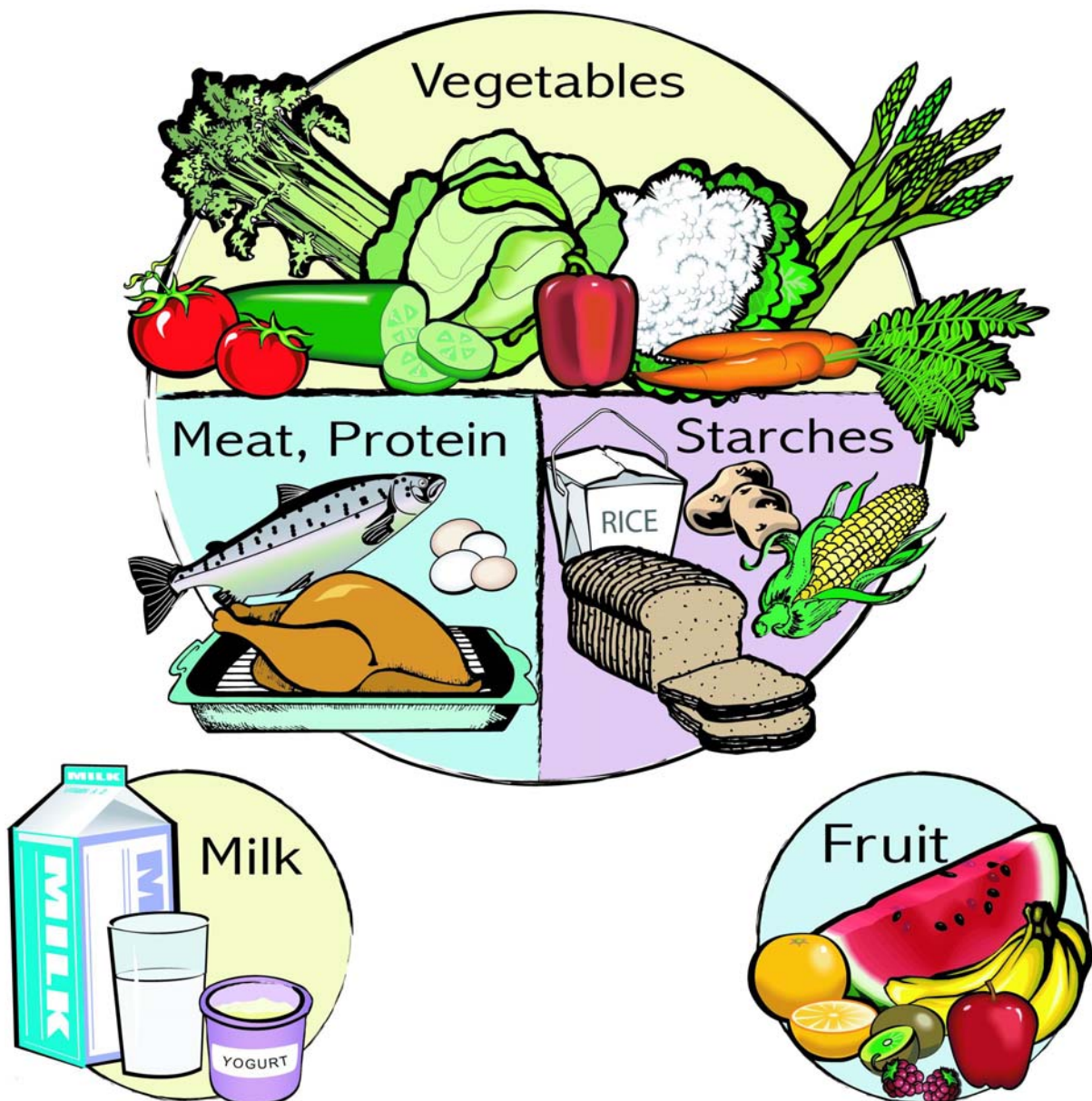


Meals Made Easy For Diabetes

2006



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Meals Made Easy for Diabetes

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Introduction

An estimated 178,000 – about 6.5% - of adults in Oregon have been told that they have diabetes. Another 64,800 likely have the disease, but do not know it. This is a concern because diabetes is a chronic disease that can result in serious complications, such as heart disease, kidney disease, blindness, stroke, amputations and death.

The economic burden of diabetes is staggering: almost 42,700 hospitalizations, with any mention of diabetes, cost Oregonians over \$700 million during 2004 alone. Unfortunately, diabetes is a growing problem in our state: the 6.5% percent of people who self-reported having diabetes in 2004 is up from 4.0% in 1995.

Research clearly shows that the risk of diabetes complications can be decreased when blood glucose levels are maintained within a range that mimics “normal” levels. To achieve this level of control, lifestyle changes (healthy diet, regular physical activity and weight management) are recommended.

Why Meals Made Easy?

In 2000, over one-third of Oregonians with diabetes reported that they had either never received meal-planning education, or if they did, they were still confused. This lack of education and understanding was coupled with the fact that in 2004, 36% of adult Oregonians with diabetes said that it is “difficult” or “very difficult” to follow a recommended eating plan.

A healthy diet and regular physical activity are considered the cornerstones of diabetes self-management. The lessons and recipes in the Meals Made Easy program are presented to people with diabetes and their family members to improve daily food choices. The Meals Made Easy program was developed in an effort to help reduce the burden of diabetes complications by offering a program that can enhance meal planning and food preparation skills for self-management, with the ultimate goal of good blood sugar control.

The Meals Made Easy program offers a social environment conducive to the transfer of knowledge and skills by participatory nutrition education, food preparation activities, and tasting of foods. Self-efficacy is further enhanced by the social support of others in the classroom. Extension faculty and diabetes health care professionals facilitate the sessions, incorporating learning, discussion, and goal setting.

The Goals of Meals Made Easy:

- Participants will understand how food choices and serving sizes impact blood glucose.
- Participants will be able to plan meals using the Plate Method and Nutrition Facts food labels.
- Participants will learn how to buy healthy foods for Plate Method meals.
- Participants will be able to evaluate recipes and make healthy recipe alterations for Plate Method meals.

The following topics are covered in the four sessions:

- 1. What You Eat Makes A Difference – teaches participants how food choices and portions impact blood glucose (sugar). Additionally, participants will be shown the Plate Method as a simplified method for planning balanced meals.*
- 2. Planning Healthy Meals – provides participants with practice in planning meals and using the Plate Method. Participants are also shown how to use Nutrition Facts labels to assist in meal and snack planning.*
- 3. Shopping Smart – teaches participants how to buy healthy foods using Nutrition Facts labels and to reinforce their knowledge of appropriate food portions.*
- 4. In the Kitchen – illustrates techniques for evaluating recipes and making healthy recipe alterations.*

The Plate Method is not intended to replace diabetes education delivered by qualified health professionals such as Registered Dietitians and Certified Diabetes Educators. This program is not intended to provide individualized meal plans for participants. Individualized goals for calories, carbohydrate, fat, and sodium are not provided. The lesson plans do not include the use of Exchange Lists or carbohydrate counting. Food groups and the 2005 Dietary Guidelines for Americans are introduced in this program; these are intended to supplement, but not replace, individualized meal planning instructions from qualified health care providers.

Implementation Guide

Who will Benefit from the Course?

This course was developed to help a person with diabetes make meal choices to better manage his/her blood sugar. Because a person with diabetes may not be the person who makes the meal planning decisions in the household, this class is appropriate for family members and caregivers.

Recruitment

Who to recruit?

Meals Made Easy for Diabetes was designed for people with diabetes and their family or support person(s). The class is best geared towards people with diabetes who are:

- Elderly
- Low income
- Low literacy
- Interested in diabetes meal planning
- Hispanic

Where to recruit?

Here are some ideas of places you may want to post information about the classes you are offering. Consider your target audience and where they are most likely to learn about your program:

- Health clinics
- Pharmacies
- Physician offices
- Health plan newsletters
- Local community gathering places (i.e., senior centers, congregate meal sites, local food bank)
- Religious organizations
- Major employers
- Referral from health care provider

How to recruit and what to say?

What methods are you going to use to get people with diabetes or their family members to come once you have identified where you will recruit? What are the ways that your target audience gets their information? Do they get their information from radio, word of mouth, or newspapers? Begin advertising six-weeks to one-month prior to the class.

Here are some ideas on how to get information about the MME program to your audience:



Public Service Announcements (PSAs) on local radio stations – You may already have links with local radio stations. If you don't, identify which radio stations may reach your target audience and contact those stations to air PSAs. You can use the sample letter available on the CD ROM to provide information to the radio station; the letter can also be adapted for a community organization. A sample radio script is also included on the CD ROM.



Newspaper ads – Contact your local paper that advertises community events and ask them to place an ad in their paper. You may want to add your own logo and customize the ad to your community organization. A sample ad can be found on the CD ROM.



Fliers/ Brochures – Adapt the sample flier available on the CD ROM and post them in sites where you plan to recruit participants.

Logistics

Class Location

Successful programs can be held in a variety of settings. You may want to consider what recipes you are going to use and what type of facility you need to be able to prepare those recipes. Is there a common meeting place or community center where your target audience generally gathers? Is there a location that is easy to access along public transportation routes?

High schools and middle schools with home economics labs can be ideal. Senior citizen centers or cultural centers with feeding sites are adaptable and are also good places to hold a class. Church fellowship halls with adjacent kitchens, technical education centers and public libraries with kitchens can be used successfully.

Make sure participants and volunteers are permitted to use the kitchen facility at the site you choose. Reserve your site far in advance. You will need access to the site at least one hour prior to the program for setup and one hour after the program for cleanup.

Class Time

Time of day and day of week are important considerations. Depending upon who your audience is, time of day and day of the week may make a difference in attendance. Determine who your audience is and identify what the most convenient time would be to hold the class. For example, a younger, employed person may not be able to attend a class in the middle of the day, during a work week. An elderly person who may not drive at night may be more likely to attend a class held during the day. Weather might be a factor as well. One site offered the class after church on Sundays and had a full class each time. Another site offered their class on Saturday afternoon when many of the Latino grandparents in their community were free to care for their grandchildren. Also consider better times/days for volunteer teachers (RD/CDE) since timing may likely determine their ability to assist you.

Class Size

The optimal class size is 15-20 people. You may be able to accommodate more people, depending upon the location of the class. Keep in mind that if you register 20 people, only 15-17 may end up attending the class. You may also decide to create a waiting list if you plan to hold the class again. Participants are expected to attend all sessions.

Class Fee

Some pilot sites were able to offer the classes at no charge, while others decided they would have to charge. Charging a fee for the class depends upon the resources your organization has available to buy supplies and in-kind donations received for items such as the meeting space, food, and printing.

Class Leader/Instructor

From the piloting process, we learned that it is necessary to have a Certified Diabetes Educator (CDE) or a

Registered Dietician (RD) present at each class. Extension faculty who taught the classes felt that clinical questions asked by participants were outside the scope

Supermarket Tour Suggestions

- Identify stores that are easily accessible to your target population and close to public transportation stops.
- Consider asking for help in taking your group around or make arrangements to meet small groups at different times, or on different days. More than 4 or 5 participants will block aisles for shoppers.
- You will want to contact the store manager for permission to bring your group into the store. Do this as soon as you establish dates for your classes. Questions for the manager include:
 - What are the best times for a tour? You will not want to be conducting a tour during "rush hour."
 - Can your group gather in a meeting room or dining area at the beginning and end of class?
 - Will you consider providing product samples? Suggestions include unusual produce, different fat levels of milk or cheese, special "diabetic" foods, or other items your group might benefit from sampling.

of their expertise, thus having a CDE or RD present was invaluable. The CDE or RD was able to provide accurate and current clinical information related to diabetes.

Who you may want to teach the classes:

- Local Extension faculty: visit <http://extension.oregonstate.edu/people/employeeSearch/employeeSearch.php> to locate an Extension faculty member in your area
- CDE: contact a local hospital or clinic
- RD: contact a local hospital or clinic

Meet with your local Diabetes Coalition or professional organization where RDs and CDEs meet regularly. These groups often have a mission to assist educational efforts such as this and may even have a budget to help. Share the history of the program, its goals and success stories. Request assistance in teaching the class, perhaps on a rotating basis, so that the volunteer "burden" can be shared.

Request a meeting with your local RD/CDE from a hospital or clinic. Be sure you have a plan in mind (dates, location, time involvement), but be willing to be flexible so that these professionals can help. Often their administrators are supportive of volunteerism but their work with patients/clients must come first.

Oregon Dietetic Association groups: Contact a local Registered Dietitian at a hospital, clinic or assisted living center for officer information and meeting schedule. (www.eatrightoregon.org)

Oregon Diabetes Educators: A membership list can be found at ODE web site: www.odenet.org though not all CDEs belong to this organization.

Presentation Timing

(2 hours with participants/lesson)

Expect to take at least 30 minutes prior to each class to review the lesson script and activities. Additional time will be needed to gather materials. That time will vary depending on the particular activities/demonstrations. The following is an estimate of times for class activities:

<u>Activity</u>	Time
Greeting/Review Goals.....	5 - 10 minutes
Lesson/Activities	60 - 90 minutes
Recipe Demonstration	15 - 30 minutes (group activity at supermarket)
Goal Setting/Closing	10 - 20 minutes (do not omit)

Class Retention

Contact an influential person from the targeted group for assistance in identifying the needs and concerns of your target audience. Participants are more likely to return for each class if their questions and concerns are being answered and if the class conditions are suited to their situations.

Here are some things community groups have done to get people to come back to the next class:

- **Provide transportation.** Does your organization have a van, or is there a local organization that has a van that you can borrow, to pick up people who do not drive and have no alternative way to get to the class? Can you help participants navigate the public transportation system to get to the location where you are holding the classes?
- **Provide childcare.** Can you find a volunteer to watch the participants' children while they are in the class? Can you work with a local day care center to volunteer some staff time to watch the children?
- **Obtain incentives.** Some sites have worked with the grocery store, where the 3rd class is held, to provide gift certificates or other "freebies" to class participants. Consider doing a drawing at each class for a diabetes cookbook. Cookbooks may be donated by local bookstores or by diabetes drug representatives (ask for assistance from local dietitian or diabetes educator).
- **Reminders.** Make reminder phone calls or send reminder postcards.

Resources

Community Resources for Participants

Some of your class participants may want to know where they can access more information about diabetes or other self-management classes. Your county health departments may have listings of chronic disease community resources available to the public. If not, consider offering information about these community resources:

- Local health clinics
- Local diabetes education programs at hospitals
- Additional diabetes or chronic disease self-management programs
- Restaurants with diabetes friendly meal options
- Local support groups
- Local social service providers
- Where people can get screened and then receive follow-up care. This may be important if you have participants who do not have access to health insurance or a regular health care provider.

Print Resources for Participants



Diabetes Care Card - This wallet-sized card lists appropriate tests and diabetes management services people with diabetes need to receive. People with diabetes can use this card to work with their health care provider to ensure they are receiving timely services. To obtain copies of the card, contact the Oregon Diabetes Program at 971.673.0984 or order on the web at <http://egov.oregon.gov/DHS/ph/diabetes/carecard.shtml>.



Food/Physical Activity log books – These log books, available from the National Diabetes Education Program, encourage individuals to log the amount of physical activity they obtain each day as well as their food intake for the day. Log forms have been shown to be effective tools to help people change behaviors (Wadden, 1995). These log books can be downloaded at http://ndep.nih.gov/diabetes/pubs/GP_FoodActTracker.pdf or call 1-800-860-8747 to order the log books.



National Diabetes Information Clearinghouse (NDIC) – An information dissemination service of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK); part of the National Institutes of Health (NIH). NDIC was established to increase knowledge and understanding about diabetes among patients, health care professionals, and the general public. Publications, in several languages can be ordered at no cost, or low cost, from the website. <http://diabetes.niddk.nih.gov/>

Recommended Cookbooks

Diabetic Cooking for Seniors by Kathleen Stanley, CDE, RD, LD, MSED. Available from ADA, \$12.95, ISBN: 1-58040-073-6

Diabetic Meals in 30 Minutes – or Less by Robyn Webb. Available from ADA, \$11.95
ISBN: 0-945448-60-0

Diabetes Meals on \$7 a Day - or Less by Patti B. Geil and Tami A. Ross. Available from ADA, \$12.95, ISBN: 1-58040-023-X

Express Lane Diabetic Cooking by Robyn Webb. Available from ADA, \$16.95,
ISBN: 1-58040-005-1

How to Cook for People with Diabetes by ADA. Available from ADA, \$11.95, ISBN: 0-945448-68-6

More Diabetic Meals in 30 Minutes - or Less by Robyn Webb. Available from ADA, \$16.95
ISBN: 1-58040-029-9

Month of Meals: Meals in Minutes. Available from ADA, \$19.95, ISBN: 1-58040-078-7

The Diabetes & Heart Healthy Cookbook. Available from ADA, \$16.95, ISBN: 1-58040-180-5

Resources for Instructors

Dietary Guidelines for Americans 2005

- www.healthierus.gov/dietaryguidelines/

Food Portions/Portion Sizes

- **MyPyramid, Inside the Pyramid:**
www.mypyramid.gov/pyramid/index.html
- Interactive Portion Distortion Quiz from the National Institutes of Health:
<http://hin.nhlbi.nih.gov/portion/>

Food Safety

- Fight BAC!, Partnership for Food Safety Education - Information about cross-contamination and how bacteria spreads: www.fightbac.org
- Gateway to government food safety information: www.FoodSafety.gov

Thrifty Meals

- Recipes and Tips for Healthy, Thrifty Meals from the United States Department of Agriculture Center for Nutrition Policy and Promotion:
www.usda.gov/cnpp/Pubs/Cookbook/thrifty.pdf
- Thrifty Meals For Two: Making Food Dollars Count:
www.hoptechno.com/book28.htm

Unit Pricing

- Using Unit Pricing – consumer tips with practice problems from the Department of Consumer Protection:
www.westchestergov.com/consumer/get5.htm
- Unit Price: www.umass.edu/nibble/infofile/unitpric.html

About Diabetes and Pre-diabetes

- Small Steps, Big Rewards:
www.ndep.nih.gov/campaigns/SmallSteps/SmallSteps_index.htm
- National Diabetes Education Program: www.ndep.nih.gov/
- Diabetes Forecast magazine by the American Diabetes Association:
www.diabetes.org/diabetes-forecast.jsp
- Diabetes Self-Management magazine: <http://DiabetesSelfManagement.com>

Physical Activity and Diabetes

- 2003 position statement from the American Diabetes Association, "Physical Activity/Exercise and Diabetes Mellitus" in *Diabetes Care* 26:S73-S77, 2003:
http://care.diabetesjournals.org/cgi/content/full/26/suppl_1/s73

- “What I Need to Know about Physical Activity and Diabetes,” from the National Diabetes Information Clearinghouse: http://diabetes.niddk.nih.gov/dm/pubs/physical_ez/index.htm
- From the Weight-control Information Network, you can download a PDF version of “Walking: A Step in the Right Direction” publication (<http://win.niddk.nih.gov/publications/walking.htm>) that includes safety tips and warm-up exercises for people ready to increase their physical activity through a walking program.
- The National Center on Physical Activity and Disability maintains a website at www.ncpad.org/index.php. Information related to diabetes is found under “Disability/Condition.” Provides assistance on how to use a pedometer.

Sugar Substitutes

- A comparison of available sugar substitutes and links to tested recipes: <http://homecooking.about.com/library/weekly/bl010598b.htm>
- “Low-calorie Sweeteners and Other Sugar Substitutes: A Review of the Safety Issues” from Vol.5, 2006 *Comprehensive Reviews in Food Sciences and Food Safety*: <http://members.ift.org/NR/rdonlyres/DA941122-00F5-49AA-8BC3-27E32F80B746/0/crfsfsv5n2p3547.pdf>
- American Dietetic Association’s Position Paper on Use of nutritive and nonnutritive sweeteners can be found at the ADA website (www.eatright.org): www.eatright.org/cps/rde/xchg/ada/hs.xsl/advocacy_adap0598_ENU_HTML.htm

Nutrition Facts/Trans fat

- This Food and Drug Administration site explains trans fat labeling and provides a fun, interactive comparison between margarines and snack foods: www.cfsan.fda.gov/~dms/transfat.html#main

Mindful Eating

- If you’d like to read more about how to encourage participants to slow down and pay more attention to their eating habits, check out the Center for Mindful Eating: www.tcme.org/

More Helpful Websites

- **Oregon Diabetes Program:** www.oregon.gov/DHS/ph/diabetes/
- **American Diabetes Association (ADA):** www.diabetes.org. This website provides information on diabetes, risk factors and ways in which someone with diabetes can manage their diabetes.
- **Centers for Disease Control and Prevention (CDC), Diabetes Public Health Resource:** www.cdc.gov/diabetes. This website provides information on diabetes-related statistics and provides updates on diabetes resources and current research findings.
- **National Institutes Diabetes & Digestive & Kidney Diseases (NIDDK):** www.niddk.nih.gov. Information on diabetes. Also includes a complete glossary on diabetes terms.
- **American Heart Association:** www.americanheart.org/

- **National Diabetes Information Clearinghouse:** www.niddk.nih.gov/health/diabetes/ndic.htm
- **Diabetes Recipes online:** www.diabeticgourmet.com/recipes/, <http://vgs.diabetes.org/recipe/index.jsp>
- **American Dietetic Association:** National organization for food and nutrition professionals. Provides information on nutrition and healthy lifestyles. www.eatright.org/
- **American Association of Diabetes Educators** – Multi-disciplinary professional membership organization whose mission is to promote healthy living through self-management for all people with diabetes: <http://www.aadenet.org/index.shtml>

Optional items to purchase

- Idaho Plate Method posters and placemats: www.platemethod.com
- 3 D Food models: www.nascofa.com/prod/Static?page=foodrep&seqid=0
- Dairy Council food cards and other items: <http://www.oregondairyCouncil.org/catalog/categories/>
- Food magazines to cut out pictures of different foods to use in the activities

Miscellaneous

Glossary of Terms

- **Ounce-equivalent:** In the grains food group, the amount of food counted as equal to a one-ounce slice of bread; in the meat and meat alternate group, the amount of food counted as equal to one ounce of cooked meat, poultry, or fish. Examples are listed on the Plate Method Portions handout provided in Lesson 1.
- **Portion/Portion Size:** The amount of food consumed in one eating occasion; the amount suggested for any food group for a Plate Method meal.
- **Serving Size:** A standardized amount of food, such as a cup or an ounce, used in providing dietary guidance or in making comparisons among similar foods. Because the Plate Method provides suggested serving sizes as portions on a plate, the terms are used interchangeably.
- **Whole Grains:** Foods made from the entire grain seed, usually called the kernel, which consists of the bran, germ, and endosperm. If the kernel has been cracked, crushed or flaked, it must retain nearly the same relative proportions of bran, germ and endosperm as the original grain to be called whole grain.
- Additional terms are defined in the Glossary provided in Dietary Guidelines for Americans 2005: www.healthierus.gov/dietaryguidelines

Additional Information

Choosing Recipes

- The recipes and menus provided with this curriculum were chosen to communicate healthy Plate Method meals. They are intended to be simple to prepare with readily available ingredients and relatively low-cost. Leaders of Meals Made Easy are encouraged to keep those reasons in mind as they make substitutions for their group population (see Resources section of this implementation guide for recipe resources that only scratch the surface of what is available!). The recipes can be used to communicate various principles as well as encourage participants to increase the variety of foods they are willing to try in the class and to make at home.

