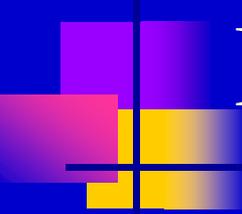


Food As Medicine

Pamela M. Green, R.D.L.N.

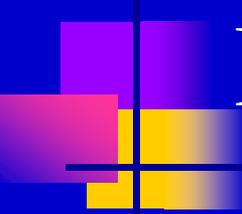
C.D.E.

Baptist Health Center for Diabetes



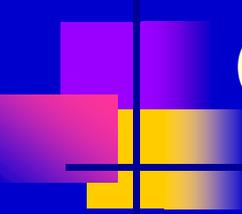
Meal Planning is the Cornerstone

- No matter what a person's diabetes regimen is, they will have to eat every day
- Almost every time a person eats, it will have an effect on his diabetes control- either positive or negative
- Learning and applying appropriate nutrition principles is critical for good blood sugar control.



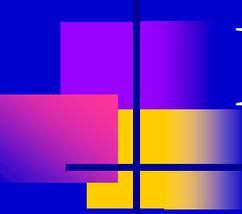
Meal Planning for Diabetes

- Ordinary food
- Well balanced
- Includes all the food groups and nutrients
- Should promote good heart health
- Flexible
- Permanent lifestyle changes
- NOT A DIET!



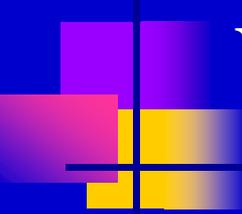
Considerations of the Meal Plan

- Carbohydrates for glucose control
- Fats for lipid control
- Sodium for blood pressure control
- Calories for weight management



Meal Planning Guidelines

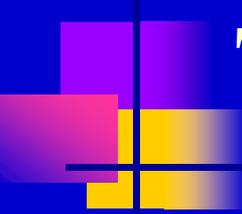
- Control the amount of carbs you eat. We want carbohydrate intake to be consistent from meal to meal.
- Choose foods low in saturated fat
- Control portions. Weight loss is usually desirable.
- Limit sodium to promote good blood pressure.



Which approach is best??

- No sweets or low fat, low sugar (simplified)
- Exchange system (similar to carb counting)
- Plate method
- Carbohydrate counting
- Carb counting using carb to insulin ratios

Note: What you teach, depends on the patient. We usually try carb counting if the patient can read labels and is comfortable with basic math.

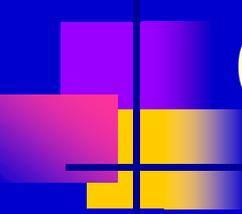


Three Major Nutrients in Foods

- Carbohydrate

- Protein

- Fat



Carbohydrates

- Main nutrient that effects blood sugars
- 90-100% of these foods convert to sugar shortly after eating.
- Includes foods such as:
 - Breads, Grains, Cereals, Pasta, and Rice
 - Dried Beans, Peas, Corn and Potatoes
 - Fruits, Juices, Milk and Yogurt
 - Sweets, Desserts, Sweetened Beverages

Protein

- Protein is slowly turned into some sugar but does not significantly raise the blood sugar eaten in moderation

Meat, Poultry, Fish, Seafood

Eggs

Cheese

Peanut Butter, Cottage Cheese, Tofu

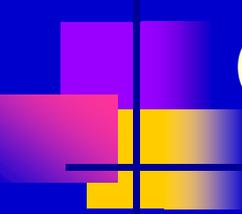


Fats

- Only about 10% of fat turns into sugar and it has little to no effect on blood sugar levels when eaten in small amounts.
- Fats include:
 - oils, margarine, butter, mayonnaise, salad dressings, nuts, seeds, bacon, cream cheese, sour cream

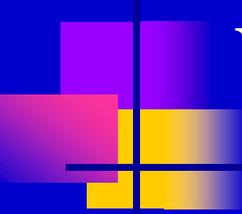
****Emphasis is placed on choosing mostly monounsaturated and polyunsaturated fats****





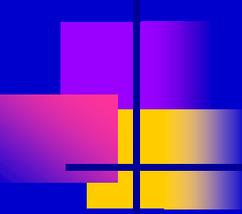
Carbohydrate Counting

Since carbohydrates have the biggest impact on blood sugar levels, appropriately limiting carbs is a great way to help control diabetes.



