Diabetes Meal Planning Made Easy What You Need to Know Today

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Disclosure

I do not carry a conflict of interest, financial or material, regarding the information to be discussed today.

Objectives

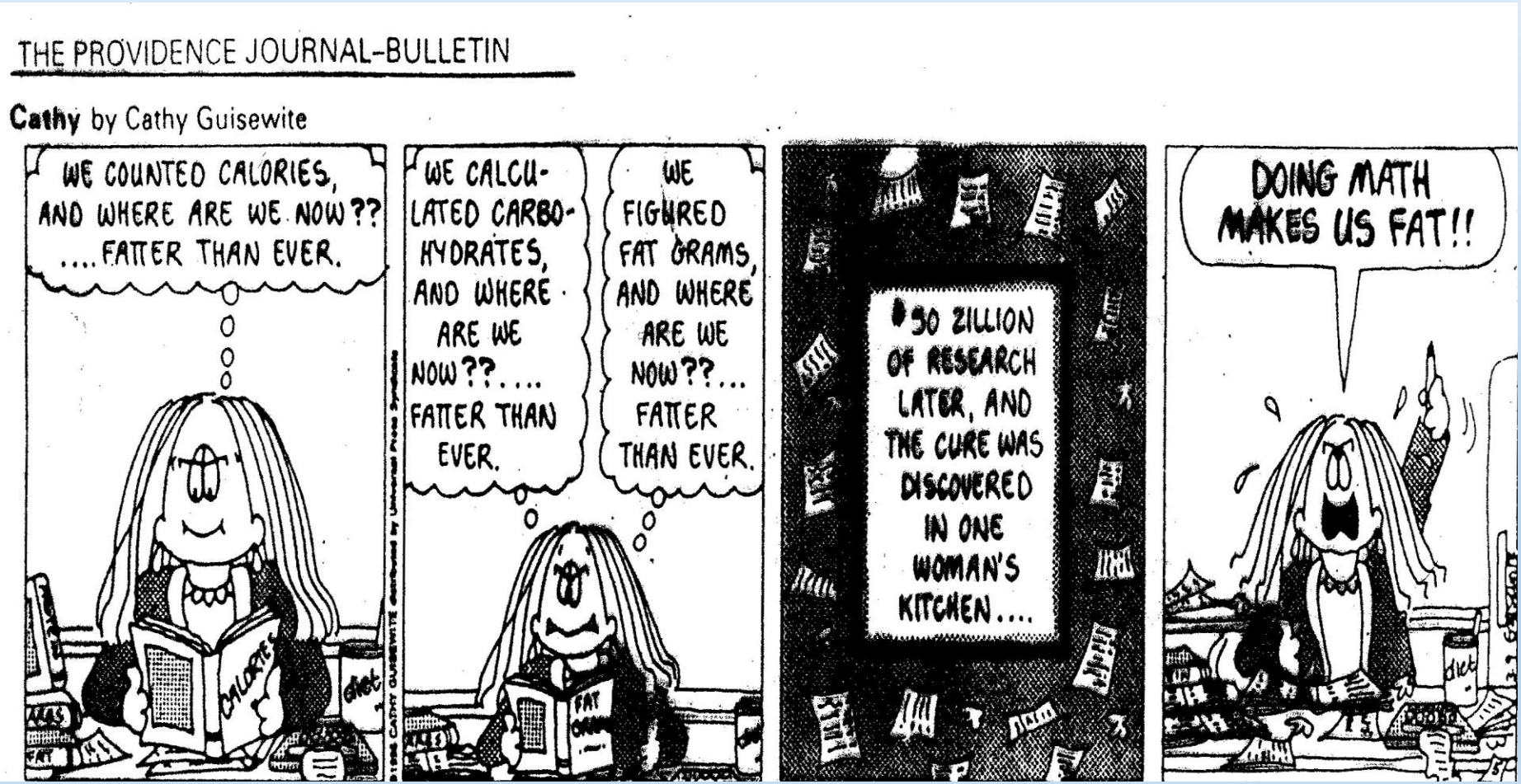
Pharmacists

- Apply basic concepts and recommendations from current dietary and weight management guidelines to specific needs of patients with diabetes
- Discuss concepts of carbohydrate controlled meal planning used for patients with diabetes.
- Discover how a person's eating habits and food choices are influenced by their environment.
- Explain how the elements of motivational interviewing and empathy can optimize adherence to nutrition recommendations.