Physical Activity

- Most adults do not need to see their health care provider before starting a moderate-intensity physical activity program. However, people with diabetes (a risk factor for heart disease) should consult their physician to design a safe, effective program. Encourage participants to speak with their health care provider about physical activity at their next doctor visit.
- It is important during leisure time to limit sedentary behaviors, such as television watching and video viewing, and replace them with activities requiring more movement. If the individuals in your group have not spoken with their health care provider about physical activity, you can encourage them to start with goals for reducing sedentary behaviors. You can also show them how to warm up and cool down with stretches. See suggested Physical Activity Resources in the list above.
- Some Meals Made Easy leaders have incorporated the use of pedometers into their classes. The simple step counters can provide class participants with a sense of how much moving they do in a typical day. America on the Move is a source for reliable pedometers:
www.americaonthemove.org/store/detail.asp?id=1

Recipe Nutrition Analysis

The following nutrition fact labels are provided for recipes appearing in the MME for Diabetes curriculum:

Splenda Blueberry Muffins

Nutrition Facts

Serving Size 1 muffin (85g)
Servings Per Container 10

Amount Per Serving	
Calories 180	Calories from Fat 50
% Daily Value*	
Total Fat 6g	9%
Saturated Fat 1g	5%
Cholesterol 45mg	15%
Sodium 300mg	13%
Total Carbohydrate 30g	10%
Dietary Fiber 2g	8%
Sugars 8g	
Protein 5g	

Bean Salad

Nutrition Facts

Serving Size 3/4 cup (213g)
Servings Per Container 4

Amount Per Serving	
Calories 200	Calories from Fat 70
% Daily Value*	
Total Fat 8g	12%
Saturated Fat 1g	5%
Cholesterol 0mg	0%
Sodium 420mg	18%
Total Carbohydrate 22g	7%
Dietary Fiber 8g	32%
Sugars 2g	
Protein 8g	

Gingered Broccoli

Nutrition Facts

Serving Size 3/4 cup (179g)
Servings Per Container 6

Amount Per Serving	
Calories 80	Calories from Fat 15
% Daily Value*	
Total Fat 1.5g	2%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 340mg	14%
Total Carbohydrate 15g	5%
Dietary Fiber 5g	20%
Sugars 4g	
Protein 4g	

Caribbean Sunrise Smoothie

Nutrition Facts

Serving Size 1 cup (207g)
Servings Per Container 4

Amount Per Serving	
Calories 120	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Cholesterol 5mg	2%
Sodium 70mg	3%
Total Carbohydrate 25g	8%
Dietary Fiber 1g	4%
Sugars 16g	
Protein 4g	

Chicken Vegetable Soup

Nutrition Facts

Serving Size 1 serving (326g)
Servings Per Container 6

Amount Per Serving	
Calories 90	Calories from Fat 10
% Daily Value*	
Total Fat 1g	2%
Saturated Fat 0g	0%
Cholesterol 20mg	7%
Sodium 630mg	26%
Total Carbohydrate 7g	2%
Dietary Fiber 2g	8%
Sugars 4g	
Protein 12g	

Chicken Under Wraps

Nutrition Facts

Serving Size 1/6th recipe (3-4 oz.) (99g)
Servings Per Container 6

Amount Per Serving	
Calories 130	Calories from Fat 40
% Daily Value*	
Total Fat 4.5g	7%
Saturated Fat 1.5g	8%
Cholesterol 65mg	22%
Sodium 400mg	17%
Total Carbohydrate 3g	1%
Dietary Fiber 0g	0%
Sugars 2g	
Protein 19g	

Ham & Cheese Omelet

Nutrition Facts

Serving Size 1 serving (96g)
Servings Per Container 4

Amount Per Serving	
Calories 80	Calories from Fat 20
% Daily Value*	
Total Fat 2.5g	4%
Saturated Fat 1.5g	8%
Cholesterol 15mg	5%
Sodium 200mg	8%
Total Carbohydrate 2g	1%
Dietary Fiber 0g	0%
Sugars 2g	
Protein 11g	

Tortilla Roll-Up

Nutrition Facts

Serving Size 1 wrap (167g)
Servings Per Container 4

Amount Per Serving	
Calories 220	Calories from Fat 30
% Daily Value*	
Total Fat 3g	5%
Saturated Fat 0g	0%
Cholesterol 30mg	10%
Sodium 760mg	32%
Total Carbohydrate 26g	9%
Dietary Fiber 3g	12%
Sugars 2g	
Protein 19g	

Spanish Rice

Nutrition Facts

Serving Size 3/4 cup (197g)
Servings Per Container 4

Amount Per Serving	
Calories 130	Calories from Fat 10
% Daily Value*	
Total Fat 1g	2%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 25mg	1%
Total Carbohydrate 28g	9%
Dietary Fiber 3g	12%
Sugars 4g	
Protein 3g	

Cabbage Slaw

Nutrition Facts	
Serving Size 1 cup (1152g)	
Servings Per Container 6	
Amount Per Serving	
Calories 810	Calories from Fat 320
% Daily Value*	
Total Fat 35g	54%
Saturated Fat 1.5g	8%
Cholesterol 30mg	10%
Sodium 970mg	40%
Total Carbohydrate 118g	39%
Dietary Fiber 23g	92%
Sugars 73g	
Protein 17g	

Sloppy Garden Joes (includes 2 oz. bun)

Nutrition Facts	
Serving Size 1/8th recipe (281g)	
Servings Per Container 8	
Amount Per Serving	
Calories 270	Calories from Fat 60
% Daily Value*	
Total Fat 7g	11%
Saturated Fat 1.5g	8%
Cholesterol 30mg	10%
Sodium 530mg	22%
Total Carbohydrate 40g	13%
Dietary Fiber 7g	28%
Sugars 10g	
Protein 18g	

Dilled Carrots

Nutrition Facts	
Serving Size 1/2 cup (75g)	
Servings Per Container 6	
Amount Per Serving	
Calories 40	Calories from Fat 20
% Daily Value*	
Total Fat 2g	3%
Saturated Fat 0.5g	3%
Cholesterol 0mg	0%
Sodium 70mg	3%
Total Carbohydrate 6g	2%
Dietary Fiber 2g	8%
Sugars 3g	
Protein 0g	

Chicken Skewers

Nutrition Facts	
Serving Size 1/4th recipe (426g)	
Servings Per Container 4	
Amount Per Serving	
Calories 270	Calories from Fat 45
% Daily Value*	
Total Fat 5g	8%
Saturated Fat 1g	5%
Cholesterol 65mg	22%
Sodium 230mg	10%
Total Carbohydrate 31g	10%
Dietary Fiber 3g	12%
Sugars 20g	
Protein 26g	

Cauliflower Sauté

Nutrition Facts	
Serving Size 1/2 cup (102g)	
Servings Per Container 6	
Amount Per Serving	
Calories 50	Calories from Fat 25
% Daily Value*	
Total Fat 3g	5%
Saturated Fat 0.5g	3%
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 5g	2%
Dietary Fiber 2g	8%
Sugars 2g	
Protein 2g	

Oven Fried Fish

Nutrition Facts	
Serving Size 4 oz. (141g)	
Servings Per Container 4	
Amount Per Serving	
Calories 220	Calories from Fat 60
% Daily Value*	
Total Fat 7g	11%
Saturated Fat 1g	5%
Cholesterol 80mg	27%
Sodium 200mg	8%
Total Carbohydrate 8g	3%
Dietary Fiber 0g	0%
Sugars 2g	
Protein 30g	

Tips for Goal Setting

Below are steps that will help participants set weekly goals. This information comes from *Living a Healthy Life with Chronic Conditions* by Kate Lorig, et al. The *Action Plan* worksheets can be found at the end of each class section in the notebook and are also available on the CD ROM.

Decide what you want to accomplish

- Think of something you would like to do that you are not doing in your life right now.

Action Planning

Think about how you will accomplish the goal you have set.

- Set actions that can realistically be done within a week period.
- Action steps should be "behavior specific." For example, don't just state, I will increase my fruit and vegetable consumption, but say "I will eat 5 fruits and vegetables 3 times this week."

Making out the plan

Follow these five steps to help you determine how you will reach your goal.

1. State exactly **what** you are going to do. For example, I will walk each day. I will increase the amount of fruits and vegetables that I eat each day.
2. Decide **how much** you will do. I will walk ½ mile each day. I will eat 2 fruits and 4 vegetables each day.
3. Decide **when** you will do it. I will walk in the morning, after I eat breakfast. I will eat one serving of fruit at breakfast and 2 servings of vegetables at lunch.
4. Connecting a new activity with an old activity will make it easier to make sure it gets done. You can also do the new activity before a favorite old activity. For example, eat a piece of fruit when you sit down to watch your favorite television show. Take a walk before you read the morning newspaper.
5. State **how often** you will do this activity. It would be ideal to do this activity every sometimes that can be hard. For example, I will eat one serving of fruit at breakfast 5 days a week.

Things to consider when creating an action plan

- Start slowly. If your goal is to walk for 30 minutes and you have not been walking at all, consider starting with a shorter amount of time.
- Allow yourself some time off. Some days you may not feel like doing your action plan, that is ok. Be realistic when you decide “how often” you will do the activity.
- Post your action plan where you can see it.

Evaluation

The Oregon Diabetes Program would like to gather information about Meals Made Easy for Diabetes. We are specifically interested in where and when classes are being taught and how many persons are attending the classes. In exchange for providing this curriculum, we ask that the instructor complete the “Class Log” form. Completing this form involves entering basic participant attendance information after each class, and returning the form via mail to the Oregon Diabetes Program. The type of information gathered on the “Class Log” form will help us better track the reach of Meals Made Easy; this information may also be a helpful tracking device for your organization. In appreciation for returning a completed “Class Log”, we will send you ten copies of Idaho Plate Method placemats to use as tools in future classes.

We would also like to gather information about class participants; we are specifically interested in learning about age, gender, ethnicity, race, education, and whether the participant is attending the class because he/she is diabetic or because he/she is helping someone who is diabetic. This information is captured on the "Participant Information" form. Although this form is voluntary, we encourage instructors to administer this questionnaire to class participants during the first class session. Before the questionnaire is administered, please advise class participants of the following:

- The questionnaire is voluntary
- Participants should **not** write their name on the questionnaire
- Information will be kept confidential
- Information gathered will help the Oregon Diabetes Program better plan for programs in the future

Please mail both the "Class Log" and "Participant Information" forms together to:

Oregon Diabetes Program
Oregon Department of Human Services
Attn: Carrie Washburn
800 N.E. Oregon Street, Suite 730
Portland, OR 97232-2162

In addition to the "Class Log" and "Participant Information" forms, we have provided two documents you may wish to use in order to further evaluate the program. The first document is a participant questionnaire, consisting of questions regarding demographics, confidence, eating behaviors, and satisfaction; this questionnaire has been used in the past to evaluate, among other things, behavior change. If utilized, the questionnaire should be administered during the beginning of the first class and at the end of the last class; the questionnaire can also be used for evaluation six months after the last class to assess maintenance of behavior change.

The second document is a qualitative tool for instructors involving three open-ended questions. The questions could be asked of the class participants as a whole at the end of the last class. It may be helpful to record comments in the spaces provided and/or ask a class participant to take notes while you lead the discussion. Both the participant questionnaire and open-ended questions should **not** be returned to the Oregon Diabetes Program; please use them only for your own evaluation purposes. Both documents are included on the CD ROM, but not included in paper-form.

The following evaluation documents are included on the CD ROM provided:

- MME Class Log.doc
- MME Participant Information Form.doc
- Optional Materials: Open-Ended Questions.doc
- Optional Materials: Participant Questionnaire.doc

The Oregon Diabetes Program is available for all questions, comments, and technical assistance. You can reach us by:

Phone: (971) 673-0984

Fax: (971) 673-0994

Email: carrie.l.washburn@state.or.us

Lesson 1

Your Food Choices Make a Difference

Purpose	Lesson 1 aims to teach participants how food choices and serving sizes impact blood glucose (sugar). Additionally, participants will be shown the Plate Method as a simplified method for planning balanced meals.
Lesson Theme	This class will help you understand how different foods, and the amounts you eat, are likely to affect your blood sugar.
Learning Objectives	<ul style="list-style-type: none"> • Participants will recognize that keeping blood sugar at close to normal levels can reduce the complications of diabetes. • Participants will understand that carbohydrate-containing foods have the greatest affect on their blood glucose. • Participants will identify the different food groups and the effect of each on their blood glucose. • Participants will understand that the portion of a food consumed determines the total carbohydrate consumed. • Participants will be able to measure and estimate portions from each food group.
Leader Preparation	Review Lesson 1 Script & Lesson 1 Activities
Materials Needed	<ul style="list-style-type: none"> • Nametags • Lesson 1 PowerPoint slides and script • PowerPoint projector • Food pictures (Dairy Council, magazine pictures, blank cards/paper & markers) • "Plate Method Portions" handout • "Tips for Estimating Food Portions" handout • Food models & "real food" large portion comparison(s) • Foods & measuring tools (see Lesson 1 Activity: Measuring Foods) • 9" paper plates (at least 3) • "One Week of Plate Method Menus" handout • Supplies for Breakfast Demonstration (see Lesson 1 Activity: Breakfast Demonstration) • "Plate Method Breakfast Ideas" handout • "Breakfast Recipes" handout • "Action Plan Worksheet - Lesson 1"
Estimated Teaching Time	<p>Registration, evaluation tool completion & introductions - 15 min</p> <p>Presentations & Learning Activities - 60 min</p> <p>Breakfast Demonstration & Tasting - 20 min</p> <p>Action Plan & Closing - 20 min</p>

Materials, Slides, Handouts

- Registration list
- Name Tags
- Pens/Pencils
- Evaluation Tool

Begin Slides



Lesson 1 Your Food Choices Make a Difference

- Register participants, provide name tag.
- Introduce the evaluation.
- Introduce course faculty and volunteers.
- Have participants introduce themselves (*Consider having them tell something about their experience with type 2 diabetes*)

• **Presentation: Course Outline & Intro**

This 4-week course has been designed for the person with type 2 diabetes and those who prepare meals for them. It is based on a simple way of planning meals called The Plate Method. Each week there will be new activities and a chance to try some healthy foods. **(slide1)** The course *will not* provide individualized meal plans and *is not* intended to replace diabetes education from qualified health care providers. (*Guide participants to local resources for diabetes care and education; see Implementation Guide for suggestions.*)

As you probably know, diabetes is a disease that is diagnosed, or discovered, when a person's level of blood glucose (sugar) is found to be higher than normal. Sometimes people go to their doctor with troubling symptoms, such as fatigue, excessive thirst or urination, or blurry vision, and learn they have diabetes. Other people have no symptoms but find out when they go to the doctor for a routine visit or for some other medical reason. **(slide2)** (*Consider asking the group if they'd like to share how they found out about their diabetes.*)

Diabetes is a serious disease because of the complications that can occur when blood sugar levels stay too high. These complications include heart and blood vessel damage, dental disease, kidney failure, blindness, and nerve damage. **(slide3)** (*Consider asking the group if they'd like to share any knowledge of or experience with diabetes complications.*)

Although diabetes cannot be cured, the good news is that by keeping their blood sugar levels as close to normal as possible, people with diabetes can feel better today and lower their chances of developing those diabetes complications in the future. This goal can be reached with a healthy diet, regular physical activity and medication, when necessary. **(slide4)** (*Consider asking if those first two "treatments" are only recommended for people with diabetes...chances are good they realize that a healthy diet and regular activity are recommended for us all.*)

Dairy Council food cards


- pictures of food
- blank paper/index cards

Sugar is in everyone's blood.



Blood Sugar provides energy for everything we do!


Carbohydrate in the foods we eat & drink affect our blood sugar the most.



Two Types of Carbohydrate

- SUGAR
- STARCH

Total carbohydrate eaten determines how much sugar reaches your blood



- **Activity: Participants identify foods typically eaten by picking out Dairy Council pictures, food pictures from magazines, or names of foods written on blank cards**

Before we go any further, I'd like you all to look at the names/pictures of foods that are on your table. Pick out five or six that you eat regularly. If you don't see something you eat regularly, look for the blank cards. On them, write the name or draw a picture of foods you eat that you don't happen to see on the table. We will use these for our first activity. For example, if you like to eat a banana, corn flakes and milk for breakfast regularly, find those foods or write them down. If you need any help, let us know as we come around to each table.

- **Presentation: Carbohydrate foods affect blood sugar**

Glucose (sugar) is normally in everyone's blood because it is our main source of energy. (slide 5)

And of all the foods we eat, the ones containing **carbohydrate** have the greatest affect on our blood sugar. (slide6) This doesn't mean that carbohydrate is bad. In fact, the blood sugar that comes from it is our brain's favorite source of energy! However, because diabetes affects the body's ability to keep blood sugar in the normal range, an important thing to learn for diabetes meal planning is which foods contain carbohydrate.

There are two main types of carbohydrate in foods that raise blood glucose: sugar and starch. (slide7)

Sugars include glucose and its relatives. They are ingredients of sweet foods such as candies, cookies, regular soda pop and ice cream. Sugars are also found naturally in fruit, fruit juices, milk and yogurt.

Starch is another type of carbohydrate. Grains, starchy beans and starchy vegetables contain starch. Examples would be bread, oats, rice, pinto beans, potatoes and corn.

The amount of carbohydrate you eat at a time determines how much sugar reaches your bloodstream after that meal. (slide8) Because of this, meal plans for people with diabetes are designed to encourage eating similar amounts of carbohydrate at similar times each day. The Plate Method will help you do this in a way that is simple to see and remember.

Food Groups *with* Carbohydrate:

- Grains, Beans & Starchy Vegetables
- Fruit
- Milk & Yogurt
- Sweets



Food Groups *without* Carbohydrate:

- Vegetables (non-starchy)
- Meat & meat alternates
- Fats/Oils



A note about Calories

- Calories are a measure of the energy a food provides.
- A person's need for calories depends on many factors, such as age, size, sex, and activity level.
- Extra calories eaten are stored as body fat.

A Healthier Weight Helps

- Modest weight loss improves the way insulin works. (For most people this means 10 - 20 lb.)
- The Plate Method can help you focus on eating fewer calories so that you lose weight.



Physical Activity Helps

- Regular physical activity lowers blood sugar AND improves the way insulin works.
- For most people, this means finding ways to move around for at least 30 minutes more nearly every day.



• **Presentation: Identify food groups & note which contain carbohydrate**

Grouping foods based on their nutrition content will be the first step in learning to use the Plate Method.

As already mentioned, foods that increase blood glucose *because of their carbohydrate content* are in the **Grains, Beans, and Starchy Vegetables** group, the **Fruit** group and the **Milk** group. **Sweets** also contain carbohydrate and will increase blood glucose. (slide 9) Because most sweets do not contain the vitamins, minerals and fiber of the other food groups, they are best eaten every once in a while rather than at every meal or snack.

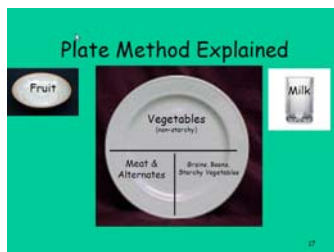
Foods that do not have a direct effect on blood glucose are in the **Vegetables** group, **Meat & Meat Alternate** group and the **Fats & Oils** group. (slide 10)

All Americans (not just those with diabetes) are encouraged to avoid eating too much fat because it is a very concentrated source of calories. It is easier than you might realize to eat too many calories, which can contribute to weight gain over time. In addition, some fats have been shown to increase one's risk for heart disease, one of the complications of diabetes.

A note about calories: carbohydrate, protein and fat provide the energy (fuel) our body needs to function, and the unit we use to measure food energy is called a calorie. (slide 11) Thus the more calories a food contains, the more energy it provides. Each person's need for energy depends on a number of factors, including their size, age, sex and activity level. Anytime a person regularly eats more energy than their body needs (to remain at a particular size), that extra energy is gradually stored as fat and they gain weight. On the other hand, if a person regularly eats somewhat less than their body needs (to stay the same), they will gradually lose stored fat.

Most people with type 2 diabetes will benefit from modest weight loss (for example, 10 pounds), because having less body fat helps insulin work better. (slide 12) The Plate Method is designed to help you eat fewer calories than usual so that you can lose weight. If you're not sure what weight is healthy for you, a dietitian or diabetes educator can help you determine a reasonable and realistic weight goal.

Most people with type 2 diabetes also benefit from regular moderate physical activity because it lowers blood sugar AND helps insulin work better. (slide 13) (Optional: Ask how many participants exercise regularly and have them share. If you plan to include additional physical activity programming, now is when you can mention when you will be addressing it.)



animation on this slide fills the plate in a stepwise fashion

• **Activity: Place typically eaten foods into appropriate food groups**

I'd like to give you an opportunity to practice placing foods you usually eat into their food groups and to find out if there are questions about the food grouping system. Look now at the foods you chose earlier. As a group, stack together the food pictures or cards into one of the seven food groups just mentioned: Grains, Beans, Starchy Vegetables; Fruits; Milk/Yogurt; Meat & Meat Alternates; Vegetables; Fats & Oils and Sweets (Other Carbohydrates). **(slide 14)** Feel free to discuss your decisions (*Leaders circulate among table groups to answer questions and evaluate understanding.*)

Let's see how everyone did. I will ask each group to tell us several foods you have placed in each group and we'll compare with each other. You might also describe when or how you like to eat the foods. If you happen to think of another food, and you're not sure where it fits, be sure to ask.

Now, draw an imaginary line down the middle of your table. **(slide 15)** Move the food groups/foods that DO contain carbohydrate over to one side of the line. Move the food groups/foods that DO NOT contain carbohydrate over to the other side of the line. Let's see how you did: Grains, Beans and Starchy Vegetables; Fruit; Milk/Yogurt and Sweets belong on the side that DO contain carbohydrate. Meat & Meat Alternates, Fats & Oils and (non-starchy) Vegetables belong the side that DO NOT contain carbohydrate. **(slide 16)** What questions might you still have about grouping foods?

• **Presentation: Introducing the Plate Method**

Now that you have a strong foundation of the food groups, it is time for a simple description the Plate Method.

(slide 17) The Plate Method helps you plan meals so that your blood sugar response to food will be more predictable through the day and from day to day.

We will always begin with a 9" plate. First, I'll draw a horizontal line across one half of the plate. Next, I will draw a vertical line to separate the bottom half into quarters.

For a Plate Method lunch or dinner:

- Fill the top half of the plate with (non-starchy) vegetables.
- Fill one quarter with grains, beans or starchy vegetables.
- Fill the other quarter with a meat/meat alternate food, and
- Add, to the outside of your plate, a serving of fruit and one cup of milk.

For a Plate Method breakfast,

- Skip the vegetables if you choose.
- Fill one quarter with grains, beans or starchy vegetables.



Have a 9" plate and food models to show as you go through the Plate Method slide

Dairy Council food pictures & 9" paper plate with slots cut for food picture tabs to fit into in the appropriate part of the plate

- A meat/meat alternate on a quarter of the plate is optional.
- Add, just like with lunch and dinner, a serving of fruit and one cup of milk.

Here's a "cartoon" example of a Plate Method meal. (slide 18)

I will show you some other examples of Plate Method meals with the food pictures/models we have here:

(The following are just examples using food models or pictures – you should share examples with your audience using foods they commonly eat...recall those mentioned in the food grouping activity).

