are away from home. Split the dessert with a friend to keep yourself on track”.*

### Including Sweets into Your Meal Plan

CHW Says:

“*The key to keeping your blood glucose levels on target is to substitute small portions of sweets for other carb-containing foods in your meals and snacks. Carb-containing foods include bread, tortillas, rice, crackers, cereal, fruit, juice, milk, yogurt, potatoes, corn, and peas. For many people, having about 45 to 60 grams at meals is about right. Serving sizes make a difference. To include sweets in your meal, you can cut back on the other carb-containing foods at the same meal.”*

*“For example, if you'd like to have cookies with your lunch, you need to substitute for another carb-containing food. If your lunch is a turkey sandwich with two slices of bread, here are the steps you would take to make the substitution”.*

1. Your first step is to identify the carb foods in your meal. Bread is a carb.
2. You decide to swap two slices of regular bread for two slices of low-calorie bread (with ½ the carbohydrate) and have the cookies—it's an even trade.
3. Your total amount of carbohydrate remains the same for the meal.

**Bengali Sweets with Lower Sugar Content**

Most of the time, when we buy or make Bengali mishti there are no nutrition labels to read. You don’t have to avoid Bengali mishti altogether. Here are some alternatives to lower-sweet mishti:

* Chanar shandesh
* Mishti Shimoy or Payesh with splenda
* Mishti pita typically has less sugar. When making mishti pita (e.g. theler pita, patishapta, pakan pita), use splenda instead of gur

**Refer to Handout I: Eat Well, Live Well: Motivational Strategies to Eating Healthy**

**Healthy Eating Habits and Behavioral changes:**

* For more variety, include your favorite foods and foods you haven't tried before. Get creative within the guidelines of your healthy-eating plan.
* Look for inspiration from others who are following a plan — and enjoying the benefits.
* Walk after meals to digest your meals, walk with a family member or friend to keep you company. In winters take few laps inside the house.
* Choose the healthiest foods in the right amounts at each meal
* If you stick to your meal plan and watch your serving sizes, you'll eat about the same amount of carbohydrates and calories every day. This helps control your blood sugar and your weight. On the flip side, the more you vary what you eat — especially the amount of carbohydrates — the harder it is to control your blood sugar.
* If you're already eating a variety of healthy foods, you may simply need to adjust portion sizes to keep your blood sugar (glucose) under control.

### MAKE SHORT-TERM & LONG TERM GOALS

Make a list of short-term and long-term goals.  Short-term goals might include testing your blood sugar levels more often if you've been lax in testing.  Other short-term goals are:

a) Eating your meals at regular times

b) sticking to your meal plans  
c) starting an exercise program  
d) starting a food journal

**Long-term goals** are also important.  Long-term goals might include losing twenty pounds in five months, if you're overweight.  Other long-term goals might include:

a) Having your Hemoglobin A1C level drop closer to normal levels  
b) losing a certain amount of weight in a few months  
c) learning more about diabetes

### USING REWARDS

*You may want to use a reward system in your goal setting.*

*If you want to use rewards make sure the rewards aren't food or activities that would be counter-productive to your diabetes management plan.  A chocolate ice cream cone might sound like a great reward, but if it will make your blood glucose rise to much and/or make you gain weight it's not a good bonus.  Now that you know what and when to rewarding yourself, go ahead and reward yourself for a job well done when you complete your goal. Reward Shouldn’t be food, it can clothing, trip to the mall oor movies, getting the jewelry that you eyed on.*

Try to choose rewards that will help you feel better about your new found success and help you with your diabetes control. Try a low sugar ice cream or a diabetic snack. For some people feeling better and having better diabetes control is a good reward in itself.

* Make realistic goals and approach them in manageable increments.

CHW Says:

*“How do you stick to your resolve when you're offered something you're not comfortable eating? Choose phrases that acknowledge the person's feelings, but still make your point: "That looks amazing, and I wish I had room, but I'm really enjoying the [insert other food here]." If the server persists, take a little of the food and give it a try, if you like; there's no law that says you have to clean your plate. If you're offered a second helping you don't need, keeping your reply in the past tense gives your words a sense of finality: "It sure was delicious, but I've had enough." "I couldn't eat another bite, but it was fantastic."*

*If you have trouble saying no, take a tip from trained speakers and practice, practice, practice. Take some time ahead of the event to imagine what it will be like, being as specific as possible. Who will be there? What will be served? How will you act, and what will you say? Rehearse as much as you need to, until you feel you can head into the festivities with confidence.”*

***Managing Your Eating Habits in Social Situation***

* If you are going for a party eat something before that at home, doing this when you are at the party you won’t feel an urge to eat everything and concentrate on the food at the table that is healthy and appropriate for you.
* Involve your family and friends talk to them about your goals and ask them to motivate you in your fight to control diabetes.

