## THE CULTURAL ADAPTATION OF THE USDA'S MYPLATE GUIDELINES FOR THE PUNJABI SIKH HERITAGE COMMUNITY OF GREATER SACRAMENTO



RESULTS

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## Figure 2 Phase 1: Quantitative Survey (N = 36)☐ Chronic disease has become the largest contributor to death and disability in the United States (CDC, 2024). Selected Modifications for MyPlate by Punjabi Sikh Participants for the Cultural Adaptation Process (N=36) ☐ Major underlying risk factors: smoking, poor nutrition, physical inactivity, and excessive alcohol use (CDC, 2024). **Key Barriers Identified:** Provide Examples of Cultural Food Sources for Fruits, Vegetables, Grains, & Protein ☐ Public health interventions like the **Dietary Guidelines for Americans (DGA)** aim to address **poor nutrition** and promote **healthy dietary** □ 75% of participants either ate their meals in a plate-bowl combo practices to prevent chronic disease (USDA & HHS, 2020). Provide Pictures of Real Punjabi Food or in **family-style**. ☐ To simplify the complex guidelines from the DGA, the visual icon **MyPlate** was launched in 2011 replacing MyPyramid (USDA, n.d.). Show Pictures of Real Food in the Correct Serving/Amount ☐ 42% of participants preferred Punjabi as their primary language to Despite the widespread use, awareness and adherence of MyPlate remain significantly low among marginalized racial and ethnic Show Pictures of Food in Plates and Bowls acquire nutrition and health information, while 31% preferred both communities (Wambogo et al., 2022). (English & Punjabi). Provide MyPlate Translated into Punjabi □ 67% of participants expressed wanting to see examples of □ Cultural and linguistic barriers have played an integral role in preventing diverse groups from adhering to the MyPlate visual (Garcia et al., Makes Words Easy and Simple to Understand cultural foods sources on the MyPlate visual (Figure 2). 2022; Kim 2013). ☐ While the USDA has made efforts to make MyPlate culturally inclusive (e.g. 21 diverse language options, cultural customizability, and cultural Phase 2: Qualitative Interviews (N = 9)food photos), there is still a lack of adaptations for all the cultural nuances of specific ethnic subgroups and languages (USDA, n.d.). **Key Feedback For The Initial MyPlate Adaptation:** ☐ Punjabi Sikhs are disproportionally affected by chronic diseases, and there is no formal translation or cultural adaptation of MyPlate in <del>-</del> 40 Punjabi, despite being a widely spoken language (Dietrich & Hernandez, 2019; Sikh Coalition, n.d.; USDA, n.d.). % 30 ☐ Participants preferred simpler language, suggested color-coding food labels to align with MyPlate and identified missing elements **Research Goal:** on visuals (animal-based protein and butter). Modification Options □ 100% of participants said the visuals were culturally relevant and To develop a culturally adapted MyPlate visual tool for the Punjabi Sikh heritage community of Greater Sacramento area. authentic. Note. Participants were allowed to select more than one option. Percentages □ 100% of participants preferred the adapted version of MyPlate represent how many participants selected the suggested modification. Percentages **Objectives:** have been rounded. versus the original to build healthy meals. ☐ To assess Punjabi Sikhs barriers to utilizing the USDA's MyPlate through quantitative data collection. ☐ To design a culturally adapted MyPlate tool incorporating the communities' needs and food preferences. Figure 3: The Iterative Process of Adapting the Healthy Punjabi Plate Visual Tool Based on Two Rounds of Semi-Structured Interviews ☐ To field test the culturally adapted material for acceptability, through qualitative data collection with the target audience. Final Adaptation: Healthy Punjabi Plate **Initial Adaptation** Original MyPlate Visual **METHODS** ਸਿਹਤਮੰਦ ਪੰਜਾਬੀ ਭੋਜਨ ਸਿਹਤਮੰਦ ਅਤੇ ਸੰਤੁਲਿਤ ਪੰਜਾਬੀ ਭੋਜਨ ਕਿਵੇਂ ਬਣਦਾ ਚੌਥਾ ਹਿੱਸਾ ਤੁਹਾਡੀ ਪਲੇਟ ਦਾ ਸਬਤ ਅਨਾਜ ਨਾਲ ਭਰਿਆ ਹੋਵੇ, ਅਤੇ ਰਿਫਾਈਨ ਅਨਾਜ ਬਿਲਕੁਲ ਘੱਟ ਮਾਤਰਾ ਵਿੱਚ ਹੋਵੇ Figure 1 Two-Phase Mixed-Methods Research Design to Culturally Adapt MyPlate For the Punjabi Sikh Community Based on the Stages of the Cultural Adaptation Process of Evidence-Based Intervention **ANALYTICAL** OUTCOMES PHASES ACTIVITIES **PROCEDURE MyPlate**.gov · Recruited a sample of Identified barriers to Conducted a ਆਪਣੇ ਭੋਜਨ ਨਾਲ ਇੱਕ ਦੁੱਧ ਦੇ ਨਾਲ ਸੰਬੰਧਿਤ ਦੀਜ਼ ਰੁੱਖੋ। ਇੱਕ ਗਲਾਸ ਜਾਂ ਚੌਥਾ ਹਿੱਸਾ ਤੁਹਾਡੀ ਪਲੇਟ ਦਾ ਪ੍ਰੋਟੀਨ ਦੇ ਵੱਖ-ਵੱਖ ਸਰੋਤਾਂ ਨਾਲ ਭਰਿਆ ਹੋਵੇ (e.g.ਦਹੀ) n=36 Punjabi Sikh adults. MyPlate adherence & descriptive analysis of ਸ ਤਸਵੀਰ ਵਿੱਚ ਸਾਗ, ਮੱਕੀ ਦੀ ਰੋਟੀ, ਦਹੀਂ, ਲੱਸੀ, ਅਤੇ ਸੰਤਰੇ ਨੂੰ ਪੇਸ਼ ਕੀਤਾ ਹੈ। Phase 1: Administered a theorymodifications needed measured variables Quantitative Data ਮੈਂ ਹੋਰ ਫਲ ਅਤੇ ਸਬਜ਼ੀਆਂ ਖਾ ਸਕਦਾ/ਸਕਦੀ ਹਾਂ। 🌎 ਮੈਂ ਹੋਰ ਸਾਬਤ ਅਨਾਜ ਖਾ ਸਕਦਾ/ਸਕਦੀ ਹਾਂ। for the preliminary based quantitative survey (Qualtrics, Microsoft Collection assessing barriers to adaptation design in & Analysis Excel) MyPlate adherence. Phase 2. Healthy Punjabi Plate WHAT DOES A HEALTHY AND BALANCE PUNJABI MEAL LOOK LIKE? Add vegetables (sabji) and whole fruits to 1/2 of your plate. (e.g. saag, side salad) Add grains to 1/4 of your plate them whole grains. (e.g. corn flour roti) Punjabi Analyzed Developed a preliminary adaptation design of qualitative feedback Finalized the Phase 2: MyPlate, integrating Phase 1 through an iterative culturally adapted Cultural Adaptation MyPlate visual for the Design Development 8 Conducted two rounds of Revised and Punjabi Sikh Qualitative Data theory-based iterative semimodified the intial community of Greater Collection structured one-on-one adapted design Add a protein source to 1/4 of your plate. (e.g. greek or plain yogurt) Sacramento. interviews.(n= 9 Punjab Sikh according to Scan Barcode To View The gathered feedback.