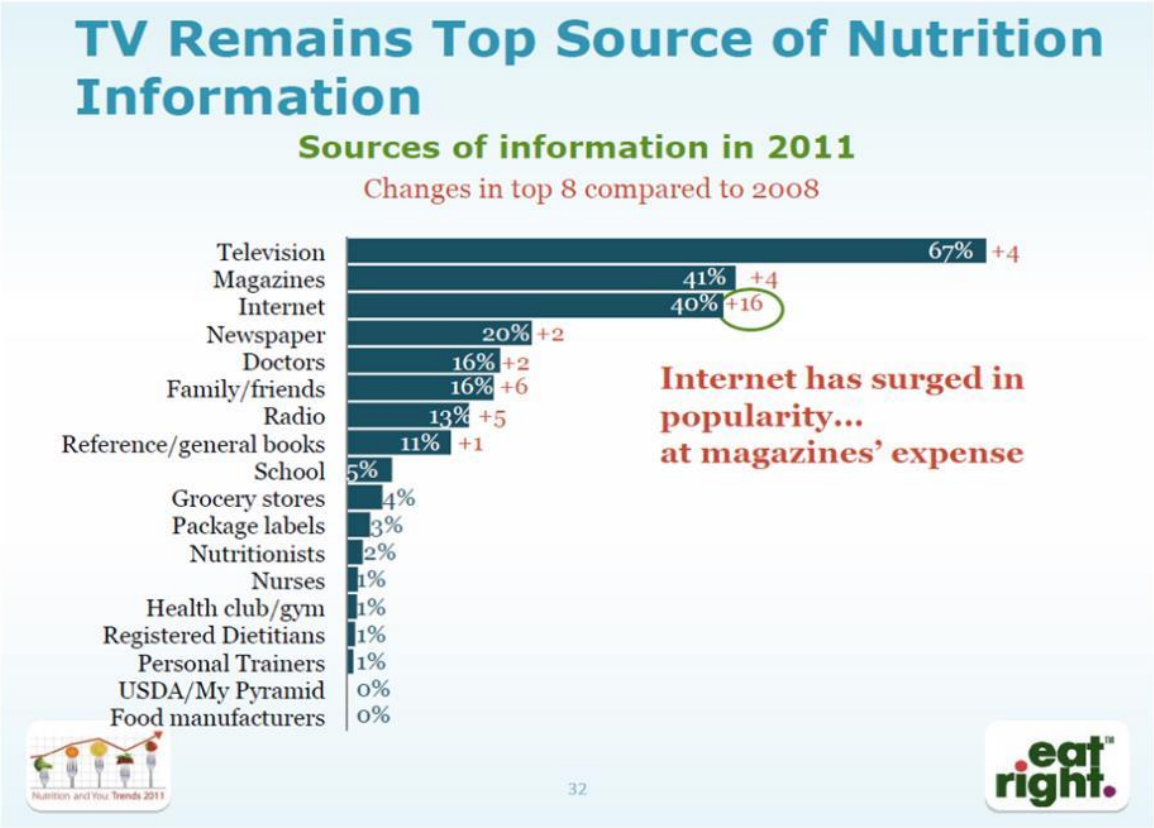
Technicians

- Discover how a person's eating habits and food choices are influenced by their environment
- Identify the impact carbohydrates have on blood sugar for patients with diabetes

Meal Planning



Meal Planning



Evidence-Based Guidelines And Evidence Statements

Evidence

- 2013 AHA/ACC Guideline on Lifestyle Management to Reduce CVD Risk.

- 2015 ADA/AHA paper on the Update on Prevention of Cardiovascular Disease in Adults With Type 2 Diabetes.

- U.S. Department of Health and Human Services and U.S. Department of Agriculture. *2015 – 2020 Dietary Guidelines for Americans*. 8th Edition. December 2015. Available at http://health.gov/dietaryguidelines/2015/guidelines/.

- American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Jan 2016; 39, Suppl 1.

AADE7™
Self-Care Behaviors

•Healthy Eating

- Being Active
- Monitoring
- Taking Medication
- Problem Solving
- Reducing Risks
- Healthy Coping

American Association of Diabetes Educators. AADE7 Self-Care Behaviors. URL: http://www.diabeteseducator.org/ProfessionalResources/AADE7

AADE7™ Self-Care Behaviors

Immediate Outcomes

Learning
Knowledge
Skill Acquisition

Intermediate Outcomes

Behavior Change

Post-Intermediate Outcomes

Improved Clinical Indicators

Long Term Outcomes

Improved Health Status

American Association of Diabetes Educators. AADE7 Self-Care Behaviors. URL: http://www.diabeteseducator.org/ProfessionalResources/AADE7/Background.html

AADE7™ Self-Care Behaviors

Nutrition Problem: Elevated pre-dinner blood glucose

Immediate Outcome

Learning:
Food Sources and amount of carbohydrate at lunch

Intermediate Outcome

Behavior Change:
Choose more vegetables and less bread/crackers

Post-Intermediate Outcome

Improved Clinical Indicators:
Improved pre-dinner blood glucose

Long Term Outcomes

Improved Health Status:
Decrease phone calls to doctor /educator and improved A1C levels

American Association of Diabetes Educators. AADE7 Self-Care Behaviors. URL: http://www.diabeteseducator.org/ProfessionalResources/AADE7/Background.html

Effectiveness of Nutrition Therapy

Comprehensive programs including nutrition therapy or individual education sessions have reported A1c decreases of 0.3-1% for type 1 diabetes and 0.5% -2% for type 2 diabetes

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Jan 2016; 39, Suppl 1.

Effectiveness of Nutrition Therapy

Because diabetes nutrition therapy can result in cost savings and improved outcomes (e.g., A1C reduction) MNT should be adequately reimbursed by insurance and other payers.

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Jan 2016; 39, Suppl 1.

Goals of Medical Nutrition Therapy for Adults With Diabetes

1. To promote and support healthful eating patterns, emphasizing a variety of nutrient-dense foods in appropriate portion sizes, in order to improve overall health and specifically to:
   - Achieve and maintain body weight goals
   - Attain individualized glycemic, blood pressure, and lipid goals
   - Delay or prevent complications of diabetes

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Jan 2016; 39, Suppl 1.

Goals of Medical Nutrition Therapy, Continued

2. To address individual nutrition needs based on personal and cultural preferences, health literacy and numeracy, access to healthful foods, willingness and ability to make behavioral changes, and barriers to change

3. To maintain the pleasure of eating by providing nonjudgmental messages about food choices.

4. To provide an individual with diabetes with practical tools for developing healthful eating patterns rather than focusing on individual macronutrients, micronutrients, or single foods

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Jan 2016; 39, Suppl 1.

Key Messages - Dietary Guidelines 2015-2020

Eat for health and the long run:

✓Healthy eating patterns include all foods and beverages consumed over a long span of time, and they can be flexible and adaptable to your tastes and preferences.

- ✓ Include a large variety of fruits, vegetables, whole-grain products, and lean proteins and legumes. Add healthy fats from nuts, seeds, and vegetable oils.
- ✓ Healthy eating patterns are low in added sugars and saturated/trans fats. Aim for <10% of calories from these groups.
- ✓ Healthy eating patterns are low in sodium from processed foods. Aim for <2 300 mg/day.

Key Messages, continued

Start with shifts, or small changes:

- ✓ All foods and beverages count toward a healthier meal pattern
- ✓ Shift toward more nutrient-dense choices within and across food groups
- ✓ Small changes add up
- ✓ Accommodate personal tastes and cultural preferences to make the shift easier to maintain

Key Messages, continued

Support healthy choices for everyone

✓ Healthy food, beverages, and physical activity choices should be available to all ages and throughout the food system:

- Schools
- Workplace
- Community and restaurants
- Grocery stores and home

✓Professionals in these sectors should develop strategies that help individuals align their choices with the *Dietary Guidelines*.