What do you need to know??

- What are carbohydrate foods.
- The carbohydrate content of the food you are eating.
- The recommended amount of total carbohydrate that should be eaten for each meal and snack.



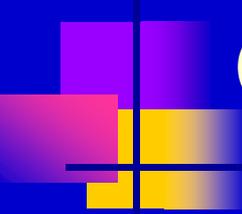
How much carbohydrate?

Women: 2-3 servings of carb (**30-45 grams**) at each meal. Eat 3 meals daily.

Snacks are optional: 1 serving of carb (15 grams)

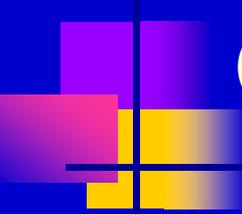
Men: 3-4 servings of carb (**45-60 grams**) at each meal. Eat 3 daily meals.

Snacks are optional: 1-2 servings of carb (15-30 grams)



Carbohydrate Foods

- Breads, Grains and Cereals
- Pasta and Rice
- Dried Beans, Peas, Corn and Potatoes
- Milk and Yogurt
- Fruits and Juices
- Sugar and Sweets



Carbohydrate Content of Foods

- Label Reading
- Exchange System
- Phone Apps
- Internet

Understanding Food Labels

SERVING SIZE

All the information on the label is based on this portion. If you eat double the serving size, you will eat double the carbohydrate, other nutrients, and calories.

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%

Cholesterol 30mg 10%

Sodium 660mg 28%

Total Carbohydrate 31g 10%

Dietary Fiber 0g 0%

Sugar 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	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:

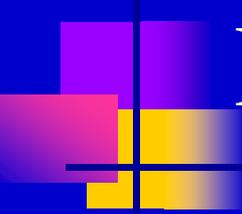
Fat 9 • Carbohydrate 4 • Protein 4

SERVINGS PER CONTAINER

The number of servings contained in the package.

TOTAL CARBOHYDRATE

The total grams of carbohydrate in one serving. The carbohydrate from dietary fibers and sugar is included, so don't count it twice.



Exchange System

Foods are grouped together based on similar nutrients per serving:

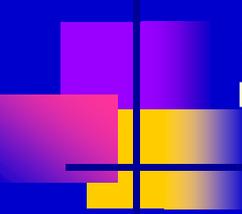
Calories

Carbohydrates

Protein

Fat

Groups are starches and starchy vegetables, fruits, non-starchy vegetables, dairy, meats and fat



Starches /Starchy Vegetables

Contain 80 calories per serving

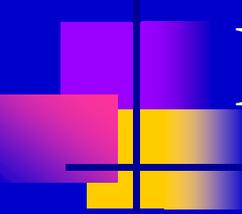
15 grams of carbohydrate

3 grams of protein

0-1 grams of fat

STARCHES





Fruits

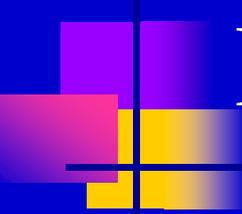
Contain on average 60 calories per serving

15 grams of carbohydrates

0 grams of protein or fat

FRUITS



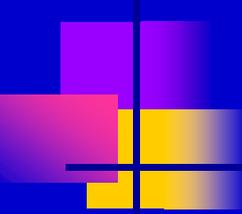


Dairy

Calories depend on whether they are nonfat or full fat choices

12-15 grams of carbohydrates

Only milk and yogurt are part of this group. Cheese is counted in the meat group.



Non-starchy Vegetables

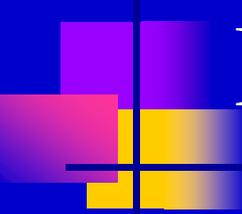
25 calories per serving

5 grams of carbohydrate

Insignificant protein and fat grams

Usually counted as “free” if the patient does not eat more than 3 servings at a time which would be 15 grams of carbohydrate





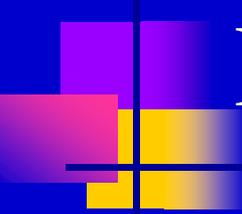
Meats/Meat Substitutes

Calories vary from 35 – 100 calories per serving depending on the fat content

0 grams of carbohydrate

7 grams of protein per serving

1-8 grams of fat per serving



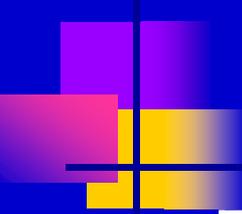
Fats

45 calories per serving

0 grams of carbohydrates

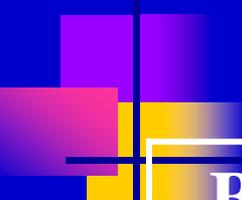
0 grams of protein

Choose more mono and polyunsaturated fats to promote good heart health. Limit saturated fats.



