What Can I Eat? Healthy Choices for People with Type 2 Diabetes

Cultural Adaptation of a Diabetes Nutrition Education Program for American Indian and Alaska Native Adults with Type 2 Diabetes

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Speaker Disclosure

No conflicts of interest to disclose

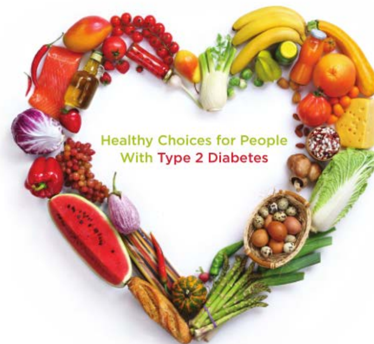
Learner Objectives

As a result of attending this session, attendees will be able to:

1. Describe the American Diabetes Association's "*What Can I Eat*?" diabetes nutrition education program
2. Describe key findings being used to adapt an existing diabetes nutrition education program for the unique needs of American Indian/Alaska Native (AI/AN) adults with type 2 diabetes

Project Overview

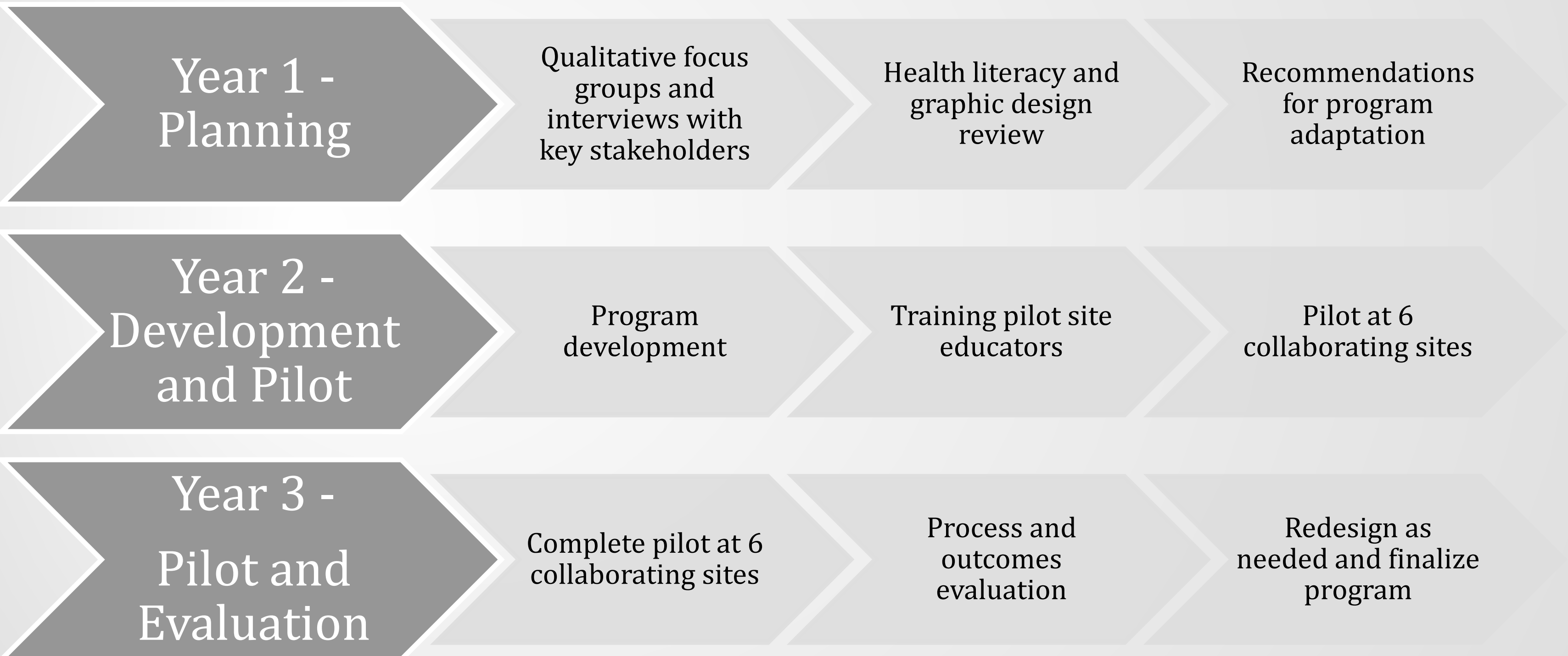
- Collaboration between American Diabetes Association (ADA) and Shakopee Mdewakanton Sioux Community of Minnesota
- Adapt existing diabetes nutrition education program for American Indian/Alaska Native (AI/AN) adults with type 2 diabetes (T2D)