Recommended Shifts

Eat more fruits, vegetables, low-fat dairy, and healthy oils

- ✓ Replace high-fat snacks and desserts with vegetables and fruit
- ✓ Choose more dark green, red, and orange fruits and vegetables by including them as a component in mixed dishes
- ✓ Include a green leafy salad with meals
- ✓ Shift to consumer dairy in more nutrient-dense forms:
    - lower sugar, fat-free yogurt, 1% milk, low-fat cheese
- ✓ Replace butter and margarine with oils

Recommended Shifts

Reduce added sugars, saturated/trans fat, and sodium

- ✓ Choose water or beverages without added sugar
- ✓ Shift away from packaged snacks and desserts and toward whole fruits and vegetables
- ✓ Choose more nutrient-dense and whole foods in place of processed meals and ingredients
- ✓ Cook with oils instead of butter, margarine, or other solid fats

Recommended Shifts

Replace refined grains with 100% whole-grain products

- ✓ Shift to 100% whole-wheat bread, pasta, brown rice instead of white
- ✓ Substitute whole-grain baked goods for those made with white flour

Incorporate more fish, nuts, seeds, legumes and soy products as protein sources

LDL-C : Advise adults who would benefit from LDL-C lowering* to:

Consume a dietary pattern that emphasizes intake of vegetables, fruits, and whole grains; includes low-fat dairy products, poultry, fish, legumes, nontropical vegetable oils and nuts; and limits intake of sweets, sugar-sweetened beverages, and red meats.

- Adapt this dietary pattern to appropriate calorie requirements, personal and cultural food preferences, and nutrition therapy for other medical conditions (including diabetes).
- Achieve this pattern by following plans such as the DASH dietary pattern, the U.S. Department of Agriculture (USDA) Food Pattern, or the AHA Diet.

NHLBI Grade: A (Strong);ACC/AHA COR: I LOE:A

Eckel RH, et al. 2013 AHA/ACC Lifestyle Management Guideline. 2013 Guideline on Lifestyle Management to Reduce Cardiovascular Risk: A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. Circulation 2013; Nov 12.

Dietary Cholesterol

There is insufficient evidence to determine whether lowering dietary cholesterol reduces
LDL-C.

Eckel RH, Jakicic JM; Ard JD, de Jesus JM, Miller NH, Hubbard VS, et al. 2013 AHA/ACC Guideline on Lifestyle Management to Reduce Cardiovascular Risk. Journal of the American College of Cardiology 2014; 63:25.

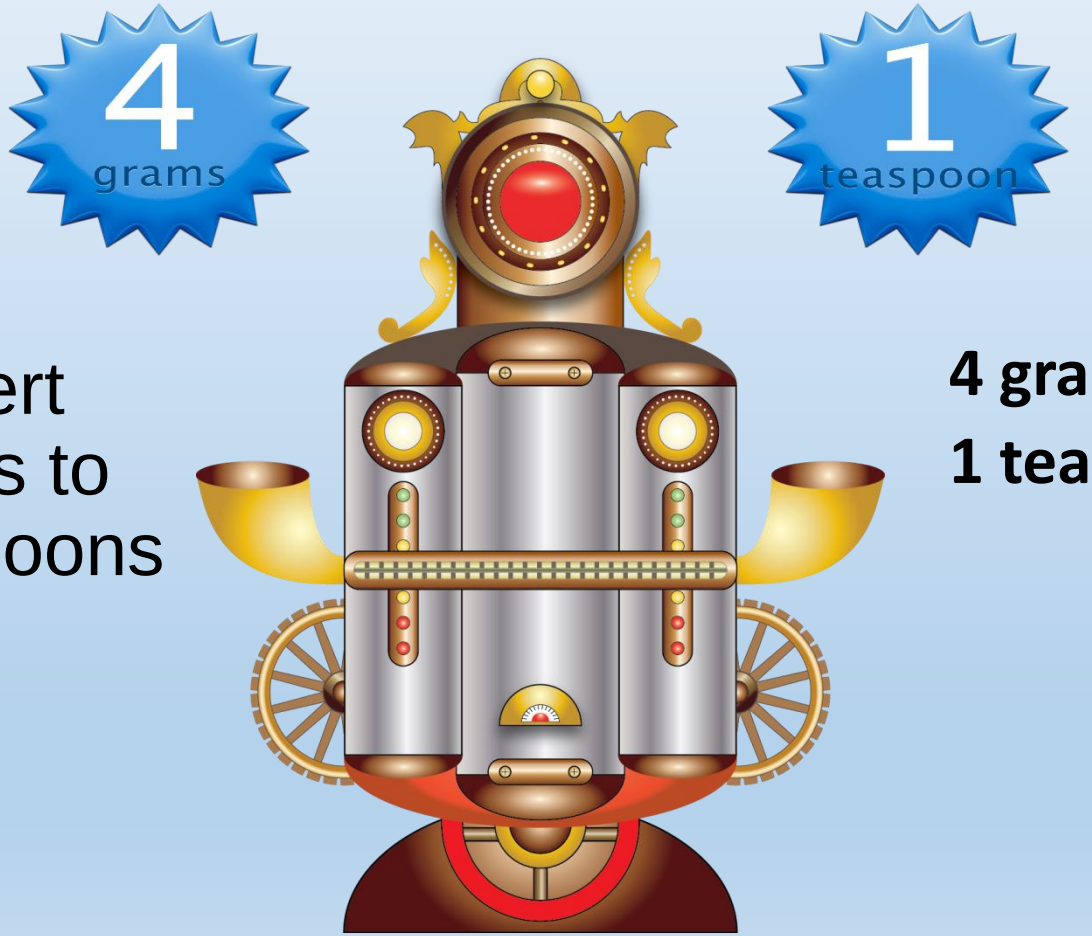
Added Sugars

Added Sugars

How much is just right?

The American Heart Association (AHA) recommends limiting the amount of added sugars you consume to no more than half of your daily discretionary calories allowance. For most American women, that's no more than 100 calories per day, or about 6 teaspoons of sugar. For men, it's 150 calories per day, or about 9 teaspoons.

Added Sugars



Convert Grams to Teaspoons

4 grams =

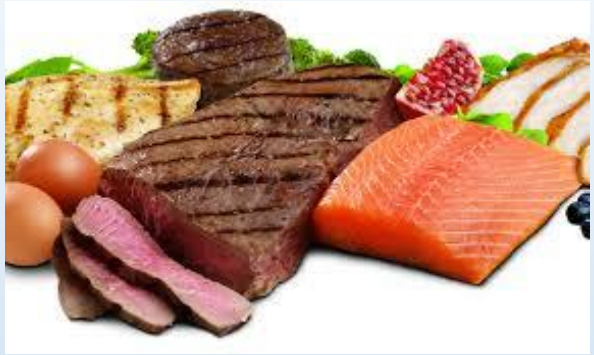
1 teaspoon

Dietary Fat

Whereas data on the ideal total dietary fat content for people with diabetes are inconclusive, an eating plan emphasizing elements of a Mediterranean-style diet rich in monounsaturated fats may improve glucose metabolism and lower CVD risk and can be an effective alternative to a diet low in total fat but relatively high in carbohydrates.