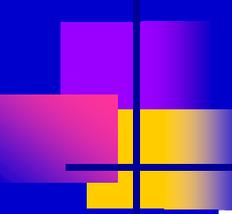
Exchange Table

Food Groups	Carb Grams per Serving
Bread/Starch	15 grams
Fruit	15 grams
Milk	12-15 grams
Non Starchy vegetables	5 grams
Meat	0 grams
Fat	0grams



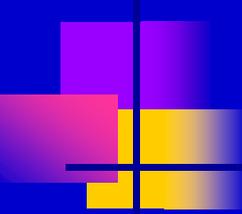
What counts as 15 gram carb serving?

Bread/Starch	Fruit	Milk
1 slice bread	1 small fruit	8 oz white milk
$\frac{3}{4}$ cup dry cereal	$\frac{1}{2}$ grapefruit	4 oz chocolate milk
$\frac{1}{2}$ cup cooked cereal	17 small grapes	6 oz light yogurt
$\frac{1}{3}$ cup cooked rice or pasta	4 oz juice	4 oz sweetened yogurt
$\frac{1}{2}$ cup starchy vegetable	$\frac{1}{2}$ large banana	



Additional 15 gram carb servings

1/2 cup ice cream	4 oz regular soda
1/4 cup sherbet	8 oz sports drink
2-inch piece of unfrosted cake	4 tsp sugar
2 small sandwich type cookies	1 TBSP syrup, jam or jelly
1 oz (about 12) potato chips	1 fun size candy bar



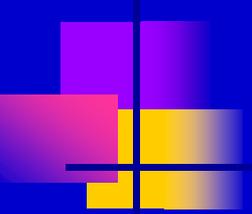
How much carbohydrate?

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Snacks are optional: 1 serving of carb (15 grams)

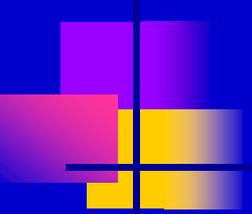
Men: 3-4 servings of carb (**45-60 grams**) at each meal. Eat 3 daily meals.

Snacks are optional: 1-2 servings of carb (15-30 grams)



Apps for Smart Phones

- Diabetes Companion
- Diabetes Log
- Diabetes Buddy
- Diabetes in Check
- Gomeals.com
- My Fitness Pal
- Daily Carb
- Nike Training
- FatSecret
- FastFood



Websites

- www.calorieking.com
- www.diabetes.org
- www.dlife.com
- www.glucerna.com
- www.myfitnesspal.com
- www.myfoodadvisor.com