Need for AI/AN Version of a Diabetes Nutrition Education Program

- AI/AN populations suffer disproportionately from obesity, T2D, and food insecurity than general US population
- Limited access to registered dietitians (RDs)
- Scarcity of culturally tailored nutrition education programs for AI/ANs, especially for AI/ANs who do not receive care in the Indian Health system
- Need for culturally-tailored and evidence-based approaches, resources, and programs

Project Timeline



Original “What Can I Eat?” Program

- Existing program, developed by the American Diabetes Association, is entitled “*What Can I Eat? Healthy Choices for People with Type 2 Diabetes*”
- Includes five 90-minute, interactive, nutrition-specific, diabetes education lessons led by registered dietitian
- Aim to answer the most common question people with diabetes ask their registered dietitian “What Can I Eat?”
- Complements Diabetes Self-Management Education and Support (DSMES) programs

What Can I Eat?

Healthy choices for people with Type 2 Diabetes

Original "What Can I Eat?" Program

Lessons include

- Interactive diabetes nutrition education learning activity
- Physical activity
- "Me time" activity
- Peer-to-peer learning opportunities
- Family member involvement
- Goal setting

What Can I Eat?

Healthy choices for people with Type 2 Diabetes

Original "What Can I Eat?" Program

Lesson topics

- Managing healthy eating in social and emotional situations
- Basic diabetes nutrition education (carbohydrates, calories, protein, etc.)
- Shopping and cooking
- Eating out and special occasions/celebrations
- Reunion session

What Can I Eat?

