



# Holiday Eating with Diabetes

Laura Baker, MS, RDN, LD

# Continuing Education

- To complete the course, the learner must:
  - Watch the 60-minute webinar (live or recorded)
  - Complete post-test questions & evaluation
- **1.25 contact hours approved for Nursing**
  - Quality Insights is accredited as a provider of nursing continuing professional development by the American Nurses Credentialing Center's Commission on Accreditation
- There are no identified conflicts of interests.

# Learning Outcomes

- After this course, the learner will be able to:
  - Explain how all foods can fit – no naughty list
  - Develop two simple dietary substitutions for your adult patients
  - Identify two new updates related to fiber for adults
  - Describe how to get your patients the dietary help they need including telehealth

# Holiday Eating with Diabetes

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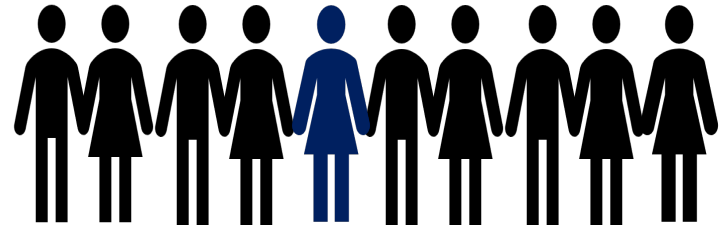
# What I Hope You Will Learn

1. How all foods can fit - No naughty list here!
2. Develop simple substitutions for your patients.
3. Provide an update on fiber.
4. Refer your patients to get the help they need.

# The Numbers

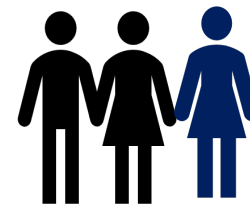
## Diabetes

- 13% of adults
- >34.2 million, 10.5% of population
- 7 million are not yet diagnosed
- 27% are 65yrs older



## Prediabetes

- 35% of adults , 88 million
- 45% >65years or older
- Only 15% are aware



# The Numbers

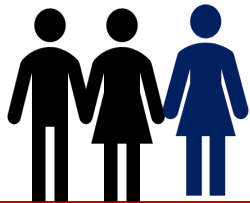


## Diabetes

- WV has the **HIGHEST RATE** of diabetes in the U.S. at **16.2%** with **~240,000 people** (estimated projection 2018 BRFSS).
- An additional **~45,000 people** have diabetes but don't know it.
- Every year an estimated **~14,000 people** in WV are diagnosed with diabetes.

## Prediabetes

- In the average primary care practice, **1 of 3 patients > age 18** and **1 of 2 patients > age 65**



It can take as little as **5 YEARS** for prediabetes to progress to diabetes.





# Role of Insulin

Medications

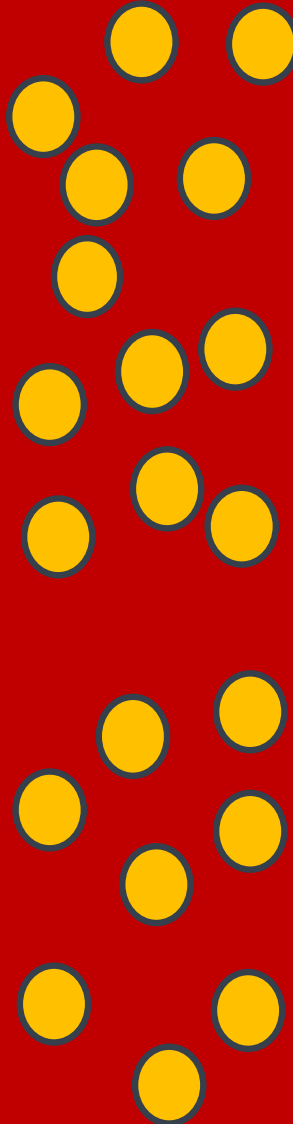
Illness

Stress

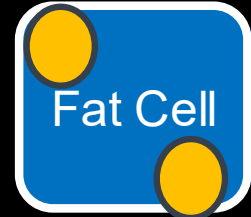
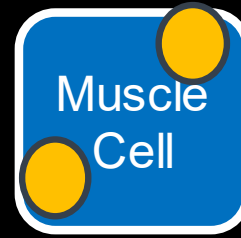
Physical Activity