**Motivational Strategies to Eat Healthy**

CHW Asks;

*“What are some of your strategies to eat healthy when you go out to a restaurant or a dawat?”*

**Refer to Handout I: Eat Well, Live Well: Motivational Strategies to Eating Healthy**

**Eating Out? Make Healthy Choices**

* As a beverage choice, ask for water or order fat-free or low-fat milk, unsweetened tea, or other drinks without added sugars.
* If you drink Coffee or lattes — ask for them with fat-free (skim) milk.
* In a restaurant, start your meal with a salad packed with veggies, to help control hunger and feel satisfied sooner.
* Order an item from the menu instead of heading for the “all-you-can-eat” buffet.
* Look for healthy, low cal. And low sugar
* Order steamed, grilled, or broiled dishes instead of those that are fried or sautéed.

**Final Words**

*To Summarize, today we learned about many things*:

* Healthy Eating
* Calories and Portion Size and Control
* About the diabetes food pyramid
* All about Fiber
* Avoiding Sugar and Carbohydrate counting
* Managing BP and reducing your salt intake
* How to increase your healthy chloresterol by eating certain foods
* Label Reading
* Options to incorporate healthy food into your diet without losing the taste!

APPENDIX

**Handout A –** ***Diabetes and Healthy Eating***

**Handout B**- ***Portion Control***

Portion Control (adapted from Learning about Diabetes, INC (2006) and NDEP Power to Prevent, Appendix L) <http://www.learningaboutdiabetes.org/downloads/PortionSizesEN.pdf>

**Handout C1**- ***About Fiber***

Dietary Fiber Taken from <http://www.dietaryfiberfood.com/dietary-fiber/>

Ramani R., Murthy N.K. andAnnapurani S. (1986) Indian J. Nutr. Diet**23**, (11), 309–314.

**Handout C2**- ***About Grains***

About Grains taken from Portion Control (adapted from Learning about Diabetes, INC (2006) and NDEP Power to Prevent,)

[http://www.learningaboutdiabetes.org/downloads/](http://www.learningaboutdiabetes.org/downloads/PortionSizesEN.pdf)

**Handout D**- ***Carb Counting***

Karmeen D. Carbohydrate Counting: A practical meal planning option for people with Diabetes. Clinical Diabetes 23:120-122, 2005

Kulkarni K: Carbohydrate counting for pump therapy: insulin to carbohydrate ratios. In A Core Curriculum for Diabetes Education. Diabetes Management Therapies. 5th ed. Chicago, American Association of Diabetes Educators, 2003.

**Handout E**- ***Cholesterol***

The National Cholesterol Education Program (May 16, 2001), Journal of American Medical Association

Taken from American Heart Association <http://www.americanheart.org/presenter.jhtml?identifier=180>

Controlling your Cholesterol: Facts you should know. Taken from <http://www.askdrsears.com/html/4/T040800.asp>

Cholesterol, Fiber and Oat Bran: American Heart Association, Taken from <http://www.americanheart.org/presenter.jhtml?identifier=4494>

**Handout F- *Good fats and Bad Fats***

**Handout G- *Nutrition Labels***

Portion Control (adapted from Learning about Diabetes, INC (2006) and NDEP Power to Prevent, Page 9)

[http://www.learningaboutdiabetes.org/downloads/](http://www.learningaboutdiabetes.org/downloads/PortionSizesEN.pdf)

**Handout H- *Healthy Fish***

1. Modified from Power to Prevent session 2 and 4 http://www.cdc.gov/diabetes/pubs/pdf/powertoprevent2007.pdf [↑](#footnote-ref-1)
2. Taken from: http://diabetes.niddk.nih.gov/dm/pubs/eating\_ez/#eat [↑](#footnote-ref-2)
3. Taken from: http://diabetes.niddk.nih.gov/dm/pubs/eating\_ez/#eat [↑](#footnote-ref-3)
4. , 3 Modified from Diabetes Network, session Diet/ Nutrition [↑](#footnote-ref-4)
5. 4 Taken from Journal of American Dietetic Association, *Use of Carbohydrates in Clinical Practice, 98(8) pg. 897-905* [↑](#footnote-ref-5)
6. Modified from ASPIRE: Healthy Heart, Healthy Family, Session 5 [↑](#footnote-ref-6)
7. Taken from American Heart Association <http://www.americanheart.org/presenter.jhtml?identifier=180>

   3 Controlling your Cholesterol: Facts you should know. Taken from <http://www.askdrsears.com/html/4/T040800.asp> [↑](#footnote-ref-7)