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Jan 2016; 39, Suppl 1.

Protein



In individuals with type 2 diabetes, ingested protein appears to increase insulin response without increasing plasma glucose concentrations. Therefore, carbohydrate sources high in protein should not be used to treat or prevent hypoglycemia

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Jan 2016; 39, Suppl 1.

Dietary Fat

Eating foods rich in long-chain omega-3 fatty acids, such as fatty fish (EPA and DHA) and nuts and seeds (ALA), is recommended to prevent or treat CVD however, evidence does not support a beneficial role for omega-3 dietary supplements.

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Jan 2016; 39, Suppl 1.

Alcohol

Adults with diabetes who drink alcohol should do so in moderation (no more than one drink per day for adult women and no more than two drinks per day for adult men). Alcohol consumption may place people with diabetes at increased risk for delayed hypoglycemia, especially if taking insulin or insulin secretagogues. Education and awareness regarding the recognition and management of delayed hypoglycemia are warranted.

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Jan 2016; 39, Suppl 1.

Micronutrients and herbal supplements

There is no clear evidence that dietary supplementation with vitamins, minerals, herbs, or spices can improve diabetes, and there may be safety concerns regarding the long-term use of antioxidant supplements such as vitamins E and C and carotene

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Jan 2016; 39, Suppl 1.

Sodium

As for the general population, people with diabetes should limit sodium consumption to ,2,300 mg/day, although further restriction may be indicated for those with both diabetes and hypertension.

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Jan 2016; 39, Suppl 1.

Energy Balance

Modest weight loss achievable by the combination of lifestyle modification and the reduction of energy intake benefits overweight or obese adults with type 2 diabetes and also those at risk for diabetes. Interventional programs to facilitate this process are recommended

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Jan 2016; 39, Suppl 1.

Nutrition Therapy- Diabetes

- For individuals whose daily insulin dosing is fixed, having a consistent pattern of carbohydrate intake with respect to time and amount can result in improved glycemic control and a reduced risk of hypoglycemia.

- A simple and effective approach to glycemia and weight management emphasizing healthy food choices and portion control may be more helpful for those with type 2 diabetes who are not taking insulin, who have limited health literacy or numeracy, and who are elderly and prone to hypoglycemia.

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Jan 2016; 39, Suppl 1.

Nutrition Therapy and Diabetes

- As there is no single ideal dietary distribution of calories among carbohydrates, fats, and proteins for people with diabetes, macronutrient distribution should be individualized while keeping total calorie and metabolic goals in mind.

- Carbohydrate intake from whole grains, vegetables, fruits, legumes, and dairy products, with an emphasis on foods higher in fiber and lower in glycemic load, should be advised over other sources, especially those containing sugars.

- People with diabetes and those at risk should avoid sugar-sweetened beverages in order to control weight and reduce their risk for CVD and fatty liver B and should minimize the consumption of sucrose-containing foods that have the capacity to displace healthier, more nutrient-dense foods.

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Jan 2016; 39, Suppl 1.

Weight Loss Recommendations

Lifestyle Interventions Weight loss can be attained with lifestyle programs that achieve a 500–750 kcal/day energy deficit or provide approximately 1,200–1,500 kcal/day for women and 1,500–1,800 kcal/day for men, adjusted for the individual's baseline body weight. Although benefits may be seen with as little as 5% weight loss, sustained weight loss of 7% is optimal. These diets may differ in the types of foods they restrict (such as high-fat or high-carbohydrate foods) but are effective if they create the necessary energy deficit The diet choice should be based on the patient's health status and preferences.

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Jan 2016; 39, Suppl 1.

Pharmacological Therapy

- Indicated for individuals with a BMI of 25-30kg/m2 with comorbidities
- > 30kg/m2 with or without comorbidities.

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Sept 2015; 38; 1783.

Surgical Procedures for Obesity and Metabolic Diseases

Commonly performed procedures	Frequency of use
Roux-en-Y gastric bypass	49%
Sleeve gastrectomy	30%
Adjustable gastric banding	19%
Biliopancreatic diversion	2%

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Sept 2015; 1784.

Long Term Weight Loss Data for Bariatric Surgery 15 years

- Gastric Bypass 27 +/- 12% (percent of total body weight)
- Vertical-banded gastroplasty 18+/-11%
- Gastric Banding 13 +/- 14%
- Non Surgical rarely exceeded 8%

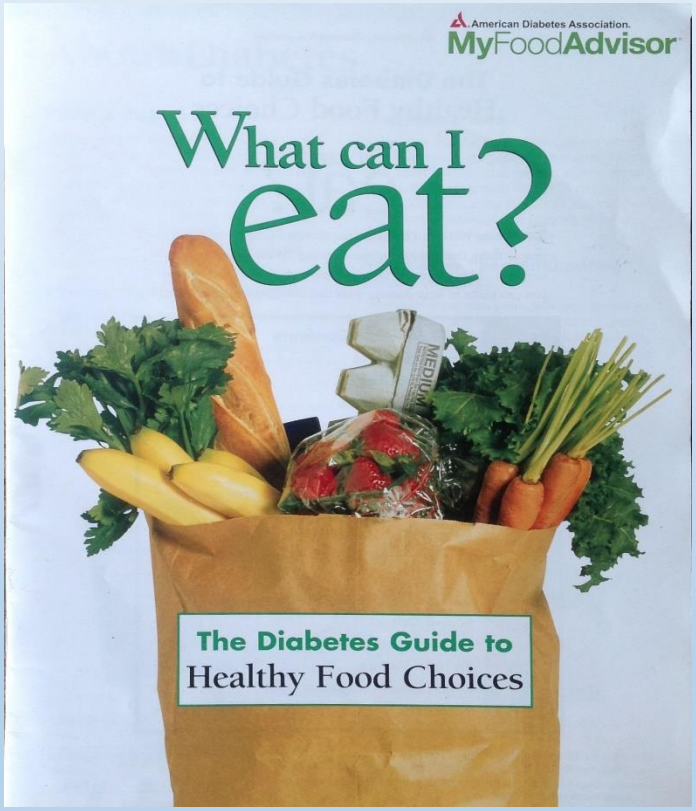
American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Sept 2015; 1784.

