

Balancing Tradition and Health

Diabetes Management with
Southwest Tribal Foods

SDPI Advancements in Diabetes



Ya'át'ééh

I'm Denee!

I help American Indian and Indigenous communities understand our relationship with food and teach practical skills for building a healthier life while staying true to our heritage.

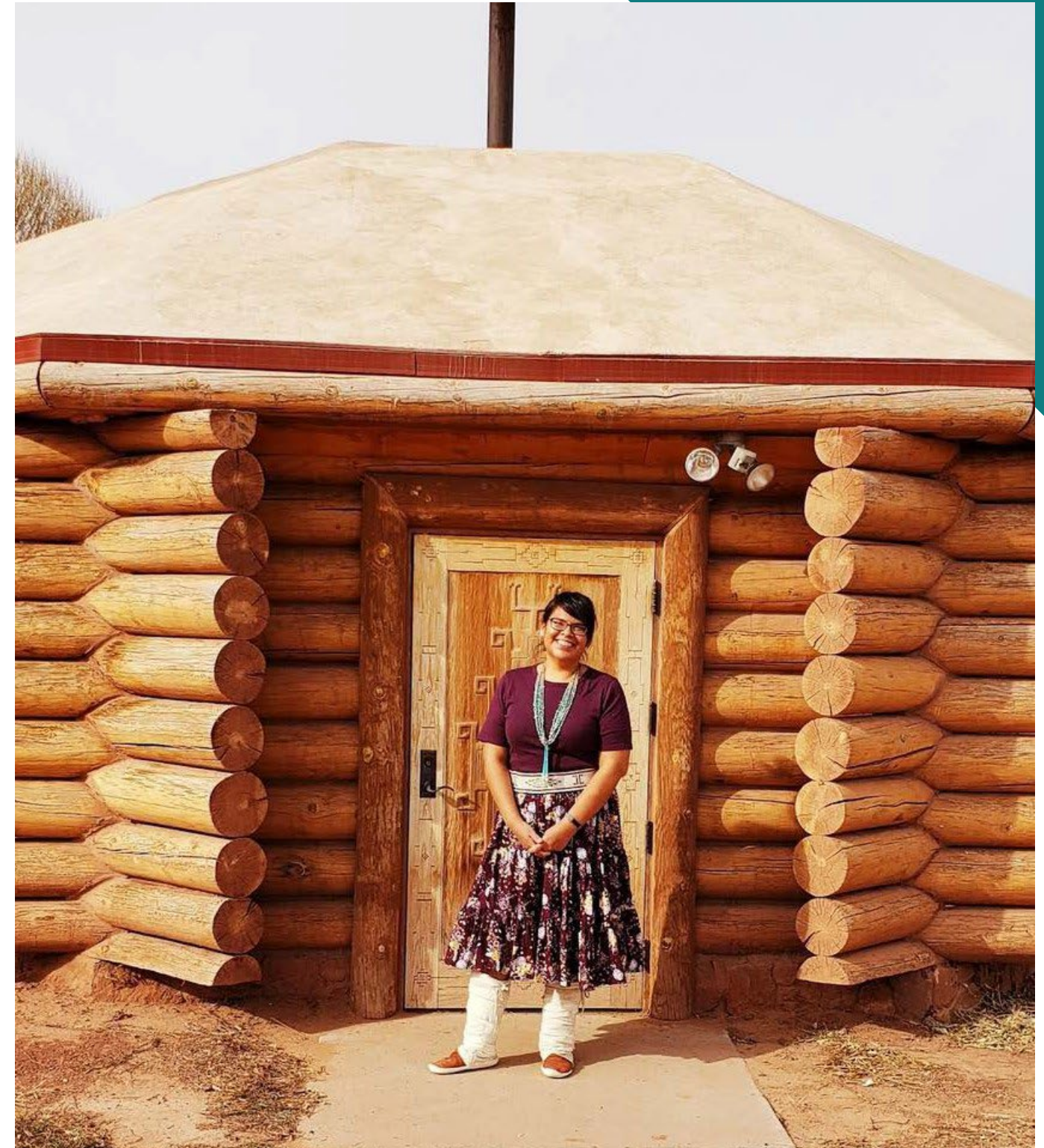
I am the owner and founder of Tumbleweed Nutrition LLC, founded in 2021 to help tribal organizations deliver evidence-based care.

I am from the Navajo Nation and currently live in New Mexico.



Disclaimer

- I can only speak from my own perspective of my lived experiences as a Navajo woman and dietitian.
- Take what is helpful, leave what is not



What are we going to learn today?

