## Utilizing the 2020-2025 Dietary Guidelines for Americans to Tailor and Deliver Type 2 Diabetes Prevention Programs

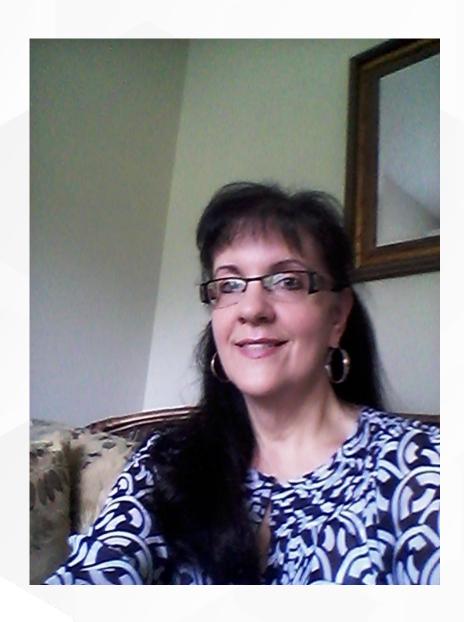
September 21, 2021

**Centers for Disease Control and Prevention** 

**National Center for Chronic Disease Prevention and Health Promotion** 

Division of Diabetes Translation





# Pat Schumacher, MS, RD Chief, Program Implementation Branch Division of Diabetes Translation Centers for Disease Control and Prevention

- Leads a multidisciplinary team working to eliminate the preventable burden of diabetes
- Works with many partners including:
  - State and local health departments
  - Tribes
  - National organizations

#### Disclosure Statement

In compliance with continuing education requirements, all presenters must disclose any financial or other associations with the manufacturers of commercial products, suppliers of commercial services, or commercial supporters as well as any use of unlabeled product(s) or product(s) under investigational use.

CDC, our planners, content experts, and their spouses/partners wish to disclose they have no financial interests or other relationships with the manufacturers of commercial products, suppliers of commercial services, or commercial supporters. Planners have reviewed content to ensure there is no bias. Content will not include any discussion of the unlabeled use of a product or a product under investigational use.

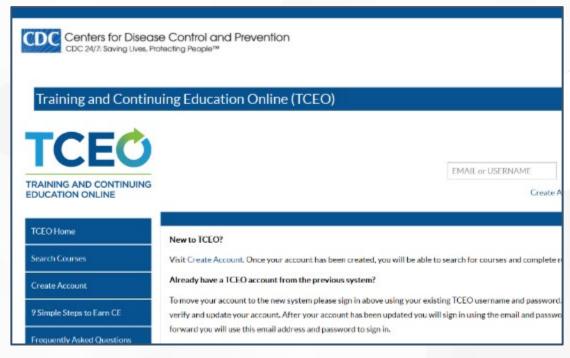
CDC did not accept commercial support for this continuing education (CE) activity.

No fees are charged for CDC's CE activities.

The information presented here is for training purposes and reflects the views of the presenters. It does not necessarily represent the official position of the Centers for Disease Control and Prevention.

#### Continuing Education

- This program has been approved for CNE, CEU, CECH, and CPH credit.
- To receive credit:
  - Complete the activity
  - Sign in at TCEOnline
  - Complete the evaluation
  - Pass the posttest with 60%



https://tceols.cdc.gov/ Password: Diabetes

#### Please Note

- To receive credit, you must visit www.cdc.gov/TCEOnline
- If you have never registered in TCEOnline, you will have to create a new account.
  - Returning users should login with their existing username and password.



#### Today's Objectives

- Describe the major components of the 2020-2025 Dietary Guidelines for Americans (DGAs) and recognize how they differ from the previous editions.
- Incorporate the materials, messages, and resources from the DGAs Call To Action to Make Every Bite Count when communicating dietary guidance in diabetes education and type 2 diabetes prevention in community or teambased clinical settings.
- Compare food classification among cultures and apply the basics of the L.E.A.R.N model in cross-cultural communication.

#### Have a Question for our Speakers?

Submit your question by clicking the Q&A icon located below. We'll do our best to answer all questions during the Q&A portion at the end of this webinar.



### Today's Presenters



Jennifer Seymour, PhD
Senior Scientist/Policy Advisor, Division of
Nutrition, Physical Activity, and Obesity,
Centers for Disease Control and Prevention



Sacha Uelmen, RDN, CDCES

Director of Diabetes Education &

Prevention Programs, Association of

Diabetes Care & Education Specialists



Lorena Drago, MS, RDN, CDN, CDCES Principal, Hispanic Foodways, LLC

#### Dietary Guidelines for Americans 2020-2025

Jennifer Seymour, PhD

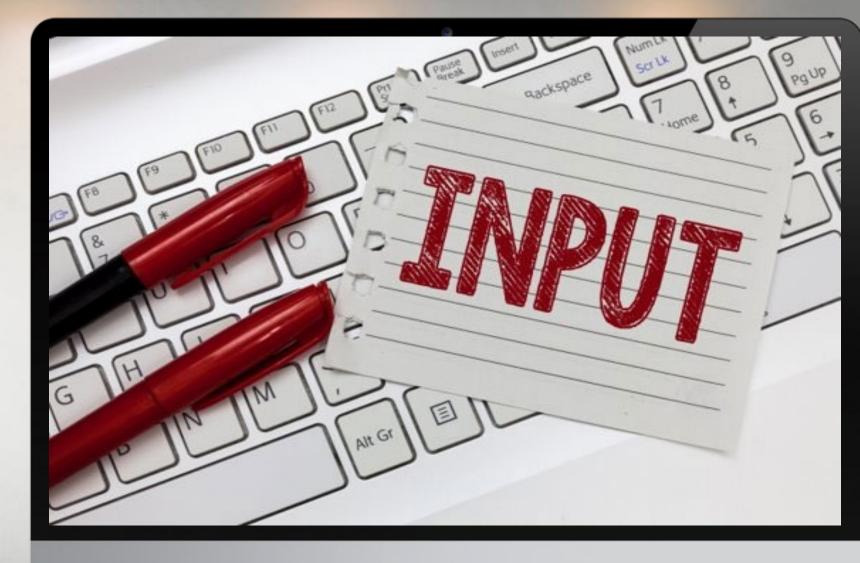
Senior Scientist/Policy Advisor

Division of Nutrition, Physical Activity, and Obesity

Centers for Disease Control and Prevention



## **Poll Question**











2020 - 2025











## Healthy Eating Can Promote Health and Reduce Risk of Chronic Disease



### Children and Adolescents

- Lower adiposity
- Lower total and low-density lipoprotein (LDL) cholesterol

#### Women Who Are Pregnant or Lactating

- Favorable cognitive development in the child
- Favorable folate status in women during pregnancy and lactation

