

**Improving Awareness and Utilization of Tofu Among WIC Participants:
A Cultural and Educational Approach**

Mayu Hirono

MBA in Organizational Management, Eastern University

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Dr. Delores Springs

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Executive Summary

This white paper investigated the possibility of unawareness of tofu among participants in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program at Takoma Park, Maryland. Despite tofu being an approved food in WIC food packages, tofu remains underutilized due to a lack of awareness, cultural unfamiliarity, and limited staff education. A multilingual survey of 155 participants was conducted and revealed that 83% of participants were unaware of its inclusion, and only 6% had ever selected it. The majority of respondents, who were predominantly Hispanic or Latino, reported unfamiliarity with tofu, uncertainty about preparation methods, and a lack of explanation from staff as barriers to selection. Based on these findings, this paper discusses the solution to this problem and the limitations of this study. Solutions include providing classes about tofu, both virtual and in-person, staff training, offering cooking demonstrations, and distributing handouts of tofu. A phased seven-month implementation timeline from August 2025 to February 2026 has been proposed, supported by measurable key performance indicators (KPIs) that track improvements in awareness, selection rates, cooking confidence, and staff engagement. Short feedback surveys will be used to assess participant response and guide program refinement.

This project aligns with WIC's mission to promote equitable access to nutritious food and improve health outcomes among low-income women and children. By addressing cultural and communication barriers, this effort could promote the inclusion of tofu in diverse households, support plant-based eating patterns, and contribute to long-term dietary improvements within the WIC community.

Introduction

WIC was one of the U.S. The Department of Agriculture's (USDA) key public programs, piloted in 1972 and enacted into legislation in 1975 (National Academies of Sciences, Engineering, and Medicine, 2017). The goal of WIC is to improve the health and nutrition of low-income, nutritionally at-risk pregnant women, new mothers, and children up to age five by providing supplemental foods, nutrition education, and referrals (U.S. Department of Agriculture, Food and Nutrition Service, 2024b).

As part of its commitment to supporting participants' health, tofu was introduced as a food option in their food packages. This addition is expected to result in WIC participants having more nutritional benefits for their health. Despite this inclusion, the selection rate of tofu among participants remains significantly low. Based on staff observations at the Takoma Park WIC clinic in Maryland, only a few participants choose tofu for their food package. Therefore, these findings prompted a survey to assess awareness, including cultural familiarity and interest in tofu among WIC participants.

This study focuses on understanding the reasons why the rate of tofu selection is notably low among WIC participants, particularly at the Takoma Park WIC clinic in Maryland, by exploring significant barriers to tofu adoption and recommending educational strategies to increase tofu selection in a culturally appropriate and health-promoting way. In order to understand the complexity of WIC participants' relationship with tofu, it is essential to examine the history of tofu as well as the WIC program.

Background

Overview of Research According to Cultural Relevance

Tofu was created around 2000 years ago, during the time of China's Han Dynasty (206 BCE-220 CE). Around this time, it is said that the era is important in Chinese history, where significant investigations were made. Soybeans were one of them in the environment of innovation and were widely cultivated as a highly nutritious crop. Legend has it that Liu An, who is the ruler of a small kingdom in the Huainan region, also had a passion for experimentation, accidentally creating tofu by playing with ground soybeans, water, and a coagulant, such as calcium or magnesium salts. The accidental discovery by Liu An is said to have spread throughout China (Tofu World, n.d.).

Tofu is also popular in neighboring countries like Japan and Korea, as Chinese travelers and merchants journey along trade routes. In Japan, it was called "tofu" and was brought in the Nara period (710 - 784 AD), as an ideal ingredient in a meatless diet for Buddhism. It became an essential part of *shojin ryori*, or Buddhist temple cuisine; however, tofu was considered a food for the elite and samurai up until the Edo period (1603- 1868 AD) (Superior Natural, 2022). In Korea, it was called "dubu" and was found in every meal, like soups and pancakes. Over time, tofu also took root in Southeast Asia and became an important part of local cooking. (Tofu World, n.d.). Tofu is becoming more recognized globally as a nutrient-rich, high-protein option that is especially beneficial for individuals who follow vegan and vegetarian diets (Zheng et al., 2020).

Global Market Trends and Interest in Tofu

Tofu is consumed specifically in the Asia region in the global market with cultural significance. Countries like China, Japan, South Korea, and Indonesia are the major contributors to the

region's market (Straits Research, 2024). The Asia-Pacific region holds the largest share of the global tofu market at 48.5%, followed by North America with 20%. Europe has 15% of the global market, the Middle East and Africa use 5 % of the tofu market, and Latin America has 7 % of the market (MarketResearch.biz, 2024).

China is the largest market for tofu in the Asia-Pacific region, with nearly 40 % of the region's market share in 2023, having a deep history with tofu for over 2000 years. The demand for tofu in China is increasing due to being aware of health and wellness, as well as its attractiveness as a low-calorie, high-protein alternative to meat (Straits Research, 2024).

In the North American market, the tofu market is increasing due to the adoption of plant-based diets and the growing awareness of its health benefits. The plant-based food market reached USD 7 billion in 2022, and tofu is a key product in this category (Straits Research, 2024). This market data shows the growing global interest in tofu and identifies which country has the largest tofu market. In addition to growing rapidly, more research about the nutritional value of tofu is being made accessible.

Nutritional Benefits of Tofu

Tofu provides some important nutrients since it has large amounts of proteins, lipids, vitamins, minerals, and isoflavones; moreover, tofu is known as a healthy food because of its potential benefits of reducing the risk of cardiovascular disease, hypertension, diabetes, hyperlipidemia, and others. (Zheng et al., 2020).

Mayo Clinic Staff (2024) reported that soy-based food, like tofu, has less saturated fat than other protein sources like meat and cheese, and provides some beneficial fats, vitamins, minerals, and fiber. By this, a meta-analysis of 46 studies identified by the FDA noted that soy

protein, including tofu, can reduce LDL cholesterol and total cholesterol (Blanco Mejía et al., 2019).

A vegetarian or vegan diet leads to more favorable health outcomes when compared to a diet that includes meat. Increasing consumption of plant-based foods may prove beneficial for overall health. For instance, the AHS-2 and ARIC studies showed that plant-based diets are associated with improvements in cardiovascular mortality when compared to standard diets. The EPIC-Oxford study identifies that vegetarians are associated with a lower risk of ischemic heart disease than diets that include meat. A BROAD study found improvements in BMI, cholesterol, and HbA1c among those following a plant-based diet (Anand et al., 2023). Due to these growing studies, programs like WIC have made efforts to incorporate nutritional meals into their curriculum.

WIC Program and Tofu Inclusion

USDA and Food and Nutrition Service (FNS) administers 16 nutrition assistance programs along with the missions of increasing food security and reducing hunger by providing people who are low-income access to food, a healthy diet, and nutrition education so that it supports American agriculture and inspires public confidence (U.S. Department of Agriculture, Food and Nutrition Service, 2024b). Among these programs, WIC offers participants nutritional counseling, dietary guidance, and access to medical services for economically disadvantaged people who are pregnant, postpartum women, and children under five. (U.S. Department of Agriculture, Food and Nutrition Service, 2024b).