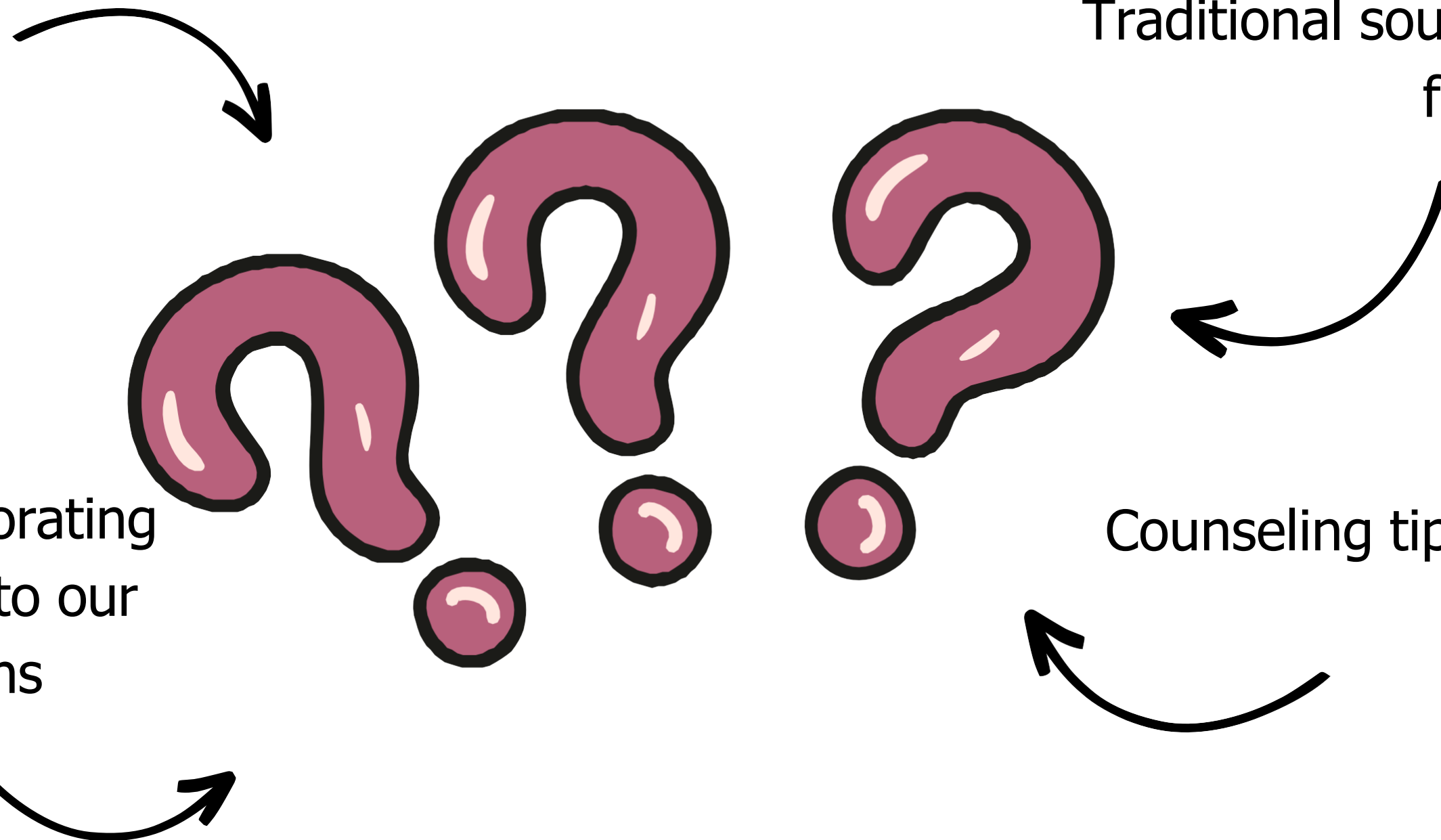
Current diabetes & nutrition recommendations

Traditional southwest Indigenous foods

Southwest tribal demographics

Strategies for incorporating Indigenous foods into our recommendations

Counseling tips & tricks





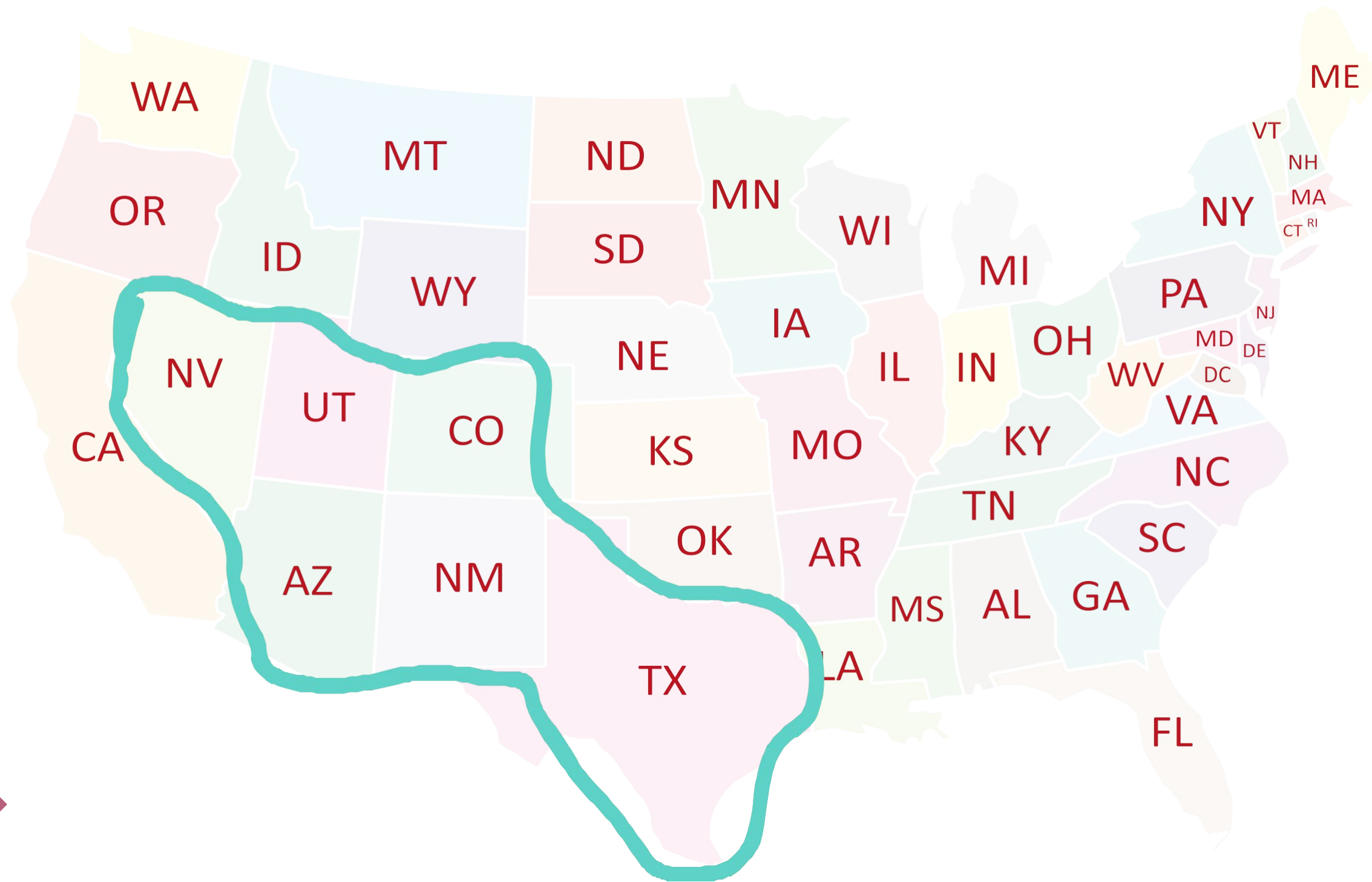
Southwest Tribal Demographics & Foods

Poll!