Complications of Bariatric Surgery

Complications	Frequency, %, and outcomes
Sepsis from anastomotic leak	1-2
Hemorrhage	1-4
Cardiopulmonary events	…
Thromboembolic disease	0.34
Late complications for AGB:	Surgical revision required in as many 20 within 5 years
Band slippage	15
Leakage	2-5
Erosion	1-2
Late complications of bypass procedures:	
Anastomotic strictures	1-5
Marginal ulcers	1-5
Bowel obstructions	1-2
Micronutrient and macronutrient deficiencies from RYGB	2-3 years after surgery:
Iron deficiency	45-52
Vitamin B12 deficiency	8-37
Calcium deficiency	10
Vitamin D deficiency	51
Fat-soluble vitamin deficiencies (A, D, E, K) and protein calorie malnutrition from BPD and DS procedures	1-5

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Sept 2015; 1784.

Meal Planning



Meal Planning

Does anyone cook anymore?

Meal Planning

Foods Grandma wouldn't recognize

It recently came to our attention that McDonald's Chicken McNuggets are prepared using TBHQ, a preservative derived from petroleum, and dimethylpolysiloxane, an antifoaming agent also used as a hair or skin conditioner. So we got to thinking: What simple, homey-sounding products have ingredients that would mystify Grandma?

We found, for starters, a brownie mix containing carnauba wax, a pasta dinner with polyglycerol esters of fatty acids, and a blueberry muffin mix with something called datem.

We're not judging the merits of these funny-sounding ingredients. Carnauba wax serves as an anticaking agent; those esters of fatty acids are emulsifiers. And datem, it turns out, helps strengthen dough. But still ... mix and match if you can.

Mix-and-match quiz

1

2

3

A Sugar, vegetable oil shortening, water, corn syrup, 2% or less of: cornstarch, salt, color (titanium dioxide, yellow 5, red 40), preservatives, natural and artificial flavors, lactic acid, sodium acid pyrophosphate, citric acid, sodium citrate.

B Water, nonfat milk, sugar, modified cornstarch, vegetable oil, less than 2% of: salt, natural and artificial flavor, calcium carbonate, sodium stearoyl lactylate, color added.

C Modified cornstarch, tapioca starch, vegetable oil, onion powder, potato flour, salt, sugar, torula yeast, hydrolyzed torula yeast proteins, hydrolyzed brewer's yeast proteins, monosodium glutamate, garlic powder, paprika, spice extractive flavorings, yellow 5, yellow 6, red 3, blue 1.

D Onion, dextrose, salt, paprika, spices, hydrolyzed corn gluten, soy protein and wheat gluten, garlic, parsley, calcium silicate, caramel color, barley malt flour, autolyzed yeast extract, lactic acid, natural flavors.

E Sugar, dextrose, partially hydrogenated vegetable oil, modified cornstarch, propylene glycol monostearate, sodium caseinate, less than 2% of cellulose gel, cellulose gum, hydroxypropyl methylcellulose, natural and artificial flavor, acetylated monoglycerides and mono- and diglycerides, sodium silicoaluminate, yellow 5, yellow 6.

4

F Sugar, bleached enriched flour, vegetable shortening, modified cornstarch, salt, baking soda, sodium aluminum phosphate, sodium aluminum sulphate, spices, malic acid, cellulose gum, artificial flavor, caramel color, yellow 5, yellow 6, sulfur dioxide.

G Sugar, modified food starch, dextrose, 2% or less of disodium phosphate, tetrasodium pyrophosphate, salt, artificial flavor, mono- and diglycerides, nonfat dry milk, partially hydrogenated soybean oil with BHA, titanium dioxide, yellow 5, yellow 6.

H Water, sorbitol, polydextrose, citric acid, malic acid, guar gum, natural and artificial flavors, ascorbic acid, acesulfame potassium, locust bean gum, sucralose, red 40, yellow 6, yellow 5, blue 1.

5

6

7

8

ANSWERS: 1A, 2C, 3F, 4D, 5E, 6B, 7H (popsicles only), 8G

Carbohydrates

What Is Carbohydrate Counting?

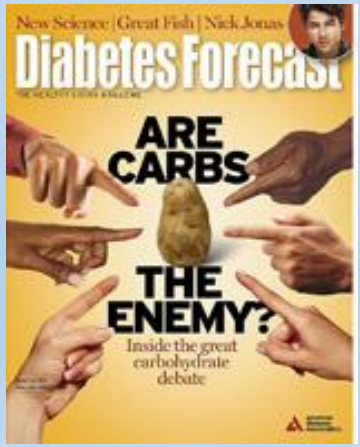
A meal-planning approach for all patients with diabetes, based on the following ideas:

- Carbohydrate is the main nutrient affecting postprandial glycemic response
- Total amount of carbohydrates consumed is more important than the source of carbohydrates

The Great Carbohydrate Debate

Studies examining the ideal amount of carbohydrate for people with diabetes are inconclusive.

Monitoring carbohydrate intake and considering the available insulin are key strategies for improving post prandial glucose control.



American Diabetes Association. *Diabetes Forecast: The Healthy Living Magazine*, March 2011

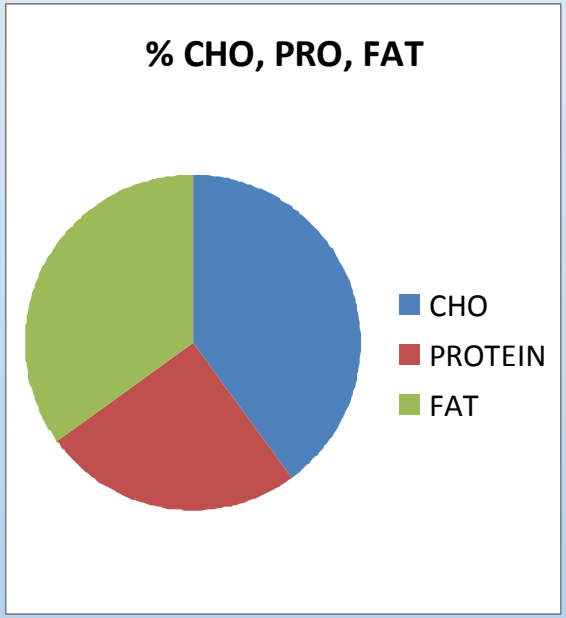
The Great Carbohydrate Debate

- The literature concerning glycemic index and glycemic load in individuals with diabetes is complex. Reductions of A1c of 0.2%-.0.5% have been demonstrated in some studies.