Healthy choices for people with Type 2 Diabetes

Project Timeline

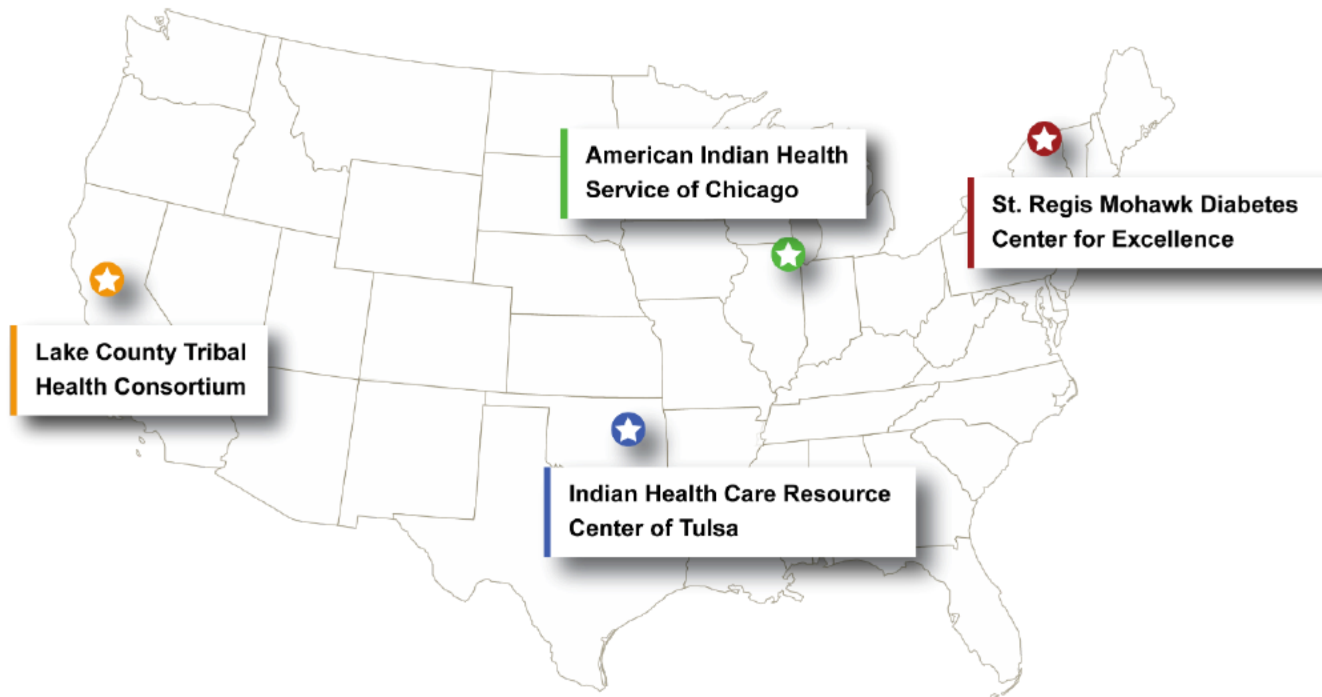
Needs Assessment and Formative Methods

Year 1 (May 1, 2018 – April 30, 2019)

- Comprehensive literature review
- Qualitative needs assessment with key stakeholders
- Comprehensive health literacy review of participant materials
- Recommendation report to funders: American Diabetes Association and Shakopee Mdewakanton Sioux Community of Minnesota

Qualitative Methods

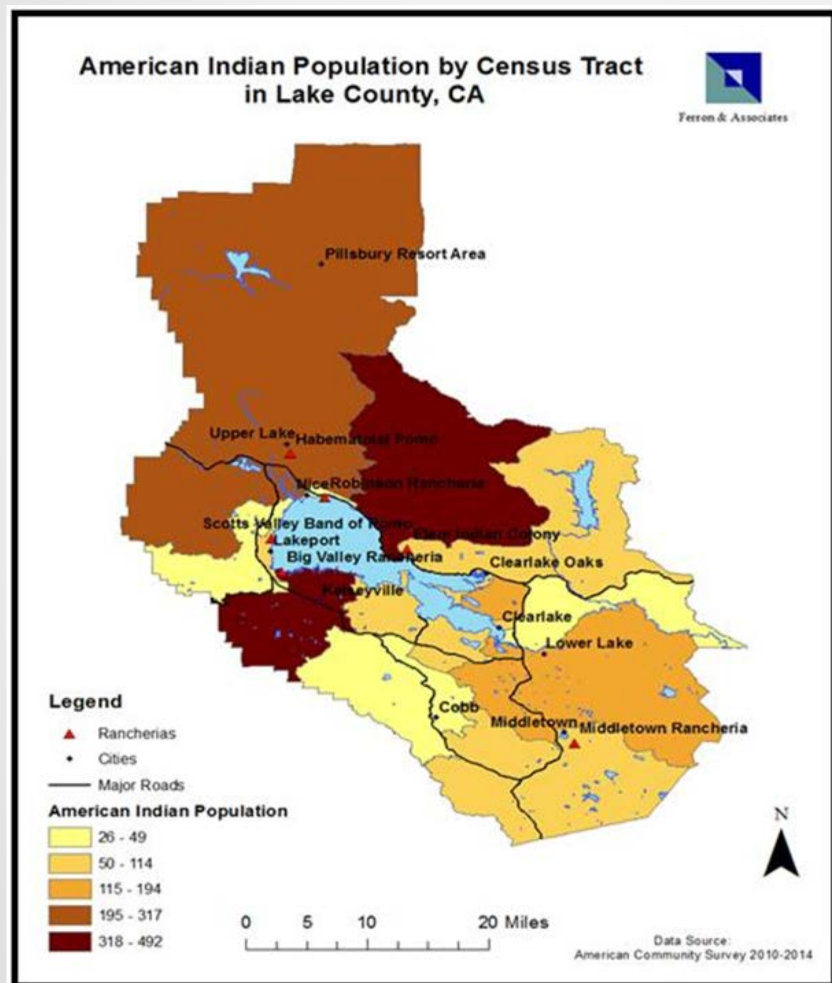
- 8 Focus groups (n=52)
  - Communities
    - 4 unique AI/AN communities (2 rural and 2 urban) in the USA