How familiar are you with the foods from tribes in the Southwestern U.S.?



Southwest



- Arizona
- Colorado
- Nevada
- New Mexico
- Texas
- Utah

Indigenous foods vs. Cultural foods



- Harvested from the land
- Plant or animal resources
- Local, seasonal, nutritious & environmentally friendly



- Can represent current access or environment
- Cross-cultural & fusion
- Connected to colonization/globalization

Arizona

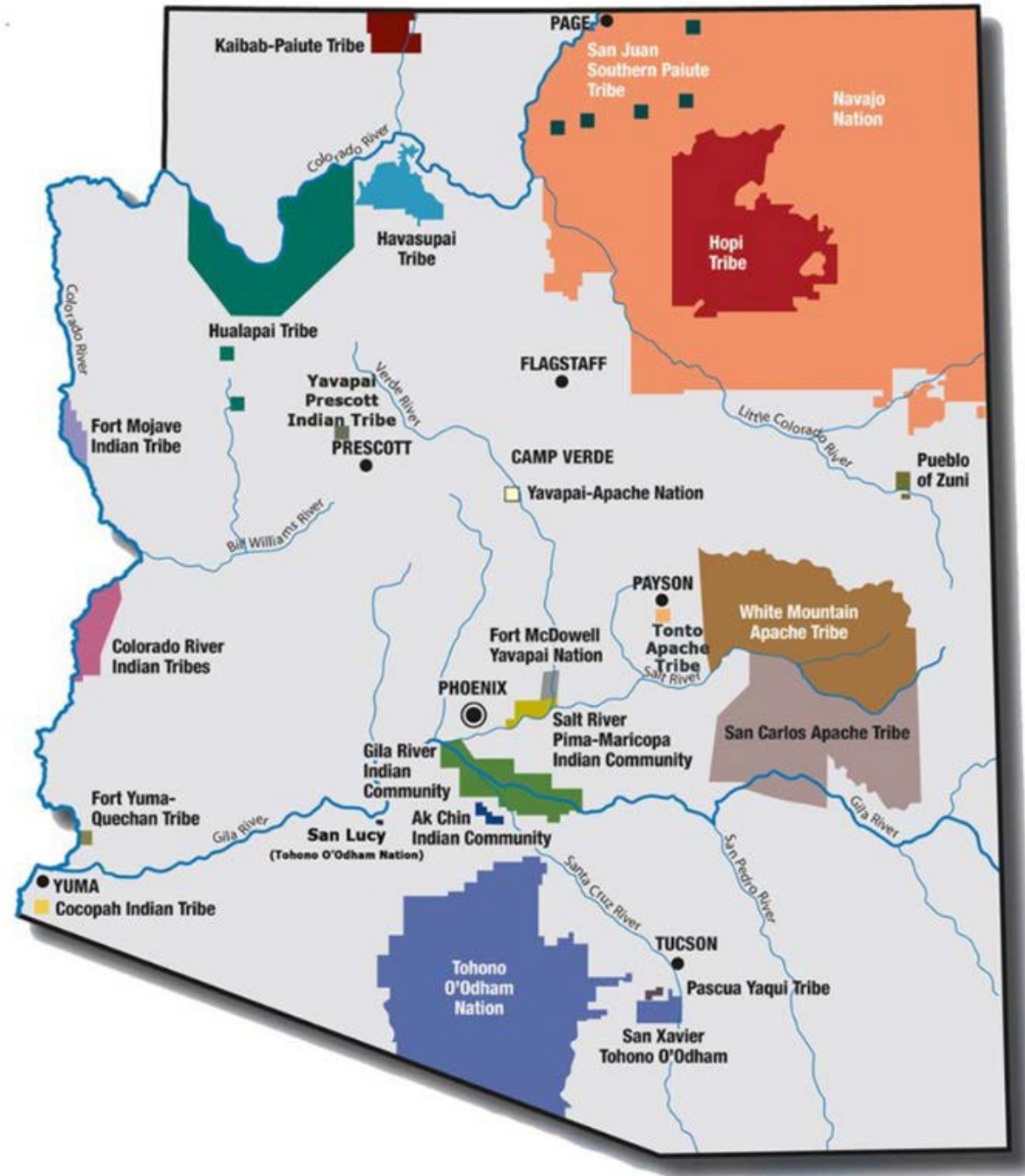


Image credit: Arizona Department of Education

Population

Total state population: 7,151,502

Total tribal population
(alone/combination): 453,651

Representation: 6.3%

Tribes

- **22** Federally Recognized Tribes

(United States Census Bureau, 2022) (Arizona Department of Education, 2021)

Arizona

Popular Tribal Foods



Apache



Hopi



Navajo/Dine



Tohono O'odham

(University of Arizona, 2011)