- A systematic review found consumption of whole grain was not associated with improvements of glycemic control although it may reduce systemic inflammation.

WholeGrainsCouncil.org
WHOLE GRAIN
Good Source
TM

The Great Carbohydrate Debate



Ranges % total Calories

- Carbohydrate: 45%-65%
- Protein: 10-35%
- Total fat: 20-35%

This is individually assessed by RD

Nutrition Therapy Diabetes

An individualized MNT program, preferably provided by a registered dietitian, is recommended for all people with type 1 or type 2 diabetes. For people with type 1 diabetes or those with type 2 diabetes who are prescribed a flexible insulin therapy program, education on how to use carbohydrate counting or estimation to determine mealtime insulin dosing can improve glycemic control.

American Diabetes Association. Standards of Medical Care in Diabetes – 2016. *The Journal of Clinical and Applied Research and Education*, Jan 2016; 39, Suppl 1.

Benefits of Carbohydrate Counting

Patients with type 1 or type 2 diabetes benefit from carbohydrate counting in terms of:

- Improvement in average glucose levels
- Quality of life
- Treatment satisfaction

Carbohydrate Counting

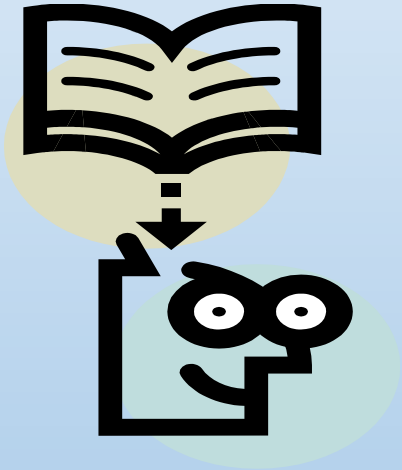
“Of course learning math is important.
When we get older we’ll have to count carbs.”

What is Carbohydrate Counting?

- Keeping track of the amount of carbohydrate eaten at meals and snacks.
- Keeping carbohydrate intake consistent at meals from day to day (for most people).
- Matching insulin injections to carbohydrate intake (for some people)

Myth: “Carbohydrates are Bad”

Many carbohydrates are healthy food choices such as:



- Whole grains
- Fruits
- Vegetables
- Low-fat milk and yogurt

Warning

"Net CHO"

"Impact CHO"

"Digestible CHO"

The FDA does not have a definition for these terms.

How Much Carbohydrate Should You Eat?

Overweight, Sedentary Women:

45-60 grams per meal

or

3-4 CHO choices

How Much Carbohydrate Should You Eat?

Overweight, Sedentary Men:

60–75 grams per meal

or

4–5 CHO choices

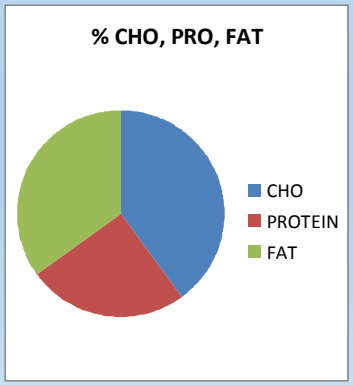
Weight Loss and Carbohydrate Counting

You can lose weight if you:

Count carbohydrates

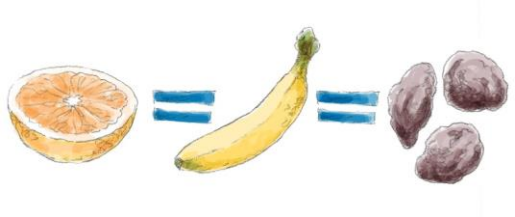
AND

Pay attention to the fat content of foods



Exchange lists for meal planning

- Each list has foods that have about the same amount of carbohydrates, calories, protein, and fat
- The lists come in these groups:
  - Starch
  - Fruits
  - Milk
  - Sweets, desserts, and other carbohydrates
  - Non-starchy vegetables
  - Meat and meat substitutes
  - Fats



Nutrients in Food Groups

Group	Carbohydrate (g)	Protein (g)	Fat (g)	Calories
Carbohydrate				
Starch	15	3	1 or less	80
Fruit	15	-	-	60
Milk				
Fat free (skim)	12	8	0-3	90
Low-fat (1%)	12	8	5	120
Whole	12	8	8	150
Nonstarchy Vegetables	5	2	-	25
Other Carbohydrates	Varies	Varies	Varies	Varies

Academy Nutrition and Dietetics Eat Right Pro 2016.

Nutrients in Food Groups

Group	Carbohydrate (g)	Protein (g)	Fat (g)	Calories
Meat/Meat Substitute				
Very lean	-	7	0-1	35
Lean	-	7	3	55
Medium fat	-	7	5	75
High fat	-	7	8	100
Fat				
Monounsaturated	-	-	5	45
Polyunsaturated	-	-	5	45
Saturated	-	-	5	45
Hydrogenated	-	-	5	45

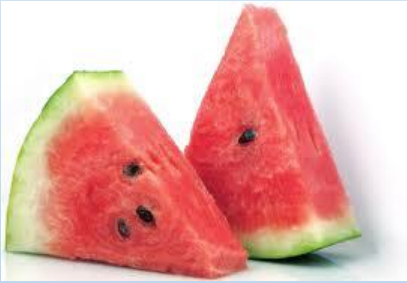
Academy Nutrition and Dietetics Eat Right Pro 2016.