Example Meals

Dinner:

Vegetables half of plate: green salad & cooked broccoli
 Starch quarter of plate: 1 slice bread with margarine
 Meat quarter of plate: grilled chicken
 Milk outside: glass of milk
 Fruit outside: dish of sliced strawberries

Lunch:

Vegetables half of plate: vegetable soup
 Starches quarter of plate: whole grain crackers
 Meat quarter of plate: beef (in soup)
 Milk & fruit outside: dish of yogurt with peaches

Breakfast:

Vegetables: omitted
 Starch quarter of plate: oatmeal
 Meat quarter of plate: chopped nuts (add to oats)
 Milk outside: milk (add to oats)
 Fruit outside: blueberries (add to oats)

After seeing these examples, what questions do you have about the Plate Method? *(Take this opportunity to answer questions, clarify basic understanding.)*

• **Presentation: Explaining & Measuring Serving Sizes**



Now that you know what foods/food groups affect your blood sugar and how to balance those carbohydrate foods at each meal using the Plate Method, consider the following comparison: We know apples, as a member of the fruit group, contain carbohydrate. Which of these two apples would you figure has the most carbohydrate? (slide 19) And which of these, when eaten, would have the greatest effect on your blood glucose? *(Participants will most likely offer that the larger portion has more carbohydrate and would lead to higher blood glucose.*

“Plate Method Portions”
handout



Slides 21-25 omitted from this margin for lack of space.

Food models, measuring cups & spoons, food scale, food items and beverages for demonstrating



Consider having other comparisons on hand to make clear the point about portion sizes...a 3 oz. potato vs. a larger one, a small muffin vs. a larger one, etc.).

It sounds like you understand that, along with knowing *what* foods contain carbohydrate, it could helpful to know about *how much*, because the quantity you eat determines the effect on your blood sugar.

Here’s another situation to consider: If I used the Plate Method to plan my dinner, but stacked up more of the grains, beans or starchy vegetables (or went back for seconds) or even had a larger glass of milk, how would that meal affect my blood sugar compared to the examples that were just shown to you? (*Again, participants will most likely offer that the larger portions, even when using the Plate Method to plan the meal, would lead to a higher blood glucose.*)

For this reason, it is helpful to know the amount of foods to include in your Plate Method meals. A Plate Method Portions handout has been made to help you with this (*distribute this handout and review the serving sizes. slides 20 – 25*)

What foods haven’t been mentioned that you might have questions regarding how to measure their portion? (*Use this as an opportunity to clarify any questions about serving sizes. There is a good chance that you will be asked about the portion for rice and pasta. If any participants have received education from a RD or CDE, they may have learned that 1/3 cup cooked pasta or rice is “one carbohydrate choice.” Because the Plate Method is a simplified meal planning method, portions for cooked starches are made consistent. When just one or two servings are included in a meal there will be little consequence.*)

• **Activity: Measuring Foods (See Lesson 1 Activities for detail)**

Because the amount of the food eaten determines the effect on your blood glucose and/or your total energy intake, it can be very helpful to practice ways of recognizing measured quantities of food. I have cups, spoons, scales, food models and other tools to show you how to do that. (slide 26)

(FYI MME instructors: you can assume that the basic Plate Method day of meals represents an intake of 1400 – 1600 calories when portions and reduced fat/sugar items are chosen.)

Because you don’t always have access (or interest) in measuring foods every time you eat, it can be helpful to learn some ways to estimate those amounts. (slide 27)

Notice that one half cup of fruit is a piece about the size of a tennis ball. I have here a food model fruit and a tennis ball. I’ll

"Tips for Estimating Food Portions" handout

pass it around so that you get a sense of how big it is by how it fits into your hand. When you go to the store next, you can practice finding apples (and other fruits) that are "half cup" apples.

Notice on the "Tips for Estimating..." handout that there are more ways to use your hands to judge a quantity of food. This can be helpful when you don't have a measuring cup but you want to know about how much you are eating. To estimate 1/2 cup, I could hold my cupped hand or my palm nearby to compare. To estimate 1 cup, I can see how my fist compares.

People have different sized hands, so take that into consideration as you make your comparisons to what the handout suggests. If you have large hands, 1/2 cup might be just 1/2 of your palm.

Take some time to demonstrate measuring items with standard measuring tools (cups, spoons, scales) and then transferring them to your hands or a 9" plate for comparison. Ask volunteers to come help you. You can also pass more food models or assistive devices around the room, such as the deck of cards. The goal is to establish some understanding of the amounts of food that would be expected in a Plate Method meal.

What did you learn from the measuring activity that you will be able use after today? What questions do you still have about Plate Method portions? (*Answer questions and encourage participants to practice measuring & estimating serving sizes after this lesson.*)



Can you count how many carbohydrate food portions are included in a Plate Method meal? (**slide 28**) (*The answer is 3: one starch, one fruit and one milk.*) Because you include similar measures of the different food groups, the Plate Method is an easy way to plan your plate with foods that provide a similar amount of carbohydrate at each meal. This will help keep your blood sugar from going too high. It also encourages you to include a variety of healthy and tasty foods. If you are younger, bigger or more active, you may need to add another serving of a carbohydrate food to each meal or have one for a snack between meals . You can experiment with that over the next week.

"One Week of Plate Method Meals" handout

- **Handout: One Week of Plate Method Meals**

These menus are provided to give participants additional guidance until they meet with you again. Participants may find ideas to help reinforce use of the Plate Method.

Consider giving them time to look at the menus and make substitutions within groups...but reinforce the serving size issue. If you know the menus are not suitable for your population, consider making some more appropriate ones for them.

<p>Supplies for Breakfast Demonstration</p> <p>Plate Method Breakfast Ideas handout Breakfast Recipes handout</p>	<ul style="list-style-type: none"> • Activity: Breakfast Demonstration (See Lesson 1 Activities handout for detail) <p>Breakfast doesn't always fill all the spaces on the plate (vegetable and meat/meal alternate), but it is important not to overeat carbohydrate at this meal or your blood sugar may go higher than you desire.</p> <p>Demonstrate recipes and allow time for tasting</p>
<p>Action Plan worksheet</p>	<ul style="list-style-type: none"> • Activity: Developing an Action Plan (See Implementation Guide for additional background) <p>I would like each of you to think of something you'd like to do differently based on what you learned today. Is anyone willing to share your thoughts? (assume you will have some volunteers)</p> <p>In order to increase the chances of following through on your thoughts, it can be helpful to put your idea into the form of an Action Plan.</p> <p>Having an Action Plan means thinking through your idea and being more specific about what you will do and when. Writing it down is like giving your mind a set of instructions to carry out. It also allows you to review that plan often, at least once a day, so that you can follow through. (Refer participants to Action Plan Worksheet.)</p> <p>Would anyone like to share your Action Plan for the week? (Allow those who volunteer to share their goal.)</p> <p>Closing – Bring Action Plan Worksheet back next week.</p>

"Meals Made Easy" with the Diabetes Plate

- Week 1: What You Eat Makes a Difference
- Week 2: Planning Healthy Meals
- Week 3: Shopping Smart
- Week 4: In the Kitchen



Diabetes



- Blood Glucose (sugar) is too high
- Sometimes there are symptoms
- Often there are no symptoms

Diabetes Complications

- Heart & Blood Vessel Damage
- Nerve Damage
- Kidney Failure
- Blindness
- Dental Disease

Good News!

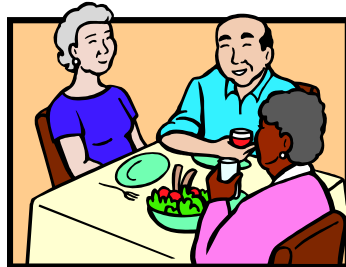
- ♥ There are fewer complications when blood sugar is kept as close to normal as possible
 - . Healthy Eating
 - . Regular Physical Activity
 - . Medication, when necessary

Sugar is in everyone's blood.



Blood Sugar provides energy for everything we do!

Carbohydrate in the foods we eat & drink affects our blood sugar the most.



Two Types of Carbohydrate

-SUGAR

-STARCH

Total carbohydrate eaten
determines how much sugar
reaches your blood



Food Groups *with* Carbohydrate:

- Grains, Beans & Starchy Vegetables
- Fruit
- Milk & Yogurt
- Sweets



Food Groups *without* Carbohydrate

- Vegetables (non-starchy)
- Meat & meat alternates
- Fats/Oils



A note about Calories

- **Calories** are a measure of the energy a food provides.
- A person's need for calories depends on many factors, such as age, size, sex, and activity level.
- Extra calories eaten are stored as body fat.

A Healthier Weight Helps

- Modest weight loss improves the way insulin works. (For most people this means 10 - 20 lb.)
- The Plate Method can help you focus on eating fewer calories so that you lose weight.



Physical Activity Helps

- Regular physical activity lowers blood sugar AND improves the way insulin works.
- For most people, this means finding ways to move around for at least 30 minutes more nearly every day.



Food Groups

- Grains, Beans, Starchy Vegetables
- Fruits
- Milk/Yogurt
- Vegetables (non-starchy)
- Meat & Meat Alternates
- Fats & Oils

Food Groups

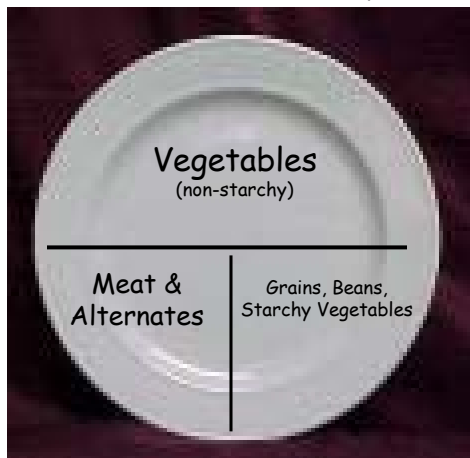
Carbohydrate food groups



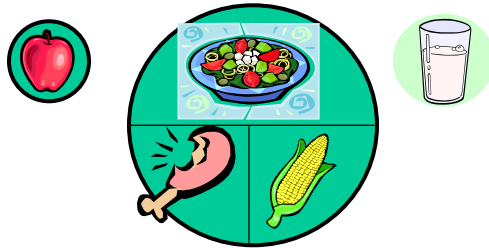
Not Carbohydrate



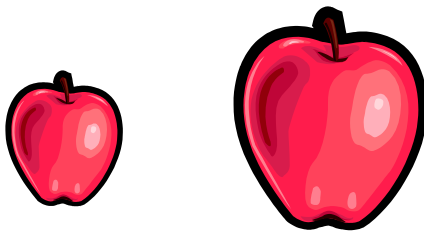
Plate Method Explained



The Plate Method



Serving Size Makes a Difference



Which apple will have the
greatest effect on blood sugar?

Plate Method Portions

Grains (one ounce-equivalent)

- 1 slice of bread
- 1/2 English muffin or pita bread
- 1/2 cup of cooked rice or pasta
- 1/2 cup of cooked cereal
- 3/4 cup dry (unsweetened) cereal
- 1 6-inch tortilla
- 4 - 6 crackers

Beans & Starchy Vegetables (1/2 cup)

- 1/2 cup cooked beans, peas, lentils or corn
- 1/2 cup mashed potatoes
- 1/2 cup sweet potatoes or yams
- 1 small (3 oz.) potato

Plate Method Portions

Fruit (1/2 cup)

- 1 small fresh fruit (4 pieces per pound)
- 1/2 cup canned fruit (light or juice syrup)
- 1/2 cup fruit juice
- 1/4 cup dried fruit

Plate Method Portions

Milk & Yogurt (1 cup)

- 8 oz. milk (cow's, soy or rice)
- 8 oz. plain yogurt
- 6 - 8 oz. yogurt with low-calorie sweetener

Plate Method Portions

Vegetables (1/2 cup)

- 1 cup raw
- 1/2 cup cooked
- 1/2 cup juice

Plate Method Portions

Meat, fish, poultry

- 2-3 oz. cooked lean meat, fish, or poultry

Meat Alternates**

- 1/4 cup cottage cheese or tuna
- 1-1/2 oz. cheese
- 1 egg
- 1/4 c. egg substitute
- 1 Tablespoons peanut butter
- 4 oz. tofu

** equivalent to 1 oz. meat, fish, poultry

Plate Method Portions

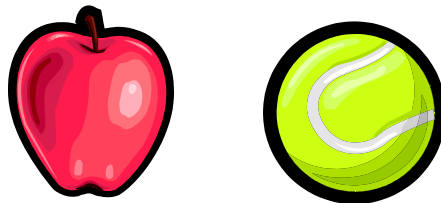
Fats & Oils (1 tsp.)

- 1 tsp. margarine or oil
- 10 peanuts
- 1 Tablespoon salad dressing
- 2 Tablespoons reduced fat salad dressing
- 1/8th medium avocado
- 2 tsp. peanut butter
- 1 Tablespoon cream cheese
- 2 Tablespoons reduced fat cream cheese
- 8 small olives
- 1 Tablespoon sour cream
- 1 strip bacon

Tools for Measuring Plate Method Portions



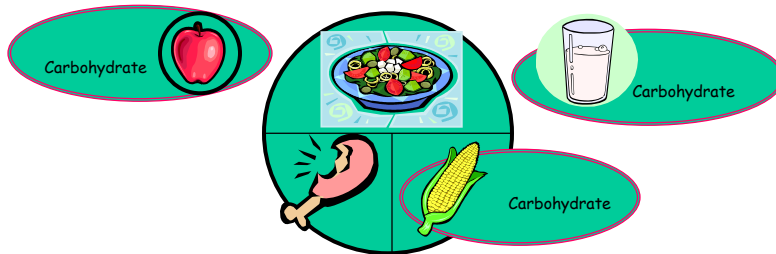
Tips for Estimating Food Portions



The Plate Method

Will help you...

- Eat similar amounts of carbohydrate at meals & snacks
- Plan simple & tasty meals



Lesson 1 Activity: **Measuring Foods**

Goal: To help people understand how standard measurements make a difference in the amount of carbohydrate and calories are being eaten at a meal or snack. Having practical guides to assist in estimating standard portions will increase accuracy.

Materials Needed:

Measuring cups & spoons (2 each: t; T; 1/4 c., 1/2 c., & 1 c. dry; 8 oz. liquid)

Food scale

Knives (for dipping, spreading, cutting)

Deck of playing cards, coffee mug, jelly jar glass, tennis ball

Food models (medium fruit, 3 oz. meat, 1 oz. cheese)

Pretzels* - 1 cup

Cooked rice - 1/2 cup portion (or food model)

Almonds* - 1/2 cup

Medium-sized piece of fruit (4 oz. apple, peach or pear)

Bread - two slices per participant

Peanut butter - 1 small jar creamy style (or mayonnaise)

Cheese - 2 to 3 ounces

Water in pitcher for pouring into liquid measure

1 teaspoon (thumb tip)

- margarine (or jelly) and cracker: take out "thumb tip" on knife, place into measuring spoon to see how close it comes to filling the standard teaspoon, spread on bread to see coverage

1 Tablespoon (thumb)

- peanut butter (or mayonnaise) & bread: take out "thumb" on knife, place into measuring spoon to see how close it fits, spread on bread to see coverage

1/4 cup (small cupped hand)

- almonds: place 1/4 cup measure of almonds into hand to determine fullness

1/2 cup (large cupped hand/tennis ball/palm)

- rice: have 1/2 cup measured on plate (or use 1/2 cup mashed potato food model); place hand near to compare
- medium (4 oz.) fruit: hold to determine "feel" or fullness in hand, compare to tennis ball
- pretzels: measure 1/2 cup into hand to determine fullness in hand

1 oz. (thumb, 3-1/2" computer disk)

- cheese: have block of cheese to cut "thumb" or "computer disk" from and place on scale to measure

3 oz. (palm/deck of cards)

- 3 oz. chicken breast (or other "meat") food model: place on palm to compare, have deck of playing cards to compare

8 fluid oz. (standard coffee mug, jelly jar glass)

Directions:

Demonstrate various measurements of participants. Consider having them assist. Encourage comments regarding usefulness of tips for keeping track of portions for Plate Method meals. Suggest they make notations on "Tips for Estimating..." handout.

* You can dedicate a bag of almonds and pretzels to this activity and re-use for future classes. Or, of course, use other items you have on hand.

Lesson 1 Activity: **Breakfast Demonstration**

Below you will find a list of Plate Method breakfast suggestions. Fix at least two different breakfasts for the class, demonstrating safe food preparation methods (see Implementation Guide for resources).

Show appropriate portions on a 9" plate and have extra available for tasting. Enlarge recipes as needed based on number of participants. Menus and recipes can be printed for distribution.

Breakfast #1

Breakfast Tortilla

- 2 eggs or 1/2 cup egg substitute, scrambled with
- 2 T. chopped onion and
- 2 T. chopped green pepper and
- 2 T. salsa, wrapped in
- 1 small whole wheat flour tortilla

1 Kiwifruit

8 oz. skim or 1 % milk

Breakfast #2

1 cup Caribbean Sunrise Smoothie*

1 slice whole wheat toast with

1 – 2 T. peanut butter

Breakfast #3

1 Splenda Blueberry Muffin* with

1 t. soft margarine (optional)

6 – 8 oz. plain low-fat (or light low-fat) yogurt over

1/2 cup cubed papaya (or other fruit)

Breakfast #4

1 egg, cooked in non-stick skillet and

1 oz. slice Canadian bacon

on 1/2 toasted whole wheat English muffin with

1 tsp. soft margarine

1/2 grapefruit

1 cup skim or 1% milk

Breakfast #5

1/2 c. cooked whole grain hot cereal (e.g. oatmeal, Zoom)

1 serving Ham & Cheese Omelet*

1 cup skim or 1% milk

1/2 cup canned peaches in light syrup

Breakfast #6

1 whole grain toaster waffle spread with

1 T. peanut butter and

1/2 banana, sliced

1 cup skim or 1% milk

* see recipes on handout

Plate Method Portions

Carbohydrate Food Groups

Grains (one ounce-equivalent)

- 1 slice of bread
- 1 small dinner roll
- 1 small muffin
- ½ English muffin or pita bread
- ½ c. cooked rice or pasta
- ½ c. cooked cereal
- ¾ c. dry (unsweetened) cereal
- 1 6-inch tortilla
- 4 - 6 snack crackers

Beans & Starchy Vegetables (1/2 cup)

- ½ c. cooked beans, peas, lentils or corn
- ½ c. mashed potatoes
- ½ c. sweet potatoes or yams
- 1 small (3 oz.) potato

Fruit (1/2 cup)

- 1 small piece fresh fruit (4/lb.)
- ½ c. canned fruit, light syrup
- ½ c. fruit juice
- ¼ c. dried fruit

Milk & Yogurt (1 cup)

- 8 oz. milk (cow, soy or rice)
- 8 oz. plain yogurt
- 6 - 8 oz. yogurt with sugar substitute

Little to No Carbohydrate Food Groups

Vegetables (1/2 cup)

- 1 c. raw
- ½ c. cooked, fresh or frozen

Meat, Fish, Poultry

- 2-3 oz. cooked lean meat, fish, or poultry

Meat Alternates**

- ¼ cup cottage cheese or tuna
- 1 ½ oz. cheese
- 1 egg or egg white
- ¼ c. egg substitute
- 1 Tablespoons peanut butter
- 4 oz. tofu

**equivalent to 1 oz. meat

Fats (1 tsp)

mostly unsaturated fat:

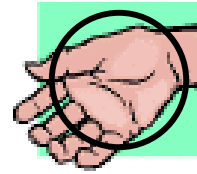
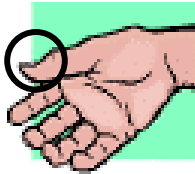
- 1/8th medium (2 T. mashed) avocado
- 1 tsp. margarine, butter, oil or mayonnaise
- 6 - 10 peanuts, 8 almonds
- 4 walnut halves, 8 pecan halves
- 2 tsp. peanut butter
- 1 Tablespoon salad dressing
- 2 Tablespoons reduced fat salad dressing
- 8 black olives

mostly saturated fat:

- 1 Tablespoon cream cheese
- 2 Tablespoons reduced fat cream cheese
- 1 ½ Tablespoon sour cream
- 1 strip bacon

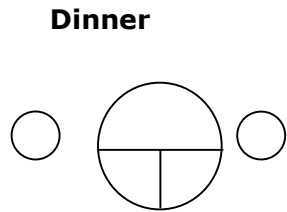
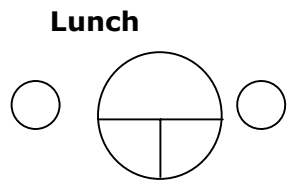
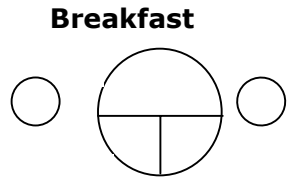
Tips for Estimating Food Portions

- 1 teaspoon = the tip of your thumb
- 1 Tablespoon = the size of a medium thumb
- 1/4 cup = the size of a woman's palm-full
- 1/2 cup = the size of a woman's hand-full
the size of a medium palm, no fingers
the size of a tennis ball
- 1 cup = the size of a man's hand-full
the size of a medium fist
- 1 medium piece fruit (4 oz.) = the size of a tennis ball
- 1 small potato (3 oz.) = the size of a medium new red potato (smaller than a baseball)
- 1 ounce = the size of your thumb
the size of a 3-1/2" computer disk
- 3 ounces = the size of an average woman's palm
the size of a deck of cards



One Week of Plate Method Menus

Below are some simple Plate Method meals for you to try. Substitute the specific fruits, vegetables, meats and grains based on what you have available or what might be on sale at your market. Practice what you learned in class to determine the amount of food for each section of the plate.



