

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

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SACRAMENTO  
STATE

## INTRODUCTION

- ❑ **Chronic disease** has become the largest contributor to death and disability in the United States (CDC, 2024).
- ❑ Major underlying **risk factors**: smoking, **poor nutrition**, physical inactivity, and excessive alcohol use (CDC, 2024).
- ❑ Public health interventions like the **Dietary Guidelines for Americans (DGA)** aim to address **poor nutrition** and promote **healthy dietary practices** to prevent chronic disease (USDA & HHS, 2020).
- ❑ To simplify the complex guidelines from the DGA, the visual icon **MyPlate** was launched in 2011 replacing MyPyramid (USDA, n.d.).
- ❑ Despite the widespread use, **awareness and adherence** of MyPlate remain significantly **low among marginalized racial and ethnic communities** (Wambogo et al., 2022).
- ❑ **Cultural and linguistic barriers** have played an integral role in preventing diverse groups from adhering to the MyPlate visual (Garcia et al., 2022; Kim 2013).
- ❑ While the USDA has made efforts to make MyPlate **culturally inclusive** ( e.g. 21 diverse language options, cultural customizability, and cultural food photos), there is still a lack of adaptations for all the cultural nuances of specific ethnic subgroups and languages (USDA, n.d.).
- ❑ **Punjabi Sikhs** are **disproportionally affected by chronic diseases**, and there is **no formal translation** or **cultural adaptation** of MyPlate in **Punjabi**, despite being a widely spoken language (Dietrich & Hernandez, 2019; Sikh Coalition, n.d.; USDA, n.d.).

### Research Goal:

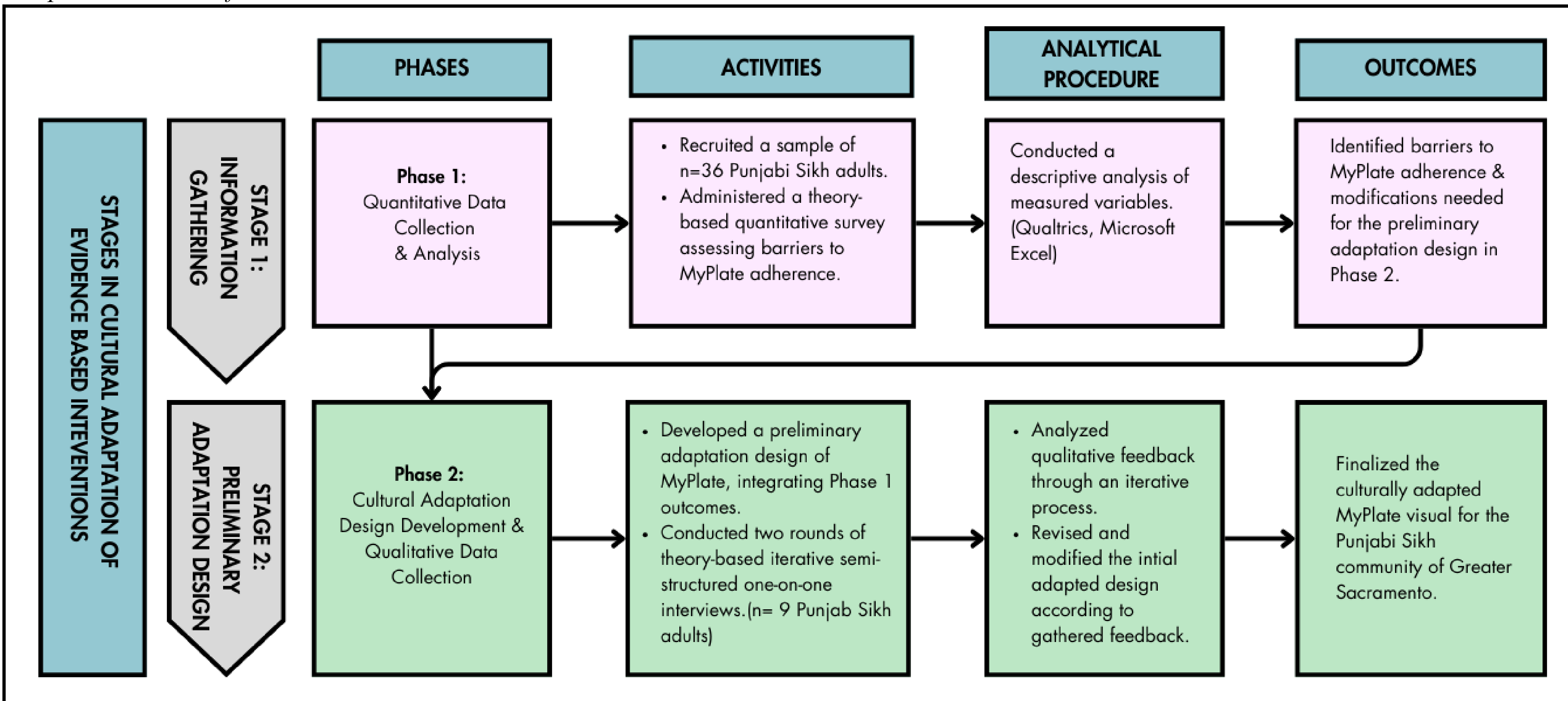
To develop a culturally adapted MyPlate visual tool for the Punjabi Sikh heritage community of Greater Sacramento area.