Nutrients in Food Groups

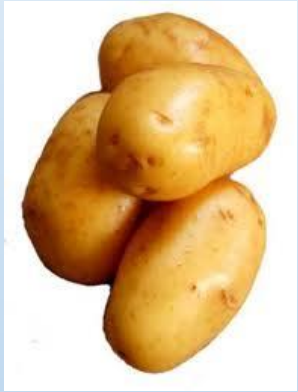
Food Group	Nutrient(s)	Effect on Blood Glucose	Rate of Effect on Blood Glucose
Starch	Carbohydrate Protein	Large	Fast
Fruit	Carbohydrate	Large	Fast
Milk	Carbohydrate Protein Fat	Large	Fast (slower if reduced fat [2%] or whole milk)
Vegetable	Carbohydrate Protein	Small	Fast
Meat	Protein Fat	-	-
Fat	Fat	-	-

Academy Nutrition and Dietetics Eat Right Pro 2016.

Fruit

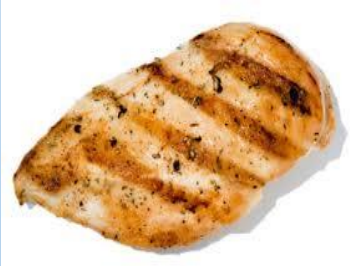


Starch



VEGETABLE

Lean Protein



Healthy Fats

Low Fat Dairy

Carbohydrate Counting Method

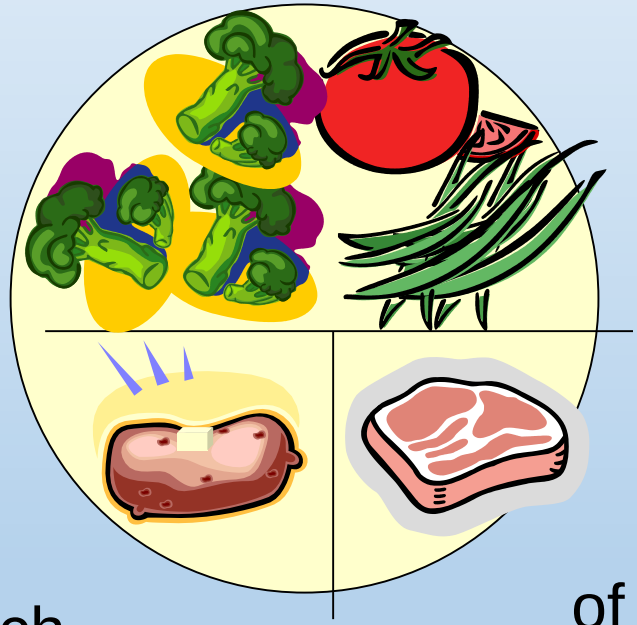
Since carbohydrates raise blood glucose the most … that's what you need to pay attention to.

Plate Method

Fill ½ of the plate with non-starchy vegetables

Finish with
a fruit

Choose a starch
serving



Don’t forget
The low fat dairy**!**

Add a serving
of lean protein food

Ways to Plan Meals

- Exchange System
- Carbohydrate Counting
- Plate Method

What Makes It Hard to Eat Healthy?

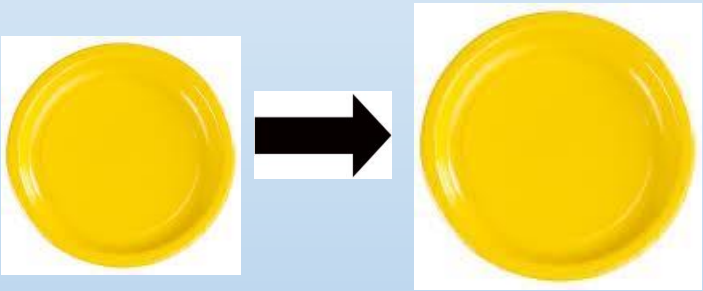
Cake is Cake
No Matter The Shape

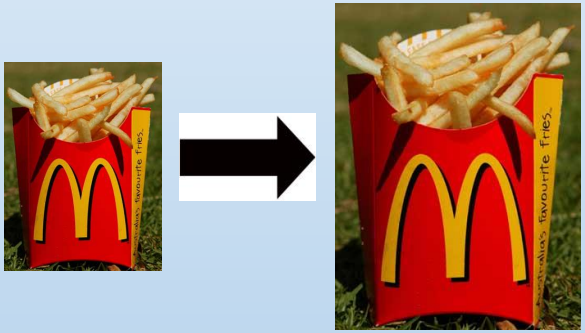
Fried Fat?

DOUGH
FRIED JELLY BEANS
FRIED BUTTER BALLS
MARION'S
Fried Dough
Fried Dough
Fried Butter Balls
Fried Jelly Beans
Funnel Cakes

Who creates portion size norms?

Larger packages, larger restaurant portions, larger kitchenware suggest a consumption norm that subtly influences how much people believe is appropriate to eat.





Wansink, B, van Ittersum, K. Portion Size Me: Downsizing Our Consumption Norms. *Journal of the American Dietetic Association 2007;* 107:7 (July); 1103-1106.

Environmental Portion Control

- Use smaller sized bowls, cups, and plates

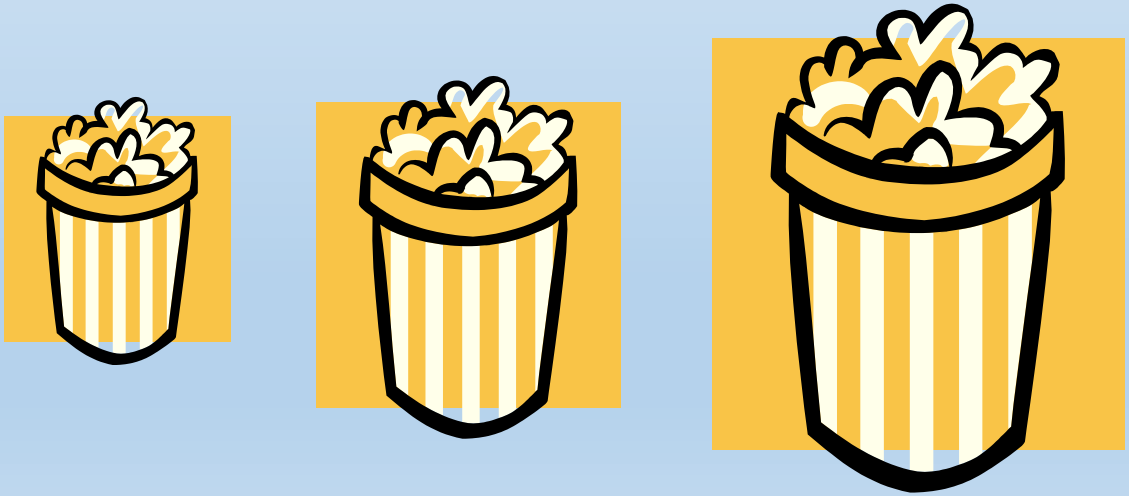
- When buying bulk packages of food repackage them into serving sizes.