A key goal is to offer support for last improvements to their eating and physical habits and prevention of nutrition-related problems using the WIC benefits. Nutrition education helps individuals to be aware of the dangers of using drugs and other harmful substances during

pregnancy and while breastfeeding. WIC aims to strengthen its nutrition education component, adopt a more behavioral approach in nutrition counseling, be more client-oriented, and focus on healthy behavior for life through its program (U.S. Department of Agriculture, Food and Nutrition Service, 2016).

WIC introduced tofu as an option on food packages through the interim food package rule in the Federal Register [72 FR 68966] on December 6, 2007 (U.S. Department of Agriculture, Food and Nutrition Service, n.d.). This change helped participants who were no longer required to have documentation from a healthcare professional licensed to write a medical prescription to receive tofu on October 1, 2009 (U.S. Department of Agriculture, Food and Nutrition Service, 2007).

The final rule published on March 4, 2014, codified these changes, and tofu was permanently included in the WIC food package (U.S. Department of Agriculture, Food and Nutrition Service, 2014). These updates to the WIC food package reflect WIC's commitment to improving nutritional access and dietary diversity for participants, not only for vegans and vegetarians but for all American families. These changes are particularly relevant when considering the diverse populations served by WIC clinics in Montgomery and Prince George's Counties, where the majority of participants receive services from the Takoma Park WIC clinic.

Demographic Information

According to recent demographic data estimates, Montgomery County and Prince George's County, two major regions served by the Takoma Park WIC clinic, have notably diverse populations. Hispanic or Latino individuals make up approximately 20.5% of Montgomery County's population and 21.2% of Prince George's County's population (U.S. Census Bureau, 2023a; U.S. Census Bureau, 2023b). Additionally, 59.1% of Prince George's

residents and 18.1% in Montgomery County identify as Black or African American, while Asian populations make up 15.3% in Montgomery and 4.3% in Prince George's. These demographics highlight the need for culturally relevant nutrition education.

Moreover, both counties report some of the highest WIC participation rates in Maryland. In Montgomery County, 75.5% of eligible residents are enrolled in WIC, while Prince George's County has a participation rate of 52.4% (Maryland Hunger Solutions, 2020a; Maryland Hunger Solutions, 2020b). These high enrollment rates further emphasize the importance of expanding awareness of lesser-known food options such as tofu through inclusive education strategies that reflect the cultural and dietary preferences of WIC families. The tofu awareness survey was conducted at the WIC Takoma Park clinic to assess access barriers within a localized setting.

Methodology

This tofu awareness survey was conducted to assess how familiar WIC participants at Takoma Park in Maryland, US. are with tofu's availability through WIC food packages and to evaluate their interest in tofu from May 8, 2025, to June 8, 2025. Despite tofu being included in WIC food packages, many participants are unaware of its availability or may not know what tofu is, possibly due to cultural unfamiliarity. Making unfamiliar foods, such as tofu more familiar to participants can help participants understand its health benefits and encourage its selection, especially among culturally diverse populations. This approach would not only support WIC's goals of improving dietary behaviors but also promote long-term health outcomes for American families.

The questionnaire consisted of 12 questions focused on awareness, preferences, and reasons for not choosing tofu. The questions were designed to be simple, straightforward, and clear, using plain language for all participants to comprehend. Since the languages spoken by the

majority of WIC participants are diverse, the survey was translated into six languages: Spanish, French, Dari, Haitian Creole, Amharic, and Pashto from English. These languages are spoken by most of the participants at Takoma Park, in Maryland, and are completed using OpenAI's GPT-4 architecture. The Spanish version of the survey was reviewed by bilingual WIC staff at the WIC for accuracy and cultural sensitivity, to maintain and tone of the original language. This survey was also reviewed by the WIC chief, staff, registered dietitians at the WIC training center, and the WIC executive director before it was conducted.

This questionnaire was made available as QR codes, with a separate code for each language printed on a single flyer. The flyers were distributed to all staff members at the clinic and they were asked to invite participants to complete the survey during nutrition education appointments. Participants were also encouraged to complete the survey in the waiting room.

Participants were assured that their responses were anonymous and voluntary, and participation or answers would not affect any benefits or services they received. The data would remain confidential and be used solely for academic and public health research purposes.

A total of 156 participants responded to this survey; however not all participants answered every question, resulting in slight fluctuations in the number of responses per question. Percentages for each question were calculated based on the number of respondents to that specific question. The following section presents the key findings from the survey, beginning with the demographic profile of the participants who responded.

Survey Findings

Participant Demographics

A total of 156 WIC participants at the Takoma Park clinic responded to the survey. As expected in WIC programs demographic, the majority identified as female (n=141), while 13 identified as male, and one individual answered “I don’t know yet.”

In terms of age, most respondents were in the 25 to 34 age range (44%), followed by those 35 to 44 (25%) and 18 to 24 (24%), and aligned with the WIC program’s target population of young women and caregivers of young children. A smaller percentage were under 18 (5%), and only 3% were aged 45 to 54 with no participants being 55 or older.

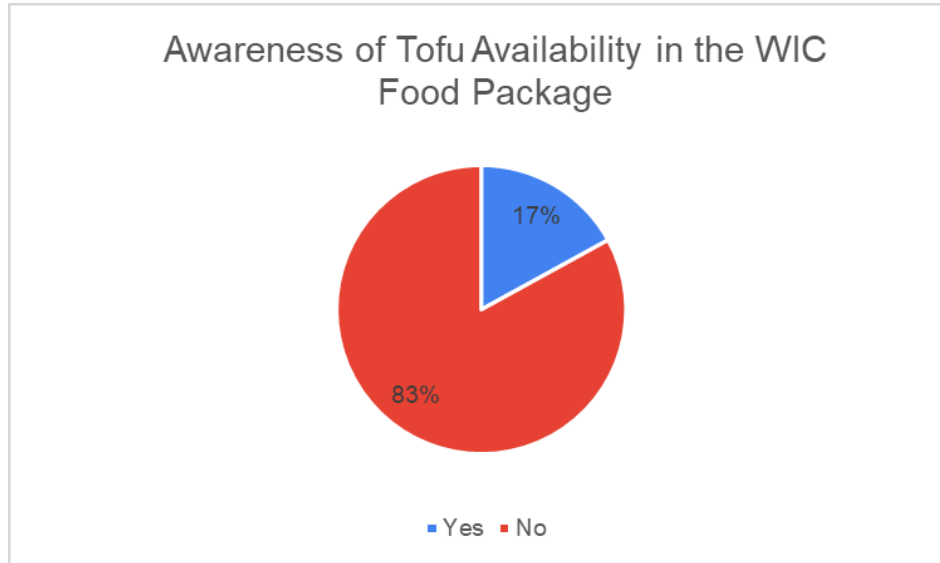
Ethnic background varied, though the majority of respondents reported as Hispanic or Latino (79%), followed by Black or African American (13%). A smaller number identified as Asian (4%), White (4%) or Native American or Alaska Native (1%). No respondents identified as Middle Eastern or North African. Several participants selected more than one category, such as “White and Asian” or “Hispanic or Latino and White.” This reflects the multicultural population served by the Takoma Park WIC clinic. Beyond demographics, the survey explored participants’ knowledge of tofu and its availability within their food package. Following the demographic overview, the survey examined how familiar participants were with tofu and whether they were aware of its inclusion in the WIC food package.

