



# BeWell365

nutritional/physical/emotional

## DIABETES MANAGEMENT BALANCE FOODS TO MANAGE BLOOD SUGAR

[www.bewell365.com](http://www.bewell365.com)

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LIFESTYLE & WELLNESS PROGRAM

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# OBJECTIVES



- ▶ Knowledge: Learn how diabetes starts and progresses.
- ▶ Knowledge: Learn how foods affect sugar and insulin.
- ▶ Knowledge: Understand balance, consistency, and moderation for eating right.
- ▶ Skill: Learn to use the 50/50 Plate and the Diabetes Food Guide Pyramid for planning meals.
- ▶ Skill: Identify carbohydrates, proteins, and fats.
- ▶ Skill: Estimate portions sizes and read a food label.
- ▶ Skill: Plan balanced meals and snacks.
- ▶ Skill: Make change and keep a journal.

# INSULIN/CARBOHYDRATE THEORY



- ▶ Most of the food we eat is carbohydrates (sugar) which turn into glucose in the blood (blood sugar).
- ▶ When there is sugar on board, the brain tells the pancreas to make the hormone called insulin.
- ▶ Insulin acts as an escort or transporter and delivers the blood sugar (glucose) into all the cells in our body which provides us with energy.
- ▶ Sugar is to the body like gasoline is to the automobile.
- ▶ When the sugar is cleared (delivered into the cells), the brain tells the pancreas to stop/decrease producing insulin.

# EPIDEMIC OF DIABETES

- ▶ Main theory of diabetes: we wear out the pancreas by overproducing insulin. There are two reasons:
  - ▶ Lack of physical activity and consistent daily movement. Exercise makes the insulin we produce work better.
  - ▶ High intake of processed foods (simple carbohydrates and sugary drinks) which spike blood sugar rapidly.
- ▶ Diabetes is a journey/process.
  - ▶ Insulin resistance. A1C 5.6 or less; blood sugar normal: 60-99 mg/dl.
  - ▶ Prediabetes. A1C 5.7-6.4; blood sugar creeping up: 100-125 mg/dl.
  - ▶ Diabetes. A1C 6.5 or greater; blood sugar high: 126 mg/dl or greater.
  - ▶ Insulin dependent. Pancreas worn out, making very little insulin.
- ▶ Couple of decades ago, used to start age 40-50, now age 14-15.



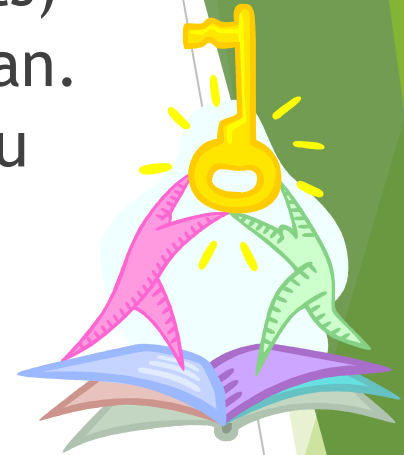
# INSULIN & WEIGHT GAIN



- ▶ High levels of insulin send its own messages to the brain:
  - ▶ Send extra calories (not burned up soon) into fat storage (triglycerides).
  - ▶ Send the fat to the abdominal (tummy) area.
  - ▶ Don't let the fat out (lose weight) easily.
- ▶ More body weight interferes with sugar transport. (5-10% loss improves transport significantly).
- ▶ If our diet is primarily carbohydrates, especially simple carbohydrates (white flour and refined sugar), with very little activity (life in America), we have high insulin levels consistently throughout the day. We are wearing out our pancreas.
- ▶ Get back to eating right and get moving!

# THE BASIC KEY TO EATING RIGHT

- ▶ There are NO BAD FOODS! (only bad diets)
- ▶ All foods can fit into a healthy eating plan.
- ▶ You don't have to be an "A" student; you can be a "C" student and still have very successful outcomes.