Wansink B., Painter JE, North J. Bottomless Bowls: Why Visual Cues of Portion Size May Influence Intake *Obesity Research* 2005;13:93-100.

Bad Popcorn in Big Buckets: Can Portion Size Influence Intake as Much as Taste?

Larger packages and containers lead people to eat as much as 45% more.

Moviegoers given STALE popcorn still ate 33.6% more from large containers.



Wansink B, Kim J. Bad Popcorn in Big Buckets: Portion Size Can Influence Intake as Much as Taste, *Journal of Nutrition Education and Behavior* 2005; 37:5 (Sept-Oct): 242-5.

Descriptive Labels Increase Sales by 27%, and They Make Food Taste Better

Wansink, Painter & van Ittersum, *Food Quality & Preference*, 2003

The Curse of the Candy Dish!

© 2010 Wansink

Wansink, Painter & Lee
Int'l J of Obesity, 2006

This Your Brain On Doritos!

Weight Can Be Contagious!

1 companion – 35% more
3 companions – 75% more
>7 companions– 96% more

.

Bell R, Pliner. Time to eat: The relationship between the number of people eating and meal duration in three lunch settings. *Appetite* 2003*; 41* (2), 215–18.

Portion Sizes

Two Slices of Pizza

Twenty years ago
500 Calories

Today
850 Calories

Portion Sizes

Original 8-ounce bottle
97 calories

12 ounce can
145 calories

20-ounce bottle
242 calories

Portion Sizes

32 ounces	44 ounces	64 ounces
388 calories	533 calories	776 calories
$0.99	$1.09	$1.19

Portion Sizes

Twenty years ago
330 calories

Today's Cheeseburger
590 calories

Cake is Cake
No Matter The Shape

Helping Patients Eat Healthy

Adam and Eve disobeyed. They disobeyed God!

The Spirit of Motivational Interviewing

- Agape
- Caring
- Collaboration
- Patient is the focus, not me

Empathy

No one cares how much you know, until they know how much you care.
Theodore Roosevelt

Short Video - 3 minutes
Experimentinunderstanding.com

Empathy and Improved Outcomes

THE IntroDia™ STUDY

As mentioned in the n=you video, IntroDia* is an unparalleled, proprietary, multinational survey on conversations in type 2 diabetes that found that collaborative and encouraging conversations may be associated with improved patient outcomes.[1,2]

*IntroDia is dedicated to understanding and optimizing the early conversations, at diagnosis and when more medication needs to be added, between patients and physicians in type 2 diabetes.

References: 1. Capehorn M, Belton A, Down S, et al. Physician-patient communication at prescription of an additional oral agent for type 2 diabetes (T2D): link between key conversation elements, physician empathy and patient outcomes—insights from the global IntroDia™ study. Paper presented at: 75th Annual Scientific Sessions of the American Diabetes Association; June 2015; Boston, MA. **2.** Polonsky WH, Belton A, Down S, et al. Physicians' challenges when discussing the type 2 diabetes (T2D) diagnosis with patients: Insights from a cross-national study (IntroDia™). 74th Annual Scientific Sessions of the American Diabetes Association; June 2014; San Francisco, CA.

Empathy and Improved Outcomes

CONSIDER WHAT ROLE ENCOURAGEMENT AND COLLABORATION CAN PLAY IN YOUR PRACTICE WITH

3 SIMPLE STEPS

Developed in collaboration with sociologists Dr. Sam Richards and Dr. Laurie Mulvey

IN PREPARING FOR YOUR NEXT APPOINTMENT

Consider your patients not only as people living with type 2 diabetes, but as busy individuals juggling all the demands of everyday life.

Empathy and Improved Outcomes

2

DURING THE APPOINTMENT

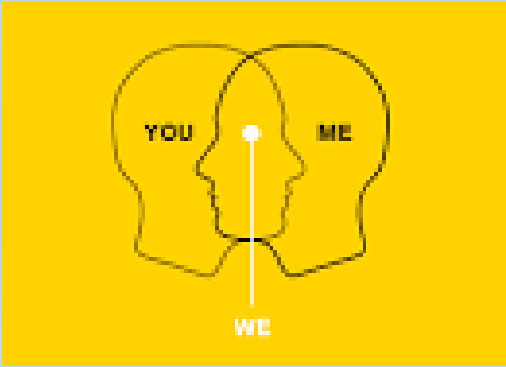
Imagine what your patients may:

- Be feeling about their ability to meet your shared goals
- Need to hear about their progress
- Find helpful to sustain a successful level of motivation

Empathy is

- The ability to accurately understand the patient's meaning.

- The ability to reflect that accurate understanding back to the client.



Empathy is not

- Having had the same experience or problem
- Identification with the client
- Let me tell you my story…
- Sympathy

www.karmatube.org

Empathy Starters

- “You seem_____”
- “In other words…”
- “You feel ___ because ___”
- “It seems to you…”
- “You seem to be saying…”
- “I gather that…”
- “You sound…”

Patients need *how-to* information about nutrition information that is …

- Simple
- Positive
- Practical
- Consistent

Summary

- Current evidence suggests that consuming a dietary pattern that emphasizes intake of vegetables, fruits, and whole grains; includes low-fat dairy products, poultry, fish, legumes, non tropical vegetable oils and nuts; and limits intake of sweets, sugar-sweetened beverages, and red meats can help in optimizing health.

- Meal plans that utilize the exchange system, carbohydrate counting or the plate method can provide patients with options to manage weight and glucose levels.

- The environment can pose challenges for patients to control energy intake.

- Provider empathy as part of Motivational Interviewing can assist in optimization of health through improved adherence to health recommendations.

Take a Tour

www.diabeteseducator.org

AADE
American Association of Diabetes Educators

Find A Dietitian

www.eatrightRI.org

RIAND
Rhode Island Academy of Nutrition & Dietetics

Find Me

dpezza@lifespan.org

Lifespan
Delivering health with care

Thank you