### Birth Through 23 Months

- Lower risk of overweight and obesity
- Lower risk of type 1 diabetes
- Adequate iron status and lower risk of iron deficiency
- Lower risk of peanut allergy
- Lower risk of asthma



#### Adults, Including Older Adults

- Lower risk of all-cause mortality
- Lower risk of cardiovascular disease
- Lower risk of cardiovascular disease mortality
- Lower total and LDL cholesterol
- Lower blood pressure
- Lower risk of obesity
- Lower body mass index, waist circumference, and body fat
- Lower risk of type 2 diabetes
- Lower risk of cancers of the breast, colon, and rectum
- Favorable bone health, including lower risk of hip fracture



### The Guidelines

Follow a healthy dietary pattern at every life stage.







Limit foods </ and beverages higher in added sugars, saturated fat, and sodium, and limit alcoholic beverages.











Focus on meeting food group needs with nutrient-dense foods and beverages and stay within calorie limits.



#### The 85-15 Guide:

Percentage of Calories Needed To Meet Food Group Needs With Nutrient-Dense Choices and Percentage Left for Other Uses

Most of the calories a person needs to eat each day—around 85 percent—are needed to meet food group recommendations healthfully, in nutrient-dense forms. The remaining calories—around 15 percent—are calories available for other uses, including for added sugars or saturated fat beyond the small amounts found in nutrient-dense forms of foods and beverages within the pattern, to consume more than the recommended amount of a food group, or for alcoholic beverages. This equates to 250 to 350 remaining calories for calorie patterns appropriate for most Americans.





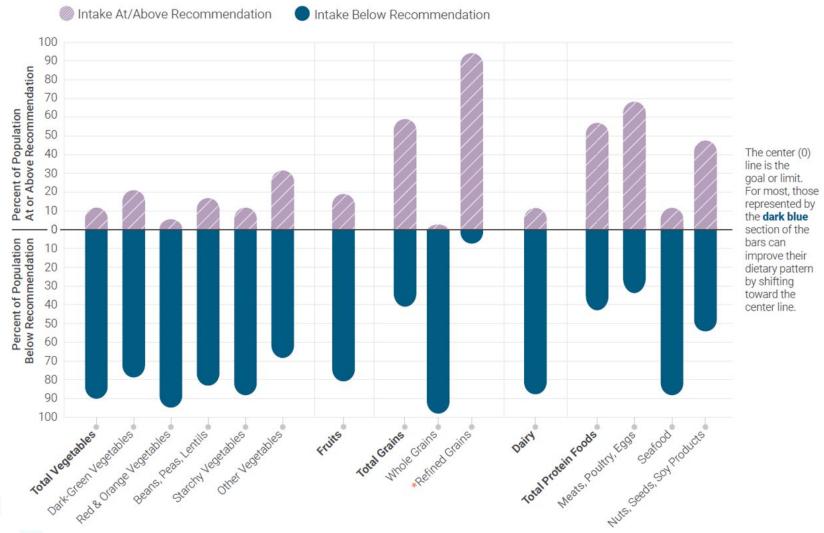
of remaining calories are available for other uses (including added sugars and saturated fat)





#### **Dietary Intakes Compared to Recommendations**

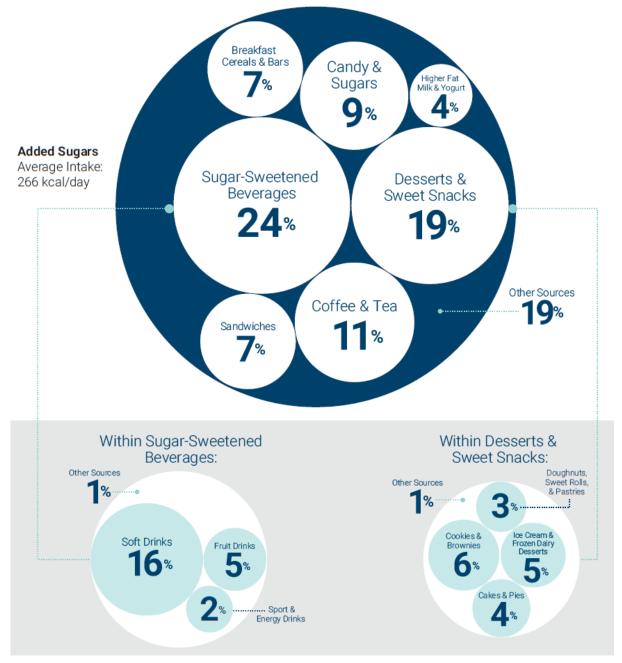






**NOTE:** Recommended daily intake of whole grains is to be at least half of total grain consumption, and the limit for refined grains is to be no more than half of total grain consumption.