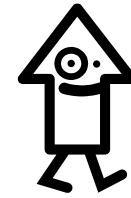


## BCM

- ▶ **Balance** foods that raise blood sugar with foods that have little or no effect on blood sugar.
- ▶ **Consistency** is spacing meals and snacks every 2-3 hours and no skipping meals.
- ▶ **Moderation** is choosing smaller portions (small, frequent meals and snacks).

## HOW DO FOODS AFFECT SUGAR?

# DO ALL FOODS MAKE BLOOD SUGARS GO UP?



- ▶ No. Different foods affect blood sugar differently.
- ▶ We eat three nutrients: **carbohydrates**, **proteins**, and **fats**.
- ▶ **Carbohydrates** are sugar; are digested the fastest and raise blood sugar.
- ▶ **Proteins** are not sugar; are digested more slowly and have little or no effect on raising blood sugar.
- ▶ **Fats** are not sugar; are digested the slowest and have no effect on raising blood sugar.
- ▶ The idea is to balance foods that raise blood sugar with foods that do not raise blood sugar.

# BALANCING FOOD (Balance)

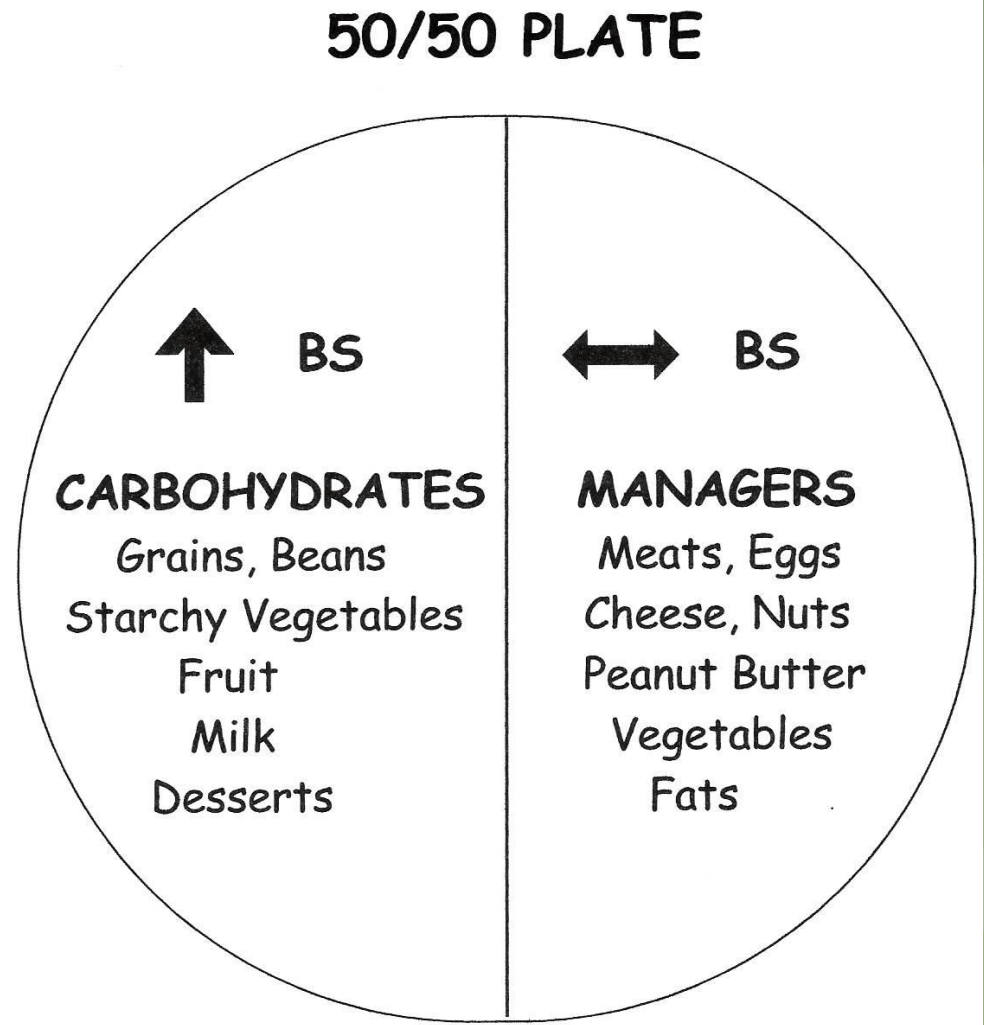


- ▶ Let's use the **50/50 Plate** as a tool to balance foods.
- ▶ Imagine a line down the center of your plate.
- ▶ Let's place carbohydrates (foods that raise blood sugar) on the left side of the plate and call them **CARBOHYDRATES**.
- ▶ Let's place proteins and fats (foods that have little or no effect on blood sugar) on the right side of the plate and call them **MANAGERS**.
- ▶ We want to balance foods that raise blood sugar (carbohydrates) with foods that have little or no effect on blood sugar (managers which are proteins and fats).
- ▶ **NOTE:** Proteins and fats do not lower blood sugar. They have little or no effect on raising blood sugar.

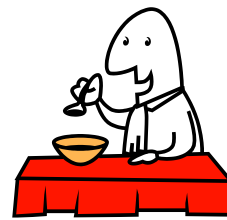