Protein

\* Carbohydrate

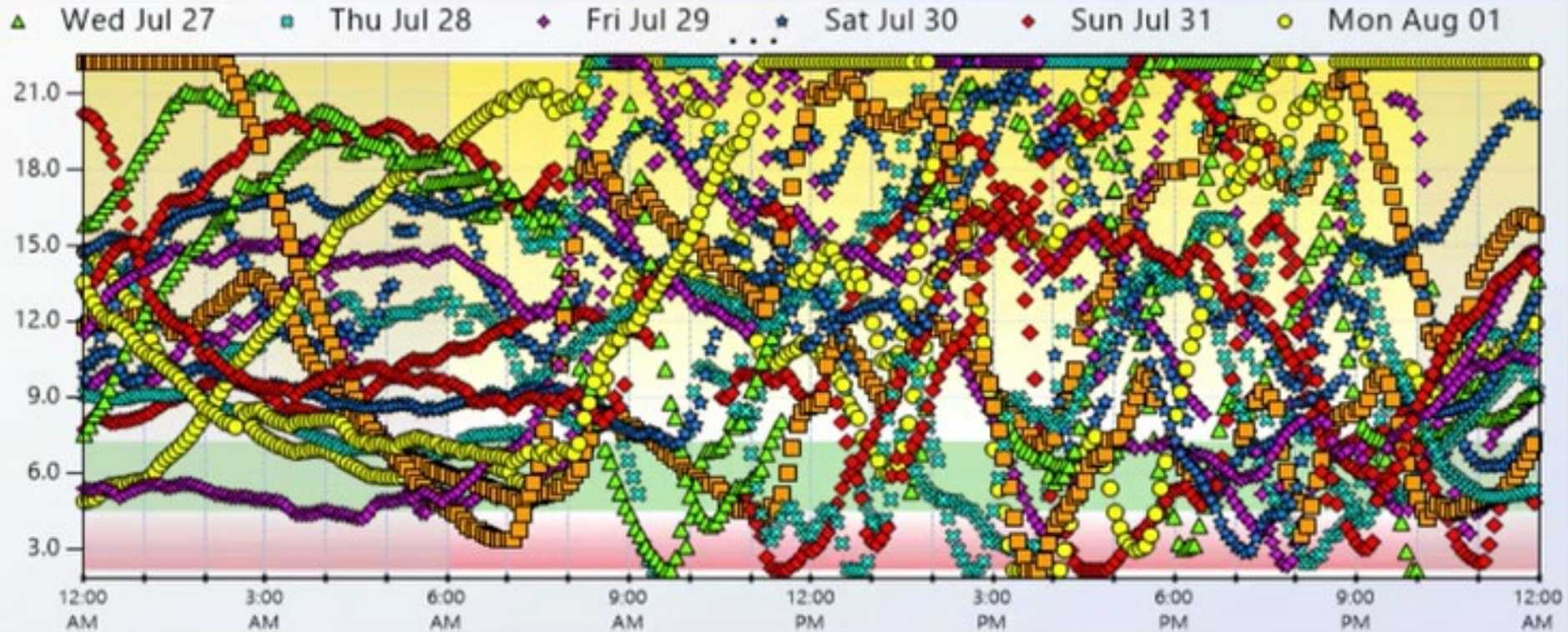


↑ Insulin





# Poor Glycemic Control



# Dietary Management

**Prior to the discovery  
of insulin**



**Since the discovery of  
insulin in 1921**



# Dietary Management





# “One Size Fits All, Does Not Fit”

1. **No ideal macronutrients**
2. **Calorie reduction independent of weight loss-improves metabolic profiles**
3. **Wt. loss of 5% is effective (7-15% wt. loss yield more benefits)**
4. **Extensive evidence of several different eating patterns that are effective**
  - a. **Mediterranean, DASH, LC, VLC, plant-based, Low Fat, DGA→ all can be effective**



# Low and Very–Low Carbohydrate Eating Patterns

## Low Carbohydrate

- Reduction of carbohydrates has most evidence for glucose management.
- Quality counts

## Very-Low Carbohydrates for SELECT people

- Long-term impact on glucose levels
- CVD risk factors
- Sustainability to adhere to eating pattern



# No Naughty List

## Enjoyment of eating!

- There's *no Ideal %* of calories from carbohydrates, protein and fat.
- Must be individualized
- Dessert CAN be included → portion size