### Objectives:

- ❑ 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.
- ❑ To field test the culturally adapted material for acceptability, through qualitative data collection with the target audience .

## METHODS

**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



*Note.* The research design was based on the cultural adaptation stages from “Cultural Adaptations of Behavioral Health Interventions: A Progress Report,” by M. Barrera, F. G. Castro, L. A. Strycker, & D. J. Toobert, 2013, *Journal of Consulting and Clinical Psychology*, 81(2), 196–205. <https://doi.org/10.1037/a0027085>.

- ❑ As shown in Figure 1, this study employed a **mixed methods research** design consisting of two phases: a **quantitative phase** followed by a **qualitative phase**.
- ❑ The phases were informed by the first two proposed stages for the **cultural adaptation process of evidence-based interventions** by Barrera et al. (2013).
- ❑ The quantitative survey and qualitative interviews were based on the constructs of the **Self-Determination Theory (SDT): autonomy, competence, and relatedness** (Deci & Ryan, 1985; Ryan & Deci, 2000).

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## RESULTS

### Phase 1: Quantitative Survey (N = 36)

#### Key Barriers Identified:

- ❑ **75%** of participants either ate their meals in a **plate-bowl combo** or in **family-style**.
- ❑ **42%** of participants preferred **Punjabi** as their primary language to acquire nutrition and health information, while **31%** preferred both (**English & Punjabi**).
- ❑ **67%** of participants expressed wanting to see **examples of cultural foods sources** on the MyPlate visual ( Figure 2).