Awareness and Familiarity with Tofu and the WIC Food Package

The survey results reveal a significant lack of familiarity with tofu among WIC participants at the Takoma Park clinic. Among 155 respondents, only 24% stated that they knew what tofu was, while 54% stated they did not know, and 22% selected that they had heard of it

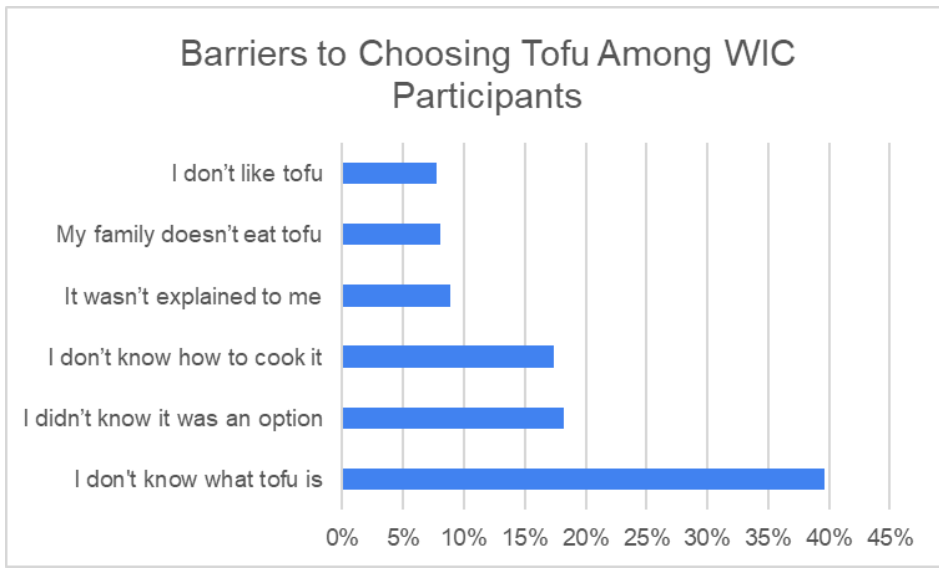
but were unsure. Below is Figure A, which represents participants' awareness of tofu's inclusion in the WIC food package.

Figure A Awareness of Tofu Availability in the WIC Food Package



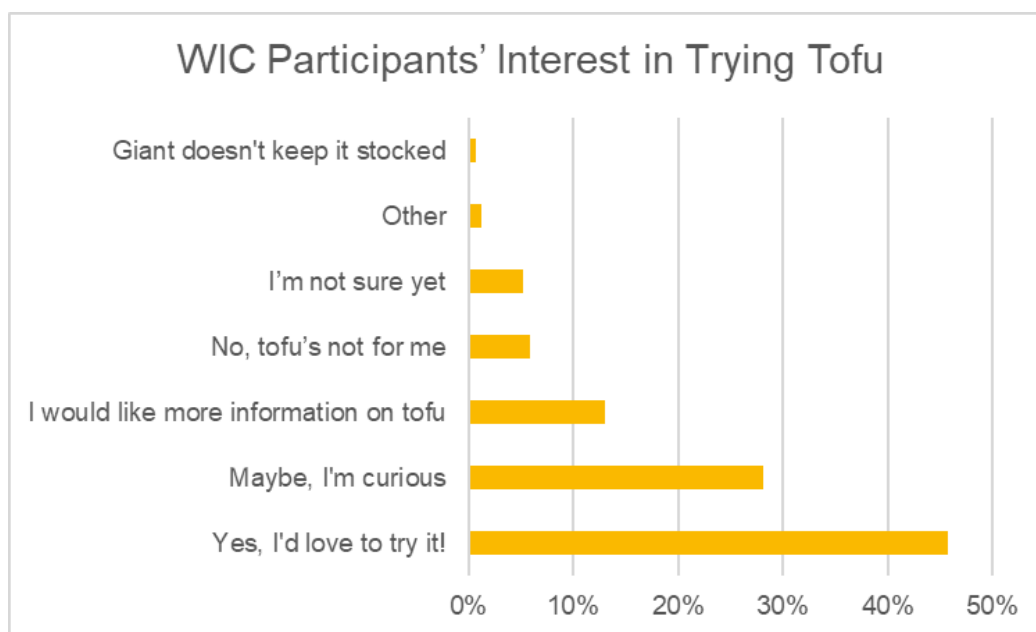
As shown in Figure A, 83% were unaware that tofu is included in the WIC food package, while only 17% were aware. This highlights a major communication gap between WIC services and participants regarding food package options. To further explore reasons behind low tofu selection, Figure BA illustrates the barriers reported by WIC participants who had never chosen tofu.

Figure B Barriers to Choosing Tofu Among WIC Participants



As shown in Figure B, the most common barrier was a lack of knowledge about tofu (40%), followed by unawareness that it was available through WIC (18%), not knowing how to cook it (17%), and a lack of explanation from WIC staff (9%). Despite these barriers, survey data showed a high level of openness to trying tofu. Figure C summarizes participants' interest in incorporating tofu into their diet.

Figure C WIC Participants' Interest in Trying Tofu



As shown in Figure C, 46% responded that they would love to try it, while 28 % said they were curious. Another 13% wanted more information on tofu, only 6% felt that tofu wasn't for them, and a few others were unsure or mentioned concerns such as availability at local stores.

This information shows a significant gap in nutrition education and communication between WIC services and participants. Tackling these gaps helps WIC promote the use of tofu as the participants' choice of food package while having the benefits of its nutritional value, which leads to WIC's health and program goals. While the findings highlight low awareness and a general interest in trying tofu, several key barriers preventing participants from selecting it through WIC were discovered.

Barriers to Adoption

Unawareness of Tofu's Inclusion in WIC Packages

The survey results showed the two important issues. First, the majority of WIC participants at Takoma Park are Hispanic or Latino, which indicates that this group is not familiar with tofu. Second, many participants who were unfamiliar with tofu reported that tofu

was either not explained to them or that they were unaware that it was available in the WIC food package. This shows that there's a gap in communication and education about available food options, which may be limiting access to tofu as a healthy protein choice. In addition to limited awareness, cultural familiarity and cooking knowledge also emerged as barriers to tofu adoption among WIC participants.

Lack of Culturally Appropriate Outreach or Preparation Support

According to LeBlanc et al. (2024), tofu is commonly found in Asian heritage diets but is not typically included in the traditional dietary patterns of Latin or Africa communities. Dietary patterns among various Hispanic groups in the U.S. showed that they had higher refined grains, vegetables, red meat, and fats, fruit and poultry, whereas Puerto Ricans had lowest intakes of fruit and vegetables. Central and South Americans intakes of fruit and poultry and the highest in fish intake in comparison with other groups (Siega-Riz et al., 2014); however, tofu is not commonly reported as part of their diet among Hispanics in the U.S. This lack of cultural familiarity with tofu may contribute to uncertainty about how to cook or serve it.