## ED-DMT is becoming more prevalent

- ~7% of adolescents with T1DM
- One study found that 27.7% females and 8.6 males 11-19 years w/ T1DM had disordered eating
- T2DM 5-25.6%

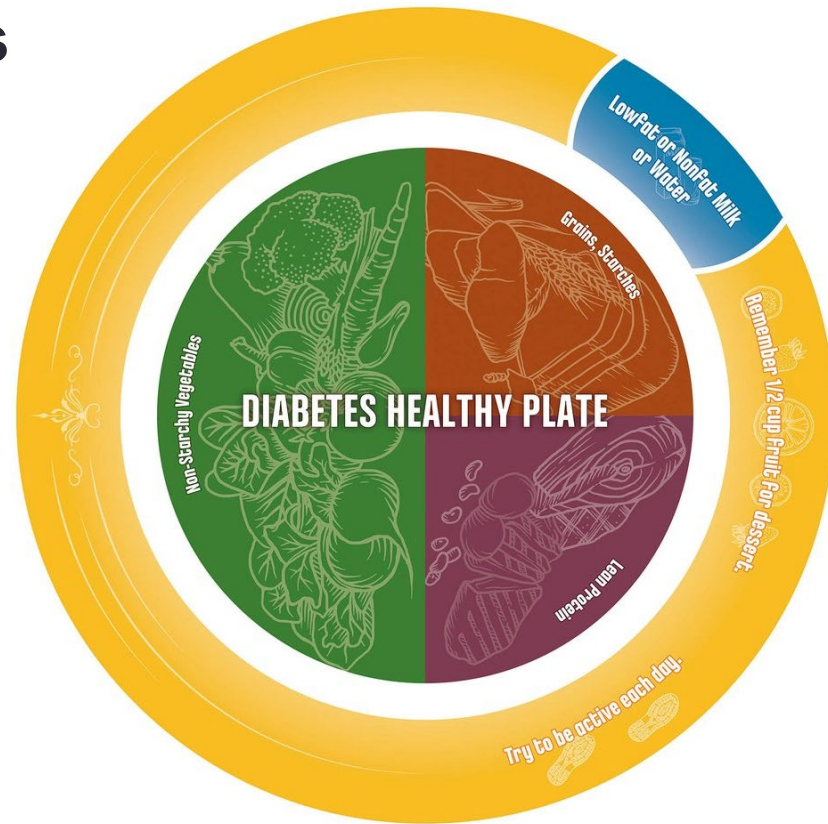


# No Naughty List

## Promote Healthful Eating Patterns

- Increase non-starchy vegetables
- More water
- Whole foods over processed foods

Must be sustainable for the individual!