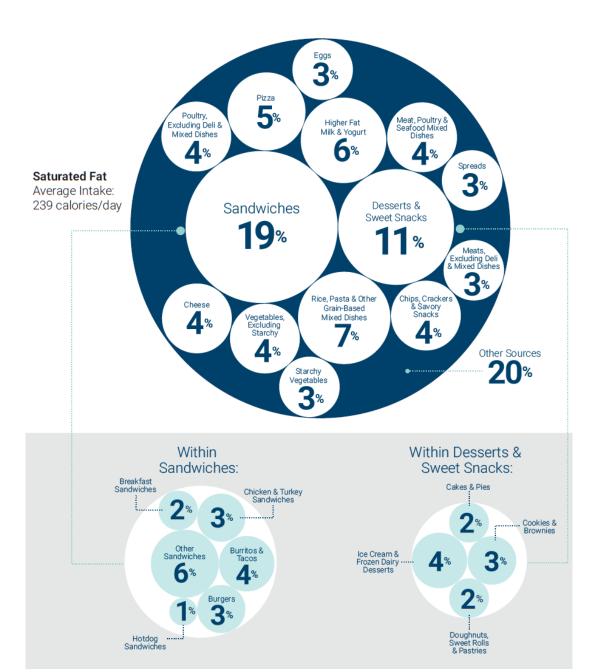
# Top Sources and Average Intakes of Added Sugars





Guideline

## Top Sources and Average Intakes of Saturated Fat

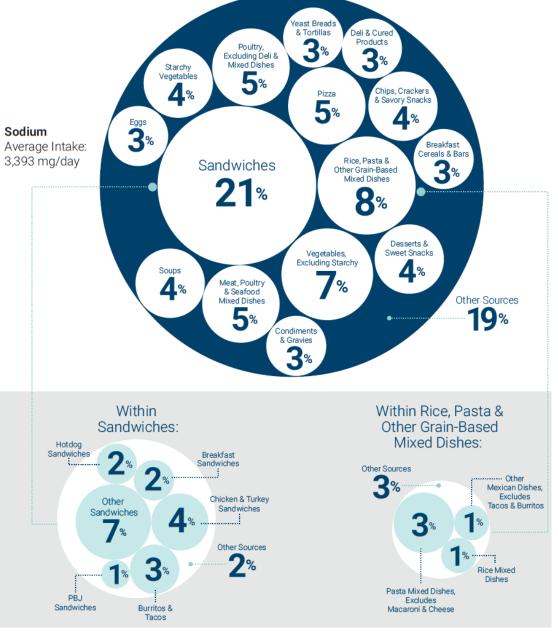




Guideline

## Top Sources and Average Intakes of Sodium







**Data Source:** Analysis of What We Eat in America, NHANES 2013-2016, ages 1 and older, 2 days dietary intake data, weighted.



## Infants & Toddlers





#### Birth to 24 Months

- Birth until child's second birthday critical period for proper growth and development.
  - » Nutrients critical for brain development and growth must be provided in adequate amounts.
- Key for establishing healthy dietary patterns, influence trajectory of eating behaviors and health throughout life.
  - » Children in this age group consume small quantities of foods, important to make every bite count!
- Human milk feeding alone is the ideal form of nutrition from birth through about age 6 months.
- Developmental Readiness for Beginning To Eat Solid Foods
  - » Signs that an infant is ready for complementary foods
  - » Infants and young children should be given age- and developmentally appropriate foods to help prevent choking.





### **Special Considerations**

- Supplementing Infants:
  - » Iron
  - » Vitamin D
  - » Vitamin B12
- Avoid:
  - » Added Sugars
  - » High Sodium Foods
  - » Honey, Other Unpasteurized Foods
  - » 100% Fruit Juice
  - » Cow's Milk, Soy Beverages
  - » Plant Milks
  - » Toddler Milks
  - » Caffeine







# Women Who Are Pregnant or Lactating



#### **Pregnancy & Lactation**

- Dietary pattern consistent, just different calorie levels
- Nausea, vomiting, food aversions and food cravings
- Women do not need to restrict dietary choices to prevent allergies in their children
- Vegetarian and vegan women may need to supplement with Iron, B12, choline, zinc, iodine, EPA/DHA
- Weight
  - » Importance of achieving and maintaining healthy weight before pregnancy
  - » Gain during pregnancy within guidelines
  - » Returning to a healthy weight during postpartum period
  - » Start pregnancy overweight or having obesity weight gain recommendations reduced
- Food safety



### **Special Considerations**

- Meeting Nutrient Needs
- Folate/Folic Acid
- Iron
- Iodine

- Choline
- Seafood
- Alcoholic Beverages
- Caffeine







## **Older Adults**





#### **Older Adults**

- Older adults is 60+
- More susceptible to chronic diseases, osteoporosis, and sarcopenia
- Difficulty chewing and swallowing can impact intake
- Food safety more important in this population – decline in immune system





## **Special Considerations**

- Protein
- Vitamin B<sub>12</sub>
- Beverages
- Alcoholic Beverages





#### Customizing the *Dietary Guidelines* Framework



#### Figure 1-5

#### Customizing the *Dietary Guidelines* Framework

The Dietary Guidelines approach of providing a framework-not prescriptive details-ensures that its recommendations can "meet people where they are," from personal preferences to cultural foodways, and including budgetary considerations. The examples below are a sample of the range of options in each food group—to be eaten in nutrientdense forms. Additional examples are listed under Table A3-2 in Appendix 3.



- Dark-Green Vegetables: All fresh, frozen, and canned darkgreen leafy vegetables and broccoli, cooked or raw: for example, amaranth leaves, bok choy, broccoli, chamnamul, chard, collards, kale, mustard greens, poke greens, romaine lettuce, spinach, taro leaves, turnip greens, and watercress.
- Red and Orange Vegetables: All fresh, frozen, and canned red and orange vegetables or juice, cooked or raw: for example, calabaza, carrots, red or orange bell peppers, sweet potatoes, tomatoes, 100% tomato juice, and winter squash.
- Beans, Peas, Lentils: All cooked from dry or canned beans, peas, chickpeas, and lentils: for example, black beans, black-eyed peas, bayo beans, chickness (garbanzo beans) edamame, kidney beans, lentils, lima beans, mung beans, pigeon peas, pinto beans, and split peas. Does not include green beans or green peas
- Starchy Vegetables: All fresh, frozen, and canned starchy vegetables: for example, breadfruit, burdock root, cassava, corn, jicama, lotus root, lima beans, plantains, white potatoes, salsify, taro root (dasheen or yautia), water chestnuts, yam,
- Other Vegetables: All other fresh, frozen, and canned vegetables, cooked or raw: for example, asparagus, avocado, hambon shoots heets hitter melon. Brussels sprouts cabbage (green, red, napa, savoy), cactus pads (nopales), cauliflower celery, chayote (mirliton), cucumber eggplant. green beans, kohlrabi, luffa, mushrooms, okra, onions, radish, rutabaga, seaweed, snow peas, summer squash, tomatillos,



All fresh, frozen, canned, and dried fruits and 100% fruit juices: for example, apples, Asian pears, bananas, berries (e.g., blackberries, blueberries, currants, huckleberries, kiwifruit, mulberries, raspberries, and strawberries); citrus fruit (e.g., calamondin, grapefruit, lemons, limes, oranges, and pomelos); cherries, dates, figs, grapes, guava, jackfruit, lychee, mangoes, melons (e.g., cantaloupe, casaba, honeydew, and watermelon); nectarines, papaya, peaches, pears, persimmons, pineapple, plums, pomegranates, raisins, rhubarb, sapote, and soursop.