Day 1	Day 2	Day 3
<p>Cold Cereal</p> <ul style="list-style-type: none"> • Whole Grain Cold Cereal • Banana • 1% or skim milk 	<p>Hot Cereal</p> <ul style="list-style-type: none"> • Cooked Oatmeal • Apple chunks • Cinnamon, sweetener • 1% or skim milk 	<p>Breakfast Burrito</p> <ul style="list-style-type: none"> • Scrambled Egg • Whole Wheat Tortilla • Vegetables (spinach, onions, salsa) • Orange Juice • 1% or skim milk
<p>Turkey Wrap</p> <ul style="list-style-type: none"> • Turkey slices • Whole wheat tortilla • low-fat cream cheese or ranch-type dressing • Spinach leaves, grated carrots, chopped onions • Applesauce • Light Yogurt 	<p>Ham Sandwich</p> <ul style="list-style-type: none"> • Lean ham slices • Whole wheat bread • Light mayo, mustard • Lettuce, tomato • Green beans, steamed • Grapes • Pudding, no sugar added 	<p>Stuffed Potato</p> <ul style="list-style-type: none"> • Low-fat cheese, grated • Baked potato, small • Soft margarine • Broccoli, cooked • Mango • Light yogurt
<p>Baked Fish</p> <ul style="list-style-type: none"> • Baked tilapia • Sweet potato, roasted • Asparagus, roasted • Melon balls • 1% or skim milk 	<p>Baked Chicken</p> <ul style="list-style-type: none"> • Chicken thigh • Whole wheat pasta • Zucchini & onion, chopped • Vinaigrette, reduced fat • Berries • 1% or skim milk 	<p>Grilled beef patty</p> <ul style="list-style-type: none"> • Ground beef patty • Corn (on or off cobb) • Green salad, sliced tomato • Salad dressing, reduced fat • Pear, medium • 1% or skim milk
Snacks	Snacks	Snacks

Day 4	Day 5	Day 6	Day 7
<p>Toast</p> <ul style="list-style-type: none"> • Peanut butter • Whole wheat toast • Orange • Milk 	<p>Waffles</p> <ul style="list-style-type: none"> • Whole grain waffle • Canned peach slices • Light yogurt 	<p>Omlette</p> <ul style="list-style-type: none"> • Egg • Low-fat cheese & ham • Onion, mushroom • Whole grain muffin • Orange juice • Milk 	<p>French Toast</p> <ul style="list-style-type: none"> • Whole wheat bread • Egg, milk, cinnamon • Low sugar syrup • Berries • Milk
<p>Taco Salad</p> <ul style="list-style-type: none"> • Cheese, grated • Ground turkey • Black beans • Salad greens • Dressing, reduced fat • Salsa • Avocado • Plain yogurt, low-fat 	<p>Tuna Sandwich</p> <ul style="list-style-type: none"> • Tuna, water packed • Celery, onion • Light mayo • Whole wheat pita • Baby carrots • Cherries • Milk 	<p>Soup & Crackers</p> <ul style="list-style-type: none"> • Chicken & vegetable soup • Whole grain crackers • Apple slices • Light Yogurt dip 	<p>Muffin Pizza</p> <ul style="list-style-type: none"> • Mozzarella cheese, grated • English muffin • Tomato sauce • Chopped vegetables • Banana, small • Milk
<p>Broiled Salmon</p> <ul style="list-style-type: none"> • Salmon filet • Wild rice pilaf • Cauliflower & red pepper • Green grapes • Milk 	<p>Stir-Fry</p> <ul style="list-style-type: none"> • Lean pork, thin sliced • Vegetables, any variety • Stir-fry sauce, low sodium • Brown rice • Pineapple • Milk 	<p>Grilled Steak</p> <ul style="list-style-type: none"> • Beef steak, lean • Mashed potatoes • Carrots, steamed • Mixed fruit • Milk 	<p>Chili</p> <ul style="list-style-type: none"> • Beef & bean chili • Cornbread muffin • Broccoli slaw (includes raisins) • Milk
Snacks	Snacks	Snacks	Snacks

Plate Method Breakfast Ideas

Breakfast #1

Breakfast Tortilla

- 2 eggs or 1/2 cup egg substitute, scrambled with
- 2 T. chopped onion and
- 2 T. chopped green pepper and
- 2 T. salsa, wrapped in
- 1 small whole wheat flour tortilla

1 Kiwifruit

8 oz. skim or 1 % milk

Breakfast #2

1 cup Caribbean Sunrise Smoothie*

1 slice whole wheat toast with

1 - 2 T. peanut butter

Breakfast #3

1 Splenda Blueberry Muffin* with

1 t. soft margarine (opt.)

6 - 8 oz. plain low-fat yogurt over

1/2 cup cubed papaya

Breakfast #4

1 egg, cooked in non-stick skillet and

1 oz. slice Canadian bacon

on 1/2 toasted whole wheat English muffin with

1 tsp. soft margarine

1/2 grapefruit

1 cup skim or 1% milk

Breakfast #5

1/2 c. cooked whole grain hot cereal (e.g. oats, Zoom)

1 serving Ham & Cheese Omelet*

1 cup skim or 1% milk

1/2 cup canned peaches in light syrup

Breakfast #6

1 whole grain toaster waffle spread with

1 T. peanut butter and

1/2 banana, sliced

1 cup skim or 1% milk

* see recipes on back

Breakfast Recipes

Caribbean Sunrise Smoothie

Serves 4

Serving size: 1 cup

- 1 small peeled ripe banana, frozen
- 1 8-oz. can crushed pineapple in juice, frozen until slushy
- 2 8-oz. containers sugar free coconut cream pie, lemon or lime yogurt
- 1/2 c. 100% orange juice

Splenda Blueberry Muffins

Serves 10

Serving Size: 1 muffin

- 1 c. whole wheat pastry flour
- 1 c. all purpose flour
- 2 t. baking powder
- 1/2 t. salt
- 1/4 c. honey
- 1/2 c. light margarine
- 1 c. Splenda granular low-cal sweetener
- 2 large eggs
- 1 t. vanilla
- 1/2 c. skim milk
- cooking spray

Ham & Cheese Omelet

Serves 4 Serving Size: 1/4th recipe

- 1 c. egg substitute or 4 eggs
- 1/3 c. low-fat milk
- dash salt & pepper
- 1 oz. diced ham
- 1 oz. reduced fat sharp cheddar cheese

Plate Method portions: 1 fruit and 1/2 milk

Whip all ingredients in blender until smooth. Put fruit in the freezer the night before so that you can fix this quickly in the morning. Transfer pineapple from can to freezer container. If it freezes too hard, thaw slightly in the microwave.

Plate Method portions: 2 grains

Preheat oven to 350 degrees. Combine flour, baking powder and salt. In separate bowl, beat margarine, Splenda, and honey, until fluffy. Beat in eggs one at a time, then add vanilla. Add dry ingredients alternately with milk, stirring just until combined. Fold in berries and spoon batter into greased muffin tins. Bake for 25 - 30 minutes, until muffins are golden and spring back when touched. Cool on rack.

Plate Method Portions: 1 1/4 oz. meat

Mix egg, milk, salt and pepper. Heat a non-stick frying pan over medium heat. Pour in egg mixture & cook 1-2 minutes, lifting sides to allow uncooked egg to run to the bottom. Flip, then sprinkle half with ham; place cheese on top and fold over to serve.

Action Plan Worksheet: Lesson 1

Setting goals for yourself and then taking action to meet them is a way to move from just wanting something to actually making it happen. Think of something from today that you could turn into an Action Plan for this week. Here are a few suggestions to get you started:

Use the Plate Method to plan dinner
Eat whole grains

Measure portions at meals
Eat vegetables at meals

In the section below, write your goal in the form of an Action Plan. Use the Daily Action Plan Log to track your progress.

Your Action Plan should include:

1. **What** you are going to do,
2. **How** much you are going to do,
3. **When** you are going to do it, and
4. **How many** days a week you are going to do it.

An example: This week, I will eat (what) 2 servings of either fruits or vegetables (how much) at each meal (breakfast, lunch and dinner) (when) at least three days (how many) this next week.

This week I will:
What I will do:
How much will I do:
When will I do it:
How many times I will do it:

My Daily Action Plan Log

	Completed Action (Yes/No)	Comments
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Bring this with you to class next week.

Lesson 2

Meals & Snacks with the Plate Method & Nutrition Facts

Purpose	Lesson 2 aims to provide participants with practice in planning meals and using the Plate Method. Participants are also shown how to use Nutrition Facts labels to assist in meal & snack planning.
Lesson Theme	The Plate Method is a simple method for planning meals that are consistent with 2005 Dietary Guidelines. The Nutrition Facts panel on food labels can help you plan Plate Method meals and snacks.
Learning Objectives	<ul style="list-style-type: none"> • Participants will be able to use the Plate Method to plan a variety of meals, with emphasis on foods that promote health and reduce risk for major chronic diseases, as recommended by the Dietary Guidelines for Americans 2005. • Participants will be able to recognize how combination foods can fit into Plate Method meal planning. • Participants will be able to use the Nutrition Facts food label for Plate Method meal planning and choosing snacks.
Leader Preparation	Review Lesson 2 Script & Lesson 2 Activities (30 minutes)
Materials Needed	<ul style="list-style-type: none"> • Nametags • Lesson 2 PowerPoint slides and script • PowerPoint projector • 9" plate, larger plate, food models • Plate Method Meal Planning worksheets <ul style="list-style-type: none"> • Large Plate – general use • Small Plates – 3 meals & snacks • "Color Your Plate Healthy with Fruits & Vegetables" handout (optional) • "Whole Grains for Health" handout (optional) • "Using the Nutrition Facts Label" handout • Nutrition Facts Comparison worksheet • Food labels (gather labels for activity prior to lesson) • Recipes & supplies for demo & tasting • Lunch Recipes handout • "Action Plan Worksheet – Lesson 2" • Pens/pencils
Estimated Teaching Time	<ul style="list-style-type: none"> • Introductions & Review Action Plans - 15 minutes • Lesson Presentation & Learning Activities - 60 minutes • Lunch Demonstration & Tasting - 30 minutes • Action Plan & Closing - 15 minutes

Lesson 2 Meals & Snacks with the Plate Method & Nutrition Facts

• **Introductions & review Action Plans**

Welcome back for Lesson 2. First, I think it would be helpful for us to re-introduce ourselves to each other. After you say your name, please recall one thing you remember learning last week. *(Be ready to finish with pertinent comments...such as the following:*

Last week you learned that carbohydrate-containing foods have the greatest effect on your blood sugar. You also learned which food groups contain carbohydrate and how the amount of those foods you eat at a meal or snack affects your blood sugar. You were shown a method for balancing foods on your plate – we called it the Plate Method for diabetes meal planning. We even demonstrated breakfast menus and you were able to sample recipes prepared.

Today we will practice planning healthy meals with the Plate Method and learn how the Nutrition Facts information on food labels can help in choosing foods for meals and for snacks. In addition, you will be able to taste-test lunch recipes. **(slide1)**

We ended last week's class by asking you to consider how you might use something you had learned. I encouraged you to turn that thought into what is called an Action Plan. Would anyone like to share something you did differently because of what you learned last week?

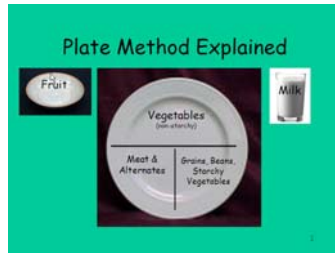
(Take time for participants to share; interject with appropriate comments that relate back to the goal-setting process and the class content. Perhaps some set too high of goals, some not high enough. Some may have forgotten to review goals regularly or to measure progress. Hopefully many will have positive reports. Keep comments in mind for goal-setting activity at close of this lesson.

Reviewing and setting goals is important for making meaningful changes...do not skip or rush through this activity! Not all your participants will be familiar with the process of goal setting. This week you may want to have them leave a copy what they wrote down for their goal with you...or consider having a small group share the goals they set and write them down together for added peer support.)

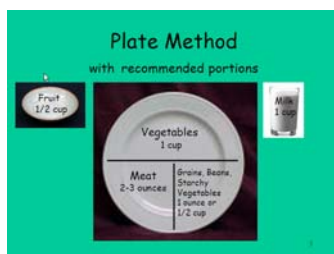
Meals Made Easy Week 2

- Plan Healthy Plate Method Meals
- Read the Nutrition Facts label
- Sample lunch recipes

9" plate & larger plate



animation draws lines & adds food groups



• **Review: Plate Method for Meal Planning**

Let's review the Plate Method. (Hold up two plates – a 9" plate and a larger one.) Which plate shall we start with? (*Assume they will remember the 9" plate.*) The 9" plate fits with the food portions you practiced last week. Using a larger plate will encourage larger portions, which will lead to more carbohydrate and calories.

Do you remember how the Plate Method meal is designed? (*This is an opportunity to have them work through the design as a group while the leader clarifies any questions*) **(slide2)**

- Cover the top half of the plate with (non-starchy) vegetables. (Use food models to review portions and types of vegetables) The vegetables are optional for breakfast.
- Cover one of the bottom quarters of the plate with a (2-3 oz.) meat or meat alternate. (*Use food models to review serving sizes*) The meat/meat alternate is also optional for breakfast.
- Cover the other quarter of the plate with grains, beans or starchy vegetables. (*Use food models to review portions...more time will likely be spent with this group...encourage care in estimation of portion sizes. Ask if younger, more active or larger participants added another serving from this group at meals or for snacks between meals, as suggested.*)
- On one side of the plate is fruit. (*Use food models to review that portion.*)
- On the other side is milk/yogurt. (*Use food models to review that portion.*)

(It doesn't matter which section of the plate you start with...in fact, you might have the group discuss how they go about planning...do they start with the vegetables, the meat or the grains? Does the way they approach the plate for planning change with the meal?)

As mentioned last week, the Plate Method is a simple way to plan balanced meals with similar carbohydrate content. You can include a variety of foods you enjoy. And, because most people with diabetes benefit from modest weight loss, the Plate Method can help you plan a day of meals with fewer calories than you usually eat.

If you recall, we discussed that the portions of food recommended for Plate Method meals make a difference. Here's a reminder of those. **(slide 3)**

Slide 4 – Breakfast A
(16 oz. milk, 16 oz. grape juice, 2 ½ c. cereal: is NOT a plate method meal)

Slide 5 – Breakfast B
(1 slice whole grain toast, 1 T. peanut butter, ½ c. grapes, 8 oz. milk: IS a Plate Method meal)

Slide 6 – Lunch A
(1-4 oz. bagel with 1 oz. cheese, 1 cup cheese crackers, 16 oz. juice: is NOT a Plate Method meal)

Slide 7 – Lunch B
(1 pita, ½ c. chicken salad, 1 cup green salad, ½ c. melon, 8 oz. milk: IS a Plate Method meal)

Slide 8 – Dinner A
(2 c. spaghetti, 1 c. sauce, 2 slices garlic bread, 16 oz. juice: is NOT a Plate Method meal)

Slide 9 – Dinner B
(1/2 c. bulgar pilaf, 3 oz. salmon, 1 c. cooked broccoli, 1 c. plain yogurt, ½ c. berries: IS a Plate Method meal)

Distribute

- Plate Method Planning worksheets
- Pencils or pens
- Dairy Council food pictures, optional

Did any of you use the sample menus that were provided last week? Did any of you design your own Plate Method meals? *(Provide opportunities for participants to discuss.)*

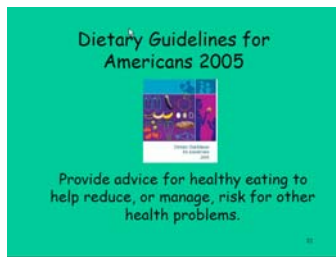
- **Activity: Rate the Plate** *The following slides show 2 different "plates" for each of 3 meals. The group can practice identifying meals that "fit" PM guidelines.*

Here's a fun way to check your understanding of Plate Method meal planning. I am going to show you two pictures each of breakfast, lunch and dinner meals. Carefully look at each one. Look at the food groups and the serving sizes (see descriptions in side bar to the left). As a group, decide whether each one IS or IS NOT an example of a Plate Method meal. *(Have the group tell why they answered the way they did; make appropriate comments regarding mixed food groups, serving sizes, etc.)* **(slides 4-9)**

- **Activity: Planning Meals using the Plate Method**

Distribute Plate Method Planning worksheets to each table group along with pencils/markers. This activity allows the leader to further reinforce the Plate Method and to discuss better choices among groups to meet the 2005 Dietary Guidelines. Explain to the class that each of their small groups will plan one meal (to include foods and their portion measure); you will be assigning groups breakfast, lunch or dinner. Have each small group start by choosing a "recorder" who is able to write foods or draw pictures. (Alternatively, provide the Dairy Council food pictures...though this will limit choices.)

As you circulate among the groups, you can offer reminders about Plate Method meal planning. When all small groups have planned a meal (they can do more than one if they choose – notice that the meal planning worksheets have space for all three meals along with snacks), have them describe that meal to the full group. Record all three meals on a white board, transparency or large piece of paper. You will then present Dietary Guidelines messages and ask small groups to review their meals after each key recommendation. Have the groups make possible substitutions, for example, changing a refined grain to a whole grain or high fat milk to lower fat milk. When finished, bring the revised meals to the large group for discussion. The entire process can be done as a large group to save time.



- **Presentation: Dietary Guidelines for Americans 2005**

The Dietary Guidelines are updated every five years, to provide us with the most current science-based advice to promote health. By following the Guidelines while planning Plate Method meals, people with diabetes get more than blood sugar control – they can also help manage or reduce their risk for other health problems, such as high cholesterol and high blood pressure, which contribute to the complications of diabetes. (slide 10)



The Dietary Guidelines contain a lot of nutrition information, including some key recommendations for consumers that I'll share with you now. At the grocery store next week we'll be able to see what foods area available to help us meet these suggestions.

Key Recommendations:

- **Choose a variety of fruits and vegetables each day. In particular, select from all five vegetable subgroups (dark green, orange, legumes, starchy vegetables and other vegetables) several times a week. (slide 11)**

“Color Your Plate Healthy” optional handout

Different fruits and vegetables are rich in different vitamins, minerals, fiber and phytochemicals.

Not all the vegetable subgroups fit on the top half of the Plate Method plate. As mentioned last week, starchy beans and vegetables do contain more carbohydrate, so they will be found on one quarter of your plate. But because these foods provide healthful nutrients, do include them in your Plate Method meal planning.

In the fruit group, eating whole fruits rather than drinking fruit juice is suggested to ensure adequate fiber intake.

(Encourage suggestions from participants...have them review the meal they have designed to see if they have, or can, include a variety of fruits and vegetables.)



- **Consume 3 or more ounce-equivalents of whole-grain products per day, with the rest of your grains coming from enriched or whole-grain products. (slide 12)**

“Whole Grains for Health” optional handout

Whole grains are an important source of fiber and other nutrients. Consuming at least 3 or more ounce-equivalents of whole grains per day can reduce the risk of several chronic diseases and may help with weight maintenance. You can meet this recommendation by substituting whole grains for refined grains.



(Offer ways to do this yourself or encourage suggestions from participants...have them review the meals they have designed to see if they have, or can, include at least three ounce-equivalents of whole grain.)

- **Consume 3 cups per day of fat-free or low-fat milk or equivalent milk products. (slide 13)**

By including a milk serving with each Plate Method meal, you can easily meet this recommendation. Milk and milk products provide nutrients that are important to bone health and contribute to healthy blood pressure. There are many low-fat and fat-free choices without added sugars that can be enjoyed by people with diabetes. If a person wants to consider milk alternatives because of lactose intolerance, choose yogurt or lactose-free milk.

Milk and yogurt are carbohydrate-containing; cheeses are considered meat alternates, so even though they are all milk products, they fill different sections of a Plate Method meal.

(Offer ways to do this yourself or encourage suggestions from participants...have them review the meals they have designed to see if they have, or can, include at least three milk/yogurt servings a day.)



- **When selecting and preparing meat and poultry, make choices that are lean, low-fat or fat-free. (slide 14)**

By using just the quarter of your plate for Meat & Meat Alternate foods, you are less likely to overeat fats that can be cholesterol-raising.

(Ask the group what they already know about selection and preparation of lean/low-fat meat and meat alternates. Did they keep these ideas in mind when planning their sample Plate Method meals?)



- **Limit intake of fats and oils high in saturated and/or trans fatty acids, and choose products low in such fats and oils. (slide 15)**

Fats supply energy and play a key role in many body functions. Fat is found in foods that come from both animals and plants. Most Americans need to reduce the amount of animal fats they eat. A day of well-designed Plate Method meals and snacks, such as the sample menus you were given last week, take care of that for you. They minimize animal fats that are cholesterol-raising, yet include enough healthy plant fats (oils).



(4-6 teaspoons of oils each day meet the recommended food intake pattern at the 1400 – 1600 calorie level. Encourage discussion of ways to include appropriate amounts of oil in daily food choices.)

- **Choose and prepare foods and beverages with little added sugars or caloric sweeteners. (slide 16)**

Sugars can be naturally present in foods (such as in fruit or milk) or added to the food. Added sugars are those sugars and syrups that are added to foods at the table or during processing or preparation. Although your body responds to both, added sugars supply calories but few or no nutrients. This is the reason to limit them when weight loss and good nutrition are your goals. The basic Plate Method meal encourages use of natural sweets in the form of milk and fruit at each meal.

(Using the Plate Method to plan meals discourages the use of added sweeteners; have group members note whether their menus happen to include sweets; encourage adjustments as needed.)

- **Choose and prepare foods with little salt. (slide 17)**

On average, the higher a person's salt (sodium chloride) intake, the higher an individual's blood pressure. Nearly all Americans consume substantially more salt than they need. Choosing foods with less salt will be encouraged during the classes.

(Have group comment on what they already know about choosing lower sodium products and cooking with less salt. Have they incorporated this into their Plate Method meals?)

- **Activity: Following Dietary Guidelines with Plate Method Meals**

If you stopped after each Key Recommendation (in above presentation) for larger or small group input on how to include the guidance, you have a Breakfast, Lunch and Dinner that were designed using the Plate Method and that incorporate Dietary Guidelines. If time allows, have participants look back over the week of menus provided last week to note how they also include Dietary Guidelines. This might provide ideas for weekly goal setting.

- **Presentation: Using Nutrition Facts labels**

So far, we have used the Plate Method Portions to learn about how much carbohydrate a food has in it and what affect it might



Using the Nutrition Facts Label handout

have on blood sugar. Another extremely helpful tool for knowing how much carbohydrate and other nutrients are in a food is the Nutrition Facts panel on a food label. **(slide 18)**

Nearly all foods sold in this country are packaged with a Nutrition Facts label. The order in which the information is presented is the same, which makes it fairly easy to learn to use. *(Consider asking how many regularly read nutrition labels.)*

What information on the label do you think will be helpful in planning a Plate Method meal? *(participant answers could guide the way you organize your review of the label parts. Alternatively you can structure the presentation as written below)*

There is a lot of information on a food label, so for the purposes of planning Plate Method meals, we are going to focus on the nutrition facts that will most affect your blood sugar and blood fats.

Serving Size & Servings per Container: all information on the label is based on the serving size – that is, if the label reads “total fat: 12 g” it means that one serving, of the specified size, contains 12 grams of fat. You may notice that the serving size on a label does not always match the suggested serving/portion for a Plate Method meal. For example, 1/2 cup is considered a serving of juice for a Plate Method meal, but 1 cup/8 fl. oz. may be specified as a serving on the food label. More on this later.

Total Calories and Calories from Fat: This information is helpful if you are trying to know or reduce the number of calories you eat each day, for weight management. For many people with type 2 diabetes, gradual weight loss helps normalize blood sugar. The three basic Plate Method meals (without snacks) provides 1400 to 1600 calories per day.

Total Fat: Look at the total grams of fat in a serving. One teaspoon of oil contains about 5 grams of fat and about 45 calories. A “low fat” food is defined as containing 3 grams of fat or less per serving. With that in mind you can have a relative sense of how fatty a packaged food item is. *(Consider comparing example labels here: pretzels vs. chips, whole milk vs. skim milk, high fat frozen meal vs. lower fat frozen entree...see end of lesson for copies of sample labels; they can be copied and distributed or you can make transparencies and show them with an overhead projector.)*

Four types of fats may be included in this category. Fat has little direct effect on your blood sugar, but the kind of fat you eat affects your insulin sensitivity and your chances of having a heart attack or stroke.

- ***Saturated Fat:*** comes mostly from animal sources, such as fat on meat, skin on poultry, butter fat in dairy products, like cheeses, ice cream and sour cream, and tropical oils like palm, palm kernel and coconut oil. It is most important for Americans to decrease their intake of saturated fat – for the Plate Method meals this would be less than 18 grams day.
- ***Trans Fat:*** *Trans* fats are produced when liquid oil is made into a solid fat. This process is called hydrogenation. *Trans* fats act like saturated fats and can raise your cholesterol level. They are found in stick margarine, shortening and processed foods that have been fried or made with shortening, such as donuts, pastries, chips, and crackers.
- ***Polyunsaturated fat:*** considered “pretty good fats” because they lower your chance of heart disease. They are found in plant oils, nuts and fish.
- ***Monounsaturated fat:*** can be considered “really good fats” because they lower your chance of heart disease. The best sources of monounsaturated fats are canola, olive and peanut oil; and olives, almonds, avocados and peanuts.