Colorado



Population

Total state population: 5,773,714

Total tribal population
(alone/combination): 198,710

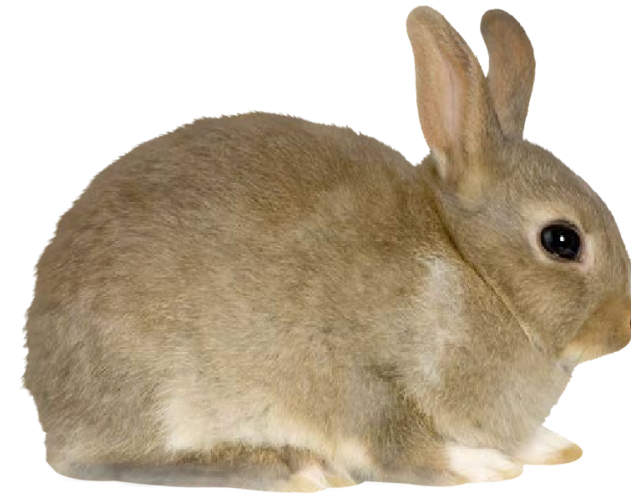
Representation: 3.4%

Tribes

- **2** Federally Recognized Tribes

Colorado

Popular Tribal Foods



Ute Mountain Ute & Southern Ute

Nevada



Population

Total state population: 3,104,614

Total tribal population
(alone/combination): 90,427

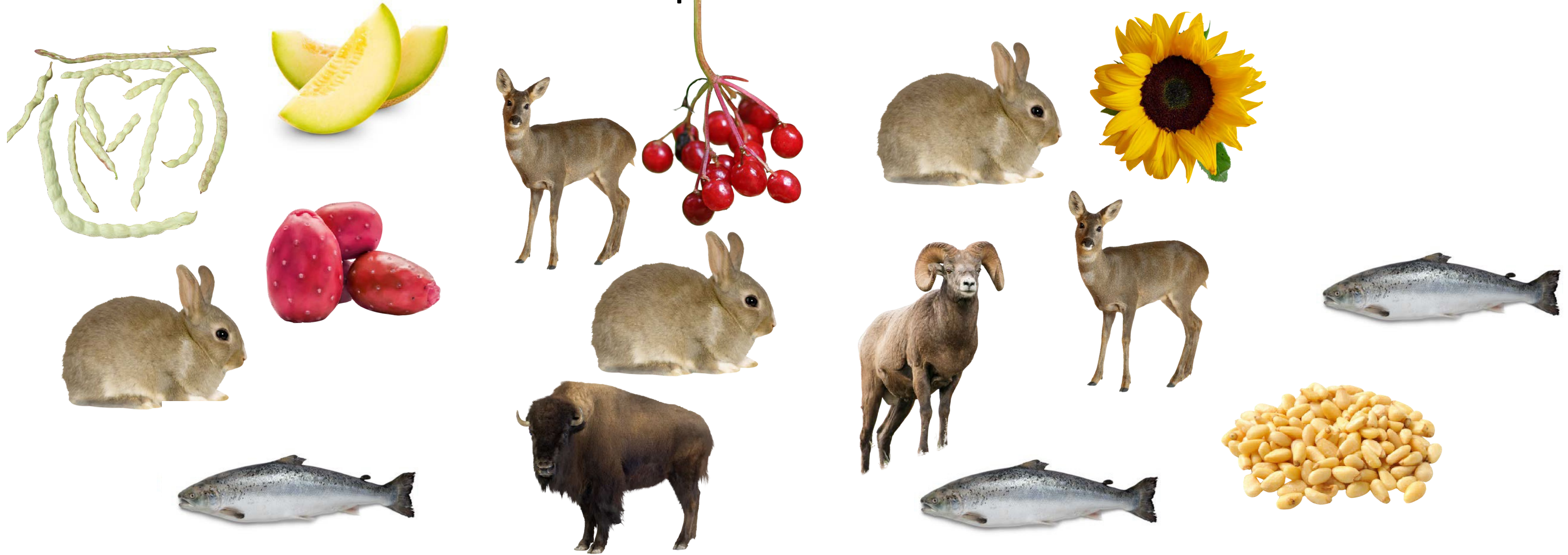
Representation: 2.9%

Tribes

- **28** Federally Recognized Tribes

Nevada

Popular Tribal Foods



Fort Mojave

Shoshone

Paiute

Washoe

New Mexico



Population

Total state population: 2,117,522

Total tribal population
(alone/combination): 250,658

Representation: 11.8%

Tribes

- **23** Federally Recognized Tribes

New Mexico

Popular Tribal Foods



Pueblo

Navajo/Dine

Texas



Population

Total state population: 29,145,505

Total tribal population
(alone/combination): 791,594

Representation: 2.7%

Tribes

- **3** Federally Recognized Tribes