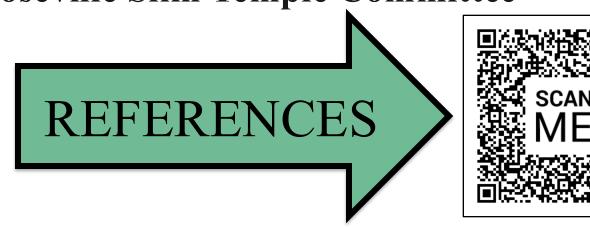
## DISCUSSION

Full Tool

- ☐ In Phase 1, significant barriers to MyPlate adherence were identified in the Punjabi Sikh community, including differences in meal-serving styles, language preferences, and the absence of culturally relevant food examples. Based on these insights, the initial draft of the tool (Figure 3) was developed.
- In Phase 2, feedback from interviews with participants led to several revisions: simplifying language, color coding food groups, and adding an animal-based protein visual. These iterative changes resulted in the final adaptation, the *Healthy Punjabi Plate*, a **five-page**, **double-sided visual tool** featuring **traditional Punjabi meals**, bilingual text (Punjabi and English), and a list of culturally relevant food sources on the reverse side.

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Note. The research design was based on the cultural adaptation stages from "Cultural Adaptations of Behavioral Health Interventions: A Progress

☐ The quantitative survey and qualitative interviews were based on the constructs of the Self-Determination Theory (SDT): autonomy,

☐ As shown in Figure 1, this study employed a mixed methods research design consisting of two phases: a quantitative phase followed by a

☐ The phases were informed by the first two proposed stages for the cultural adaptation process of evidence-based interventions by Barrera et

Report," by M. Barrera, F. G. Castro, L. A. Strycker, & D. J. Toobert, 2013, Journal of Consulting and Clinical Psychology, 81(2), 196-

205. <a href="https://doi.org/10.1037/a0027085">https://doi.org/10.1037/a0027085</a>.

competence, and relatedness (Deci & Ryan, 1985; Ryan & Deci, 2000).

qualitative phase.

al. (2013).

INTRODUCTION