Cholesterol: Reducing cholesterol intake, along with saturated fat, can help lower blood cholesterol, thus reducing your chances for heart disease and stroke. Cholesterol is found only in animal foods.

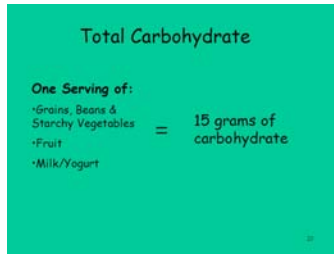
Total Carbohydrate: This includes the total amount (in grams) of starch, sugar, sugar alcohols and fiber. The grams of sugar noted on the label include added sugar and sugar that is naturally present in the food. Fiber is a type of carbohydrate that doesn't affect blood sugar.



Optional slide

Sugar alcohols include sorbitol, xylitol and mannitol, and have fewer calories than sugars and starches. Use of sugar alcohols in a “sugar-free” or “diabetic” product does not necessarily mean the product is low in carbohydrate or calories. And, just because a package says “sugar-free” on the outside, that does not mean that it is calorie or carbohydrate-free. Always remember to check the label for the grams of total carbohydrate and calories. **(slide 19 optional)**

Because the Total Carbohydrate in a serving of the food is what most determines the rise in blood sugar after a meal, I’d like to show you more about using this part of the label. **(slide 20)**



The portions recommended for the Plate Method meals for food from the grains, beans, starchy vegetables; fruit; and milk group all contain *about* 15 grams of total carbohydrate. This means that you can look at the grams of total carbohydrate per serving of a packaged product to understand how it would compare to a carbohydrate-containing food group serving/portion. However, if you happen to see a label for "one serving" of a food that matches the Plate Method portion, it may not have *exactly* 15 grams of carbohydrate in it. The table below the Nutrition Facts label on your handout can be helpful in estimating portions from the carbohydrate-containing food groups.

As mentioned earlier, the "one serving" listed on a label doesn't always match what you have learned is a Plate Method portion. Here are some examples; use the table on your Nutrition Facts handout to determine how many servings these foods represent:

Slides 21-28 omitted in margin for lack of space.

- Fruit flavored yogurt (contrast to plain yogurt)(**slide 21/22**)
- 10" Flour tortilla (contrast to 6" whole wheat flour tortilla) (**slide 23/24**)
- Sweetened cereal (contrast to 3/4 c. unsweetened cereal) (**slide 25/26**)
- 100% grape juice (contrast to 4 oz. juice) (**slide 27/28**)

If you were choosing yogurt for a Plate Method meal, which of the two shown would "fit" as a portion of milk/yogurt? Which tortilla would "fit" as a portion of starch? An alternative to choosing one product over another would be choosing a smaller serving of the higher carbohydrate item. What would you do? (*provide participants an opportunity to share their suggestions*)

• **Presentation: What is a Snack?**

So far we've been using the Plate Method to help with meal planning, but many people eat between meals. If the Plate Method meal servings are smaller than your normal choices, a snack can help take the edge off your appetite before the next meal rolls around. Or if you do need more calories than the Plate Method meals provide (you are bigger or more active or don't need to lose weight), snacks provide an opportunity to supplement your meals. By spreading carbohydrate through the day, you may be able to avoid excessively high blood sugar.



This slide shows a picture of a bowl of strawberries and strawberry shortcake. (**slide 29**) Both of these foods might be considered a snack. Which do you think would have the greatest effect on your blood sugar and why? (*Assume participants will say the "shortcake" and hopefully their reasoning would be that it contains more carbohydrate-containing servings.*)

How might you figure the carbohydrate servings in the shortcake snack? In the strawberry snack? (*Guide participants to identify/estimate serving sizes from grains, fruit and sweet groups vs. the 1 serving from fruit group.*)

For most people with diabetes, a snack is best kept at one to two carbohydrate-containing servings (and with some consideration to calories) to avoid blood sugar rising too high between meals. Can you think of other snacks that would be enjoyable and fit into the one or two servings recommendation? (*Entertain suggestions as a way to determine understanding; remind the group that sweets can fit in occasionally, though the portion would likely be small.*)

	Total Carbohydrate
• Snack size chips (2 1/2 oz.)	• 45 g
• Sugar free pudding cup	• 19 g
• 20 oz. fruit drink	• 70 g
• Granola bar	• 29 g

animation adds the ovals

Labels can also be used to determine better snack choices. According to the table on the Nutrition Facts handout, a snack that had one to two servings from carbohydrate-containing groups would contain anywhere from 8 - 37 grams of carbohydrate. Which of the following snacks would fit? (**slide 30**)

- Snack size bag of crackers or chips
- Sugar free pudding
- 20 oz. fruit drink
- granola bar

Nutrition Facts
Comparison worksheet

- **Activity: Using Nutrition Facts for Comparing Products**

Distribute labels from
foods that you have
collected

As time allows, participants are given labels from different food products within a food category (soups, snacks, frozen entrees, etc.) and are asked to use Nutrition Facts information to compare them. Leaders circulate to assist, answer questions and assure that all understand how to gather Nutrition Facts information. Complete the activity by reviewing answers to questions at the bottom of the Nutrition Facts Comparison worksheet.

Lunch Recipes handout
Demonstration supplies

- **Activity: Lunch Demonstration & Tasting** See Lesson 2 Activities for detail

Quick and easy lunches can be planned with the Plate Method. Demonstrate recipes and allow time for tasting.

Next week we will meet at the grocery store. (Add details here...time, place, etc.) We will use PM designed meals to develop a shopping list to guide us through the store.

• **Activity: Developing an Action Plan**

We'll end this week with some thoughts about goal setting. What is something you think you might do differently based on what you learned today? (*allow participants to share ideas*) Once you've thought of something, write it down. Try turning it into an Action Plan by adding in when you will do it and how often. Would anyone like to share their plan for the week? (*Allow those who choose to, share their goal.*)

Here are some more questions you might ask yourself about your action plan. These questions will help you focus even more on making the changes you want to make.

- Is this goal something I really want? (if not, you should start all over again)
- Do I have the skills to meet this goal? (If not, what do I need and where can I get them?)
- Do I have the resources to meet this goal? (If not, where can I find them?)
- Do I need help with this goal? (If so, who should I ask?)
- Can I review my goal each day? (if so, when? If not, why not? If not, you might want to start over.)

• **Closing**

Be sure to bring you Action Plan Worksheet back next week for discussion.

*(Do look to see that everyone has written down a reasonable goal for the week and consider having them also write it down on a slip of paper they turn in to you. **Remind the group once again regarding next week's supermarket tour.***

Meals Made Easy Week 2

- Plan Healthy Plate Method Meals
- Read the Nutrition Facts label
- Sample lunch recipes

Plate Method Explained

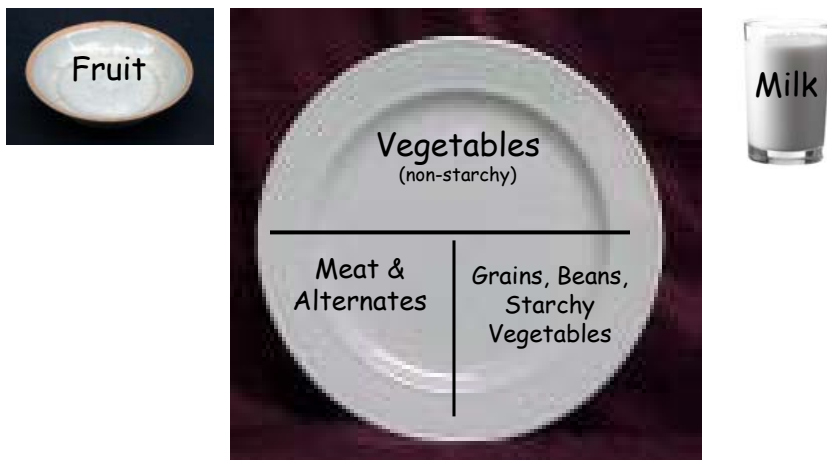
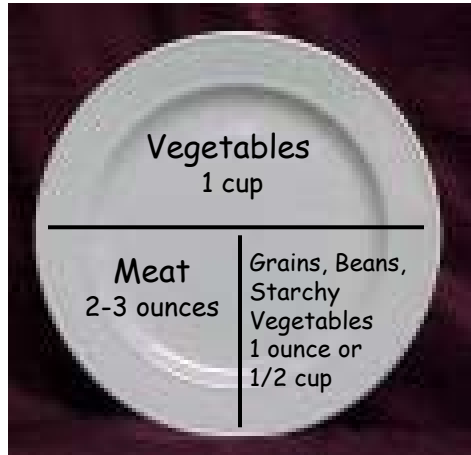


Plate Method

with recommended portions



Breakfast A



Breakfast B



Lunch A



Lunch B



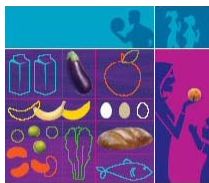
Dinner A



Dinner B



Dietary Guidelines for Americans 2005



Dietary Guidelines
for Americans
2005

Provide advice for healthy eating to help reduce, or manage, risk for other health problems.

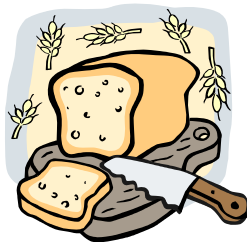
Key Recommendations

- Choose a variety of fruits and vegetables each day. In particular, select from all five vegetable subgroups several times a week.



Key Recommendation

Consume 3 or more ounce-equivalents of whole-grain products per day, with the rest of your grains coming from enriched or whole-grain products.



Key Recommendation

Consume 3 cups per day of fat-free or low-fat milk or equivalent milk products.



Key Recommendation

When selecting and preparing meat and poultry, make choices that are low-fat or fat-free.



Key Recommendation

Limit intake of fats and oils high in saturated and/or trans fatty acids, and choose products low in such fats and oils.



Key Recommendation

Choose and prepare foods and beverages with few added sugars or caloric sweeteners.



Key Recommendation

Choose and prepare foods with little salt.



Food Label
Nutrition
Facts

Nutrition Facts	
Serving Size 1 cup (228g)	
Servings Per Container 2	
Amount Per Serving	
Calories 260	Calories from Fat 120
% Daily Value*	
Total Fat 13g	20%
Saturated Fat 5g	25%
Trans Fat 2g	
Cholesterol 30mg	10%
Sodium 660mg	28%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A 4%	• Vitamin C 2%
Calcium 15%	• Iron 4%
* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9	Carbohydrate 4 • Protein 4

Sugar Alcohols

Nutrition Facts	
Serving Size 3 Pieces (36g)	
Servings per Container 3	
Amount Per Serving	
Calories 190	Calories From Fat 130
	% Daily Value*
Total Fat 14g	22%
Saturated Fat 8g	40%
Cholesterol 5mg	2%
Sodium 30mg	1%
Carbohydrate 20g	7%
Dietary Fiber 1g	7%
Sugars 3g	
Sugar alcohol 15g**	
Protein 2g	
Vitamin A 0%	Vitamin C 1%
Calcium 6%	Iron 2%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs	
**Sugar alcohol is not a sugar or alcohol. It is a hydrogenated starch derived and processed from corn.	

Total Carbohydrate

One Serving of:

•Grains, Beans &
Starchy Vegetables

=

15 grams of
carbohydrate

•Fruit

•Milk/Yogurt

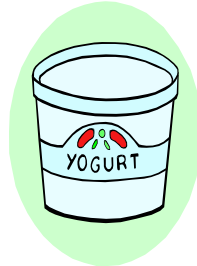
Low Fat Boysenberry Yogurt

Serving Size 1 (8 oz.) container

Total Carbohydrate **39 g**

Dietary Fiber 0 g

Sugars 36 g



How many Plate Method portions would this be? How does this compare to 8 oz. plain yogurt?

Low Fat Plain Yogurt

Serving Size 1 (8 oz.) container

Total Carbohydrate **16 g**

Dietary Fiber 0 g

Sugars 16 g

10" Flour Tortilla

Serving Size 1 (2.5 oz.) tortilla

Total Carbohydrate 36 g

Dietary Fiber 1 g

Sugars 3 g



How many Plate Method portions would this be?

How does this compare to 6" whole wheat tortilla?

6" Whole Wheat Tortilla

Serving Size 1 (1 oz.) tortilla

Total Carbohydrate 18 g

Dietary Fiber 4 g

Sugars 1 g

Honey Nut Cereal

Serving Size 3/4 cup

Total Carbohydrate 26 g

Dietary Fiber 0 g

Sugars 17 g



How many "Pyramid servings" would this be?

How does this compare to $\frac{3}{4}$ c. unsweetened cereal?

Unsweetened O's Cereal

Serving Size 3/4 cup

Total Carbohydrate 17 g

Dietary Fiber 2 g

Sugars 1 g

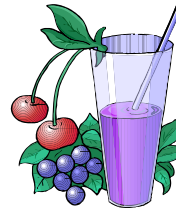
100% Grape Juice

Serving Size 8 fl. oz.

Total Carbohydrate 40 g

Dietary Fiber 0 g

Sugars 39 g



How many "Pyramid servings" would this be?

How does this compare to 3-4 oz. juice?

100% Grape Juice

Serving Size 4 fl. oz.

Total Carbohydrate 19 g

Dietary Fiber 0 g

Sugars 19 g

Which snack would have greatest effect on blood sugar?



1 serving Strawberries



Strawberry Shortcake

Which of these would "fit" for a snack?

- | | Total Carbohydrate |
|--------------------------------|--------------------|
| • Snack size chips (2 1/2 oz.) | • 45 g |
| • Sugar free pudding cup | • 19 g |
| • 20 oz. fruit drink | • 70 g |
| • Granola bar | • 29 g |

Lesson 2 Activity: **Lunch Demonstration**

Below you will find a list of Plate Method lunch recipes. Fix at least two different lunches for the class, demonstrating safe food preparation methods (see Implementation Guide for resources).

Show appropriate portions on a 9" plate and have extra available for tasting. Enlarge recipes as needed based on number of participants. Menus and recipes can be printed for distribution.

Prior to tasting recipes, have participants complete each lunch using the Plate Method by adding appropriate food groups.

Lunch #1

Tortilla Wrap*

Contains: 1 – 2 grain, beans, starchy vegetable (starch); 1 vegetable; 2 oz. meat; 1 fat.
Needs to complete: 1 fruit, 1 milk

Lunch #2

Chicken Vegetable Soup*

Contains: 1 oz. meat, ½ - 1 c. vegetable

Needs to complete: 1 – 2 starch, 1 fruit, 1 milk

Lunch #3

Bean Salad* with 2 oz. tuna

Contains: 2 –3 oz. meat, 1 starch, 1 vegetable

Needs to complete: 1 fruit, 1 milk

* Recipes available as Handout

Plate Method Meal Planning

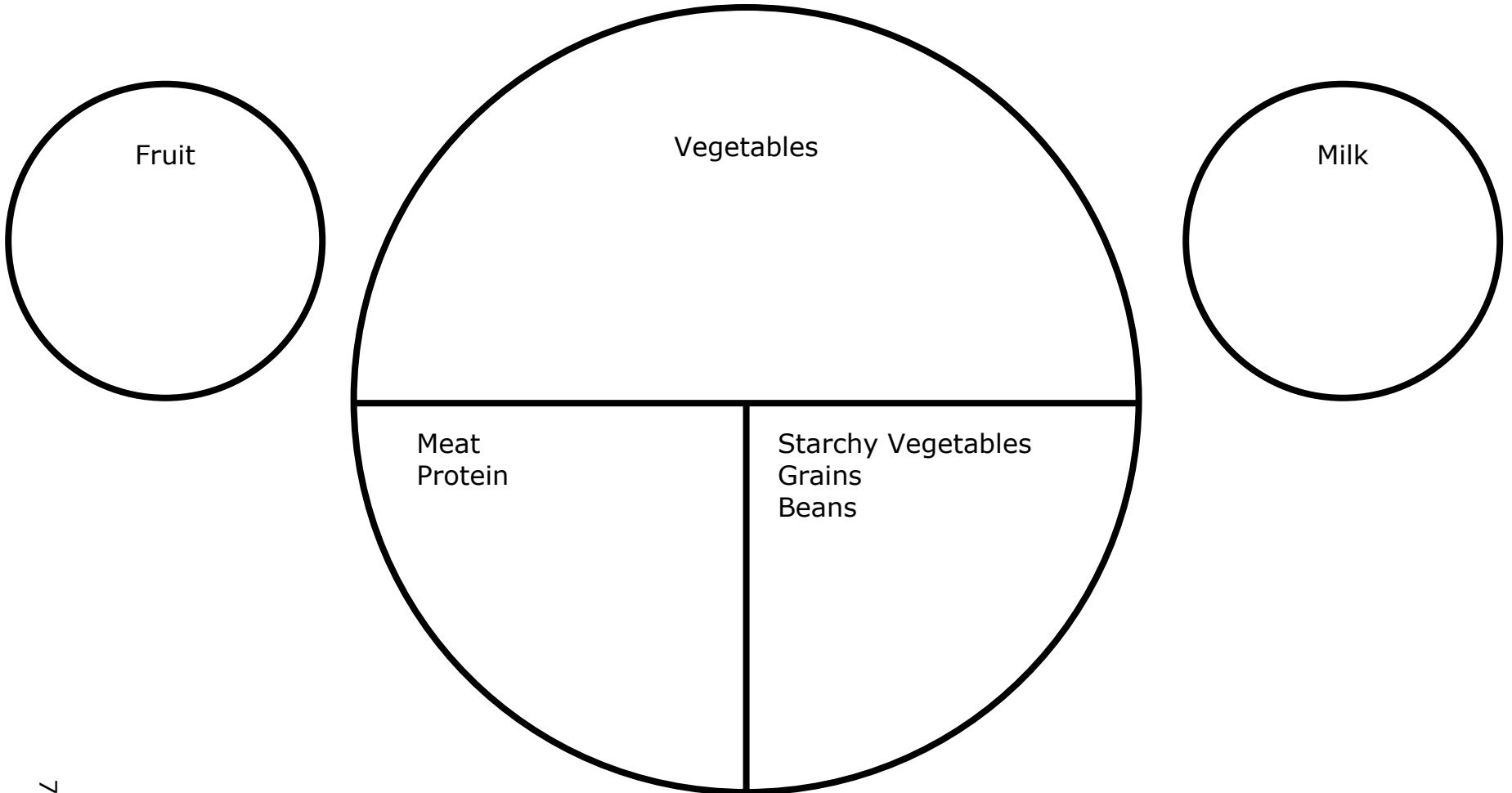
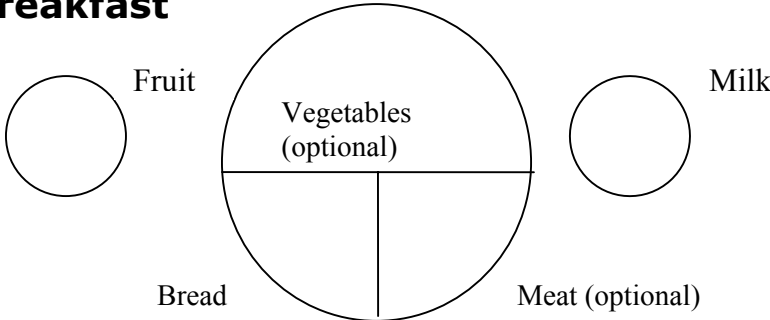


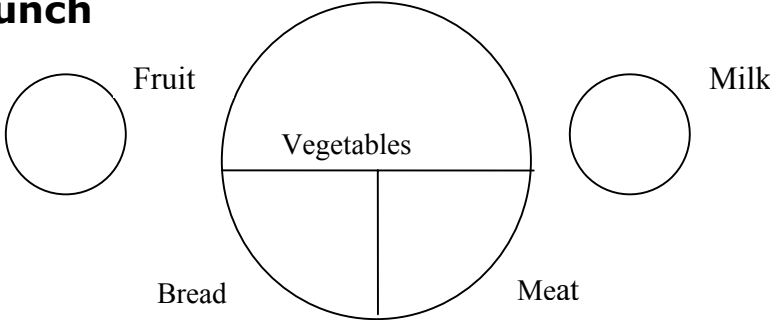
Plate Method Meal Planning: Foods & Portions

Breakfast



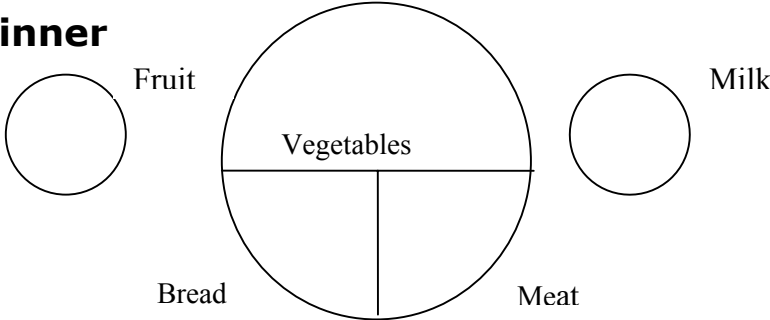
Snack (optional)

Lunch



Snack (optional)

Dinner



Bedtime Snack (optional):

Physical Activity:

Color Your Plate Healthy with Fruits & Vegetables

Colorful fruits and vegetables provide the wide range of vitamins, minerals, fiber, and plant chemicals your body uses to maintain good health and energy levels, protect against the effects of aging, and reduce the risk of cancer and heart disease. Many of the plant chemicals and other compounds that make fruits and vegetables good for us also give them their color.

BLUE/PURPLE:

Blackberries, Blueberries, Dried plums, Elderberries, Purple figs, Purple grapes, Plums, Raisins, Purple asparagus, Purple cabbage, Eggplant, Purple peppers

GREEN:

Avocados, Green apples, Green grapes, Honeydew, Kiwifruit, Limes, Green pears, Artichokes, Arugula, Asparagus, Broccoflower, Broccoli, Broccoli rabe, Brussels sprouts, Chinese cabbage, Green beans, Green cabbage, Celery, Chayote squash, Cucumbers, Leafy greens, Leeks, Lettuce, Green onion, Okra, Peas, Green pepper, Snow Peas, Sugar snap peas, Spinach, Watercress, Zucchini

WHITE:

Bananas, Brown pears, Dates, White nectarines, White peaches, Cauliflower, Garlic, Ginger, Jerusalem artichoke, Jicama, Kohlrabi, Mushrooms, Onions, Parsnips, Potatoes (white fleshed), Shallots, Turnips, White Corn

YELLOW/ORANGE:

Yellow apples, Apricots, Cantaloupe, Yellow figs, Grapefruit, Lemon, Mangoes, Nectarines, Oranges, Papayas, Peaches, Yellow pears, Persimmons, Pineapples, Tangerines, Yellow watermelon, Butternut squash, Carrots, Yellow peppers, Yellow potatoes, Pumpkin, Rutabagas, Yellow summer squash, Sweet corn, Sweet potatoes, Yellow tomatoes, Yellow winter squash

RED:

Red apples, Blood oranges, Cherries, Cranberries, Red grapes, Pink/Red grapefruit, Red pears, Pomegranates, Raspberries, Strawberries, Watermelon, Beets, Red peppers, Radishes, Radicchio, Red onions, Red potatoes, Rhubarb, Tomatoes

Whole Grains for Health

Why eat whole grains?