Texas

Popular Tribal Foods



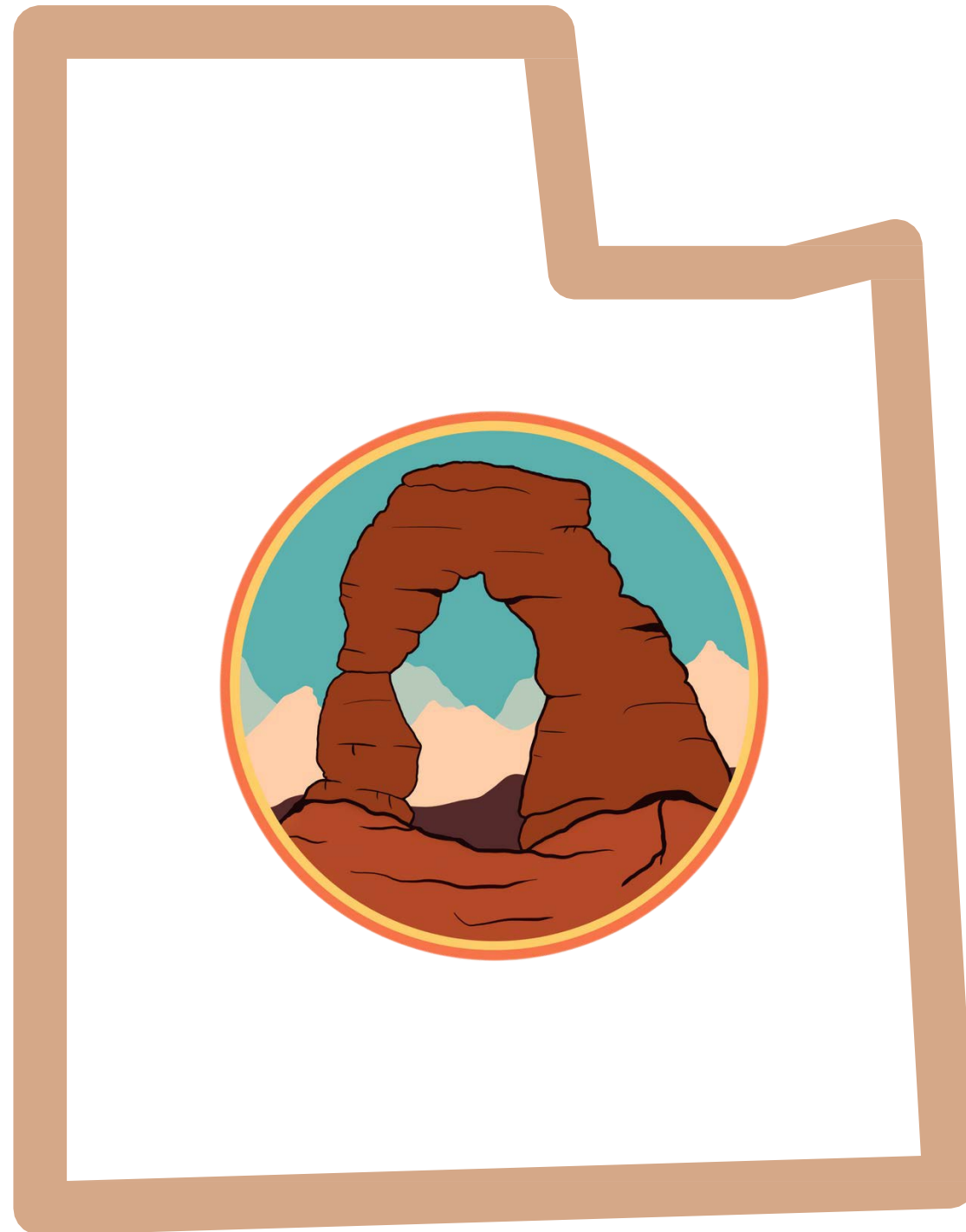
Alabama and Coushatta

Kickapoo

Ysleta Del Sur Pueblo

(Harris County Public Library, 2023)

Utah



Population

Total state population: 3,271,616

Total tribal population
(alone/combination): 72,299

Representation: 2.2%

Tribes

- **8** Federally Recognized Tribes

Utah

Popular Tribal Foods



Shoshone



Paiute



Navajo/Dine

Some statistics

WATER

Compared to White households, Native Americans are 19 times more likely to live in a household without indoor plumbing with running water.

FOOD

28 U.S. counties have a population that is majority Native American. 18 of those counties were food insecure in 2020.

ELECTRICITY

On Native reservations, 14% of households have no access to electricity, 10 times higher than the national average.

ECONOMY

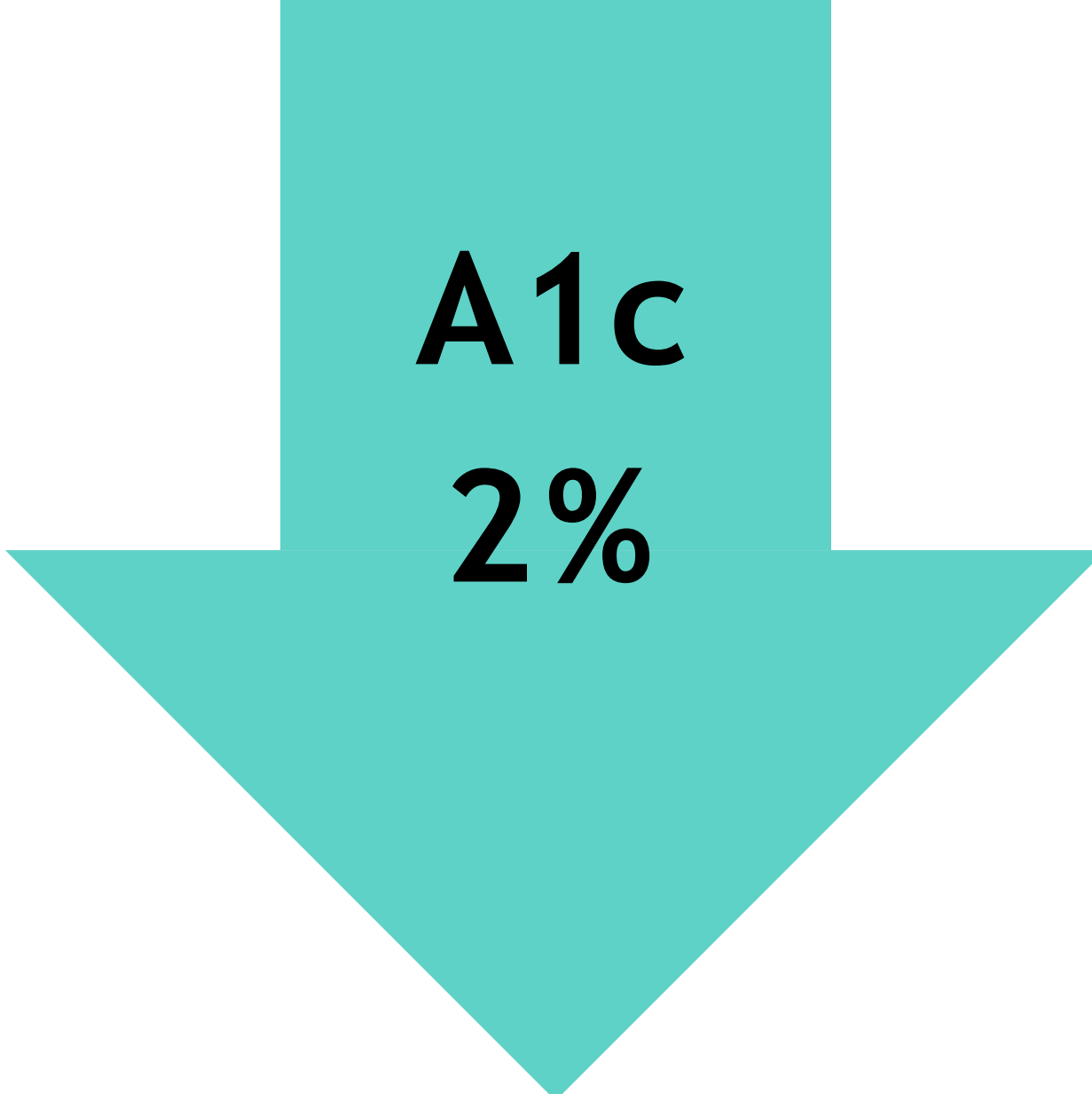
The national poverty rate for Native Americans was 25.4%, while 10.1% for White.