Moreover, WIC demographic data shows that in 2022, 63% of participants identified as Hispanic or Latino, followed by 49% non-Hispanic Black individuals (U.S. Department of Agriculture, Food and Nutrition Service, 2024a). These groups may have limited exposure to tofu due to cultural dietary patterns, resulting in hesitancy to select tofu and unfamiliarity with how to cook or prepare it. According to Agriculture and Agri-Food Canada (2024), common barriers to choosing plant-based proteins like tofu include concerns about taste, texture, and cost, resulting in lower selection rates and overall unfamiliarity with tofu.

In addition, a significant barrier is that WIC participants must give up cheese in order to select tofu. This is particularly challenging for Hispanic or Latino families, whose traditional

meals often include cheese as a main ingredient. Without culturally appropriate guidance, this trade-off can create resistance to selecting tofu, even if it is healthier or better aligned with dietary goals. Participants may feel they are losing a familiar and culturally valued food in exchange for something unfamiliar. Aside from participant-level barriers, staff-related challenges also play a role in limiting tofu adoption within the WIC program.

Gaps in WIC staff training on tofu education

Several participants noted that tofu was not explained to them by staff and did not know that tofu was available in their food package. This revealed that some WIC staff may not be consistently providing information about tofu as part of the food package as they assume that participants are not aware or interested. Another possibility is that WIC staff themselves may not be familiar with tofu, due to a lack of training and limited resources, resulting in discomfort in discussing foods that are unfamiliar to them. When tofu is not proactively introduced or described, participants hardly select it, especially if it is unfamiliar in their culture or diet. This communication gap shows a missed opportunity to promote nutritious, healthy protein-rich food options. Given these identified challenges, several strategies can be proposed to improve tofu awareness and adoption among WIC participants.

Recommendations

To address the barriers identified in the survey, several solutions can be considered to enhance the tofu awareness and promote its adoption among WIC participants.

One foundational strategy is incorporating tofu education into WIC staff training materials. This ensures that all staff are informed about tofu's nutritional benefits, cooking methods, and cultural relevance. Well-informed staff can more confidently communicate tofu as an option and answer participant questions effectively.

In addition to staff training, tofu should be presented as a standard food package choice during onboarding. Offering short educational sessions that introduce tofu alongside other familiar WIC foods can help reduce hesitation and build awareness early in the program.

Another critical step can be providing a virtual class about tofu and its benefits for participants to attend. Since WIC at Takoma Park already offers video classes that participants must watch after their in-person visit, dedicating one of these sessions to tofu would help those who are unfamiliar learn about its uses, preparation methods, and health benefits at their own pace.

Moreover, distributing the multilingual handouts includes high-quality images of tofu based recipes as well as highlighting tofu's use across different cultural cuisines can further enhance outreach. These handouts should be tailored to the primary language spoken by WIC participants, such as Spanish and Amharic, and show how tofu can be prepared in familiar ways that reflect diverse culinary traditions. Presenting tofu in recipes inspired by participants's cultural cuisine can help boost comfort and curiosity.

To build hands-on confidence, holding in-person tofu cooking classes can help participants feel more confident in preparing it at home. This cooking class could include preparation tips, step-by-step instructions, basic cooking methods for tofu, tasting opportunities, and tofu's nutritional value. During the class, distributing recipe cards, books, or handouts can empower participants to prepare tofu at home with confidence.

Additionally, providing an option that allows participants to choose both tofu and cheese, when nutritionally appropriate, could reduce resistance and support greater flexibility in food choices. This approach acknowledges the cultural and personal significance of familiar foods like cheese while introducing tofu as a complementary, rather than replacement, protein option.

By offering greater flexibility, WIC can encourage gradual adoption of tofu without requiring participants to give up preferred or traditional items, ultimately supporting more inclusive and sustainable dietary choices.

To ensure long-term effectiveness and broader impact, these recommendations can be standardized across WIC offices in the US. Each state WIC agency could host shared templates for staff training modules, virtual tofu classes, multilingual recipes and handouts, and educational flyers. This centralized approach would ensure consistency in outreach efforts and support tofu's inclusion as a culturally appropriate, nutritious option for all WIC participants, not just those in Takoma Park. To measure the impact of these strategies, several key performance indicators and a realistic implementation timeline have been developed.

Key Performance Indicators and Timeline

To assess the effectiveness of this intervention, several key performance indicators (KPIs) have been identified to measure awareness, behavior change, and engagement among WIC participants and staff. The first KPI focuses on increasing awareness among WIC participants that tofu is an available food package option. This will be measured by comparing pre-and post-intervention survey results, with a target increase from the current 17% baseline to at least 50%. This KPI directly supports efforts such as WIC staff training, multilingual flyers, and the virtual tofu education sessions.

A second KPI measures the actual selection rate of tofu using WIC benefits, with a target increase from 6% to at least 30%, and tofu redemption data will be collected from WIC program records to monitor this change. This indicator reflects the impact of cooking classes, cultural recipe outreach, and direct education during appointments.

The third KPI evaluates participants' knowledge of tofu's nutritional value, particularly its classification as a soy-based protein. This will be assessed through quiz responses following virtual and in-person education sessions, with the goal of improving recognition from 25% to at least 50%.

The fourth KPI addresses knowledge and confidence in tofu preparation methods, which will be evaluated by tracking attendance at virtual and in-person tofu education sessions and completion of preparation-related quizzes, corresponding to the hands-on cooking demonstrations and recipe handouts that support culturally relevant learning.

Finally, the fifth KPI measures staff awareness and engagement related to tofu benefits, assessed through the completion of staff training sessions, with a goal of 100% participation. To ensure continuous improvement, short feedback forms will be provided to participants following each tofu education session, both virtual and in-person, asking whether participants feel more confident cooking with tofu and whether they are more likely to choose tofu in their WIC package. These responses will provide valuable insights for refining the program and expanding it beyond Takoma Park. To implement these strategies effectively and allow time for measurable change, the following timeline outlines key phases of the intervention.

Anticipated Timeline for Effective Impact

The intervention will be implemented over a seven-month period, from August 2026 to February 2027, allowing time for phased education, engagement, and behavior change. This extended timeline ensures that materials can be carefully translated and distributed, staff can be adequately trained, and participants have time to go through tofu-related education.

In August, translated educational materials will be finalized, and staff training will be conducted to ensure frontline WIC employees in Takoma Park are equipped to communicate

about tofu confidently. From September through the end of October, virtual tofu education sessions will be held and supported by flyers and posters in WIC offices to teach tofu's nutritional benefits and its availability in participants' food packages. In November, an in-person tofu cooking demonstration will be offered to provide participants with hands-on experience in tofu preparation and to remind them that they can choose tofu in their food package.

In December, data collection for evaluation will begin, including post-intervention surveys and tofu selection data from WIC, including post-intervention surveys and tofu selection data from WIC using the same survey instrument administered initially. In January 2027, participant and staff feedback will be analyzed to assess the initial effectiveness of the intervention, and beginning in February, the results will be used to refine the program and prepare for possible expansion to other WIC sites. This timeline supports a realistic rollout with opportunities to monitor, evaluate, and adjust the intervention to meet participant needs effectively. The estimated impact of the intervention is to increase awareness and educate WIC participants on the benefits of using tofu in their diets. Although the proposed plan outlines a realistic path toward change, there are several limitations and opportunities for future work.