Whole grain foods taste great and they're good for you, too. Whole grains are an important source of fiber and other nutrients, including B-vitamins. Eating at least three 1-ounce equivalent servings of whole grain foods each day may help you manage your weight and reduce your heart disease risk – especially key for people with diabetes.

What are whole grains?

Whole grains contain all 3 parts of the grain seed, or kernel – the bran, germ and endosperm. Whole grains can be eaten either as a single food, such as brown rice, whole grain pasta, oatmeal or popcorn, or as a food ingredient, as in breads and snacks.

Grains that are not whole are called *refined grains*. Refined grains, and products made with them, have had parts of the whole grain removed – usually the bran and germ – to give the grain a finer texture. Some examples of refined grains are white flour, white rice and pasta; products made with refined grains include white bread, many crackers and baked goods.

Enriched grains are refined grains that have certain B vitamins and iron added back after being processed.

How can I eat whole grains?

Here are some tips from MyPyramid (www.mypyramid.gov), the newest food guidance system that encourages healthy eating for all Americans.

- Substitute a whole-grain product for a refined product – such as eating whole wheat bread instead of white bread, or brown rice instead of white rice.
- Try whole-wheat pasta. Try brown rice stuffing in baked green peppers or tomatoes and whole grain macaroni in mac & cheese.
- Create a whole grain pilaf with a mixture of barley, wild rice, brown rice, broth and seasonings.
- Use whole grain bread or crackers in meatloaf; try rolled oats or a crushed whole grain cereal as breading for chicken or other meat, fish, poultry.
- Popcorn, a whole grain, can be a healthy snack with little or no added salt and butter.

How can I find whole grains?

- Choose foods that name one of the following whole-grain ingredients *first* on the label's ingredient list: "brown rice," "bulgur," "graham flour," "oatmeal," "whole-grain corn," "whole oats," "whole rye," "whole wheat," or "wild rice."
- Foods labeled with the words "multi-grain," "stone-ground," "100% wheat," "cracked wheat," "seven-grain," or "bran," are usually *not* whole-grain products.
- Color is not an indicator of whole grain. Bread can be brown because of molasses or other added ingredients. Read the ingredient list to see if it is a whole grain.

Using the Nutrition Facts Label

Nutrition Facts	
Serving Size 1 cup (228g)	
Servings Per Container 2	
Amount Per Serving	
Calories 260	Calories from Fat 120
% Daily Value*	
Total Fat 13g	20%
Saturated Fat 5g	25%
Trans Fat 2g	
Cholesterol 30mg	10%
Sodium 660mg	28%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A 4%	Vitamin C 2%
Calcium 15%	Iron 4%
* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9	Carbohydrate 4 Protein 4

Serving Size & Servings per Container:

All information on the label is based on the serving size – which does not always match the portion suggested for a Plate Method meal or snack.

Total Calories & Calories from Fat:

This information is helpful if you are trying to reduce or control the number of calories you eat each day, for weight management.

% Daily Value: These percentages give you a relative idea how much that one serving contributes to your daily needs.

Total Fat: Look at the total grams of fat in a serving. One teaspoon of fat/oil contains about 5 grams of fat. A “low fat” food is defined as containing 3 grams of fat or less per serving.

Saturated and Trans Fat: These fats raise blood cholesterol. Choose foods with little or minimal saturated and *trans* fat. Alternatively, use smaller amounts of those foods that are higher in saturated and/or *trans* fat.

Total Carbohydrate: This amount includes the total grams of starch, sugar and fiber (and sugar alcohols if they are an ingredient). The grams of sugar noted on the label includes both added sugar and sugar that is naturally present in the food.

Fiber: Fiber is a carbohydrate that is not digested and does not affect blood sugar.

Carbohydrate Servings	Total Grams of Carbohydrate
1	8 – 22
2	23 – 37
3	38 – 52
4	53 – 65

Nutrition Facts Comparison

Type of Food Product _____

	Product Name	Product Name	Product Name
Serving Size			
Total Fat/Serving			
Saturated Fat/Serving			
Total Carbohydrate/Serving			
Fiber/Serving			

Into which Food Group would these foods fit? _____

Which of the three items would be the better choice for you? How did you reach your decision?

Would you include any of these foods in your meals? Explain how the label information helps you decide.

Lunch Recipes

Bean Salad

Makes 4 servings

Serving size: 3/4 cup

Plate Method Portion: 1 "beans" serving

Ingredients:

2 cups canned beans of choice,
rinsed and drained
1/3 cup minced onion
1 clove garlic, minced
1/2 cup chopped celery
1/2 cup chopped carrot
1/2 cup seeded, diced tomato
2 T. white wine vinegar
2 T. olive oil
1 tsp. Lemon juice
salt & pepper to taste

Directions:

In a medium salad bowl, combine all ingredients. Cover and chill for 1/2 hour before serving.

For an Italian twist, use garbanzo beans, add 1 T. minced parsley and basil. Substitute balsamic vinegar for white wine vinegar.

For Mexican bean salad, use red, black or pinto beans. Add 1 T. minced cilantro. Sub red wine vinegar and lime juice for white wine vinegar and lemon juice. Add 1/4 t. chili powder.

Chicken Vegetable Soup

Makes 6 servings

Serving Size: 1/6 th of recipe

Plate Method Portion: 1/2 c. vegetables &
1 oz. meat

Ingredients:

4 c. chicken broth
1/2 onion, chopped
1/2 t. each basil, oregano, marjoram
1 clove garlic, minced
1/4 t. pepper
2 c. assorted vegetables, chopped or 1
10-oz. bag frozen vegetables
2 c. chicken, cooked & cubed
1-15 oz. can low sodium tomatoes

Directions:

In a large saucepan, mix chicken broth, onions, herbs, garlic and pepper. Stir in vegetables. Bring to a boil. Reduce heat, cover and simmer for 6-8 minutes or until vegetables are crisp-tender. Stir in chicken and undrained tomatoes. Heat.

Tortilla Roll-Up

Makes 4 servings

Serving size: 1 wrap

Plate Method Portion: 2 "grains" servings

Ingredients:

4 whole wheat tortillas, 8-inch size
1/4 cup low-fat cream cheese, softened
12 slices (1 oz. each) lean turkey
spinach leaves, washed and dried
1 cup grated carrots

Directions:

Using a spatula or knife, spread about 1 tablespoon cream cheese on each tortilla, making sure to reach the edges. Place 3 slices of meat on each tortilla. Cover meat with spinach leaves and 1/4 cup grated carrots. Roll tortilla tightly; secure with a toothpick if desired.

Variations: These can be sliced for appetizers. You can add any number of colorful vegetables - red and green pepper, cucumber, for example.

Action Plan Worksheet: Lesson 2

Setting goals for yourself and then taking action to meet them is a way to move from just wanting something to actually making it happen. Think of something from today that you could turn into an Action Plan for this week. Here are a few suggestions to get you started:

Use the Plate Method to plan dinner
Eat whole grains

Measure portions at meals
Eat vegetables at meals

In the section below, write your goal in the form of an Action Plan. Use the Daily Action Plan Log to track your progress.

Your Action Plan should include:

1. **What** you are going to do,
2. **How** much you are going to do,
3. **When** you are going to do it, and
4. **How many** days a week you are going to do it.

An example: This week, I will eat (what) 2 servings of either fruits or vegetables (how much) at each meal (breakfast, lunch and dinner) (when) at least three days (how many) this next week.

This week I will:
What I will do:
How much will I do:
When will I do it:
How many times I will do it:

My Daily Action Plan Log

	Completed Action (Yes/No)	Comments
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Bring this with you to class next week.

Lesson 3

Smart Shopping with the Plate Method

Purpose	The aim of Lesson 3 is to teach participants how to buy healthy foods using Nutrition Facts labels and to reinforce their knowledge of Plate Method portions.
Lesson Theme	There are many items available in the supermarket that are easy to prepare, (economical) and fit within the Plate Method meal planning system. <i>(Emphasis on shopping on a limited budget is optional. See Implementation Guide, page 8 "resources for instructors" for more information.)</i>
Learning Objectives	<ul style="list-style-type: none"> • Participants will be able to find wholesome (affordable) foods in each of the food groups. • Participants will be able to use Plate Method portions and Nutrition Facts labels (and unit pricing) to compare items at the supermarket.
Leader Preparation	Review Lesson 3 Script & Lesson 3 Activities Confirm supermarket tour arrangements
Materials Needed (a number of activities are suggested...review the script to determine your actual handout needs)	<ul style="list-style-type: none"> • Lesson 3 script • Food Models for reinforcement/comparisons • "Using the Nutrition Facts Label" handout (you may want to enlarge this to poster size) • "Plate Method Meal Planning" handout (large plate-general use OR 9" paper plate) • "Smart Shopping List" handout (you may want to enlarge this to a poster size and laminate so that you can fill in the grocery needs during the activity) • "Smart Shopping List (form menu A (or B))" handout • "Menu A (or B) for Shopping List" handout (or enlarge to poster size) • "Recipes for Sample Plate Menu A" (or B) handout • "Meals Made Easy Shopping List" handout (see above regarding poster idea) • Easel & marker to write shopping list (and blank poster paper if you have not enlarged the handout) • "Supermarket Scavenger Hunt" handout • "Fast & Nutritious Foods" handout • "Action Plan Worksheet – Lesson 3" handout
<i>Estimated Teaching Time</i>	<p>Greeting & review - 15 minutes Plate method & Nutrition Facts review - 15 minutes Smart Shopping Intro - 10 minutes Tour - 45 minutes Action Plan & Closing - 15 minutes</p>

Materials,
handouts

Meet at Grocery
store

9" paper plate marked
to review Plate Method
meal planning or Plate
Method Planning –
general use handout
from Lesson 2

Lesson 3 Smart Shopping with the Plate Method

• **Greeting & review Action Plans**

Welcome back for Lesson 3. Just like last week, I'd like you to recall something you remember having learned last week.

Your comments can summarize: last week you practiced planning Plate Method meals and learned how to use the Nutrition Facts food label to maintain Plate Method portions. Today you will have more practice using the Nutrition Facts labels and learn how to make healthy food choices from all the foods available in the grocery store.

I ended last week's class by asking you to consider how you might use something you learned. Would anyone like to explain what he or she has accomplished this last week?

Now, take out your Action Plan Worksheet from last week. As you recall, we have ended each class by setting a positive and measurable goal, also called our Action Plan. Who would like to be the first to share something about your efforts this week?

(Take time for participants to share; interject with appropriate comments that relate back to the goal-setting process. Keep comments in mind for goal-setting activity at close of this lesson. If participants are hesitant to do this, have them get with the person they shared their goal with last week to discuss. Leaders can circulate and listen in on conversations.)

• **Review: Plate Method**

Hold up plate to review Plate Method for meal planning, pointing out food group and serving sizes for each section of the plate. Ask for input from participants to reinforce their ability to describe the Plate Method.

• **Presentation & Activity: Planning for Smart Shopping**

This section is optional. It is tempting to want to get right at your tour, but because so few people take the time (or have the skills) to plan meals ahead and to use those plans to organize their shopping, it is well worth the time it takes.

One of the more important parts of meal planning involves shopping for the food. You can design the best meal in the world, but if the food isn't in your house, that meal has no chance of turning into reality.

Here are a few tips to make your shopping adventure successful:

- Plan to go after you've had a satisfying meal or snack, rather than when you're hungry. This reduces the chances of coming home with more (or less) than you really want.
- Make a shopping list from the meals you have planned (Consider looking at supermarket sale ads as you plan your meals. Include sale items whenever possible.)
- List groceries needed by area of the store in which they are found. This can increase your efficiency and reduce the chances of missing something or coming home with unplanned items. A shopping list with items listed by category can help.

The following activity can be considered optional.

Let's use this sample day's menus and accompanying recipes to develop a shopping list. Here is a blank shopping list, organized by grocery categories. We will write down (or check off) each food necessary to prepare these meals. *(Completed shopping lists are provided for instructors in the handouts/worksheet section.)*

Let's start with produce. It is often on an outside edge of the store and a logical place to begin your shopping trip. (Identify produce needed to prepare the meals and list in appropriate space.) Next we'll list milk/yogurt products (identify products), *and so on through the list...see completed shopping list, mentioned above, for comparison.*

Now we have a shopping list to guide us through the store. In each area we will have some specific foods to look for. You'll have many opportunities to practice label reading and to ask questions.

• **Activity: Supermarket Scavenger Hunt**

In the left margin you will find ideas for searches you might have participants go on while you are in particular areas of the store. These are just ideas...you & your group may come up with others. You will also find these ideas on a Scavenger Hunt handout that you can give to participants at the beginning of the tour. Another option would be to cut the items on the handout into strips and have participants draw one to "hunt down" during the tour.

Distribute Menu A or B & Recipes (or display in front of the group as written on a flipchart)

Distribute "Smart Shopping List" or "Meals Made Easy Shopping List"

It is also suggested that you make a poster-sized copy of the shopping list you choose to use, and complete it with the group.

Refer to Using the Nutrition Facts Label handout (or poster-sized version you enlarged.)

Organize your shopping tour with the manager's assistance. Keep your group small; have extra leaders or organize multiple tours during the week.

Scavenger hunt ideas for produce area:

- ◆ Find a fruit you have never tasted
- ◆ Compare the cost/serving of two of your favorite fruits
- ◆ Compare the cost of bag salads to salad ingredients

• **Review: Nutrition Facts label.**

Before heading out on tour, provide example products for reviewing parts of the Nutrition Facts label. Consider comparing a "diabetic" product & regular version to provide an opportunity to discuss sugar substitutes and sugar alcohols. Arrange for a taste comparison with the store manager. Examples might include beverages, cookies or frozen desserts. (activity time: approximately 10 minutes)

• **Activity: Supermarket Tour**

Organize your trip to match the store's layout. Keep food safety in mind as you show participants how to organize their own shopping trips (leave refrigerated and frozen items for the end of the trip even though you're not actually purchasing food).

Your group may want to concentrate on 2 or 3 areas of the store only. Tailor the tour for them and keep their stamina in mind. Quite a few areas of the store are listed below...this does not mean you need to visit each one. You may or may not want to use the shopping list developed above to organize your tour. Again, make this tour as valuable to your participants as you can, based on what you have learned about their habits and experience.

Produce: The Plate Method encourages you to plan at least two meals with at least 1 cup of vegetables (2 cups daily) and three meals with one half cup of fruit (1 ½ cups daily). Fruits and vegetables are full of vitamins, minerals, fiber, and are low in fat and sodium.

As you look through this area of the store, which foods do you recognize as containing carbohydrate? (Assume responses will include fruits and starchy vegetables.)

Review fruit portions by showing larger fruit vs. smaller fruit compared to tennis ball and/or standard food models. Do this with a potato as a starchy vegetable. Consider using the produce department scale to demonstrate weighing as another way to check portion size.

Some people shy away from the produce area for fear that fresh fruits and vegetables are too expensive. When one looks at price per pound, it can seem like produce is expensive. By changing that to price per serving you may be better able to compare to other forms of the food, like frozen or canned, or to different foods.

- Scavenger hunt ideas for dairy area:
- ◆ How do soy milk and cow's milk compare in terms of total carbohydrate?
 - ◆ How much total carbohydrate is in one serving of different yogurt products? Which ones will fit best into a Plate Method meal?

For example, if apples are \$1.00 per pound, that may seem too expensive. But if I take the time to find out that a pound of apples is 4 pieces of fruit, I can figure that each apple would cost 25 cents. Now I can compare that to the cost per serving of canned applesauce or to a different fruit like bananas. I can also compare it to the cost of a soda pop or a cup of coffee and 25 cents doesn't seem too much for a healthy food!

Move to items on the shopping list and discuss some of the following: how to purchase, prepare, determine cost per serving. Consider comparing cost of convenience vs. cost of prep with convenience produce vs. plain produce (bag salads vs. head lettuce, little carrots vs. large unpeeled, etc).

Dairy: Look for dairy products that are made with lower fat milk. Skim (fat free) and 1% (low fat) milk and yogurt have less saturated fat and cholesterol. One cup (8 ounces) of milk or plain yogurt are considered one cup equivalents. Flavored yogurts can be considerably higher in carbohydrate because of the sweeteners added.

Plain yogurt has a tart flavor such that it can be used as a sour cream substitute. If you like your yogurt sweeter, but don't want the added sugars that are found in most of the flavored yogurts, what might you do? *(Allow participants to answer this question themselves...possible answers include add fruit and a sugar substitute or a little bit of regular sugar, add a low sugar jam, make a fruit smoothie, etc.)*

Flavored milks and yogurt-based drinks are relatively new additions to the marketplace. Also popular are flavored coffee creamers and non-dairy milks, such as rice and soymilk. Take a moment to look at some of those labels. Make a comparison by looking at serving size, fat, and total carbohydrate.

Meat, Poultry, Fish, Eggs, Cheese: People with diabetes have the same need for protein as the general public. As you pass through this area, consider purchasing lower fat items. Meats and cheese contain saturated fat and cholesterol, so the leaner your purchase, the less fat you will be eating. Cuts of meat with the word "loin" or "round" are typically leaner (do a visual comparison). Do work towards including fish at least twice per week since the fats they contain are considered healthy.

As just mentioned, most foods high in dietary cholesterol are also high in saturated fat, and vice versa. Eggs, fish and shellfish are exceptions and are confusing for many people. They can be major sources of dietary cholesterol, but they're fairly low in saturated fat.

<p>Arrange for taste-testing some of these lower fat dairy products and comparing to higher fat counterparts. These could also be worded as Scavenger hunt questions.</p>	<p>The American Heart Association’s dietary guidelines, revised in 2000, no longer make a recommendation about how many egg yolks can be eaten per week by the general population. However, if you have diabetes, the suggested daily cholesterol intake is 200 mg or less. To meet this, choose one small or medium egg, with 157 and 187 mg of cholesterol respectively. Remember to balance the dietary cholesterol in that egg with the other foods you eat that day.</p> <p>Egg whites have no cholesterol. 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 cholesterol-free egg substitutes.</p> <p>Compare fat/calorie content/ cost of available ground beef vs. ground poultry products</p> <p>Compare fat/calorie content/cost of cheeses.</p> <p>Compare fat/calorie content/protein/cost of soy products.</p> <p>Compare fat/calorie/cost of eggs vs. egg substitutes</p> <p>Compare fat/calorie/sodium/cost of various breakfast meats (bacon, sausage, luncheon meats)</p>
<p>Find a loaf of bread with whole grain listed as the first ingredient.</p>	<p>Bakery: One need not be afraid of this area of the store. Rather than giving up breads, sweets and desserts, learn to make better choices most of the time and to minimize serving sizes of higher carbohydrate items. Include 3 one ounce-equivalent portions of whole grain foods each day as some of your carbohydrate-containing foods in your Plate Method meals and snacks.</p>
<p>How many "starch" servings does one bagel provide?</p>	<p><u>Bread:</u> Look for whole grain as the first item on the list of ingredients, look for fiber on the Nutrition Facts panel, look at total carbohydrate or weight of serving to determine how the item fits into your menu. Have participants search for various items (small bagels, buns, muffins; whole grain breads, buns; check carbohydrate/fat content of sweet rolls, donuts, fried pies). Explain how to determine one-ounce equivalent portions.</p> <p><u>Cereals:</u> Have participants find their favorite cold/hot cereal and review the Nutrition Facts label(s). Look for serving size, total carbohydrate, whole grains, fiber and sodium content per serving. For serving size comparison, have measuring cups along to help visualize serving size on Nutrition Facts vs. that usually eaten.</p>

Find a cracker with whole grain listed as the first ingredient

Find examples of products that use sugar alcohol, if you haven't already. Practice determining the total carbohydrate per serving.

How does the carbohydrate content of fat-free dressing compare to regular?

Crackers & Cookies: Compare serving size, fat, total carbohydrate and fiber (and cost) of various crackers, including "reduced fat" items. Compare serving size, fat, total carbohydrate and cost of various cookies, including those with "diabetic" claims. Help participants determine the portion that is one-ounce equivalents from the grains group.

Sugar alcohols: Sugar alcohols are one type of reduced-calorie sweetener and are used in sugar-free candies, chewing gum, meal replacement bars and desserts. They provide about half the calories of sugars and other carbohydrates. Isomalt, maltitol, mannitol, sorbitol, and xylitol are examples of sugar alcohols. Even though they are called sugar alcohols, they do not contain alcohol. Sometimes sugar alcohols can cause diarrhea, especially in children. Many people think that foods with sugar alcohols are "free foods." This is not true! Recall from last week that sugar alcohols don't raise blood glucose as much as the same amount of other carbohydrates (starch and sugar). To figure out the amount of carbohydrate you should count for a food with sugar alcohols, follow these tips:

- Subtract half of the sugar alcohol grams from the total carbohydrate.
- Count the remaining grams to figure out how the portion fits into your Plate Method meals or snacks.

Fats & Oils:

Oils: Plant fats, such as oils in this aisle, are still calorie dense, but they do not contribute to heart disease in the way saturated fats do.

Salad Dressings: The calories from regular salad dressings add up quickly since oil, mayonnaise, and sometimes cheese are main ingredients. Just two tablespoons of regular dressing can add 150 calories from fat. Even the calories from reduced-fat, low-fat or fat-free dressings add up quickly. Try several salad dressings and find a few you enjoy. You might settle on a regular and use just a small amount or dilute it with vinegar or water.

Sweeteners:

Sugar: Sugars are the sweeteners you find on the shelves here (granulated sugar, brown sugar, powdered sugar, honey, jams, syrups) and the sweeteners used in commercial food products (high-fructose corn syrup, corn sweeteners, dextrose, etc.). Examples of sugary foods containing those ingredients would be soda pop, candy and fruit drinks. Other sweet foods contain sugar and fat, such as cookies, pies, cakes and pastries. The addition of fat really increases the calories in these products. Using the Plate Method for meal planning reminds us to limit added sugars and sweet foods because of the carbohydrate, fat and calorie content and because they have little other nutrition value. When you do include them, recall that each carbohydrate-

<p>How many sugar substitutes do you find in this store?</p>	<p>containing Plate Method portion has about 15 g of carbohydrate.</p> <p>There are many “sugar-free” and “no sugar added” products in the grocery store. Remember to look at the Nutrition Facts for total carbohydrate to see how they might fit into your Plate Method meals.</p> <p>Sugar substitutes: There are four low-calorie sweeteners now commonly available in the U.S. These are all considered safe for people with diabetes (except saccharin for pregnant/breastfeeding women & aspartame for those with PKU). They are acesulfame potassium (ace-K), aspartame, saccharin and sucralose (brand name Splenda). A fifth low-calorie sweetener, neotame, has been approved for use in the U.S., so be on the look-out for products sweetened with it. These low-calorie sweeteners are “free foods” because they have no calories and do not raise blood glucose levels. They can be used to sweeten foods without adding carbohydrate.</p>
<p>Find a seasoning you have never tried</p>	<p>Seasonings: By using herbs and spices you can flavor foods without relying on excess salt or fat. You can purchase single herbs/spices or mixtures that impart flavors common to ethnic foods, such as Italian, Mexican, etc.</p>
<p>What is the price difference between low sodium and regular canned vegetables?</p>	<p>Canned & Dry Foods:</p> <p><u>Vegetables:</u> Remember that starchy vegetables such as green peas, corn and potatoes are part of the grains, beans, starchy vegetables group. Canned vegetables are usually higher in sodium content, but there are many low- or no-sodium products available, usually at no extra cost.</p> <p><u>Fruits:</u> Fruits canned in juice, water or light syrup will be similar in carbohydrate content to fresh fruit. Individually packaged fruits are convenient, but more expensive than larger cans.</p> <p><u>Pasta:</u> Try whole wheat pasta as a whole grain. A one-ounce equivalent is about ½ cup cooked pasta.</p> <p><u>Rice:</u> Brown rice is a whole grain. Compare cost (price per lb or serving) of plain rice to convenience rice and pasta mixes. Instant brown rice is a quick way to include whole grains.</p>
<p>Find a frozen meal that looks good and contains less than 10 grams of total fat per serving</p>	<p>Frozen Foods: Frozen vegetables are lower in sodium than regular canned versions and can be very convenient. Check Nutrition Facts on frozen entrees and convenience items as many can be high in fat and calories.</p>
<p>Compare carbohydrate content of 100% juice to a fruit punch</p>	<p>Beverages: The Plate Method suggests milk as the beverage at each meal, but what about all the other beverages in the store? As with other foods, use the Nutrition Facts to determine how a beverage might compare with other foods.</p>

Fast & Nutritious Foods
handout

If you have time...ask your group to plan a spur of the moment Plate Method meal from items in the store. Example: 2-3 oz. rotisserie chicken, ½ c. seasoned brown rice, 2 cups tossed salad with reduced fat dressing, 1 cup skim milk and ½ cup mandarin orange slices. Have participants use the Fast & Nutritious Foods handout to help them come up with ideas.