#### Figure 1-5 Customizing the Dietary Guidelines Framework (continued)

#### Grains

- Whole grains: All whole-grain products and whole grains used as ingredients: for example, amaranth, barley (not pearled), brown rice, buckwheat, bulgur, millet, oats, popcorn, quinoa, dark rye, whole-grain cornmeal, whole-wheat bread, whole-wheat chapati, whole-grain cereals and crackers, and
- Refined grains: All refined-grain products and refined grains used as ingredients: for example, white breads, refined-grain cereals and crackers, corn grits, cream of rice, cream of wheat, barley (pearled), masa, pasta, and white rice. Refinedgrain choices should be enriched.





#### Dairy and Fortified Sov Alternatives

· All fluid, dry, or evaporated milk, including lactose-free and lactose-reduced products and fortified soy beverages (soy milk), buttermilk, yogurt, kefir, frozen yogurt, dairy desserts, and cheeses. Most choices should be fat-free or low-fat. Cream, sour cream, and cream cheese are not included due to their low calcium content.





- Meats, Poultry, Eggs: Meats include beef, goat, lamb, pork, and game meat (e.g., bison, moose, elk, deer). Poultry includes chicken, Cornish hens, duck, game birds (e.g., ostrich, pheasant, and quail), goose, and turkey. Organ meats include chitterlings, giblets, gizzard, liver, sweetbreads, tongue, and tripe. Eggs include chicken eggs and other birds' eggs. Meats and poultry should be lean or low-fat.
- Seafood: Seafood examples that are lower in methylmercury include: anchovy, black sea bass, catfish, clams, cod, crab, crawfish, flounder, haddock, hake, herring, lobster, mullet, ovster, perch, pollock, salmon, sardine, scallop, shrimp, sole, squid, tilapia, freshwater trout, light tuna, and whiting.
- Nuts, Seeds, Soy Products: Nuts and seeds include all nuts (tree nuts and peanuts), nut butters, seeds (e.g., chia, flax, pumpkin, sesame, and sunflower), and seed butters (e.g., sesame or tahini and sunflower). Soy includes tofu tempeh. and products made from soy flour, soy protein isolate, and soy concentrate. Nuts should be unsalted.





Dietary Guidelines for Americans, 2020-2025 | Chapter 1: Nutrition and Health Across the Lifespan | Page 28

Page 29 | Dietary Guidelines for Americans, 2020-2025 | Chapter 1: Nutrition and Health Across the Lifespar



This resource is available for download at DG.gov on the "Downloadable Graphics" page as a PDF https://www.dietaryguidelines.gov/resources/downloadable-graphics

## How the Dietary Guidelines Promote Health, Prevent Disease, and Inform Diabetes Education & Prevention

Sacha Uelmen, RDN, CDCES

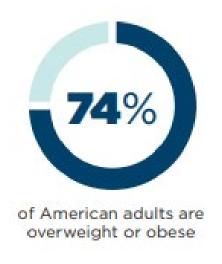
Director of Diabetes Education & Prevention Programs
Association of Diabetes Care & Education Specialists



## Our Health is Suffering from <u>Diet-related</u> Chronic Disease

#### Americans Do Not Follow the Dietary Guidelines and Our Health Is Suffering







## Lower Risk of Type 2 Diabetes



#### Following the Dietary Guidelines Can Help Improve Americans' Health



Each step closer to eating a diet that aligns with the Dietary Guidelines is associated with:



Lower Risk of Heart Disease



Lower Risk of Type 2 Diabetes



Lower Risk of Cancer



Lower Risk of Obesity

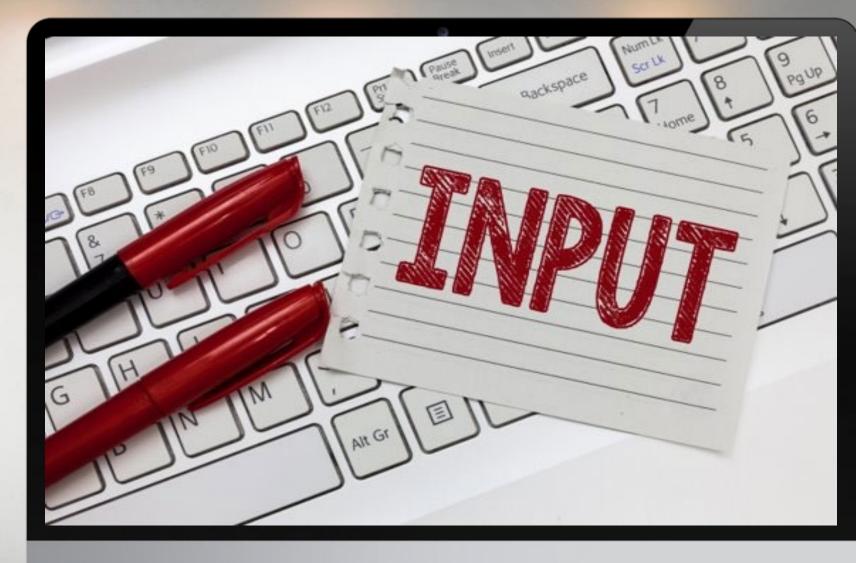


Lower Risk of Hip Fracture

For more information about the Dietary Guidelines, visit DietaryGuidelines.gov.

Aligns with goals in diabetes education and type 2 diabetes prevention programs.