Limitations and Future Work

While this survey provided valuable insights into tofu awareness and attitudes among WIC participants in Takoma Park, several limitations of this study should be considered, which may affect the results of this study.

First, the sample size was limited to 155 participants with one-month duration, and all recruited from the Takoma Park WIC site. Therefore, the results may not represent the broader WIC population across Maryland or the entire U.S. Additionally, the ethnic composition of the

respondents was skewed, with a heavy concentration of Hispanic/Latino participants, which may not reflect the full cultural diversity of WIC participants in this area.

Language accessibility can be another challenge; despite the survey being translated into six languages that are commonly participants use, some less commonly spoken languages, such as Arabic, may not have been included in the survey translations, potentially limiting accessibility for a small portion of participants. Moreover, Pashto was added later in the survey process, which led to a low response rate and limited diversity in the answers. In addition, artificial intelligence (AI) tools were used to assist in translating some survey materials. While AI translation allowed for rapid multilingual survey deployment, the accuracy and cultural nuance of translations, particularly for languages other than English and Spanish, may not have been fully preserved. As a result, minor translation inaccuracies may have influenced participant understanding of certain questions. Future research should explore best practices for the use of AI-assisted translation in multilingual public health surveys, including validation procedures or collaboration with professional translators to ensure translation reliability.

Another limitation stems from the nature of the survey itself. It relied on self-reported data, which can be influenced by misunderstandings of the questions, or some other possibilities to not answer correctly. Additionally, the survey did not collect behavioral data on actual tofu usage or selection, so it is unclear how awareness translates to action. The absence of qualitative methods, such as observing their behavior also limited the ability to understand the cultural or emotional barriers behind tofu rejection.

Digital literacy and survey format may have introduced additional bias. Some participants required staff assistance to complete the survey, especially when answering questions and the usage of smartphones. This interaction may have influenced how questions were interpreted or

how honestly participants responded, particularly on items related to staff communication or program clarity. Furthermore, some participants skipped certain questions, resulting in varying response totals that may affect consistency when comparing data across items.

In addition, an important question regarding tofu's classification as a plant-based protein was accidentally omitted in the Spanish version of the survey. Since Spanish speakers made up the majority of respondents, this missing item limited the ability to assess knowledge of tofu's nutritional value within the largest demographic group. Future efforts must ensure that all language versions of the survey are thoroughly reviewed prior to distribution, as the omission of a key nutrition knowledge item in the Spanish version limited data collection for the largest respondent group.

To build on the findings of this study and address its limitations, future research should include a larger, expanding sample size and participants from a wide range of WIC sites across Maryland or the U.S. to ensure broader representation. Special attention should be given to underrepresented language groups such as Arabic, and all language versions should be available at the beginning of the survey period to ensure equal participation.

To strengthen the validity of future findings, combining quantitative surveys with qualitative methods such as focus groups, interviews, or observations may provide deeper insight into cultural and emotional barriers to tofu adoption, possibly by partnering with WIC vendors or tracking benefit redemptions. These approaches can explore the "why" behind selection behaviors and help refine education strategies accordingly.

Lastly, future research should evaluate the effectiveness of proposed interventions, such as tofu classes, cooking demos, and staff training through pilot programs and outcome tracking to assess their real-world impact on food choice and nutrition equity. Pre and post-program

evaluations could assess changes in awareness, selection behavior, and nutritional understanding, offering concrete evidence of the intervention's impact on nutrition equity. With these limitations and opportunities for future research in mind, the study's overall conclusions are outlined below.

Conclusion

This study examined the underuse of tofu within the WIC food package at the Takoma Park WIC clinic in Maryland, revealing a significant gap in awareness, cultural familiarity, and staff communication. Despite tofu being a nutritious, plant-based protein offered through WIC, the majority of participants were unaware of its availability, unsure how to cook it, or had not received information from staff. These findings show both cultural and systemic barriers that keep participants from incorporating tofu into their diets.

By addressing these barriers through culturally tailored education, multilingual outreach, staff training, and flexible food package options, WIC can promote more inclusive nutrition strategies that support health equity. The proposed interventions, such as virtual and in-person tofu education, recipe handouts, and cooking demonstrations, offer practical steps toward empowering participants to explore unfamiliar but healthful foods. A phased implementation plan and measurable KPIs further ensure that progress can be tracked and refined over time.

In the end, this proposal reflects WIC's broader mission to ensure equitable access to nutrition education and healthy foods for all families. Promoting awareness and acceptance of tofu not only supports plant-based eating patterns and improved dietary outcomes but also reinforces WIC's commitment to meeting the diverse needs of its participants. More research, program growth, and continuous tofu education could lead the way in integrating cultural nutrition into public health programs across the nation.

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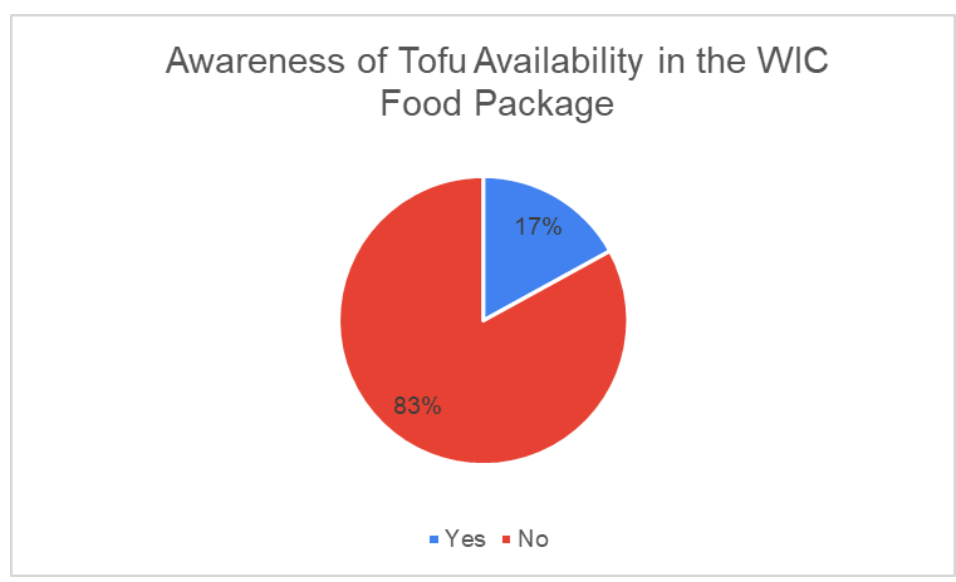
This paper was supported by ChatGPT (OpenAI, 2023) for grammar corrections, sentence structure adjustments, and clarity improvements. No original content or ideas were generated using AI.

