WCU DIABETES EDUCATION SUMMIT

MEDICAL NUTRITION THERAPY

PART I

MEDICAL NUTRITION THERAPY

- The goal of Medical Nutrition Therapy (MNT) is for people with diabetes to be comfortable and confident in making healthy food choices.
- Development of personalized meal plans
- Provided by Registered Dietitians

GOALS OF MNT

- To promote healthful eating
- Achieve/maintain body weight goals
- Delay/prevent complications of diabetes
- Address individual nutrition needs
- Maintain the pleasure of eating
- Provide tools for meal planning

EFFECTIVENESS OF MNT

- Glycemic Control
- Lipid Control
- Hypertension Control

PRIMARY NUTRITION MESSAGES

- Portion Control
- Know which foods contain carbohydrates
- Encourage nutrient-dense, high-fiber foods
- Avoid sugar-sweetened beverages
- Select lean proteins
- Limit alcohol
- Add 30 minutes of physical activity daily

MACRONUTRIENT DISTRIBUTION-DIETARY GUIDELINES

- Carbohydrates- 45-65% of total caloric intake
- Fat- 20-35%
- Protein- 10-35%
- Sodium- 2400mg per day
- Fiber- 24-35g per day

NUTRIENT CALORIC DENSITY

- Protein
  - 4 calories per gram
- Fat
  - 9 calories per gram
- Alcohol
  - 7 calories per gram
- Carbohydrates
  - 4 calories per gram

PRINCIPALS T1D/INSULIN -REQUIRING T2D

- Learn how to count carbohydrates
  - If on fixed insulin:
    - Eat similar amounts of carbohydrates each day
  - If on premixed insulin:
    - Insulin doses taken at consistent times
    - Meals consumed around the same time daily
    - Do not skip meals
    - Carry quick acting source of glucose during physical activity
  - If on multiple-daily injection/pump:
    - Take mealtime insulin before eating
    - Meals consumed around the same time daily
    - If physical activity performed- insulin may need to be lowered

PRINCIPALS- T2D

- Promote overall healthy food intake
  - Consistent carbohydrate intake
  - Avoid excess carbohydrates at one time
  - Limit saturated/trans fats
  - Encourage plant stanols or sterols
  - Follow sodium standards for individual needs
- Encourage weight loss for overweight/obese
  - Modify calories and portion size
- Encourage Physical Activity
- Monitor Blood Glucose

INITIATING THERAPY

- Individualized
- Progressive/series of visits

NUTRITION CARE PROCESS

- Nutrition Assessment
- Nutrition Diagnosis
- Nutrition Intervention
- Nutrition Monitoring/Evaluation

CASE STUDY

- 56 year old new diagnosis of T2D
- A1c – 8.5 Fasting BG- 187
- No previous nutrition education
- Needs to lose 7-10% body weight
- Currently eats 2 meals per day with no meal plan
- Likes fried foods and often will eat out
- Drinks regular soda
- No physical activity
- Prescribed metformin 500mg BID
- Monitoring BG at home, fasting daily

PLATE METHOD

A Healthy Plate

The goal of building a healthy plate is to show how eating a variety of foods will help you feel satisfied, help control blood sugar levels and control weight. We hope to make this as easy as possible for you! As you can see, eating more vegetables and less meat and starch can help meet this goal.

Add a small amount of margarine or oil in cooking or at the table.

Choose 1 serving of milk which is 8 ounces.

Add 1 serving of fruit.

Fill 1/4 of your plate with a starchy choice such as 1/2 cup mashed potatoes.
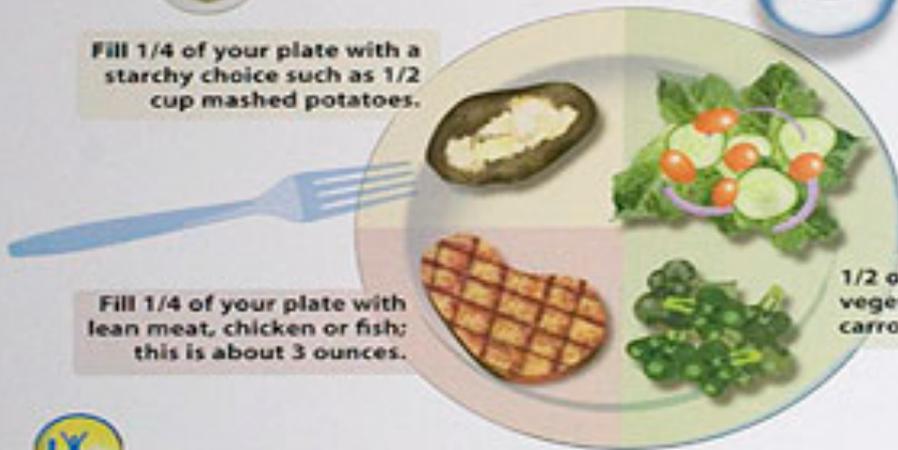
Fill 1/4 of your plate with lean meat, chicken or fish; this is about 3 ounces.

1/2 of your plate with vegetables such as broccoli, carrots, cauliflower, and salad.

For breakfast, use only half the plate.
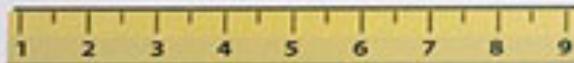
For lunch and dinner, use the whole plate.

1 2 3 4 5 6 7 8 9

CARBOHYDRATE COUNTING- BASIC

- Starch = 15g per serving
  - ½ c cooked grain/starchy veggie or 1/3 c cooked rice/pasta
- Fruits = 15 g per serving
  - 1 small piece of fruit
- Milk/milk substitutes = 12g per serving
  - 8 oz milk
- Non-starchy veggies = 5g per serving
  - ½ cup cooked veggies

Can use "Choose Your Foods" or other carbohydrate counting sources/tools.

EXAMPLE:

- At lunch Sam ate the following:
    - 3 oz grilled chicken breast
    - 1 1/3 cup cooked rice
    - 1 cup cooked broccoli
    - 1 small mandarin orange
    - 4 oz skim milk

How many carbohydrates did he eat?

EXAMPLE:

- At lunch Sam ate the following:
  - 3 oz grilled chicken breast – 0g CHO
  - 1 1/3 cup cooked rice – 60g
  - 1 cup cooked broccoli – 10g
  - 1 small mandarin orange – 15g
  - 4 oz skim milk – 6g

How many carbohydrates did he eat?

Answer= 91g

ACCESS TO MNT

- ~ 9% of those with diabetes report having seen a dietitian for MNT.
- Poor awareness of MNT contributes to these low numbers.

REFERENCES USED

- ADA- Therapy for Diabetes Mellitus
- ADA- Clinical Care Guidelines, 2015
- Academy of Nutrition & Dietetics

THANK YOU!

WCU DIABETES EDUCATION SUMMIT

MEDICAL NUTRITION THERAPY

PART II

CARBOHYDRATE COUNTING LUNCH