# 50/50 PLATE

- ▶ Half the foods on your plate are carbohydrates that raise blood sugar.
- ▶ Half the foods on your plate are managers (proteins and fats) that have little or no effect on blood sugar.



# WHAT CAN I EAT?



- ▶ We use the old **Diabetic Food Guide Pyramid** as a guide to plan meals. It groups foods more according to how they affect blood sugar (has a tighter grouping of carbohydrates).
- ▶ We make a few small changes to make it an easier tool (see both versions in Products:Handouts on our website).
- ▶ Remember we eat three nutrients: carbohydrates, proteins and fats.
- ▶ **Carbohydrates** raise the BS and include the Starch Group (Grains, Beans and Starchy Vegetables), the Fruit Group, and the Milk Group.
- ▶ **Proteins** have little or no effect on blood sugar and include the Meat and Others Group and the Vegetable Group.
- ▶ **Fats** have no effect on blood sugar and include the Fats Group.

# CARBOHYDRATES



- ▶ **STARCHY FOODS:**
- ▶ **Grains:** Bread, cereal, pasta, flour, rice, tortillas, sopapillas, crackers.
- ▶ **Beans:** Pinto beans, navy beans, kidney beans, white beans, lentils.
- ▶ **Starchy Vegetables:**



Peas, corn, cornmeal, potatoes, yams, acorn squash (green outside orange inside).

# SIMPLE CARBOHYDRATES

- ▶ Limit foods made with white flour and refined sugar, the “white stuff” like white bread, crackers, rice, pasta, flour tortillas, most cakes, cookies, sweet bread and sopaipillas. They raise the blood sugar very rapidly. Instead, choose **whole** grains. Whole grains raise the blood sugar more slowly. Look for the word “**whole**” in the first ingredient. Choose grains with **10% or more fiber**.

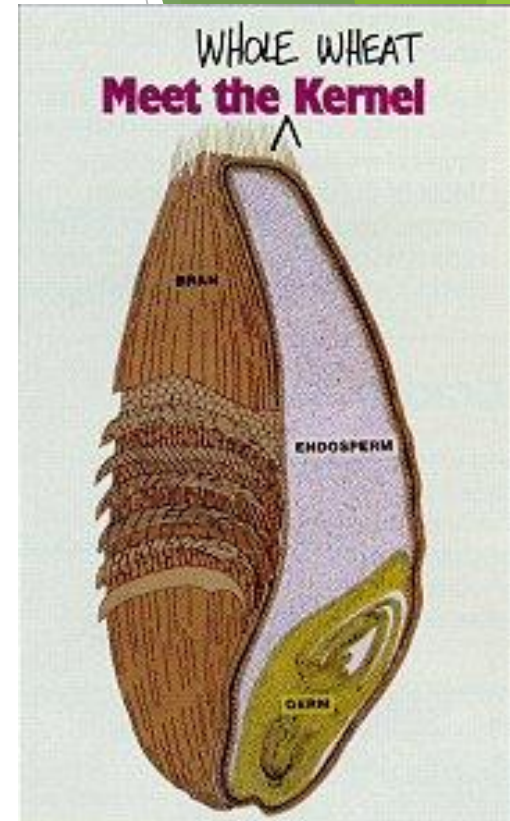
## Some Examples of Whole Grains:

- ▶ Bread: W. wheat Sara Lee, Earthgrains, Pepperidge Farm.
- ▶ Crackers: Triscut, Rye Krisp, Ak-Mak, Kavli crackers.
- ▶ Cereals: Cheerios, Total, All Bran, Oatmeal cereals.
- ▶ Pasta: Creamette, Ronzoni whole wheat pastas.
- ▶ Tortillas: Mission, Santa Fe whole wheat tortillas.
- ▶ Rice: Uncle Ben’s whole brown rice.
- ▶ **NOTE:** Add vegetables to pasta and rice to increase fiber, Also, have a fresh green salad with lots of veggies.



# Why Are Whole Grains Important?

- ▶ Whole grains contain all three parts of the grain, bran, germ and endosperm.
- ▶ The bran or the outer layer is loaded with fiber, B vitamins, iron, copper, zinc, magnesium, antioxidants, and phytochemicals (natural chemical compounds that play a role in disease prevention).
- ▶ The germ or the core is rich in healthy fats, vitamin E, B vitamins, phytochemicals, and antioxidants.
- ▶ The endosperm or the interior layer houses carbohydrates, protein, and small amounts of some B vitamins and minerals.
- ▶ When the grain is processed, the bran and the germ are removed resulting in blood sugars that spike rapidly and cause an overproduction of insulin.
- ▶ Processed grains are almost void of fiber which plays a significant role in stabilizing the spike in blood sugar.



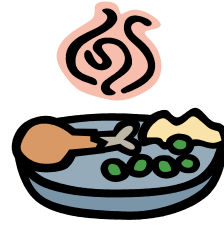
# CARBOHYDRATES



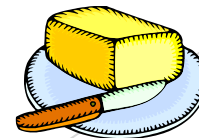
- ▶ **FRUIT:** All fruit, fruit juices, jam, jelly.
- ▶ **MILK:** All milk, yogurt, ice cream.
- ▶ **DESSERTS:** Cakes, cookies, pies, candy, sweet bread, doughnuts, flan, custard, pudding, muffins.
- ▶ **ALL FORMS OF SUGAR:** White & brown sugar, molasses, honey, pancake syrup, high fructose corn syrup, fructose, sucrose, lactose, maltose.



# MANAGERS



- ▶ **MEATS:** All meats, beef, chicken, poultry, ham, pork, hamburger, and seafood.
- ▶ **OTHERS:** All cheeses, cottage cheese, eggs, tofu, soy foods, nuts, peanut butter.
- ▶ **VEGETABLES:** All vegetables, fresh, frozen, canned (except starchy vegetables).
- ▶ **FATS:** Margarine, butter, cooking oils, salad dressings, Mayo/Miracle Whip, lard, bacon, cream cheese, sour cream.





# WHEN TO CHOOSE SUGAR-FREE AND FAT-FREE



- ▶ Most specialty products are scams and overpriced.
- ▶ Sugar-Free
  - ▶ Most natural sugar substitute is Stevia, an herb. But beware of the sugar substitute trap: sugar substitute on everything.
  - ▶ Resist changing everything to sugar-free. Limit diet soda to 2 cans per week.
  - ▶ Be selective: One or two sugar-free choices occasionally.
  - ▶ Too much sugar substitute may prove to be very harmful some day.
- ▶ Reduced Fat
  - ▶ Dairy Products: low-fat milk & cottage cheese, fat-free Greek yogurt, hard cheeses; real ice cream natural vanilla bean (clean).
  - ▶ Fats: reg or low-fat sour cream, cream cheese and mayo/Miracle Whip, but be careful--sometimes reduced-fat version removes fat and adds sugar and lots of additives, then choose regular.
  - ▶ Change the ones you can, if choose regular watch portion size.
  - ▶ Do not recommend low-fat peanut butter or fat-free salad dressings or cookies. The removed fat is replaced with sugar.