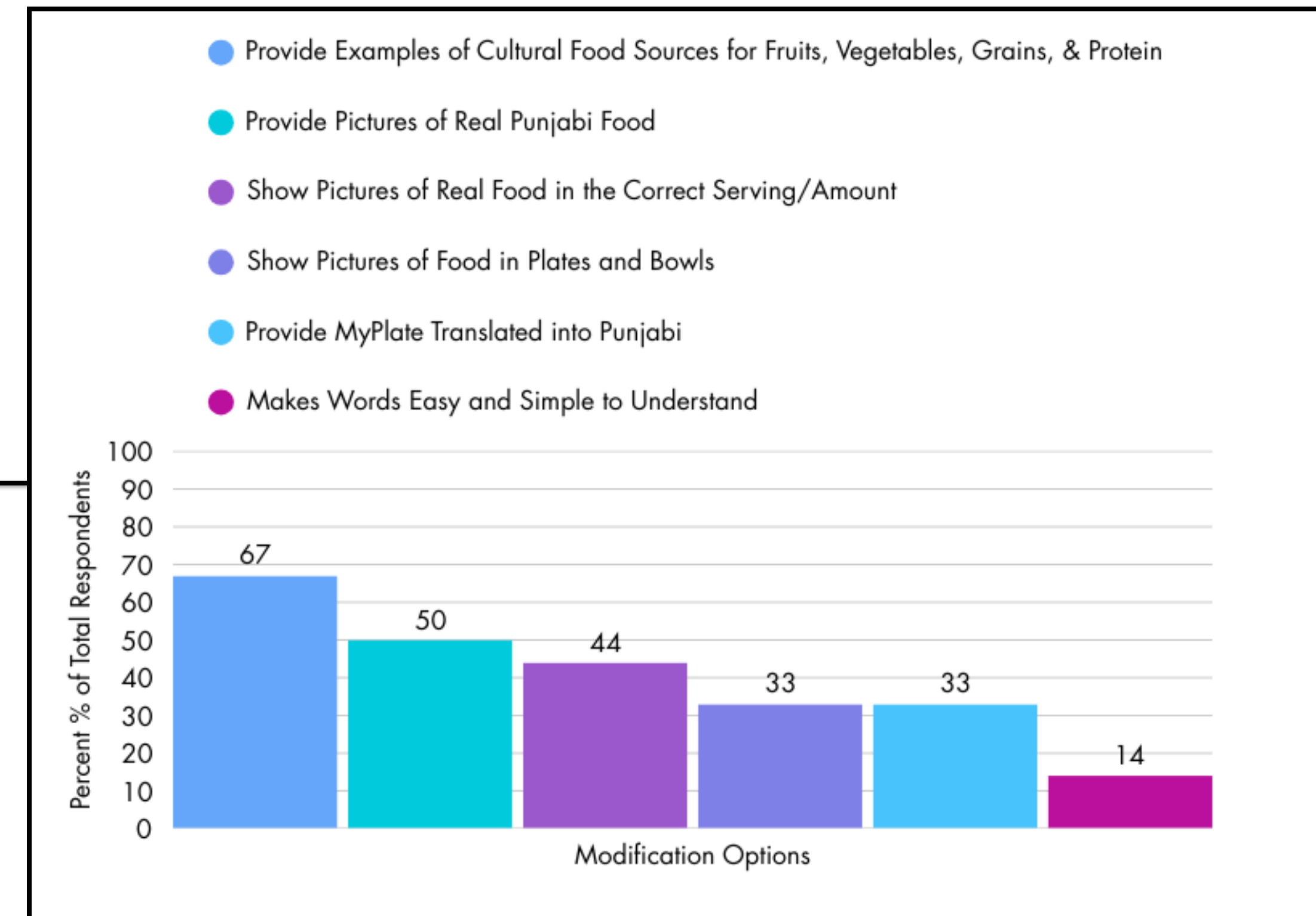
### Phase 2: Qualitative Interviews (N = 9)

#### Key Feedback For The Initial MyPlate Adaptation:

- ❑ Participants **preferred simpler language**, suggested **color- coding** food labels to align with MyPlate and **identified missing elements on visuals** (animal-based protein and butter).
- ❑ **100%** of participants said the visuals **were culturally relevant and authentic**.
- ❑ **100%** of participants **preferred the adapted version** of MyPlate versus the original to build healthy meals.