Appendices

Appendix A

Awareness of Tofu Availability in the WIC Food Package

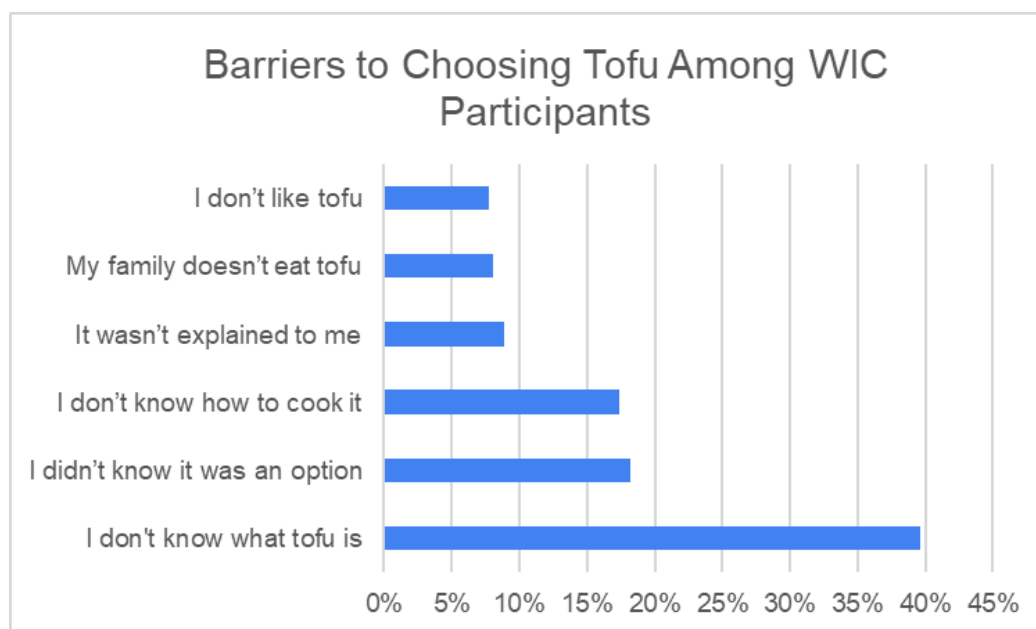
This appendix presents the survey results regarding participant awareness of tofu availability in the WIC food package. The data was collected from respondents at the Takoma Park WIC clinic in Maryland, US and highlights the percentage of participants who were aware or unaware that tofu was included as an option. This information supports the finding that limited communication about food package contents may contribute to low tofu selection rates.



Appendix B

Barriers to Choosing Tofu Among WIC Participants

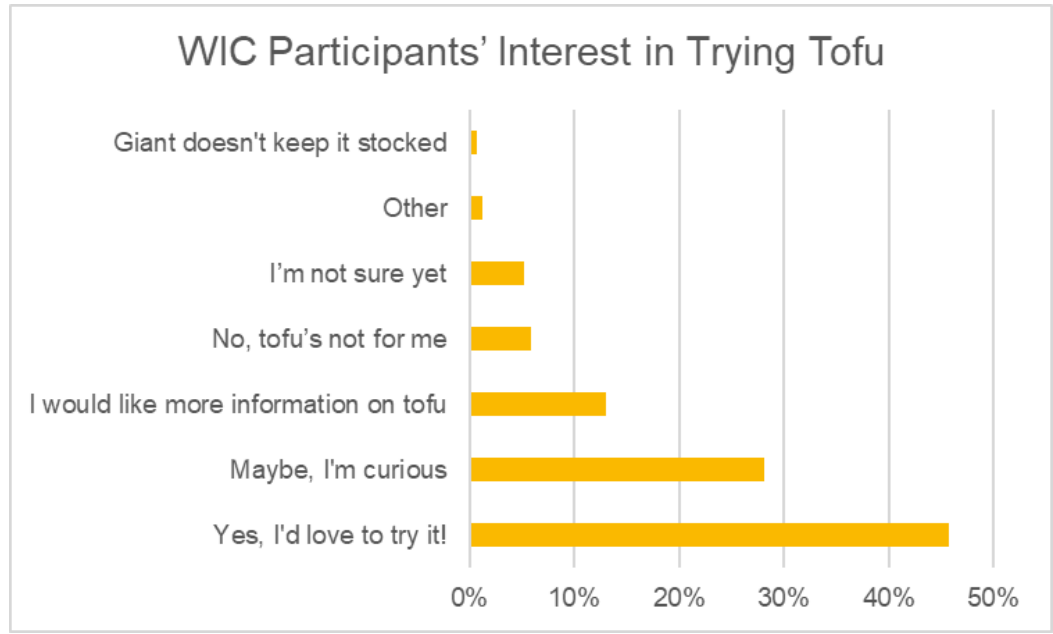
This appendix presents survey data that highlights the barriers reported by WIC participants at the Takoma Park clinic for not choosing tofu in their food packages. The figure summarizes key reasons, including unfamiliarity with tofu, lack of knowledge about how to prepare it, unawareness of its availability through WIC, personal dislike of tofu, and cultural or family-based food preferences. These findings emphasize the importance of addressing these barriers that must be addressed through targeted education and outreach.



Appendix C

WIC Participants' Interest in Trying Tofu

This appendix presents survey data depicting the level of interest among WIC participants at the Takoma Park clinic in trying tofu. The figure displays responses from strong interest and curiosity to requests for more information, as well as those who were unsure or uninterested. These results suggest that many participants are open to exploring tofu as a food option, emphasizing the demand for culturally appropriate education and hands-on support.



Appendix D

Multilingual Survey Tool Screenshots

The following images are screenshots of the Google Form used to collect survey responses from WIC participants at Takoma Park in MD, US. The form was translated into multiple languages to ensure accessibility, including English, Spanish, Amharic, Haitian Creole, French, Dari, and Pashto. This screenshot shows the English version of the Google Form distributed to WIC participants during the awareness survey conducted from May 8 to June 8, 2025. The form includes 12 questions covering tofu familiarity, usage, and cultural preferences.

Figure D1. English version of the tofu awareness survey tool

WIC Tofu Awareness Survey

This survey is voluntary and anonymous. It is part of a research project on tofu awareness among WIC participants and staff. Your responses will remain confidential and will be used only for academic and public health research purposes. You will not lose any benefits or services by choosing not to answer.

1. Q1. Do you know what tofu is?

Mark only one oval.

- Yes
 No
 I've heard of it, but I'm not sure

2. Q2. Have you ever tried tofu before?

Mark only one oval.

- Yes
 No

3. Q3. Did you know that tofu is available in your food package at WIC?

Mark only one oval.

- Yes
 No

4. Q4. Have you ever chosen tofu using WIC benefit?

Mark only one oval.

Yes

No

5. Q5. (If no to Q4) Why haven't you chosen tofu? (Check all that apply)

Check all that apply.

- I don't know what tofu is
 I didn't know it was an option
 I don't know how to cook it
 I don't like tofu
 It wasn't explained to me
 My family doesn't eat tofu

6. Q6. Do you know tofu is made out of soy (a type of bean) ?

Mark only one oval.

Yes

No

7. Did you know tofu has a texture similar to egg whites in a hard boiled egg?

Mark only one oval.

Yes

No

8. Q8. Did you know tofu is a protein-rich food?

Mark only one oval.

- Yes
- No
- I don't know what protein is

9. Q9. Would you try tofu through WIC now that you know what it's like?

Mark only one oval.

- Yes, I'd love to try it!
- Maybe, I'm curious.
- I would like more information on tofu
- I'm not sure yet.
- No, tofu's not for me.
- Other: _____

10. Q10. Which gender are you?

Mark only one oval.