Current diabetes & nutrition recommendations

Nutrition Impact



A1c
2%

- Medical Nutrition Therapy by a Registered Dietitian can decrease A1C
- Regular dietitian referrals are necessary:
 - Diagnosis
 - Annually/or when not meeting targets
 - Complicating factors
 - Life transitions

Goals of Diabetes Nutrition Therapy



- Promote and support healthful eating patterns
- Address individual nutrition needs
- Maintain the pleasure of eating
- Provide practical tools for meal planning

Diabetes plate

Encourage a mix of
carbs, protein & fat

Use an additive
approach

PROTEIN

Turkey*
Peanut/nuts
Beef
Porkchops
Poultry
Mutton*
Canned meat
Eggs
Cheese



CARBS

Corn*
Corn products*
Kneel down bread
Flour products
Potatoes*
Winter squash*
Beans*



NON-STARCHY VEGETABLES

Tomatoes*
Peppers*
Carrots
Lettuce
Onions
Broccoli
Cabbage
Celery
Summer squash
Frozen vegetables
Canned vegetables



Perfection is not
the goal

***Learn which
Indigenous foods
belong in which group**

The Additive approach

What can we add in?

- **Breakfast**
 - Blue corn mush, fried egg, spam, Navajo tortilla
- **Lunch**
 - Sandwich: Baloney, American cheese, chips, coke
- **Dinner**
 - Mutton stew, frybread, punch
- **Snacks**
 - Melons, bananas, cottage cheese, chips, crackers, etc.