## **Poll Question**



## Make Every Bite Count

3 How do we "make every bite count"?

Focus on nutrient-dense foods and beverages, limit those higher in added sugars, saturated fat, and sodium, and stay within calorie limits.





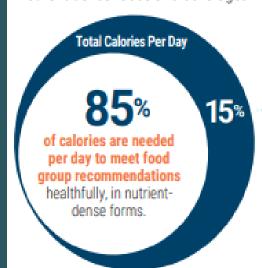
More than half of the U.S. population meets or exceeds total grain and protein foods recommendations, but are not meeting the subgroup recommendations for each food group. Eat less sugar and fat

Eat more veggies and fruit

Eat a variety of foods

Pay attention to your portion size

**Daily Goals:** Most of a person's daily calories are needed to meet food group recommendations with nutrient-dense foods and beverages.



of remaining calories are available for other uses (including added sugars and saturated fat).

### And follow these three key dietary principles:

Meet nutritional needs primarily from nutrient-dense foods and beverages.



Choose a variety of options from each food group.



Pay attention to portion size.





#### Fruits

Focus on whole fruits

Learn more



#### Vegetables

Vary your veggies

Learn more



#### Grains

Make half your grains whole grains

Learn more



## Protein Foods

Vary your protein routine

Learn more



#### Dairy

Move to low-fat or fat-free dairy milk or yogurt (or lactosefree dairy or fortified soy versions)

Learn more

## **Nutrient Density**

## What's the Opposite of Nutrient Dense?



# DGA and PreventT2 Updates

Focus on food over macronutrients

Nutrient density is emphasized

Portions still a key element

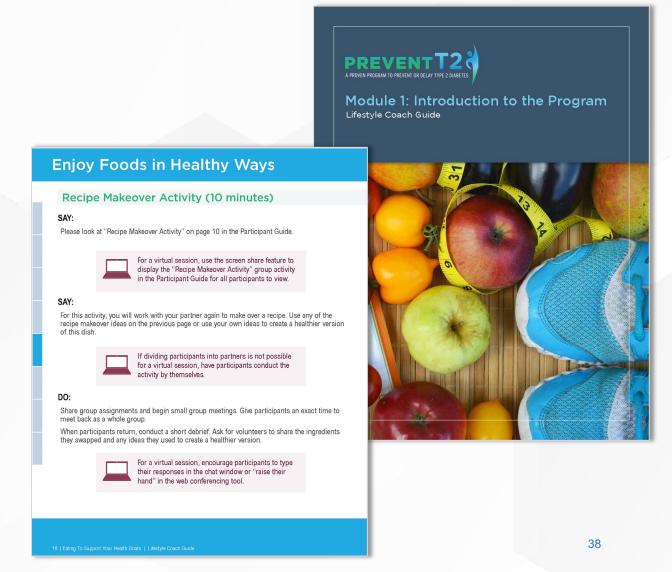
Practical tools and resources

Emphasis on habit formation and personally meaningful goal setting

Cultural considerations are more prominent

## PreventT2 Updates and the DGAs

- Eating foods you like
- Practical for a wider audience
- Familiar foods, focus on variety
- Nutrient-dense food and drinks discussed
- Portions and calories still matter
- Reflect personal preferences, cultural traditions, and budgetary considerations



## PreventT2 Updates

- Stories, scenarios and examples are more realistic
- More flexibility to tailor healthy eating approaches to meet participant's own needs
- Emphasis on habit formation and setting personally meaningful goals
- Enhanced cultural relevance
- More coaching strategies such as games and storytelling
- Guidance for:
  - Virtual delivery and engaging participants in between sessions
  - Incorporating 2021 Diabetes Prevention Recognition Program Standards

#### **About Triggers**

#### Marta's Story—Part 1

Marta just learned that she's at risk for type 2 diabetes. She knows that taking small steps to change her eating patterns and adding more movement to her day can make a big difference in reducing her risk.

On a typical workday, Marta gets up at 5:30 in the morning. As soon as she enters the kitchen, she starts making coffee. Just the smell helps her wake up. Then she warms up a pastry to dunk in her coffee.

By 3 in the afternoon, she's getting drowsy again. So, she stops at the coffee machine in the staff lounge. Her friend Adam is usually in the lounge at that time too, so she spends a few minutes chatting with



#### **About Triggers**

and a one o the T

with

#### Marta's Story—Part 2

Marta takes action to manage her triggers to help her engage in healthier behaviors. For example, instead of falling asleep in front of the TV, she is going to bed at a regular time each night, so she has more energy when she wakes up. She still loves the taste and smell of her morning coffee, as well as having some time to collect her thoughts before she starts her day. But instead of having a highly processed pastry for breakfast, she has some quick cats with a teaspoon of maple syrup, some fresh blueberries, and a few walnuts.



Marta still likes seeing her friend Adam in the staff lounge. They've started taking a 10-minute walk around the block when the weather is nice. That way, they can get out of the office at least once a day, and they can also tell funny stories about their coworkers. Marta also stopped going to the vending machine at work. Instead, she brings cut veggies and dip, a small piece of fruit, or cheese and crackers for her afternoon sack.

Marta still watches TV to unwind after a stressful day, and she really enjoys this time with her partner. But before they sit down for TV, they have started going out and taking a 20- to 30-minute walk, or when the weather is bad, they lift weights after dinner. Now that she has been doing this for a few weeks, they look forward to this time talking about their day and laughing together. Marta also has 3 cups of popcorn and a light beer for her evening snack instead of chips.

Marta was able to keep the healthy parts of her patterns while making small changes. As she practices those small changes, they will begin to feel more and more comfortable to her.

chi chi er is ont



MENU



#### Set simple goals for healthy eating



#### Pick your goals

- · Set goals within food groups (Fruits, Vegetables, Grains, Protein Foods, I
- · Choose from a variety of goals or tap "Pick for me!" to have goals selecti
- Take the MyPlate Quiz and use the results code to set your personal go.
- · Sync up to your smartwatch (or do it all on your mobile device)



#### See real-time progress

- · See daily progress in each food group as you meet your goals
- · View simple tips to help meet your goals
- · Select options for notifications and reminders
- Visit the MyPlate 101 section for more information about healthy eating



#### Earn badges that celebrate your success

- · Earn badges as food group goals are completed
- Collect a variety of badges such as first goal complete, daily-streaks, foo badges, and the ultimate MyPlate badge
- · Post your badges on social media to share your success and encourage of
- · Participate in challenges to stay motivated and earn new badges



#### Start Simple with MyPlate App

Build healthy eating habits one goal at a time! Download the Start Simple with MyPlate app today.