- Female
- Male
- I do not want to answer
- Other: _____

11. Q11. What is your age group?

Mark only one oval.

- Under 18
- 18-24
- 25-34
- 35-44
- 45-54
- 55 and older

12. Q12. What is your race or ethnicity? (Check all that apply)

Check all that apply.

- Hispanic or Latino
- White
- Black or African American
- Native American or Alaska Native
- Asian
- Middle Eastern or North African

Figure D2. Spanish version of the tofu awareness survey tool

Encuesta de Concientización sobre el Tofu en WIC

Esta encuesta es voluntaria y anónima. Forma parte de un proyecto de investigación sobre el conocimiento del tofu entre los participantes y el personal de WIC. Sus respuestas serán confidenciales y se utilizarán únicamente para fines académicos y de investigación en salud pública. No perderá ningún beneficio o servicio si decide no responder.

1. P1. ¿Sabe qué es el tofu?

Mark only one oval.

- Sí
- No
- He oído hablar de él, pero no estoy seguro/a

2. P2. ¿Ha probado el tofu alguna vez?

Mark only one oval.

- Sí
- No

3. P3. ¿Sabía que el tofu está disponible en su paquete de alimentos de WIC?

Mark only one oval.

- Sí
- No

4. P4. ¿Alguna vez ha elegido tofu usando su beneficio de WIC?

Mark only one oval.

Sí

No

5. P5. (Si respondió "No" en la P4) ¿Por qué no ha elegido tofu? (Marque todas las que correspondan)

Check all that apply.

No sabía qué es el tofu

No sabía que era una opción

No sé cómo cocinarlo

No me gusta el tofu

No me lo explicaron

Mi familia no come tofu

6. P6. ¿Sabe que el tofu está hecho de soya (un tipo de frijol)?

Mark only one oval.

Sí

No

7. P7. ¿Sabía que el tofu tiene una textura parecida a la clara de un huevo duro?

Mark only one oval.

Sí

No

8. P8. ¿Sabía que el tofu es un alimento rico en proteínas?

Mark only one oval.

- Sí
- No
- No sé qué es la proteína

9. P9. ¿Le gustaría probar el tofu a través de WIC ahora que sabe cómo es?

Mark only one oval.

- ¡Sí, me encantaría probarlo!
- Tal vez, tengo curiosidad.
- No estoy seguro/a todavía.
- No, el tofu no es para mí.
- Otro...

10. P10. ¿Cuál es su género?

Mark only one oval.

- Mujer
- Hombre
- Prefiero no responder
- Otro...

11. P11. ¿Cuál es su grupo de edad?

Mark only one oval.

- Menor de 18 años
- 18-24 años
- 25-34 años
- 35-44 años
- 45-54 años
- 55 años o más

12. P12. ¿Cuál es su raza o etnicidad? (Marque todas las que correspondan)

Check all that apply.

- Hispano o Latino
- Blanco
- Negro o Afroamericano
- Nativo Americano o Nativo de Alaska
- Asiático
- Medio Oriente o Norte de África

Figure D3. Haitian Creole version of the tofu awareness survey tool

Sondaj Konsènan Konesans Tofu nan WIC

Sondaj sa a se volontè epi li anonim. Li se yon pati nan yon pwojè rechèch sou nivo konesans moun genyen sou tofu pami patisipan ak anplwaye WIC yo. Repons ou yo ap rete konfidansyèl epi yo pral itilize sèlman pou rechèch akademik ak sante piblik. Ou p ap pèdi okenn benefis oswa sèvis si ou chwazi pa reponn.

1. **Q1. Èske ou konnen sa tofu ye?**

Mark only one oval.

- Wi
- Non
- Mwen tande pale de li, men mwen pa fin sèten

2. **Q2. Èske ou te janm manje tofu anvan?**

Mark only one oval.

- Wi
- Non

3. **Q3. Èske ou te konnen tofu disponib nan pake manje WIC ou a?**

Mark only one oval.

- Wi
- Non

4. **Q4. Èske ou te janm chwazi tofu ak benefis WIC ou a?**

Mark only one oval.

- Wi
 Non

5. **Q5. (Si ou reponn non nan Q4) Poukisa ou pa janm chwazi tofu? (Tcheke tout sa ki aplike)**

Mark only one oval.

- Mwen pa konnen sa tofu ye
 Mwen pa t konnen li se yon opsyon
 Mwen pa konnen kijan pou mwen kwit li
 Mwen pa renmen tofu
 Yo pa t esplike li ban mwen
 Fanmi mwen pa manje tofu

6. **Q6. Èske ou konnen tofu fèt ak soya (yon kalite pwa)?**

Mark only one oval.

- Wi
 Non

7. **Q7. Èske ou te konnen tofu gen yon teksti ki sanble ak blan ze ki bouyi?**

Mark only one oval.

- Wi
 Non

8. **Q8. Èske ou te konnen tofu se yon manje ki rich an pwoteyin?**

Mark only one oval.

- Wi
- Non
- Mwen pa konnen sa pwoteyin ye

9. **Q9. Èske ou ta eseye tofu atravè WIC kounye a ou konnen ki sa li ye?**

Mark only one oval.

- Wi, mwen ta renmen eseye li!
- Petèt, mwen kirye.
- Mwen ta renmen plis enfòmasyon sou tofu
- Mwen poko sèten.
- Non, tofu pa pou mwen.
- Lòt...

10. **Q10. Ki sèks ou?**

Mark only one oval.

- Fi
- Gason
- Mwen pa vle reponn
- Lòt...

11. **Q11. Ki kategori laj ou ye?**

Mark only one oval.

- Mwen poko gen 18 an
- 18–24
- 25–34
- 35–44
- 45–54
- 55 an oswa plis

12. **Q12. Ki ras oswa etnisite ou? (Tcheke tout sa ki aplike)**

Mark only one oval.

- Ispanyòl oswa Latin
- Blan
- Nwa oswa Afriken Ameriken
- Endyen Natif Natal oswa Endyen Alaska
- Azyatik
- Mwayen Oryan oswa Afriken Dinò

Figure D4. Dari version of the tofu awareness survey tool

نظرسنجی آگاهی از توفو در WIC

این نظرسنجی داوطلبانه و ناشناس است. این بخشی از یک پروژه تحقیقاتی در مورد آگاهی از توفو در میان شرکت‌کنندگان و کارکنان WIC است. پاسخ‌های شما محرمانه باقی می‌مانند و فقط برای اهداف تحقیقاتی علمی و بهداشت عمومی استفاده خواهند شد. با انتخاب نکردن پاسخ، هیچ‌گونه مزایا یا خدماتی را از دست نخواهید داد.

1. آیا می‌دانید توفو چیست؟ Q1.

Mark only one oval.

- بله
- خیر
- شنیده‌ام، اما مطمئن نیستم

2. آیا تا به حال توفو را امتحان کرده‌اید؟ Q2.

Mark only one oval.

- بله
- خیر

3. شما موجود است؟ WIC آیا می‌دانستید که توفو در بسته غذایی Q3.

Mark only one oval.

- بله
- خیر

4. **Q4.** انتخاب کرده‌اید؟ WIC آیا تا به حال توفو را با استفاده از مزایای

Mark only one oval.