Variety is essential

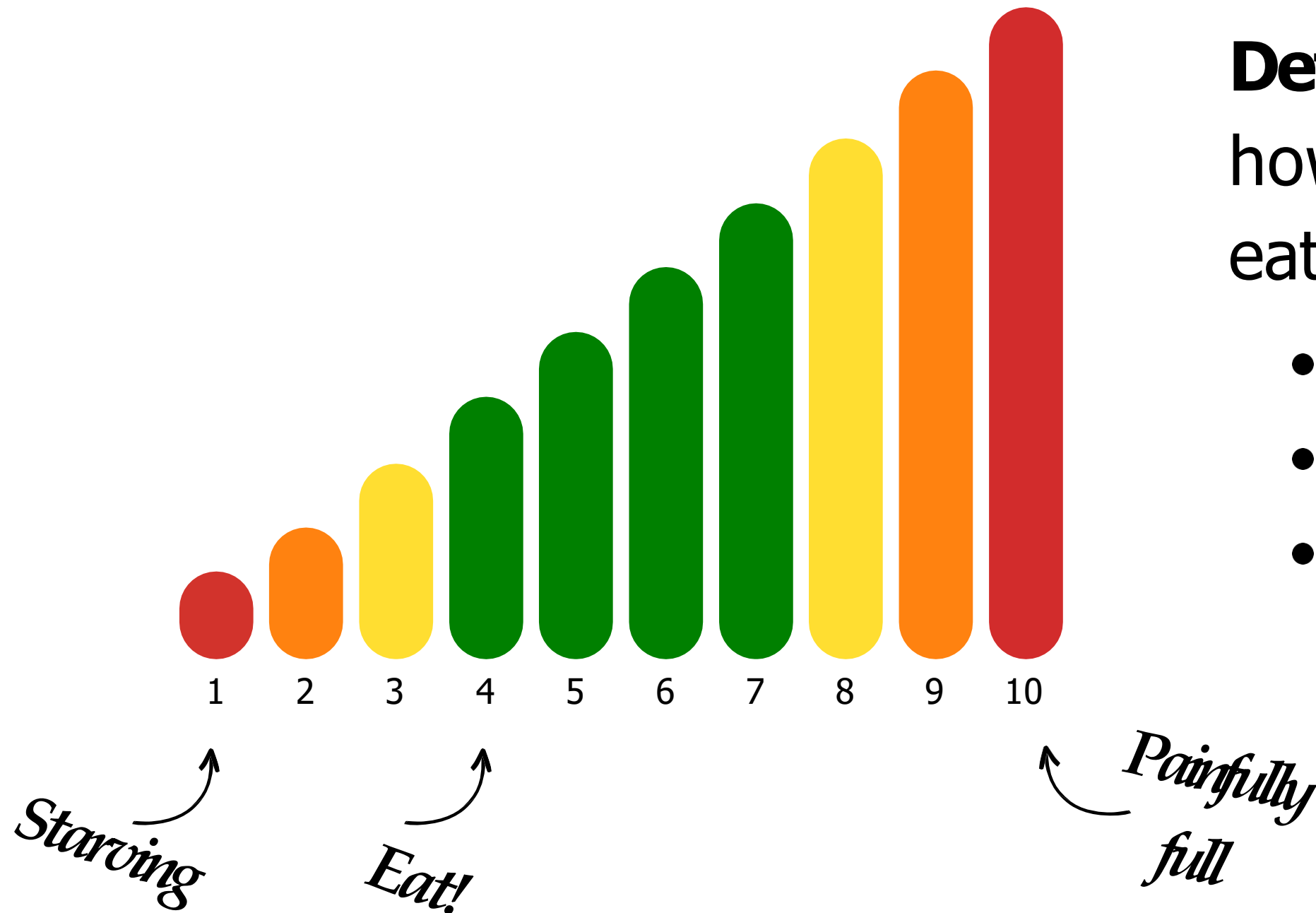


Colorful plates ensure wide variety of nutrition

Variety of forms is important, too!

Mindful eating

Body awareness



Definition: Paying attention to how your body feels while eating.

- Hunger cues
- Fullness cues
- Other physical cues?

Physical vs. Emotional nourishment



- Provides energy
- Helps you feel strong
- Provides micronutrients
- Prevents disease & illness



- Expression of a person's cultural identity
- Connection & pride
- Increases self-esteem & confidence
- Symbol of resilience

Food is more than nutrients

A Native perspective

Food can be community

Food can be both physically and emotionally nourishing

Food is part of who we are

Food can be delicious

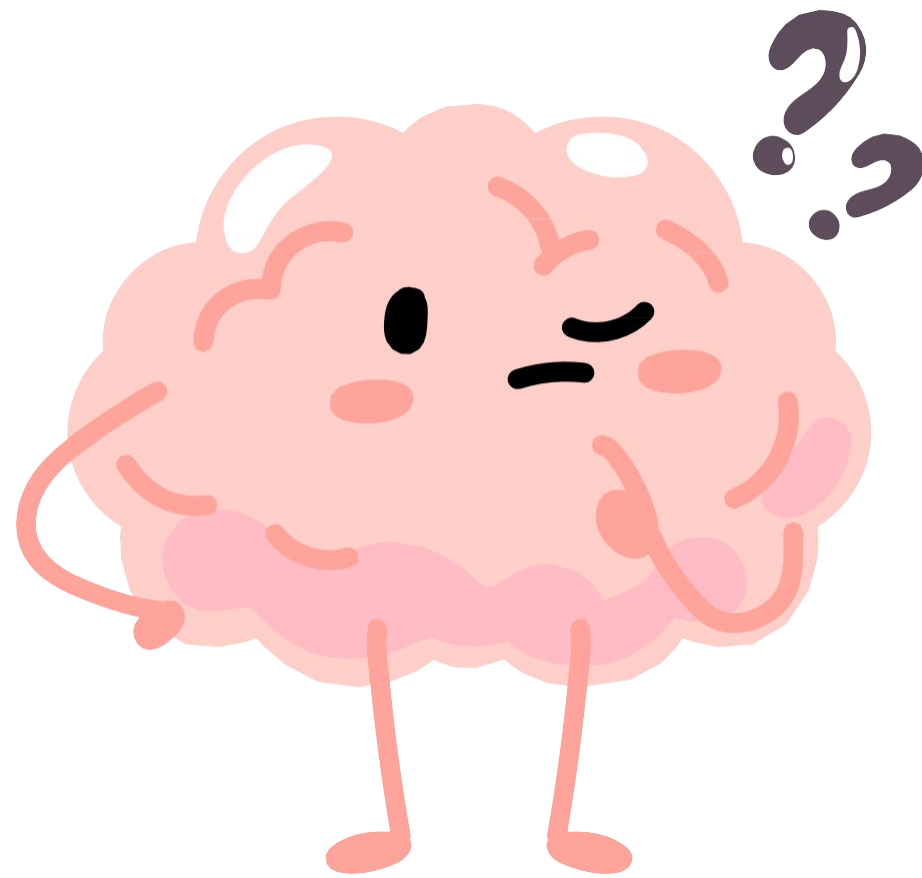
Food can be a symbol of resilience

Food can be storytelling

Food can be connection



FAQs



Is it safe for people with diabetes to eat fruit?

Yes, people with diabetes can eat fruit, and it's safe for them. Fruit has important vitamins and fiber that help manage blood sugar. Some people think people with diabetes shouldn't eat fruit, but that's a myth. It's good for them!

Should people with diabetes avoid all carbs?

There's no one perfect amount of carbs, protein, or fat that works for everyone with diabetes. How much of each you should eat depends on your body, what you like to eat, and your health goals. So, it's different for everyone!

Should people with diabetes eat foods with a low glycemic index?

Some people are interested in how the glycemic index (GI) ranks foods based on how they affect blood sugar. But studies show it doesn't have a big impact on A1C (long-term blood sugar levels) and has mixed results on fasting blood sugar. So, it's something to think about, but it's not a rule for everyone.

Meet Leona Begay



"I was shocked when the doctor diagnosed me with diabetes. My last A1c was 9.5% and blood pressure was 150/90 mm/hg. My LDL was 150 mg/dl. I am a teacher and I usually skip breakfast. I love salty snacks and eating my traditional Navajo foods. I usually eat heat-ups because I'm so busy. Sometimes it's hard to remember my medication because my kids keep me busy. I know I should take it because I want to be there for my kids when they grow up, but it's hard to stay motivated. I wish I knew what to do."

Meet Leona Ben

Question 1



What would be the most appropriate nutrition strategy for Leona to improve her A1C, blood pressure, and cholesterol levels?

- A) Follow a low-carb, high-protein diet.
- B) Incorporate a variety of nutrient-dense foods, focusing on hunger & fullness cues, and using an additive approach.
- C) Eliminate all carbohydrates from her diet to rapidly lower her blood sugar.
- D) Focus only on reducing cholesterol, as her blood pressure is not as concerning.