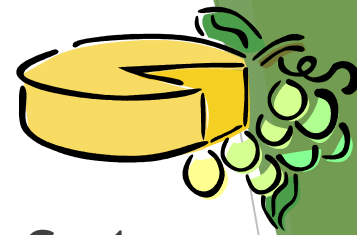
# SMALL MEALS & SNACKS

## (Consistency)










- ▶ The best way to stabilize blood sugars and lose weight is to eat 3 small meals and 2-3 balanced snacks daily every 2-3 hours; no more than 4 hours between meals & snacks.
- ▶ Remember it is important to eat from all the food groups to obtain all the nutrients necessary for good health.
- ▶ Choose **one serving from each group** to plan a small meal for breakfast, lunch and dinner. This is 3 carbohydrates (1 starch, 1 fruit, 1 milk) and 3 managers (1 meat/others, 1 vegetable and 1 fat). **Note: Limit carbohydrate servings to 3 per meal.**
- ▶ We use snacks to control hunger between meals.

# BALANCED SNACKS

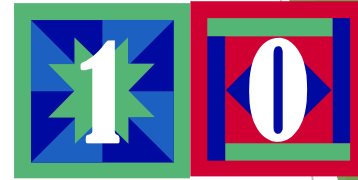


- ▶ Balance snacks: 1 carbohydrate & 1 manager.
  - ▶ Dried fruit & mixed nuts (make own).
  - ▶ Whole grain crackers & string cheese.
  - ▶ Natural peanut butter & crackers or sandwich (whole grain).
  - ▶ Whole frijoles & shredded Mozzarella cheese.
  - ▶ Quesadilla (corn or WW tortilla & Mozzarella cheese or avocado).
- ▶ What about an emergency?
- ▶ Your ideas?
- ▶ **BE PREPARED, NO SKIPPING MEALS!**

# SERVING SIZES (Moderation)

- ▶ ½ cup = a tennis ball or a handful 
- ▶ 3 oz = a deck of cards or the palm of a woman's hand 
- ▶ 1 cup = 1 coffee cup or a fist 
- ▶ 2 tablespoons = 1 golf ball or 2 thumbs 
- ▶ 1 teaspoon = 1 quarter or thumb nail 
- ▶ 1 waffle/pancake = 4" computer disk or palm of a man's hand 
- ▶ 1 baked potato = 1 computer mouse or women's hand 

# NUTRITION FACTS LABEL



- ▶ Serving Size
- ▶ Number Servings Per Container
- ▶ Fat % Per Serving: 10% or less
- ▶ Sodium % Per Serving: 10% or less
- ▶ ***Fiber % Per Serving: 10% or more***
- ▶ ***Carbohydrates Grams Per Serving:***  
***3 svg per meal (45g)***

**\*\*One serving of carbohydrates = 15 grams of carbohydrates\*\***



# SAMPLE FOOD LABEL MACARONI & CHEESE:



## Nutrition Facts

Serving Size 1 cup (228g)

Servings Per Container 2

### Amount Per Serving

**Calories** 250      Calories from Fat 110

### % Daily Value\*

**Total Fat** 12g      **18%**

    Saturated Fat 3g      **15%**

    Trans Fat 3g

**Cholesterol** 30mg      **10%**

**Sodium** 470mg      **20%**

**Total Carbohydrate** 31g      **10%**

    Dietary Fiber 0g      **0%**

    Sugars 5g

**Protein** 5g

Vitamin A      **4%**

Vitamin C      **2%**

Calcium      **20%**

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

# LET'S PRACTICE

## ► Breakfast

- Whole wheat flour tortilla
- Scrambled eggs with lots of veggies, shredded Mozzarella cheese, pico de gallo
- Fresh fruit
- Cup of skim or low-fat milk