Learn more

#### Resources







## Additional Resources







FoodSafety.gov

#### <u>Healthfinder.gov</u>

Get tips on how to eat healthy on a budget, plan ahead to save time, and eat healthy away from home.

#### **Nutrition Education**

Explore materials about menu labeling and the Nutrition Facts label.

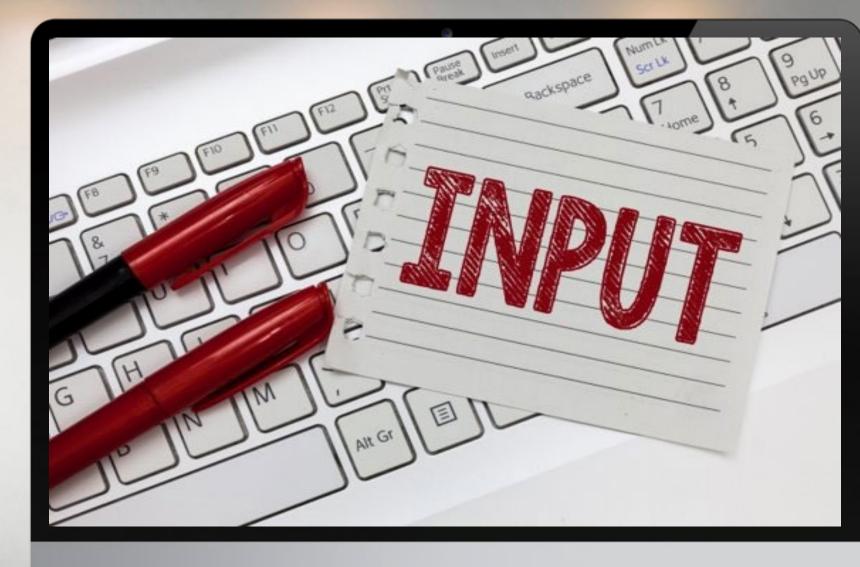
#### Start Simple with MyPlate App

Meet healthy eating goals one at a time! Use this easy-to-use app to get started.

#### Foodsafety.gov

Learn more about how to keep food safe to eat.

## **Poll Question**



## Every Encounter is a Cross-Cultural Encounter

Lorena Drago, MS, RDN, CDN, CDCES

Principal

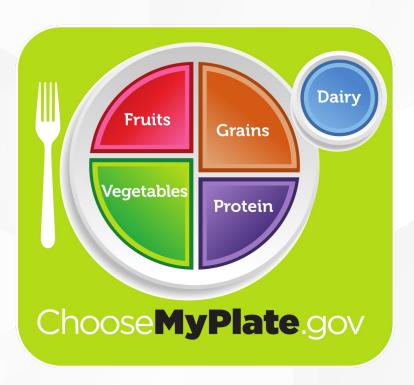
Hispanic Foodways, LLC



## Food Intake Assessment

#### Classification of foods in the USA





## Food Classification Systems in Other Cultural Groups



**Chilaquiles Mexican breakfast** 

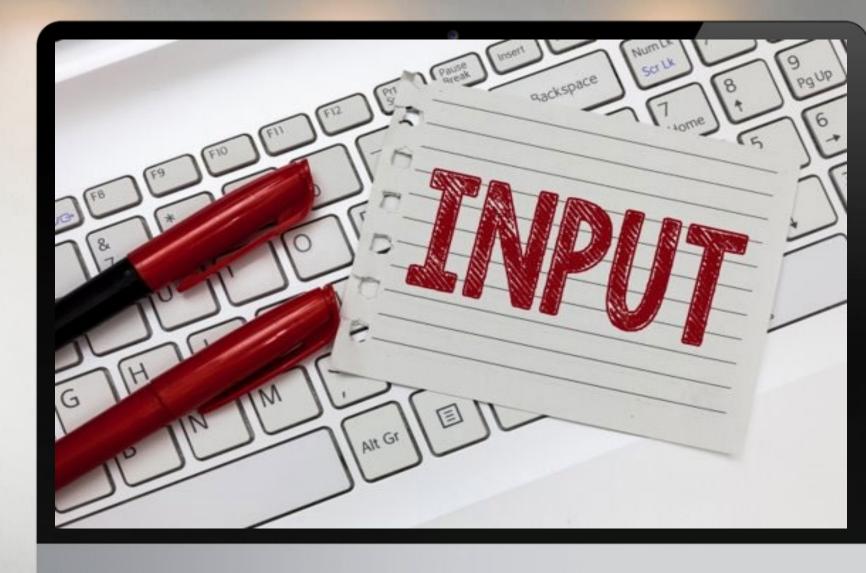
Main dishes
Side dishes
Snacks
Desserts
Beverages



**Oatmeal beverage Colombia** 

# What is the strangest food that you have ever tried?

Share your answer in the chat box!