Portion Control

Many Americans underestimate how much they really eat by 50%

Exchange Serving Size

Usual Serving Size

Cooked pasta 1/3 cup

1 cup

Potato 3 oz

7-8 oz

Muffin 1 oz

4-8 oz

Popcorn 3 cups

8-12 cups

Juice 4 oz

8-12 oz



5 cups
270 calories



Tub
630 calories



3-inch diameter
140 calories



5-6-inch diameter
350 calories



333 calories



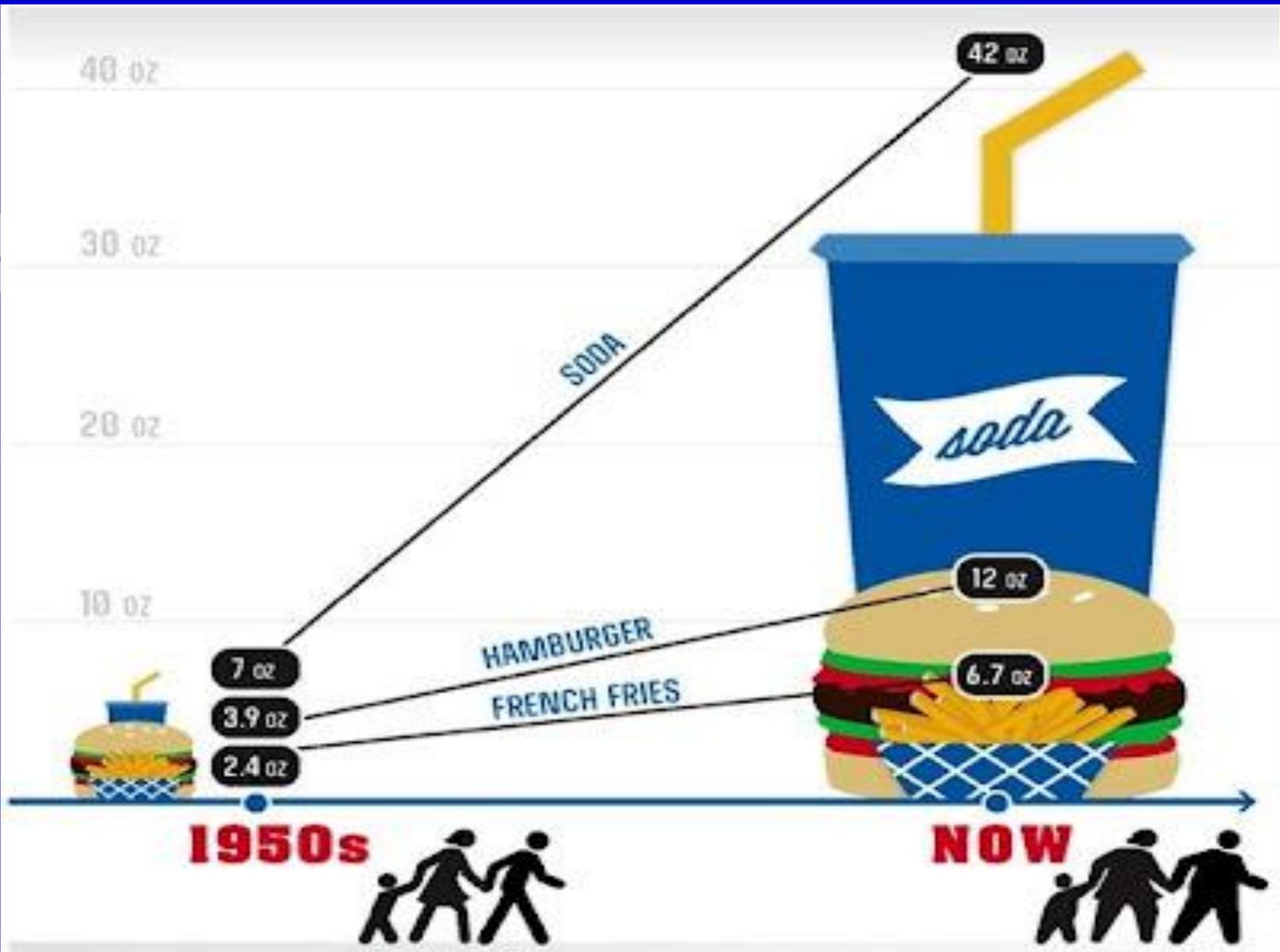
590 calories

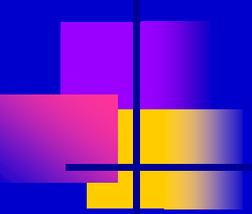


Original 8-ounce bottle
97 calories



20-ounce bottle
242 calories





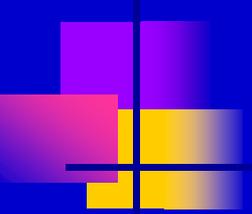
Measure , Measure, Measure

Use measuring cups and spoons at home
to teach correct portions



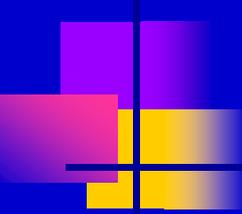
PLATE METHOD





Sodium Recommendations

It is recommended to limit your sodium intake to 1500 mg/day if you have high blood pressure or diabetes.



“Willpower”

Is not a force that makes food challenges or weight loss easy

But instead....

Is the ability to make choices that are consistent with your goals or values-even when it's difficult and part of you wants something else.