Meet Leona Ben

Question 2



How can Leona continue to enjoy her traditional meals while managing her diabetes?

- A) Eliminate all traditional foods and replace them with “diabetic” foods.
- B) Encourage Maria to use portion control and modify some ingredients in her traditional meals to make them healthier.
- C) Tell Maria she can no longer enjoy her favorite foods, as diabetes requires strict avoidance of all carbohydrates.
- D) Focus only on limiting her food choices without discussing enjoyment.

Resources

to increase your knowledge

Diabetes Care Volume 42, May 2019 731

Nutrition Therapy for Adults With Diabetes or Prediabetes: A Consensus Report

Diabetes Care 2019;42:731-754 | <https://doi.org/10.2337/dci19-0014>

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Check for updates

EVOLUTION OF NUTRITIONAL THERAPY

This Consensus Report is intended to provide clinical professionals with evidence-based guidance about individualizing nutrition therapy for adults with diabetes or prediabetes. Strong evidence supports the efficacy and cost-effectiveness of nutrition therapy as a component of quality diabetes care, including its integration into the medical management of diabetes; therefore, it is important that all members of the health care team know and champion the benefits of nutrition therapy and key nutrition messages. Nutrition counseling that works toward improving or maintaining glycemic targets, achieving weight management goals, and improving cardiovascular risk factors (e.g., blood pressure, lipids, etc.) within individualized treatment goals is recommended for all adults with diabetes and prediabetes.

Though it might simplify messaging, a “one-size-fits-all” eating plan is not evident for the prevention or management of diabetes, and it is an unrealistic expectation given the broad spectrum of people affected by diabetes and prediabetes, their cultural backgrounds, personal preferences, co-occurring conditions (often referred to as comorbidities), and socioeconomic settings in which they live. Research provides clarity on many food choices and eating patterns that can help people achieve health goals and quality of life. The American Diabetes Association (ADA) emphasizes that medical nutrition therapy (MNT) is fundamental in the overall diabetes management plan, and the need for MNT should be reassessed frequently by health care providers in collaboration with people with diabetes across the life span, with special attention during times of changing health status and life stages (1–3).

This Consensus Report now includes information on prediabetes, and previous ADA nutrition position statements, the last of which was published in 2014 (4), did not. Unless otherwise noted, the research reviewed was limited to those studies conducted in adults diagnosed with prediabetes, type 1 diabetes, and/or type 2 diabetes. Nutrition therapy for children with diabetes or women with gestational diabetes mellitus is not addressed in this review but is covered in other ADA publications, specifically *Standards of Medical Care in Diabetes* (5,6).

DATA SOURCES, SEARCHES, AND STUDY SELECTION

The authors of this report were chosen following a national call for experts to ensure diversity of the members both in professional interest and cultural background, including a person living with diabetes who served as a patient advocate. An outside market research company was used to conduct the literature search and was paid using ADA funds. The authors convened in person for one group meeting and actively participated in monthly teleconference calls between February and November 2018. Focused teleconference calls, email, and web-based collaboration were also used to reach consensus on final recommendations between November 2018 and January 2019. The 2014 position statement (4) was used as a starting point, and a search was conducted on PubMed for studies published in English between 1 January 2014 and 28 February 2018 to provide the updated evidence of nutrition therapy interventions in nonhospitalized adults with prediabetes and type 1 and type 2 diabetes. Details on the keywords and the search strategy are reported in the Supplementary Data, emphasizing randomized controlled trials (RCTs), systematic reviews, and meta-analyses of RCTs. An exception was made to the inclusion criteria for the use of meal studies for the insulin dosing section. In addition to the search results, in select cases the authors identified relevant research to include in reaching consensus. The

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This article contains Supplementary Data online at <http://care.diabetesjournals.org/lookup/suppl/doi:10.2337/dci19-0014/-/DC1>.

This article is part of a special article collection available at <http://care.diabetesjournals.org/evolution-nutritional-therapy>.

This article is featured in a podcast available at <http://www.diabetesjournals.org/content/diabetes-care-42-05-podcasts>.

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Speaking the Language of Diabetes: Language Guidance for Diabetes-Related Research, Education and Publications



Healthcare professionals, writers, researchers and the general public are invited to join a language movement by considering and adopting these recommendations:

Use language that...

- Is neutral, non-judgmental and based on facts, actions or physiology/biology.
- Is free from stigma.
- Is strengths-based, respectful, inclusive and imparts hope.
- Fosters collaboration between patients and providers.
- Is person-centered.


For additional resources, including the full list of word suggestions, visit DiabetesEducator.org/language

How we talk to and about people with diabetes plays an important role in engagement, conceptualization of diabetes and its management, treatment outcomes, and psychosocial well-being. For people with diabetes, language has an impact on motivation, behaviors and outcomes.

A task force, consisting of representatives from the Association of Diabetes Care & Education Specialists (ADCES) and the American Diabetes Association (ADA), convened to discuss language in diabetes care and education. They developed a joint paper which provides recommendations for enhancing communication about and with people who have diabetes.

Four principles guided this work and served as a core set of beliefs for the paper:

- Diabetes is a complex and challenging disease involving many factors and variables.
- Every member of the healthcare team can serve people with diabetes more effectively through a respectful, inclusive and person-centered approach.
- Stigma that has historically been attached to a diagnosis of diabetes can contribute to stress and feelings of shame and judgment.
- Person-first, strengths-based, empowering language can improve communication and enhance the motivation, health and well-being of people with diabetes.



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Conclusion

What are the takeaways?

Incorporating Indigenous and cultural foods is important

Diabetes nutrition should be flexible & tailored

Our clinical approach needs to be culturally responsive

We must collaborate with the patient

Diabetes nutrition recommendations must incorporate access & preferences

More tools for your tool box



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Axhe'hee'!