## Dietary Guideline Recommendations from Around the World

#### China



Salt, <6 g Oil, 25-30 g

Milk and milk products, 300 g Soybean and nuts, 25–30 g

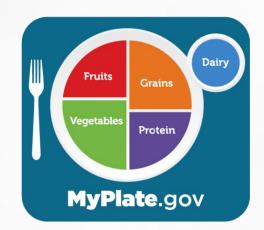
Meat and poultry, 40–75 g Aquatic product, 40–75 g Eggs, 40–50 g

Vegetables, 300–500 g Fruits, 200–350 g

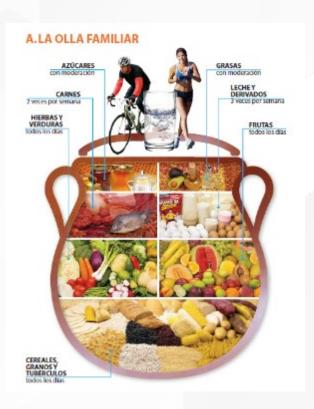
Cereals and potatoes, 250–400 g Whole grains and mixed beans, 50–150 g Potatoes, 50–100 g

Water, 1500-1700 ml

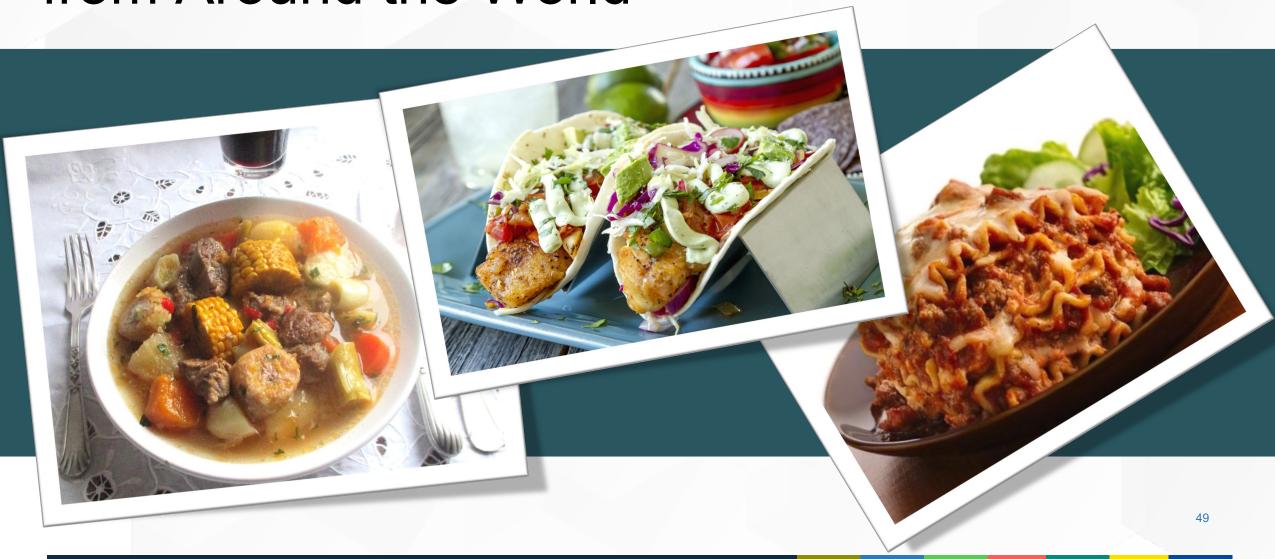
Plate method is not the only method to teach to balance, variety, and health.



#### Guatemala



Dietary Guideline Recommendations from Around the World



## Review Cultural Interpretation of Serving Size

- Ask individuals to show you what is small, medium, large, or extra-large serving size
- Use spoons, cups, plates, and bowls



## L.E.A.R.N. Framework

Listen

**Explain** 

Acknowledge

Recommend

**Negotiate** 



## **Therapeutic Uses of Food**

- Which foods do you eat to be healthy?
- Which foods do you avoid when you are sick?
- Which foods do you use to treat diabetes, hypertension, etc.?
- We all have favorite remedies that we use when we are sick; which home remedies do you use?

#### **New Foods – Acculturation**

- What new foods have you recently eaten?
- Which ones did you dislike/like?



1. Agua de berenjena



#### **Traditional Foods**

- Which foods do you commonly eat?
- What are your favorite foods?
- How often do you eat them?
- What foods do you eat on holidays or special occasions?







#### **Foods and Health**

- Which foods do you eat to be healthy?
- Which foods do you avoid now that you have diabetes?
- Which foods do you eat more of now that you have diabetes?
- Have you seen other practitioners for the treatment of diabetes and its related conditions?
   If yes, what treatments or remedies are you taking?
- We all have favorite remedies that we use when we are sick --which home remedies do you use?

#### **New Foods**

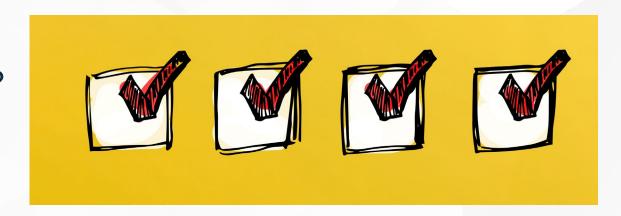
- What new foods have you recently eaten?
- What prompted you to eat them?
- Do you regularly eat the new foods?
- Which new foods did you dislike?
- What about them did you not like?

## **Food Acquisition**

- What foods do you typically purchase?
- Where do you purchase food?

## **Amount and Quality of Food**

- Do you have enough food to eat each day?
- Are you able to get the types of food you need?



### **Food Preparation**

- How do you prepare the meal? How is it cooked?
- What recipes are used?
- What is it usually accompanied with?
- Do you have enough time and equipment to prepare the foods you like?

## **Family Interaction with Food**

With whom do you eat meals? Every day?



## Traditional Foods and Dishes

Top 20 foods
Supermarket
Brands of choice
Recipes
Holiday foods
Rites of passage foods





## Counseling Tips

Do not pathologize cultural foods

Focus on wins

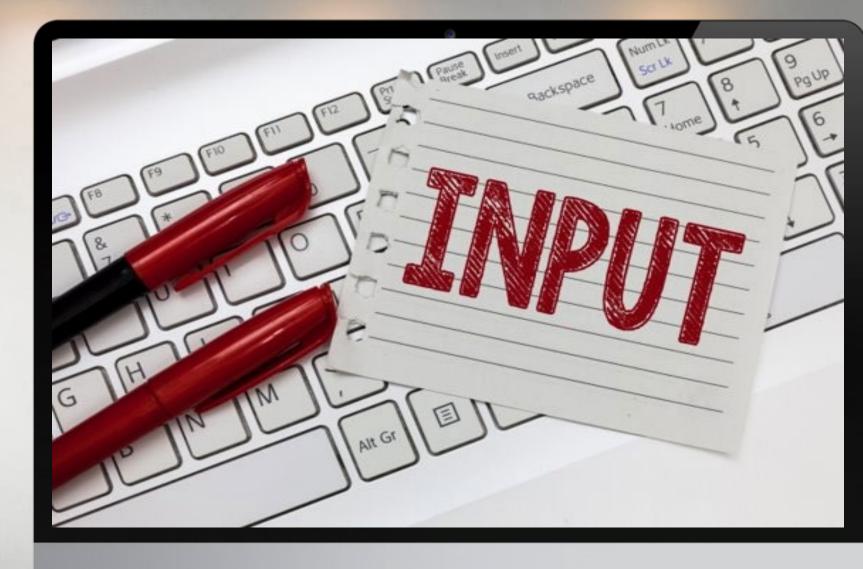
Dietary patterns that fit with the patient's lifestyle and access