# No Naughty List

**Check Blood Sugar Often to avoid DKA**

**When:**

- **Morning**
- **Pre-prandial**
- **Post-prandial**

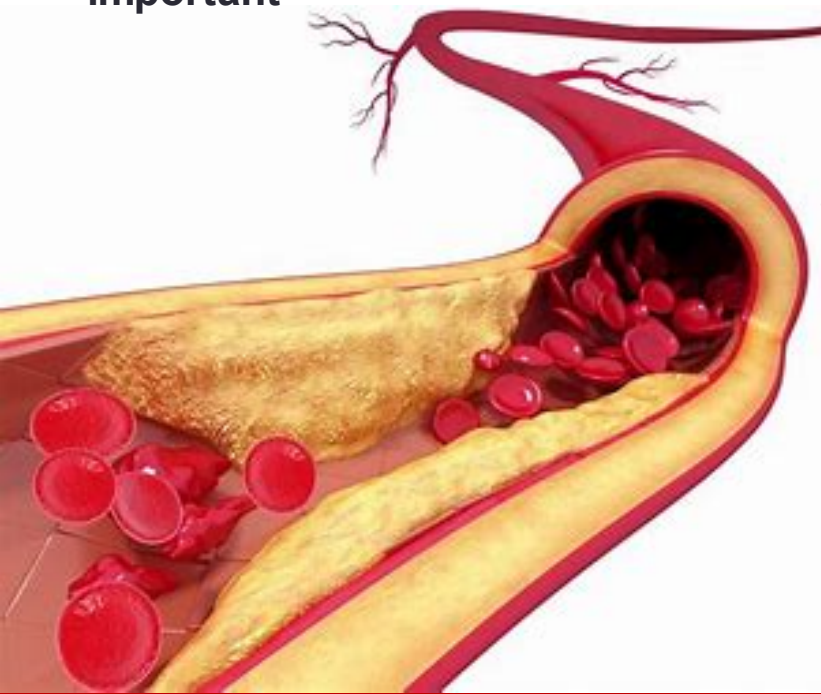


**Encourage patients to not skip meals during the holidays.**

# No Naughty List

## What about Fats?

- Data inconclusive on the ideal amount of fat but the type of fat is important



- Increased fat consumption → Reduction of HDL & increase in LDL, oxidized & glycated LDL- contribute to atherosclerosis of diabetes
- Diets high in saturated fats make insulin resistance worse
  - Avoid trans fats (look on the ingredient list for hydrogenated oils)
- Monounsaturated and polyunsaturated fats improve glycemic control and reduce CVD risk.

***Myth:*** Meat is high in saturated fat

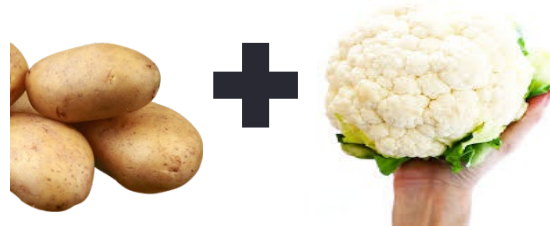
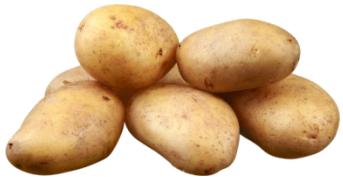
***Busted:*** Mono. fatty acids make up half the fat content of lean red meat.

- Look for the words: loin or round

# Simple Substitutions



# Simple Substitutions



# What about Fiber?



- **Fiber can slow down the conversion of enzymes that work on starch, slowing the conversion to glucose.**
- **Plant-based diet-fruits and vegetables, nuts and seeds, whole grains**
- **Dietary fiber enhances our microbiome via gut integrity, increased satiety, improved insulin sensitivity and improved energy homeostasis and loss of excess body weight.**
- **Fiber → SCFAs → energy control and appetite control → regulate BG**
- **Alterations in gut microbiome can effect metabolic pathways such as insulin signaling, appetite regulation, incretin production and inflammation.**

# Fiber

- Consume at least 14g/1000kcal
- Check out the Nutrition Label → >10%
- Glycemic Index impact only if >50g/day
- No significant impact on A1C
- Mixed results on fasting glucose



## Nutrition Facts

8 servings per container

**Serving size** 2/3 cup (55g)

**Amount per serving**

**Calories** 230

**% Daily Value\***

**Total Fat** 8g 10%

Saturated Fat 1g 5%

*Trans Fat* 0g

**Cholesterol** 0mg 0%

**Sodium** 160mg 7%

**Total Carbohydrate** 37g 13%

Dietary Fiber 4g 14%

Total Sugars 12g

Includes 10g Added Sugars 20%

**Protein** 3g

Vitamin D 2mcg 10%

Calcium 260mg 20%

Iron 8mg 45%

Potassium 235mg 6%

\* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.



# Glycemic Index

## Other Factors to Consider:

- Ripeness and storage time
- Processing-mashed potato vs baked potato
- Cooking method-al dente vs soft-cooked pasta
- Variety-white rice vs brown rice
- GI utilization may be helpful for some in fine tuning BGM

## Issues:

- Only measures single foods, not synergistically
  - Ex: pizza dough GI of 80, Pizza Hut Supreme GI of 36
- Doesn't consider the whole picture
- Current research inconclusive



**52**

**VS**



**52**

**\*Fat will always lower the GI of foods, b/c it slows digestion**



# Referring patients

**ADA Diabetes Standards of Care → Four Critical Times to Refer:**

- 1. At diagnosis**
- 2. Annually**
- 3. Not meeting txt targets**
- 4. Complicating Factors**

**Resources:**

- Diabetes Self-Management Classes**
- National Diabetes Prevention Program**
- Medical Nutrition Therapy**
- WV Health Connections database for programs to refer your patients to .**

**Telehealth services in the light of COVID**



# Questions



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