Action Plan Worksheet

- **Action Plan**

We'll end our shopping trip with some thoughts about what new things you might have learned. What is something you think you might do differently because of today's adventure? (*allow participants a chance to share*) Here's another copy of the Action Plan Worksheet. Consider turning what you'd like to do into a written plan. Take some time to write it down and share (verbalize) your plans with one other person.

Closing

Suggest participants bring a favorite recipe with them to next class, since activities will include altering recipes for health.

Lesson 3 Activity: Supermarket Scavenger Hunt

Assign items and have participants report back to the group.

1. Find a new fruit you would like to try.
2. Find a new vegetable you would like to try.
3. Compare the cost per $\frac{1}{2}$ cup portion of two fruits you often buy.
4. Compare the cost per serving of bag salads to salad ingredients.
5. How do soy milk and cow's milk compare in terms of total carbohydrate?
6. How much total carbohydrate is in one cup of chocolate milk?
7. Compare different yogurt products for their total carbohydrate and calories.
8. Compare fat and cost per 4 ounce portion of extra lean ground beef compared to lean ground turkey or chicken products.
9. Compare fat and cost of a one ounce portion of different cheeses.
10. Compare fat and protein content and cost per 2-3 ounce portions of soy products.
11. Compare cost per 1 egg vs. 1 egg portion of egg substitutes.
12. Compare fat/calorie/sodium/cost per 1 ounce serving of various breakfast meats (bacon, sausage, luncheon meats)
13. Find a loaf of bread with whole grain listed as the first ingredient. What is the cost per one ounce-equivalent serving?
14. How many ounce-equivalents of grain does a bagel provide? English muffin?
15. Find a cracker with whole grain listed as the first ingredient. What is the cost per one ounce-equivalent of grain? How many crackers is that?
16. How does the carbohydrate content of fat-free dressing compare to regular?
17. What sugar substitutes do you find in this store?
18. What is the price difference between low sodium and regular canned vegetables?
19. Compare carbohydrate content of 100% juice to a fruit punch
20. Find a frozen dinner that looks good with 10 g or less fat. How would this compare to a Plate Method meal?

Lesson 3 Activity: Planning for Smart Shopping Menu A

Breakfast

- 1 c. bran flakes
- 1 c. 1% milk
- 1 small banana

Lunch

- 2 slices whole wheat bread
toasted with
- 1 oz. part-skim cheese melted on
each slice of bread,
topped with
slices of tomato
- 1/2 cup carrot strips
- 6 oz. low sugar yogurt (or 8 oz. plain)
mixed with
- 1/2 c. crushed pineapple, canned

Dinner

- $\frac{3}{4}$ - 1 c. Gingered Broccoli*
- 3 - 4 oz. baked potato
with
- 2 T. reduced fat cottage cheese
- 3-4 oz. portion Chicken Under Wraps*
- 4 oz. seasonal fruit
- 8 oz. 1% milk

Lesson 3 Activity: Planning for Smart Shopping Recipes for Menu A

Gingered Broccoli

Makes 6 servings

Serving size = 3/4 cup

Nutrition Information: 1 vegetable

Ingredients:

1/3 c. low-fat, low-sodium chicken broth
2 cloves garlic, minced fine
1 t. grated fresh ginger root
3 T. lite soy sauce
1 T. brown sugar
1 t. canola oil
1 T. cornstarch
2 T. cold water
6 c. broccoli pieces, lightly cooked

Chicken Under Wraps

Makes 6 servings

Serving Size = 1/6th recipe

Nutrition Information: 3-4 oz. meat

Ingredients:

1 whole chicken (3 lb) skin removed
1 small onion, quartered
1/2 t. paprika
2 garlic cloves, minced
1/4 t. salt
1/4 t. black pepper
4-5 large iceberg lettuce leaves,
washed and patted dry

Directions:

Heat the chicken broth in a wok or large skillet over medium heat. Add the garlic and ginger and stir for 1 minute. Add the soy sauce, brown sugar and canola oil.

In a small bowl, combine the cornstarch and cold water and add to skillet.

Continue cooking and stirring until the sauce thickens. Then add the broccoli and heat.

Preheat oven to 450 degrees. Place the chicken breast side up in a 9"x13" baking dish. Place the onion in the cavity of the chicken. In a small bowl, combine the remaining ingredients except the lettuce; mix well.

Rub the chicken evenly with the spice mixture, then lay the lettuce leaves over the top, curving them around to completely cover the chicken.

Bake the chicken for 80-90 minutes, or until no pink remains and the juices run clear (190 degrees on thermometer). Discard lettuce leaves and cut the chicken into serving-sized pieces.

Smart Shopping List

Produce

Dried Beans, Pasta, Rice

Dry Goods (flour, sugar, etc.)

Bakery

Dairy

Cereal

Meat, Fish, Poultry

Canned Foods

Cheese

Frozen Foods

Condiments/Dressings

Beverages

Oils/Fats

Other

Meals Made Easy Shopping List

PRODUCE

- Apples
- Avocado
- Bananas
- Berries
- Canteloupe
- Grapes
- Mangoes
- Oranges
- Pears
- Asparagus
- Bell Peppers
- Broccoli
- Broccoli slaw
- Carrots, large/baby
- Lemon/Lime
- Lettuce, Romaine
- Mushrooms, presliced
- Potatoes, scalloped
- Spinach
- Sweet potatoes
- Tomatoes
- Zucchini
- _____
- _____
- _____

CANNED FOODS

- Mandarin oranges
- Pineapple
- Pears
- Pumpkin
- Beans
- Salmon, boneless, skinless
- Tuna
- Tomato sauce
- Crushed/diced tomatoes
- Soups
- fruit, light
- _____
- _____

BAKING

- All-purpose flour
- Whole wheat flour
- Sugar
- Brown sugar
- Nuts
- sugar substitute
- _____
- _____

FROZEN FOOD

- Blueberries
- Raspberries
- Strawberries
- Bell peppers, mixed
- Broccoli florets
- Carrots
- Cauliflower
- Corn Kernels
- Kale
- Peas
- Spinach
- Vegetables, mixed
- Sausage, lowfat breakfast
- Shrimp, cooked
- _____
- _____
- _____

GRAIN PRODUCTS

- Dried pasta
- Instant brown rice
- Bread, 100% whole wheat
- Pita bread
- Rolls
- Breakfast cereal
- Wheat germ
- Oats
- tortillas, whole wheat
- English muffins, whole wheat
- whole grains, other
- _____
- _____

MISC

- Peanut butter
- Fruit cup
- Applesauce
- Pasta sauce
- All-natural chicken broth
- low carb fruit spread
- _____
- _____

DAIRY

- Cheese sticks
- 1% lowfat cottage cheese
- Lite cream cheese
- Omega-3 eggs
- 1% lowfat milk
- Preshredded reduced-fat Cheddar
- Preshredded part-skim mozzarella
- Grated Parmesan cheese
- Part-skim ricotta cheese
- Reduced-fat sour cream
- margarine, soft
- yogurt, light
- _____

CONDIMENTS/OILS

- Canola oil
- Olive oil
- Nonstick cooking spray
- Light canola mayonnaise
- Salad dressing
- Ketchup
- Mustard
- Relish
- Salsa
- _____
- _____
- _____

MEATS

- Pork
- Seafood
- Chicken, boneless, skinless
- beef, lean
- turkey/ham, sliced
- _____

HOUSEHOLD

- Napkins
- Paper towels
- Bathroom tissue
- Facial tissue
- Cleaning supplies
- Laundry detergent
- Dishwasher detergent
- Aluminum foil
- Plastic wrap
- Sandwich bags
- _____
- _____
- _____

Smart Shopping List (Menu A)

Produce

- ◆ small banana
- ◆ tomato
- ◆ carrot
- ◆ 3-4 oz. potato
- ◆ seasonal fruit
- ◆ broccoli
- ◆ ginger root
- ◆ garlic
- ◆ onion
- ◆ iceberg lettuce leaves

Bakery

- ◆ Whole wheat bread

Cereal

- ◆ Bran flakes

Canned Foods

- ◆ Crushed pineapple in own juice
- ◆ Low sodium chicken broth

Condiments/Dressings

- ◆ Lite soy sauce
- ◆ salt
- ◆ black pepper

Oils/Fats

- ◆ Canola oil

Dried Beans, Pasta, Rice

Dry Goods (flour, sugar, etc.)

- ◆ Brown sugar
- ◆ cornstarch

Dairy

- ◆ 1% milk
- ◆ sugar-free yogurt

Meat, Fish, Poultry

- ◆ Chicken, 1 whole

Cheese

- ◆ Part-skim cheese
- ◆ Reduced fat cottage cheese

Frozen Foods

Other

- ◆ Paprika
- ◆ Sage

Lesson 3 Activity: Planning for Smart Shopping Menu B

Breakfast

1/3 - 1/2 c. dry oats, cooked
with
2 T. raisins
1 cup low-fat milk

Lunch

1/2 c. cooked beans
1/3 c. spanish rice*
3 oz. carne adovada
1 c. cabbage slaw*
1 medium apple

Dinner

1 flour tortilla
2 oz. grilled chicken or pork
1 oz. grated reduced fat cheese
1/2 c. diced tomato & onion
1/2 c. chopped lettuce
1/2 c. jicama slices
2 T. guacamole
1 serving seasonal fruit
1/2 c. sugar free pudding

Lesson 3 Activity: Planning for Smart Shopping Recipes for Menu B

SPANISH RICE

Makes 4 servings

Serving Size: about 2/3 cup

Nutrition Information: 1 starch, 1 vegetable

Directions:

Mix all ingredients together and bake at 350° F for 30 minutes or until heated through and bubbly. Fluff with fork before serving.

Ingredients:

2 c cooked brown rice

1/4 c. Green pepper, diced

1/2 Onion, chopped

1/4 c. Pimento bits or chopped red pepper

1/2 tsp. pepper

1 c. low sodium Tomato juice

1 tsp. Worcestershire sauce

CABBAGE SLAW

Makes 6 servings

Serving Size: 1 cup

Nutrition Information: 2 vegetable

Directions:

Combine vegetables and raisins in a large salad bowl and toss well.

Combine dressing ingredients and add to vegetables. Toss and refrigerate.

Salad Ingredients:

3 c. shredded green cabbage (about 1/2 medium head)

2 c. shredded red cabbage

1 c. shredded carrot

1/4 c. raisins

Dressing Ingredients:

1/3 c. low-fat mayonnaise

1/4 c. plain, low-fat yogurt

2 T. apple juice concentrate

2 T. poppy seed

2T. red wine vinegar

Smart Shopping List (for menu B)

Produce

- ◆ Green cabbage
- ◆ Red cabbage
- ◆ Apple, medium
- ◆ Tomato, 1
- ◆ Onion, 1
- ◆ Lettuce, 1 head iceberg
- ◆ jicama
- ◆ avocado
- ◆ fruit
- ◆ green & red pepper
- ◆ carrots

Bakery

- ◆ tortilla

Cereal

- ◆ oatmeal

Canned Foods

- ◆ Sugar free pudding
- ◆ LS tomato juice

Condiments/Dressings

- ◆ Worcestershire sauce
- ◆ Reduced fat mayonnaise
- ◆ Red wine vinegar

Oils/Fats

Dried Beans, Pasta, Rice

- ◆ Pinto beans
- ◆ Brown rice

Dry Goods (flour, sugar, etc.)

- ◆ raisins

Dairy

- ◆ Low-fat plain yogurt

Meat, Fish, Poultry

- ◆ pork roast

Cheese

- ◆ Reduced fat cheese

Frozen Foods

- ◆ Apple juice concentrate

Beverages

Other

- ◆ Poppy seed

Lesson 3 Activity: Supermarket Scavenger Hunt

Assign items and have participants report back to the group.

1. Find a new fruit you would like to try.
2. Find a new vegetable you would like to try.
3. Compare the cost per $\frac{1}{2}$ cup portion of two fruits you often buy.
4. Compare the cost per serving of bag salads to salad ingredients.
5. How do soy milk and cow's milk compare in terms of total carbohydrate?
6. How much total carbohydrate is in one cup of chocolate milk?
7. Compare different yogurt products for their total carbohydrate and calories.
8. Compare fat and cost per 4 ounce portion of extra lean ground beef compared to lean ground turkey or chicken products.
9. Compare fat and cost of a one ounce portion of different cheeses.
10. Compare fat and protein content and cost per 2-3 ounce portions of soy products.
11. Compare cost per 1 egg vs. 1 egg portion of egg substitutes.
12. Compare fat/calorie/sodium/cost per 1 ounce serving of various breakfast meats (bacon, sausage, luncheon meats)
13. Find a loaf of bread with whole grain listed as the first ingredient. What is the cost per one ounce-equivalent serving?
14. How many ounce-equivalents of grain does a bagel provide? English muffin?
15. Find a cracker with whole grain listed as the first ingredient. What is the cost per one ounce-equivalent of grain? How many crackers is that?
16. How does the carbohydrate content of fat-free dressing compare to regular?
17. What sugar substitutes do you find in this store?
18. What is the price difference between low sodium and regular canned vegetables?
19. Compare carbohydrate content of 100% juice to a fruit punch
20. Find a frozen dinner that looks good with 10 g or less fat. How would this compare to a Plate Method meal?

Fast & Nutritious Foods

The following foods are low in fat (when prepared without excess fat) and are convenient to prepare. You will find the lists organized by food group.

Grains, Beans & Starchy Vegetables

- Whole grain breads, rolls, pita bread
- Low-fat, whole grain crackers (rye wafers, flatbread, woven wheats)
- Regular or quick-cooking brown rice (cooks in 10 minutes)
- Corn and whole wheat flour tortillas
- Bulgur wheat
- Couscous (look for whole wheat)
- Canned beans (rinse well before using)
- Potatoes/sweet potatoes
- Frozen corn & peas

Fruits

- Fresh, canned (in water, juice or light syrup) or frozen (unsweetened)

Vegetables

- Frozen
- Fresh (already chopped are even faster)
- Salad mixes
- Tomato products (low sodium)

Meat & Meat Alternates

- Cubed meats for kebabs & stir-fries
- Boneless, skinless chicken breasts
- Boneless turkey breasts & cutlets
- Cooked turkey breasts (to cut in chunks for salads or casseroles)
- Fish fillets & steaks
- Scallops & shelled, cooked or raw shrimp
- Ground meats & poultry (choose lower fat types)
- Tuna, salmon or clams packed in water
- Reduced fat cheeses
- Unsalted nuts & peanut butter

Extras to keep on hand

- Vinegar (red wine & cider, rice wine, balsamic, fruit-flavored)
- Mustards, hot pepper sauce & salsa
- Low sodium broths
- Sesame oil, low sodium soy sauce (for oriental flavor)
- Minced garlic, garlic powder
- Seasonings (herbs & spices)

Action Plan Worksheet: Lesson 3

Did you meet your goal from last week? If not, consider how you might approach it differently or choose a different goal. Think of something from today that you could turn into a goal for this week or continue with last week's goal. Here are a few suggestions to get you started:

Use the Plate Method to plan quick meals
 Make a shopping list before going to the store

Measure portions at meals
 Read food labels

In the section below, write your goal in the form of an Action Plan. Use the Daily Action Plan Log to track your progress.

Your Action Plan should include:

1. **What** you are going to do,
2. **How** much you are going to do,
3. **When** you are going to do it, and
4. **How many** days a week you are going to do it.

An example: This week, I will eat (what) 2 servings of either fruits or vegetables (how much) at each meal (breakfast, lunch and dinner) (when) at least three days (how many) this next week.

This week I will:
What I will do:
How much will I do:
When will I do it:
How many times I will do it:

My Daily Action Plan Log

	Completed Action (Yes/No)	Comments
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Bring this with you to class next week.

Lesson 4

In the Kitchen with the Plate Method

Purpose	Lesson 4 illustrates techniques for evaluating recipes and making healthy recipe alterations.
Lesson Theme	Recipes can easily be adjusted to make them healthy and enjoyable for the person with diabetes (and their family).
Learning Objectives	<ul style="list-style-type: none"> • Participants will be able to recognize features and Plate Method portions of healthy recipes for the person with diabetes. • Participants will be able to modify ingredients and/or serving sizes of traditional recipes, making them more appropriate for the person with diabetes. • Participants will be able to use the Plate Method to include carbohydrate substitutions when desired or necessary.
Leader Preparation	Review Lesson 4 Script & Activities
Materials Needed	<ul style="list-style-type: none"> • Lesson 4 PowerPoint slides and script • PowerPoint projector • "Cooking Tips" handouts <ul style="list-style-type: none"> • Saturated fat & calories • Sugar & salt • Fiber • "Using Low-Calorie Sweeteners" handout • "Quick & Easy Recipes" handout • "Plate Method Carbohydrate Substitution" handout • Plate Method meal planning worksheet – Large plate (1 per group) • Materials/recipes for cooking demonstration (see Lesson 4 Activity: Quick & Easy Meals Demonstration for detail) • "Action Plan Worksheet – Lesson 4) • Evaluation tool
Estimated Teaching Time	Review Action Plans – 10 minutes Lesson Presentation & Learning Activities – 60 minutes Quick & Easy Recipes Demonstration & Tasting – 30 minutes Evaluation Tool & Closing – 20 minutes

Materials, slides,
handouts,
comments



Lesson 4 In the Kitchen with the Plate Method

• **Greeting & Review Action Plans**

Welcome back to Lesson 4.

I ended last week's class by asking you to consider how you might use something you learned on the grocery store tour. You were even encouraged to turn that thought into what I called an Action Plan. Would anyone like to share what you accomplished through the week?

Take time for participants to share; interject with appropriate comments that relate back to the goal-setting process.

Discuss issues related to staying focused on goals, how changes affect those around us, non-food ways of rewarding oneself for meeting goals. Often people reward themselves with food, but what would be non-food rewards? Ask participants what they have learned so far that they want to continue doing even after the course ends today. (slide1)

• **Presentation: Evaluating & Modifying Recipes**

Most everyone has favorite foods and favorite recipes. During this last class, you will learn how to include those favorite foods into Plate Method meals. It is possible that you will learn how to change some recipe ingredients to make your favorite foods healthier, or you may figure out the portion size that allows it to fit on your Plate. You might even decide to look for new favorite recipes that you enjoy and that fit easily into your Plate Method meals. However, if you choose to include favorite foods, the goal is to manage your blood glucose. By keeping your blood glucose within your target levels, you reduce your risk for heart disease, nerve damage, kidney failure and other complications of diabetes.

You might wonder if your favorite foods are OK to eat because of their sugar, fat, or sodium content. Today you will learn how to look at the recipes and at Nutrition Facts labels, if available, for clues to how they compare to the healthy foods we have already been including in Plate Method meals. (slide2)

A Recipe is a Formula

- List of ingredients
- Directions



A recipe is a formula. The list of ingredients tells you what goes into the formula and the directions tell you how to put everything together. Modern recipes are standardized so that if you include all the ingredients in all the specified quantities, you will get the same product each time. Recipes handed down from oral tradition are different. Because the ingredients may have included a handful of this and a pinch of that and made use of seasonal ingredients, the results were more variable. **(slide3)**

(Ask participants to think of foods they might already prepare without standardized recipes and how they deal with the variability of the end products. Ask if any take the liberty to adjust standardized recipes and how they make those decisions. This discussion may help the group realize that modifying recipes is not uncommon and can be fun.)

What's Special about Diabetes Recipes?

- Less Fat
- Less Sugar
- Fewer Calories
- Less Sodium
- More Fiber
 - Whole grains, beans, vegetables



The reasons for modifying recipes for the person with diabetes would be to have tasty foods that include:

- less fat, especially saturated fat
- less added sugar
- fewer calories from fat and sugar
- less sodium
- more fiber **(slide4)**

Ways to Alter Recipes

- REDUCE the quantity of an ingredient
- SUBSTITUTE one ingredient for another
- OMIT or ADD an ingredient

Recipes can be modified in three main ways:

- You can REDUCE the quantity of some ingredient(s)
 - Example: You could use 1 T. oil to saute vegetables in place of 1/4 c. ("Sparing" amounts of fat)
- You can SUBSTITUTE one ingredient for another
 - Example: You could use oil rather than shortening in a muffin recipe (less saturated fat)
- You can OMIT or ADD an ingredient
 - Example: You could leave the salt out of a casserole recipe (less sodium) or you could add more vegetables to a soup. **(slide5)**

Distribute "Cooking Tips" handout(s). As alterations are read, participants can be encouraged to describe times they have used any of the suggestions. The presenter can also offer suggestions and impact of modifications.

Reducing saturated fat/total fat and calories



Reducing saturated fat/total fat and calories

The kind of fats you eat affects your blood fat levels, which in turn affects your risk for having a heart attack. Saturated fat can raise blood cholesterol. **(slide6)**

- SUBSTITUTE reduced fat dairy products for whole milk products (soft and hard cheeses, fluid milk, evaporated milk, sour cream, yogurt).
- Choose strong flavored cheeses and REDUCE the amount the recipe calls for.

- Choose lean cuts of meat, trim visible fat, remove poultry skin, drain cooked ground meat to REDUCE saturated fat.
- Let stock, soups, meat/poultry drippings cool; skim fat from surface to REDUCE saturated fat.
- Use non-stick cookware and/or spray oil to OMIT fat.
- Use cooking methods that do not require added fat and/or allow fat to drip away, such as broiling, grilling, poaching, steaming and baking or roasting on a rack to REDUCE saturated fat.
- SUBSTITUTE non-fat seasonings for butter, margarine or cheese sauce on vegetables.
- SUBSTITUTE oil for butter, shortening or stick margarine in recipes (except where flakiness is a desired outcome).
- REDUCE by half (or more) the amount of fat called for in baking; replace with moisture-holding ingredients such as applesauce, plain yogurt, grated carrots or grated zucchini, depending on the recipe (this cuts fat but can increase carbohydrates).