Indian Health Care Resource Center of Tulsa

- Oklahoma has the second largest Indian population in U.S., with 38 federally recognized tribes
- 70% of Indian people live in urban areas
- Tulsa population: 401,800
- Intersection of the Cherokee, Creek & Osage lands
- About 6% Native American
- IHCRC is an ambulatory clinic serving about 12,500 clients, representing over 130 different tribes
- 10% of patients have diabetes
- Medical, dental, optometry, Behavioral Health, Health Education & Wellness, pharmacy, radiology, mammography, & lab

Lake County Tribal Health



- Rural Lake County, located about 100 miles north of San Francisco. Mountains, lakes, bad roads, and distances isolate residents.
- 6-local federally-recognized tribes. Members from over 100 other recognized tribes live in Lake→ uniquely diverse tribal community.
- 25% of County residents live below the Federal Poverty Level ("FPL").
- About half (46%) of low-income households are food insecure.

Qualitative Methods

Focus groups

- 4 focus groups (1 at each site) with AI/AN adults with type 2 diabetes
- 4 focus groups (1 at each site) with family members of AI/AN adults with type 2 diabetes
- IRB approved moderator guide; trained facilitator in qualitative inquiry
- Note taker present for all focus groups

Qualitative Methods

Community-based key informant interviews

- 2-3 at each site
- Included: Tribal Elders & Leaders, RD/CDEs, LCSW/CDE, RN/CDEs, health administrators, clinic support staff
- In-person interviews with IRB-approved moderator guide and trained facilitator

Content expert interviews

- Conducted via Zoom
- Included: RD/CDEs, experts in food insecurity, AI/AN health education program development and dissemination

Qualitative Methods

Sample moderator guide questions:

1. *Can you tell me what it's like to take care of your diabetes?*
2. *Can you tell me about traditional foods or traditional cooking in your community?*
3. *Can you tell me about any experiences where you have learned about healthy eating and diabetes?*
4. *How do you learn best about things like diabetes and healthy eating?*
5. *What makes it hard to eat healthy when you have diabetes?*

Qualitative Methods - Analysis

- All focus groups and interviews were digitally recorded and transcribed verbatim using professional transcription company
- Coding was facilitated by Atlas.ti (Mac Version 8.0)
- Codebook was established using inductive and deductive coding techniques
- Analysis was conducted using constant-comparison methods to construct themes across all transcripts

Interviews & Focus Groups

Site	Focus Group AI/AN Adults with T2D	Focus Group AI/AN Adult Family Members	Community-Based Key Informants	Key Expert Informants
Akwesasne, NY	7	5	3	-
Tulsa, OK	6	6	2	-
Chicago, IL	5	5	2	-
Lakeport, CA	11	6	3	-
Nationwide	-	-	-	9
Total	29	22	10	9

Key Qualitative Findings and Recommendations

Heterogeneous Audience

- Vast differences between regions, tribes, and urban vs. rural AI/ANs need to be accommodated regarding traditional foods and barriers to healthful eating
- Education/resource needs and barriers to healthful eating vary depending on 'stage of life' of AI/AN adults and urban/rural settings
  - Caring for children, cooking for 1, food security, access to healthy food, access to fast food, access to traditional food

Recommendations:

- Develop more than 5 lessons so the facilitator and participants can determine which lessons pertain to their situation
- Include placeholders for sites to tailor to their cultural needs

Key Qualitative Findings and Recommendations (cont.)