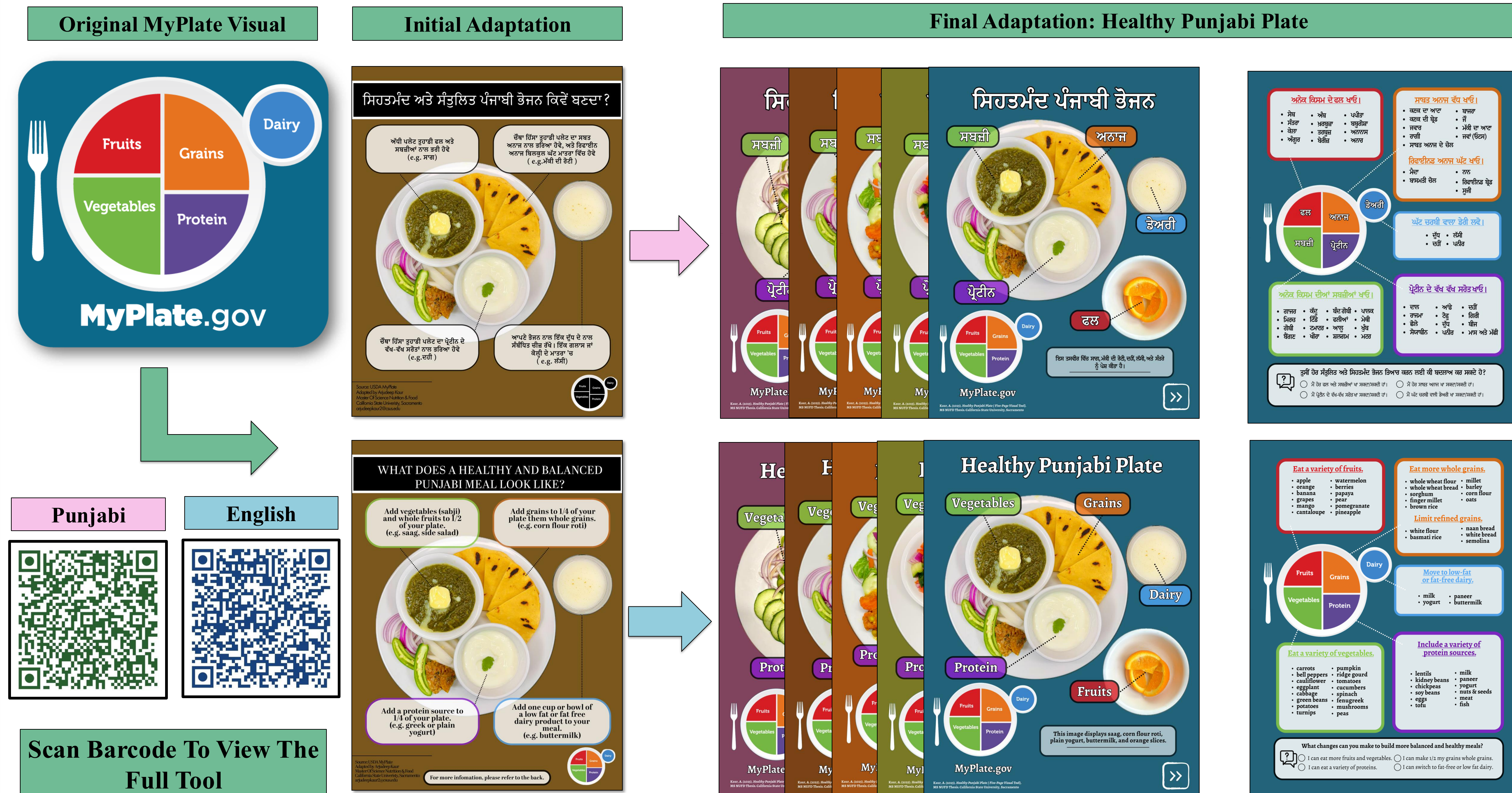
**Figure 2**

*Selected Modifications for MyPlate by Punjabi Sikh Participants for the Cultural Adaptation Process (N=36)*



*Note.* Participants were allowed to select more than one option. Percentages represent how many participants selected the suggested modification. Percentages have been rounded.

**Figure 3: The Iterative Process of Adapting the Healthy Punjabi Plate Visual Tool Based on Two Rounds of Semi-Structured Interviews**



## DISCUSSION

- ❑ 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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## REFERENCES