Reducing Sodium

If you have high blood pressure, try reducing your sodium intake to see if that change will lower your blood pressure. Most Americans consume 4,000 – 6,000 mg of sodium daily. The recommendation on sodium intake for people with diabetes is the same as that for the general public – between 2,400 and 3,000 mg per day. **(slide7)**

- SUBSTITUTE reduced or sodium-free seasonings, condiments and canned goods.
- REDUCE or ELIMINATE sodium in recipes other than yeast breads.
- SUBSTITUTE frozen or fresh vegetables for canned.



Reducing Sugar

Sugar used in cooking will raise blood sugar just like any other carbohydrate. Reducing the amount of sugar in recipes can be done, but success often depends on the role sugar plays in the product. Besides contributing a sweet flavor,

- Sugar is necessary for yeast to work properly in bread dough.
- Sugar gives tenderness and texture to baked products
- Sugar causes a browning reaction that creates a nice crust
- Sugar contributes volume to cakes **(slide8)**

Nevertheless, you can reduce sugar in many recipes. You can usually reduce sugar in a standard cake recipe by one third. In other words, if a standard cake recipe calls for 1 cup of sugar, you could reduce that to 2/3 cup with little difference in the final product. Another way of determining how much you could reduce sugar is to experiment with 1/4 to 1/2 cup sugar per cup

(An optional handout, "Using Low-Calorie Sweeteners" is provided for groups that are particularly interested.)



of flour called for in the recipe. Spices and flavorings can help bring out sweetness, so try adding vanilla, almond, cinnamon or nutmeg.

A sugar substitute can be used easily if texture and volume are not an issue. Sweetening fruit for a pie, cobbler or pudding would be an example of this sort of recipe. Different substitutes have different tolerances for heat and people have differing preferences for them. Consider experimenting with recipes standardized for them. Be sure to look at nutrition information to determine carbohydrate "savings" and compare that to cost. *(Ask participants for their experiences with sugar substitutes. They will likely be able to share much helpful information with each other.)*

Sugar can be reduced in home canned products with light fruit syrups (or water) and with special pectin.

Increasing Fiber

Diets rich in foods containing fiber, such as fruits, vegetables and whole grains, may reduce the risk of heart disease. **(slide 9)**

Including Whole Grains

The Dietary Guidelines encourage all Americans to eat at least three 1-ounce equivalents of whole grain foods each day.

- SUBSTITUTE brown rice, wild rice, or bulgur in recipes calling for white rice.
- SUBSTITUTE whole wheat pasta in recipes calling for refined pasta.
- SUBSTITUTE whole wheat flour or oatmeal for refined flour in baking.

Including Beans

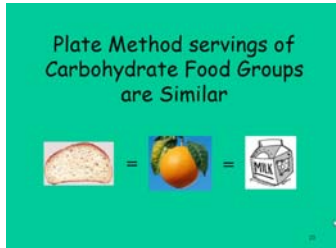
Beans (legumes) are recognized as a vegetable sub-group in the Dietary Guidelines. Plan to include at least one cup over a week's period of time, as part of your grains, beans and starchy vegetable choices.

- Add cooked beans to salads.
- Puree cooked beans to thicken a soup.
- Add beans to vegetable soups

Including (non-starchy) Vegetables

Vegetables provide a variety of vitamins and minerals and fiber. Most Americans do not eat the amounts recommended. Here are some ways to get more of their health benefits.

- Add vegetables to bean & noodle soups.
- Add frozen vegetables to soups and stir-fries.
- Add chopped or grated vegetables to tuna/salmon/chicken salad
- Add vegetables to pasta sauces (pureed, grated or chopped)



- **Activity: Recipe Make Over-** participants refer to their *Altering Recipes* handout to modify recipes supplied in class or brought from home; share suggested changes with group.
- **Presentation: Making Carbohydrate Substitutions with the Plate Method**

Recall that the three carbohydrate-containing food groups (grains, beans and starchy vegetables; fruit; milk) have suggested Plate Method portions that make them roughly equal in carbohydrate content. (slide 10) Because of this, the Plate Method offers some room for flexibility while still helping you choose meals for consistent blood sugar. There are times when you don't have access to all the food groups at one meal, or you may want a favorite combination that doesn't seem to work as a Plate Method meal. You can call this option a "Plate Method Carbohydrate Substitution."

Here's a meal that is not an unusual combination of foods: 1 cup salad, 3 oz. grilled chicken, 1/2 c. cooked brown rice, 1/2 c. seasoned black beans, 1/2 c. fruit salad). How does this meal differ from a Plate Method meal? (*the carbohydrate content of the beans has replaced the carbohydrate content of the milk.*)

Would you expect there to be a significantly different blood glucose response to this meal? (*No, because total carbohydrate is about the same.*) Sticking with the Plate Method, as it has been described, is a good way to eat from all the food groups at each meal, but it is not always practical or desirable.

I am going to give each table group a slip of paper that has a situation on it where a person would need to make some sort of substitution. You put your heads to together for some solutions.

Activity: Plate Method Carbohydrate Substitution

Give each table group a different scenario (see Lesson 4 Activity: Plate Method Carbohydrate Substitutions for copy ready list) and a Plate Method worksheet for designing a Plate Method Carbohydrate Substitution. Remind them to be aware of portions so that the meals are carbohydrate equivalent and include nutrition goals of less saturated fat, sodium, and more fiber. Leaders circulate to assist; have groups share their scenarios and meals with each other when finished.

- **Activity: Quick & Easy Meals Recipe Demonstration** See Lesson 4 Activities sheet for detail

Recipes handout

Demonstrate recipes and allow time for tasting.

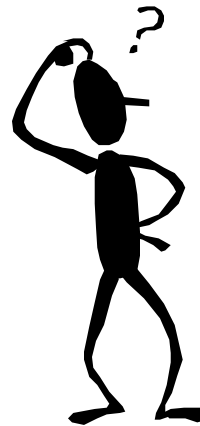
-
- ***Final goal setting***
 - ***Evaluation***
 - ***Closing***

Meals Made Easy Week 4

In the Kitchen with the
Plate Method

Can I still eat my
favorite foods?

SUGAR
SODIUM
FAT



A Recipe is a Formula

- List of ingredients
- Directions



What's Special about Diabetes Recipes?

- Less Fat
- Less Sugar
- Fewer Calories
- Less Sodium
- More Fiber
 - Whole grains, beans, vegetables



Ways to Alter Recipes

- REDUCE the quantity of an ingredient
- SUBSTITUTE one ingredient for another
- OMIT or ADD an ingredient

Reducing saturated fat/total fat and calories



Reducing Sodium



Reducing Sugar



Increasing Fiber

- Including Whole Grains



- Including Beans



- Including Vegetables



Plate Method servings of
Carbohydrate Food Groups
are Similar



=



=



Lesson 4 Activity: Plate Method Carbohydrate Substitutions

Copy this page and cut on the "dotted lines." Give each table group a different scenario along with a Plate Method meal planning worksheet.

Scenario #1

You are at a "build your own" sandwich shop where the 6-inch sub bun is equivalent to 3 grain, bean, starchy vegetable servings. There are many choices of meats, vegetables and condiments. There are regular and diet sodas along with low fat and regular milk as beverages. What would you pick to make a Plate Method carbohydrate substitution?

Scenario #2

You have been invited to dinner at a neighbor's house. You have been told that there will be grilled steaks and chicken, pasta and green salads, chips and dip, rolls and butter and her famous banana cream pie. What sort of Plate Method carbohydrate substitution could you make to include some of that pie?

Scenario #3

One of your favorite meals is spaghetti with meatballs and garlic bread. How can you have this sort of meal making a Plate Method carbohydrate substitution?

Scenario #4

On Sunday mornings you would really like to have waffles and syrup. How can you do this with a Plate Meal carbohydrate substitution?

Scenario #5

It is summer. Wonderful fresh fruit is plentiful and it's too hot to cook. What would be a tasty and refreshing meal using a Plate Method carbohydrate substitution?

Scenario #6

Scenario #7

Lesson 4 Activity: **Quick & Easy Meals Demonstration**

Below you will find a list of "Quick & Easy" Plate Method menus and recipes. Consider fixing at least two recipes for the class, demonstrating safe food preparation methods (see Implementation Guide for resources).

Show appropriate portions on a 9" plate and have extra available for tasting. Enlarge recipes as needed based on number of participants. Menus and recipes are provided in handout form for distribution to class.

Menu #1

Chicken Skewers*
Green salad
8 oz. low-fat milk

Menu #2

Sloppy Garden Joes* on
Whole wheat bun
Cauliflower Saute*
1/2 c. seasonal fruit
(1/2 bun subs for milk)

Menu #3

2 c. Chinese Chicken Salad*
1/2 whole wheat pita
8 oz. sugar free plain yogurt, mixed with
1/2 c. mandarin orange slices, canned in light syrup

Menu #4

4 oz. Oven-Fried Fish*
1/2 c. corn
1/2 c. mashed potatoes
1 c. Dilled Carrots*
1/2 c. berries
(1 starchy vegetable subs for milk)

COOKING TIPS

for people with Diabetes

To cut down on saturated fat & calories:

- ◆ SUBSTITUTE reduced fat dairy products for whole milk products (soft and hard cheeses, fluid milk, evaporated milk, sour cream, yogurt).
- ◆ Choose strong flavored cheeses and REDUCE the amount the recipe calls for.
- ◆ Choose lean cuts of meat, trim visible fat, remove poultry skin, drain cooked ground meat to REDUCE saturated fat.
- ◆ Let stock, soups, meat/poultry drippings cool; REDUCE fat by skimming from surface.
- ◆ OMIT fat by using non-stick cookware and/or spray oil.
- ◆ REDUCE fat by using cooking methods that do not require added fat and/or allow fat to drip away, such as broiling, grilling, poaching, steaming and baking or roasting on a rack.
- ◆ SUBSTITUTE reduced-fat seasonings for butter, margarine or cheese sauce on vegetables.
- ◆ SUBSTITUTE oil instead for butter, shortening or stick margarine in recipes (except where flakiness is a desired outcome).
- ◆ REDUCE by half (or more) the amount of fat called for in baking; replace with moisture-holding ingredients such as applesauce, plain yogurt, grated carrots or grated zucchini, depending on the recipe (this cuts fat but increases carbohydrate some).

COOKING TIPS

for people with diabetes

To cut down on sugar and salt:

- ◆ REDUCE sugar in a standard cake recipe by one third.
- ◆ REDUCE sugar to 1/4 to 1/2 cup sugar per cup of flour called for in the recipe.
- ◆ SUBSTITUTE spices and flavorings for sugar to bring out sweetness. Try adding vanilla, almond, cinnamon or nutmeg.
- ◆ REDUCE or OMIT sugar with a sugar substitute if texture and volume are not an issue.
- ◆ REDUCE sugar in home canned products with light fruit syrups (or water) and with special pectin.
- ◆ SUBSTITUTE reduced or sodium-free seasonings, condiments and canned goods for higher sodium products.
- ◆ REDUCE or OMIT salt in recipes other than yeast breads.
- ◆ SUBSTITUTE frozen or fresh vegetables for canned.

COOKING TIPS

for people with diabetes

To Increase Fiber

Include Whole Grains:

- ◆ SUBSTITUTE brown rice, wild rice, or bulgur in recipes calling for white rice.
- ◆ SUBSTITUTE whole wheat pasta in recipes calling for refined pasta.
- ◆ REPLACE some (or all) refined flour with whole wheat flour or oatmeal in baking. Whole wheat pastry flour works best in cookies, muffins and quick breads. Whole wheat bread flour works best in yeast breads.
- ◆ Add cooked whole grains to salads. Examples: barley, bulgur, brown rice, or quinoa.

Include Beans:

- ◆ REPLACE refined flour with cooked beans to thicken a soup.
- ◆ ADD beans to vegetable soups.
- ◆ Mash & season beans for sandwich spread or vegetable dip.

Include (non-starchy) Vegetables:

- ◆ ADD vegetables to bean & noodle soups.
- ◆ ADD frozen vegetables to soups and stir-fries.
- ◆ ADD chopped or grated vegetables to tuna/salmon/chicken salad.
 - ◆ ADD shredded or thinly sliced vegetables to wrap sandwiches.
- ◆ ADD vegetables to pasta sauces (pureed, grated or chopped).

Using Low-Calorie Sweeteners

Low-calorie sweeteners make food taste sweet without added carbohydrate or calories, and they do not raise blood sugar levels. They can be useful for reducing calories and carbohydrate when used instead of sugar in beverages and on cereals and fruit. Fruit spreads, syrups and beverages made with them are also useful, but read the Nutrition Facts panel on those products to check their total carbohydrate content.

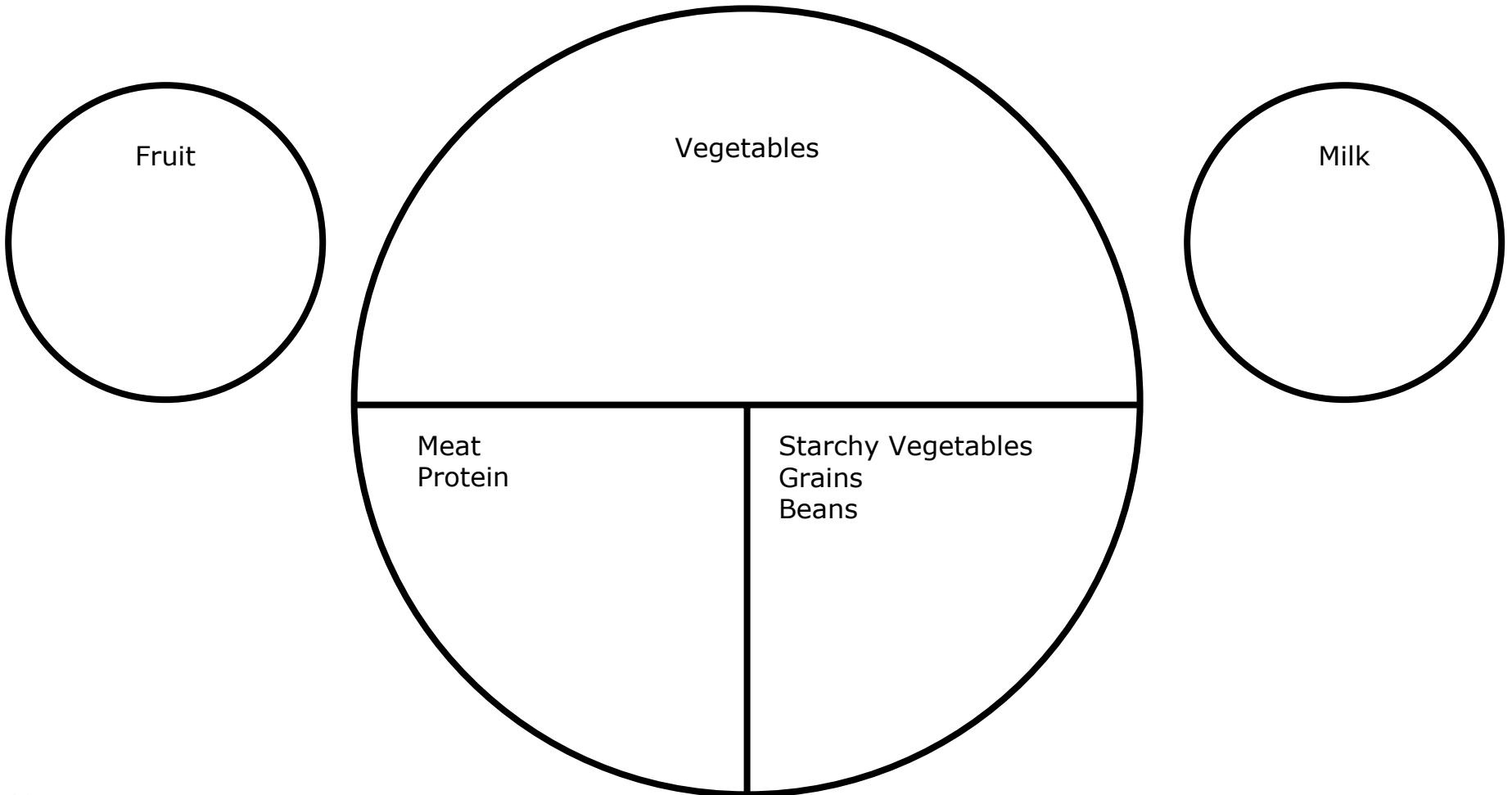
Sugar does more than just add sweetness in hot foods, especially baked goods like cookies and cakes. Sugar affects the way the foods cook, along with their appearance, final taste and texture. For the best recipes made with less sugar or low-calorie sweeteners, use a cookbook with tested recipes or recipes from companies that make the low calorie sweeteners.

The Food & Drug Administration (FDA) has approved the use of the following five low-calorie sweeteners. The American Diabetes Association accepts the FDA’s conclusion that these sweeteners are safe and can be part of a healthy diet.

Low-Calorie Sweetener	Saccharin	Aspartame	Acesulfame-K	Sucralose	Neotame
Brand Names	Sweet N Low Sugar Twin	NutraSweet Equal	SweetOne Sunett	Splenda	
Acceptable Daily Intake (ADI)*	5 mg/kg/d (375 mg/165 lb)	50 mg/kg/d (3750 mg/165 lb)	15 mg/kg/d (1125 mg/165 lb)	5 mg/kg/d (375 mg/165 lb)	18 mg/p/d (18 mg)
Amount/serving	140 mg/12-oz soda 40 mg/packet	200 mg/12-oz. soda 35 mg/packet	40 mg/12-oz. soda 50 mg/packet	70 mg/12-oz. soda 5 mg/packet	6 mg/12-oz. soda
Characteristics	Can be used in hot and cold foods, very stable for baking, aftertaste when used in large amounts	Little or no aftertaste, High temps can decrease sweetness, not suitable for people with PKU	Very heat stable for baking and cooking, less aftertaste than aspartame, may need to add some sugar for improved texture	Very heat stable for baking and cooking, very little to no aftertaste, does add volume to foods, may need to use some sugar for improved texture	Most recently approved (2002). Potential use in many types of products.
Equivalent sweetness to 1 cup Sugar	12 pkts=1 cup	24 pkts=1 cup	12 pkts=1 cup	1 cup = 1 cup	
Recipe Resource	www.sweetnlow.com www.sugartwin.com	www.equal.com	www.sweetone.com	www.splenda.com	www.neotame.com

* ADI is defined as the amount of a food additive that can be safely consumed on a daily basis over a person’s lifetime without any adverse effects. This determination includes a 100-fold safety factor and is determined by the FDA.

Plate Method Meal Planning



Quick & Easy Recipes

Chicken Skewers

Makes 4 servings

Serving size: 1/4th recipe

Nutrition Information: 3 oz. meat,
1/2 cup vegetable, 1/2 cup fruit

Ingredients:

1 lb. chicken breast, cut into cubes
1/4 c. reduced fat Italian dressing
12 cherry tomatoes
12 pearl onions or 1 large, cut into wedges
1 large green pepper, cut into 12 cubes
1 zucchini, cut into 12 slices
12 whole mushrooms
2 c. chunk pineapple, canned in own juice

Directions:

Prepare grill or oven.

Toss chicken & vegetables in salad dressing in bowl or zip lock bag and let marinate for at least 15 minutes (do this in the morning or while grill is getting hot).

Place chicken, vegetables and pineapple on skewers, alternating as you please.

Grill until chicken is done.

Sloppy Garden Joes

Makes 8 servings

Serving size: 1/8th recipe

Nutrition information: 2 oz. meat,
1/2 cup vegetable, 2 oz-equivalent grain (bun)

Ingredients:

1 onion, chopped
1 carrot, chopped fine
1 green pepper, chopped fine
1 lb. lean ground chicken, turkey or beef
1-8 oz. can low sodium tomato sauce
1-15 oz. can low sodium crushed tomatoes
1-8 oz. can mushrooms
1/4 c. barbecue sauce
pepper to taste
8 whole wheat buns (2 oz.)

Directions:

Saute onions, carrot, green pepper and ground meat/poultry in a pan over medium-high heat for 5 minutes.

Add tomato sauce, crushed tomatoes, mushrooms, barbecue sauce and seasonings. Bring to a boil.

Reduce heat and simmer for 10 minutes, stirring occasionally.

Serve on toasted or plain buns.

Quick & Easy Recipes

Cauliflower Sauté

Makes 6 servings

Serving size: 1/2 cup

Nutrition Information: 1/2 cup vegetable

Ingredients:

1 head cauliflower, cut into bite-sized pieces

2 T. reduced-calorie soft margarine

1 t. canola or olive oil

1 t. (or 1 clove) minced garlic

1/4 t. salt

1/8 t. black pepper

paprika

Directions:

Place cauliflower florets in a steamer basket above 2 inches boiling water. Cover and steam about 4 to 5 minutes or until cauliflower is crisp-tender when pierced with a fork. Remove from steam and keep warm.

Alternatively, cook in microwave.

Melt margarine in a large non-stick skillet. Add oil and garlic; sauté garlic over medium heat for 2 minutes.

Add steamed cauliflower and toss to coat. Continue sautéing for 5 more minutes, stirring periodically. Sprinkle with salt and pepper and toss. Place in serving dish and sprinkle with pepper.

Dilled Carrots

Makes 6 servings

Serving size: 1/2 cup

Nutrition Information: 1/2 cup vegetable

Ingredients:

3 c. sliced carrots or whole baby carrots

1/2 t. lemon pepper

1 t. dill, dried (or 2 t. fresh)

2 t. olive oil

Directions:

Steam the carrots until tender, about 5 - 8 minutes. Combine with the other ingredients and serve.

Quick & Easy Recipes

Oven-Fried Fish

Makes 4 servings

Serving size: 4 oz.

Ingredients:

4 (1 lb.) fish fillets (sole, flounder, perch or turbot)

2 c. corn flakes

1/2 t. each onion powder, oregano, basil and paprika

black pepper & salt to taste

1 t. Parmesan cheese

1/4 c. evaporated skim milk

nonstick cooking spray

4 t. canola oil

Directions:

Preheat oven to 500 degrees.

Roll corn flakes into fine crumbs between two layers of waxed paper. Add seasonings and cheese.

Pour milk into shallow pan. Dip fish in milk, then in crumbs.

Arrange fish on baking sheet sprayed with nonstick cooking spray. Sprinkle oil over fish.

Bake 10 - 15 minutes until fish is tender.

Action Plan Worksheet: Lesson 4

Did you meet your goal from last week? If not, consider how you might approach it differently or choose a different goal. Think of something from today that you could turn into a goal for this week or continue with last week's goal. Here are a few suggestions to get you started:

Use the Plate Method to plan dinners
Add fruit as a snack

Make substitutions for saturated fat or salt
Measure portions at meals

In the section below, write your goal in the form of an Action Plan. Use the Daily Action Plan Log to track your progress.

Your Action Plan should include:

1. **What** you are going to do,
2. **How** much you are going to do,
3. **When** you are going to do it, and
4. **How many** days a week you are going to do it.

An example: This week, I will eat (what) 2 servings of either fruits or vegetables (how much) at each meal (breakfast, lunch and dinner) (when) at least three days (how many).

This week I will:
What I will do:
How much will I do:
When will I do it:
How many times I will do it:

My Daily Action Plan Log

	Completed Action (Yes/No)	Comments
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Use this method of goal setting whenever you want to make improvements in your eating habits.