Strengths and Facilitators to Healthful Eating

- Traditional foods should be included in AI/AN nutrition education, but realistic recommendations on how to incorporate them into the diet are important.
- Tying traditional foods to culture and history regarding healthy, strong, active ancestors is a motivational technique.
- Community-based education approach works best - consider extended family and community-based goals – think outside of individual health

Recommendations

- Include examples of traditional foods, history of traditional foods, and how they can (feasibly) be included in modern diets
- Invite extended family/support to classes
- In several classes, include time for intentional discussion about region/tribe specific cultural foods

Key Qualitative Findings and Recommendations (cont.)

Social Norms and Tradition

- Food is important for social gatherings and celebrations, but foods served are often not very healthy
- Gatherings and events happen frequently
- Need help translating healthful eating practices outside of class and beyond people with T2D

Recommendations

- Include advocacy in the curriculum
- Include alternatives for food-based gatherings, tips for healthful eating at gatherings

Key Qualitative Findings and Recommendations (cont.)

Barriers to Healthful Eating

Environmental

- Food security/access to healthful foods
- High cost of healthy foods
- Limited access to supermarkets
- Too much access to fast food and processed food

Lack of Nutrition Education

- Lack of education on cooking/food preparation and healthy eating on a budget
  - Especially true for younger parents

Lack of Time

- Focus on ‘convenient foods’ due to lack of time to shop/prepare/cook at home

Key Qualitative Findings and Recommendations (cont.)

Barriers to Healthful Eating

Recommendations

- Program should include these topics:
  - Food resource management
    - Meal planning, shopping, cooking, preparation, storage
  - Use of commodity foods in healthful meals
  - Healthful eating while away from home or "on the go"
  - Time management (i.e., cooking once a week)

Key Qualitative Findings and Recommendations (cont.)

Class Format

- Educator:
  - RDs are not available in many communities
  - Should be AI/AN community member. If not AI/AN, should be a well-trusted member of the community (who has lived there for many years).
  - Supportive, non-judgmental, non-shaming education approach; “meeting participants where they are”

Recommendations

- Develop a scripted curriculum for non-RD
- Provide facilitator with access to an RD for questions
- Consider use of technology to provide ‘access’ to RD

Key Qualitative Findings and Recommendations (cont.)

Class Format

- Experiential learning, hands-on (including cooking, meal prep, tasting demonstrations)
- Include drawing, visual tools, multi-media (videos)
- Include time for peer-to-peer sharing, storytelling, support, problem-solving
- Nutrition education should help people make healthy changes gradually

Recommendations

- Include cooking demonstration in each class, opportunities to draw (perhaps in conjunction with peer-to-peer discussion)
- Include time for peer-to-peer discussion
- Include facilitating group discussions as part of educator training

Key Qualitative Findings and Recommendations (cont.)

Recruitment and Retention

- Recruitment should be personalized and active
- Attrition is a concern
- Incentives are valuable for retention

Recommendations

- Community-based educator should be heavily involved in recruitment
- Recruitment “toolkit” should be developed for guidance
- Cooking demonstrations at each class (serve as incentive)
- Gift card incentives (to offset cost of gas, etc.)

Key Qualitative Findings and Recommendations (cont.)

Technology

- Access to the Internet is no longer a barrier for most AI/AN adults
- Consider use of technology, social media, videos as a means to expand reach of the program
- Hybrid program including in-person and online resources could be valuable

Recommendation

- Obtain additional funding to develop and pilot test online resources and lessons that could enhance the curriculum

Questions or Comments?

If you have additional comments/ thoughts/ recommendations or suggestions please email Sarah

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