Look for nutrients in commonly eaten foods

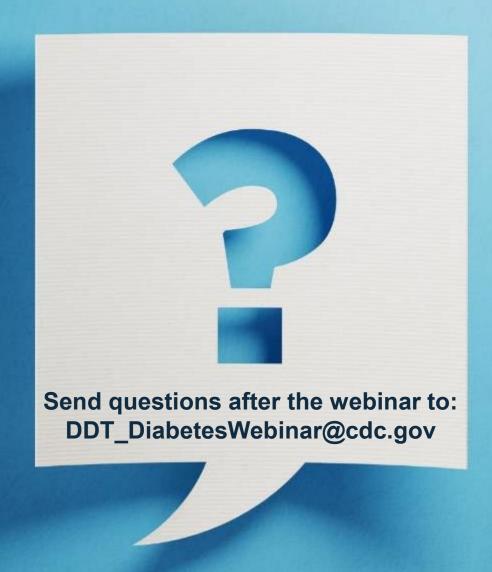
Okay if white rice is chosen if including other whole grains in diet

Offer choices/ask what modifications will be acceptable

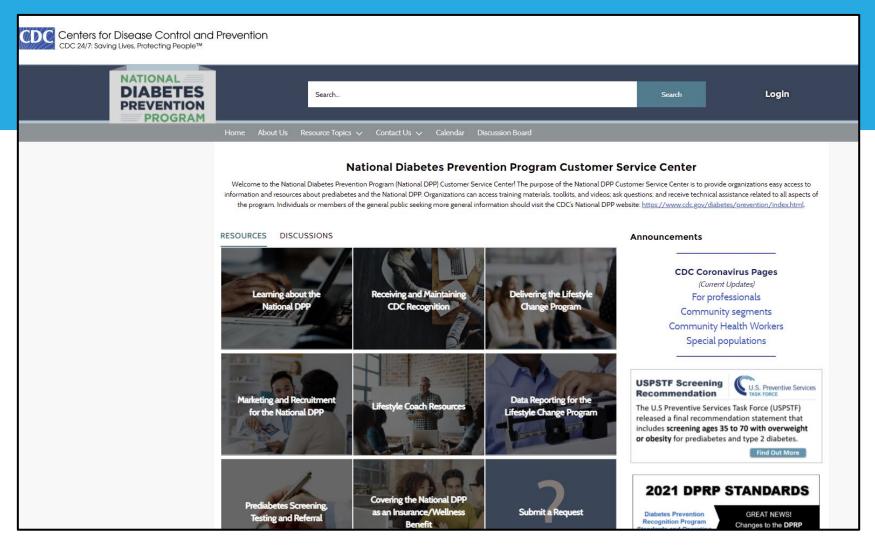
## **Poll Question**



## **Question and Answer**

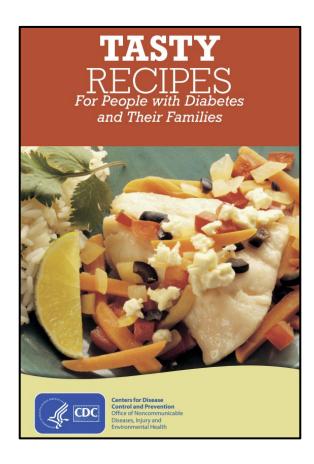


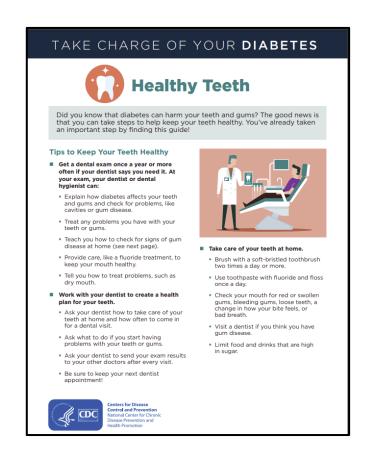
## **National DPP Customer Service Center**

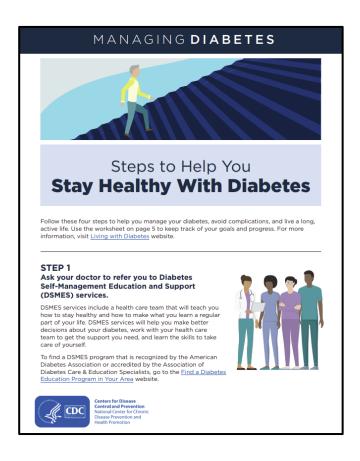


https://nationaldppcsc.cdc.gov/s/

## **CDC** Diabetes Resources







Find handouts and fact sheets at:

https://www.cdc.gov/diabetes/library/factsheets.html

Link for this webinar continuing education (CE) on TCEO: <a href="https://tceols.cdc.gov/Course/Detail2/8265">https://tceols.cdc.gov/Course/Detail2/8265</a>

In order to receive CE for WC4371-092121 - Innovations in Diabetes Behavior Change - September 21, 2021 (Webcast), please visit **TCEO** and follow these **9 Simple Steps** before October 25, 2021.

The Course Access Code is **Diabetes**.

## Thank You

Send questions after the webinar to:

DDT\_DiabetesWebinar@cdc.gov

**Centers for Disease Control and Prevention** 

**National Center for Chronic Disease Prevention and Health Promotion** 

Division of Diabetes Translation