## ► Your Idea

# LET'S PRACTICE

## ► Lunch

- Whole wheat bread w/lettuce & tomato
- Tuna in water with lots of veggies, low-fat mayo or Miracle Whip
- Fruited Greek yogurt
- Iced tea

## ► Your Idea



# LET'S PRACTICE

## ► Dinner

- Grilled sirloin steak (4-6 ounces)
- Fresh green beans w/almonds
- Green salad (more color, more nutrients), oil & vinegar dressing
- ½ cup Vanilla Bean Natural ice cream with fresh blueberries
- Iced tea or water w/lemon



## ► Your Idea



# DISCUSSION

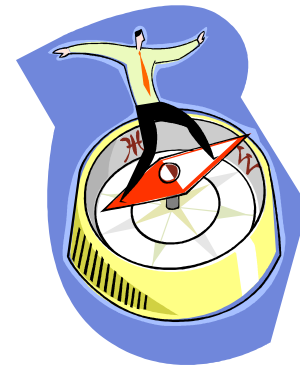


- ▶ What is difficult to understand about eating balanced meals and snacks? Will you try it?
- ▶ Are the 50/50 Plate and the Pyramid helpful tools to learn how to balance foods and plan meals?
- ▶ Do you think it will be expensive to eat balanced meals? Why?
- ▶ What would keep you from planning and eating balanced meals (time, money, family)? What are some solutions?
- ▶ Do you believe changing the way you eat will help stabilize your blood sugar and help you lose weight?

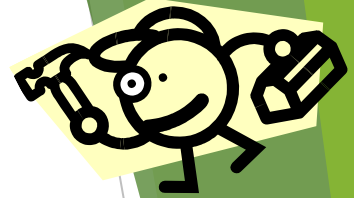
# MAKING LIFESTYLE CHANGE

Keep a Journal (little tablet) for **6 months** and record:

- ▶ Two changes per week.
  - ▶ One food change
  - ▶ One activity change
- ▶ Daily food diary.
- ▶ Daily exercise/activity diary.
- ▶ If you commit to 2 changes/week made into habits, you will have 40-50 new habits = lifestyle change. You won't believe the results!
- ▶ Fall off plan, restart this process.



# TOOLS WE LEARNED TODAY

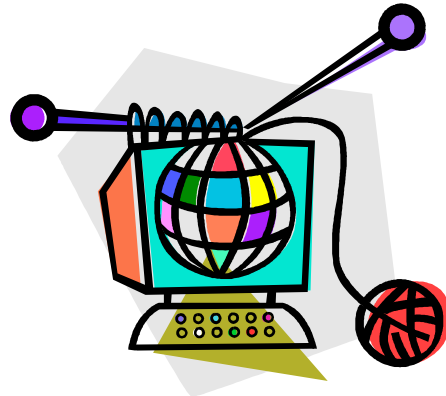


- ▶ 50/50 Plate - balance foods that raise sugar with those that have no effect on sugar (**balance**).
- ▶ Diabetic Food Guide Pyramid - plan small meals (**consistency**).
- ▶ Portion Sizes - manage calories (**moderation**).
- ▶ Nutrition Facts Label - make wiser choices.
- ▶ Balanced Snacks - control hunger.
- ▶ Keep A Journal - turn changes into habits = lifestyle change.

# WEBSITE

- ▶ BE SURE TO VISIT OUR WEB SITE AND ENJOY OUR BLOG FOR LOTS OF NUTRITION INFORMATION AND IDEAS; CHECK OUT OUR E-BOOKS AND E-CLASSES FOR MORE ADVANCED EDUCATION.

▶ [www.bewell365.com](http://www.bewell365.com)



# THANK YOU