- بله
 خیر

5. **Q5.** چرا توفو را انتخاب نکرده‌اید؟ (همه مواردی که اعمال می‌شود را انتخاب کنید) (خیر است Q4 اگر پاسخ)

Mark only one oval.

- نمی‌دانم توفو چیست
 نمی‌دانستم که یک گزینه است
 نمی‌دانم چگونه آن را بپزم
 توفو را دوست ندارم
 برایم توضیح داده نشده است
 خانواده‌ام توفو نمی‌خورند

6. **Q6.** آیا می‌دانید توفو از سویا (نوعی لوبیا) ساخته شده است؟

Mark only one oval.

- بله
 خیر

7. **Q7.** آیا می‌دانید که توفو بافتی شبیه به سفیده تخم‌مرغ پخته شده دارد؟

Mark only one oval.

- بله
 خیر

8. Q8. آیا می‌دانید که توفو یک منبع غنی از پروتئین است؟

Mark only one oval.

- بله
- خیر
- نمی‌دانم پروتئین چیست

9. Q9. امتحان کنید؟ WIC حالا که با توفو آشنا شده‌اید، آیا مایل هستید آن را با استفاده از مزایای

Mark only one oval.

- ابله، خیلی دوست دارم امتحان کنم
- شاید، کنجکاو هستم
- می‌لیم اطلاعات بیشتری در مورد توفو داشته باشم
- مطمئن نیستم
- نه، توفو برای من مناسب نیست
- ...سلیز

10. Q10. جنسیت شما چیست؟

Mark only one oval.

- زن
- مرد
- نمی‌خواهم پاسخ بدهم
- ...سلیز

11. Q11. گروه سنی شما چیست؟

Mark only one oval.

- کمتر از ۱۸ سال
- ۱۸-۲۴ سال
- ۲۵-۳۴ سال
- ۳۵-۴۴ سال
- ۴۵-۵۴ سال
- ۵۵ و بالاتر

12. Q12. نژاد یا قومیت شما چیست؟ (تمام گزینه‌های مناسب را انتخاب کنید)

Mark only one oval.

- اسپانیایی‌تبار یا لاتین
- سفیدپوست
- سیاه‌پوست یا آفریقایی‌آمریکایی
- بومی آمریکا یا بومی آلاسکا
- آسیایی
- اهل خاورمیانه یا شمال آفریقا

Figure D5. French version of the tofu awareness survey tool

Enquête sur la Connaissance du Tofu chez WIC

Cette enquête est volontaire et anonyme. Elle fait partie d'un projet de recherche sur la connaissance du tofu parmi les participants et le personnel de WIC. Vos réponses resteront confidentielles et seront utilisées uniquement à des fins académiques et de recherche en santé publique. Vous ne perdrez aucun avantage ou service en choisissant de ne pas répondre.

1. Q1. Savez-vous ce qu'est le tofu ?

Mark only one oval.

- Oui
 Non
 J'en ai entendu parler, mais je ne suis pas sûr(e)

2. Q2. Avez-vous déjà goûté du tofu ?

Mark only one oval.

- Oui
 Non

3. Q3. Saviez-vous que le tofu est disponible dans votre panier alimentaire WIC ?

Mark only one oval.

- Oui
 Non

4. Q4. Avez-vous déjà choisi du tofu en utilisant vos avantages WIC ?

Mark only one oval.

- Oui
 Non

5. Q5. (Si "Non" à la Q4) Pourquoi n'avez-vous pas choisi le tofu ? (Cochez toutes les réponses qui s'appliquent)

Check all that apply.

- Je ne savais pas ce qu'était le tofu
 Je ne savais pas que c'était une option
 Je ne sais pas comment le cuisiner
 Je n'aime pas le tofu
 On ne me l'a pas expliqué
 Ma famille ne mange pas de tofu

6. Q6. Savez-vous que le tofu est fabriqué à partir de soja (un type de haricot) ?

Mark only one oval.

- Oui
 Non

7. Q7. Saviez-vous que le tofu a une texture un peu comme le blanc d'un œuf dur ?

Mark only one oval.

- Oui
 Non

8. Q8. Saviez-vous que le tofu est un aliment riche en protéines ?

Mark only one oval.

- Oui
- Non
- Je ne sais pas ce qu'est une protéine

9. Q9. Souhaiteriez-vous essayer le tofu via WIC maintenant que vous savez à quoi il ressemble ?

Mark only one oval.

- Oui, j'adorerais essayer !
- Peut-être, je suis curieux/curieuse.
- Je ne suis pas encore sûr(e).
- Non, le tofu n'est pas pour moi.
- Autre...

10. Q10. Quel est votre genre ?

Mark only one oval.

- Femme
- Homme
- Je préfère ne pas répondre
- Autre...

11. Q11. Quel est votre groupe d'âge ?

Mark only one oval.

- Moins de 18 ans
- 18-24 ans
- 25-34 ans
- 35-44 ans
- 45-54 ans
- 55 ans et plus

12. Q12. Quelle est votre race ou ethnité ? (Cochez toutes les réponses qui s'appliquent)

Check all that apply.

- Hispanique ou Latino
- Blanc(he)
- Noir(e) ou Afro-Américain(e)
- Amérindien(ne) ou Autochtone de l'Alaska
- Asiatique
- Moyen-Oriental(e) ou Nord-Africain(e)

Figure D6. Pashto version of the tofu awareness survey tool

د WIC د توفو پوهاوي سروی

دا سروی داوطلبانه او بی نومه ده. دا د WIC گونوالو او کارکوونکو ترمنځ د توفو پوهاوي په اړه د یوه څېړنیز پروژې برخه ده. ستاسو ځوابونه به محرم پتی شي او یوازې د علمي او علمي روغتیا څېړنو لپاره به وکارول شي. که تاسو پرېکړه وکړئ چې ځواب ورکړئ، تاسو به له هېڅ کټي یا خدمت څخه محروم نه شئ.

1. پروگرام برخه یاست؟ WIC آیا تاسو د 1.

Mark only one oval.

- هو
- نه
- اورېدلي می دي، خو داده نه یم

2. آیا تاسو کله هم توفو خوړلی دی؟ 2.

Mark only one oval.

- هو
- نه

3. د خوړو په بڼه کې شامل دی؟ WIC آیا تاسو پوهیږئ چې توفو ستاسو د 3.

Mark only one oval.

- هو
- نه

4. 4. له گټې څخه په استفادې سره توفو اخیستی دی؟ WIC آیا تاسو کله هم د .

Mark only one oval.

- هو
 نه

5. 5. ولې مو توفو نه دی اخیستی؟ (ټولې مناسبې ځوابونه وټاکئ) (ځواب "نه" وي Q4 که د)

Mark only one oval.

- زه نه پوهېږم توفو څه شی دی
 زه نه پوهېږم چې دا یوه انتخاب ده
 زه نه پوهېږم چې دا څنګه پخېږي
 زه توفو نه خوښوم
 ما ته دا نه ده تشریح شوی
 زما کورنۍ توفو نه خوري

6. 6. آیا تاسو پوهېږئ چې توفو د سویابین (بو ډول لوبیا) څخه جوړ شوی دی؟

Mark only one oval.

- هو
 نه

7. 7. آیا تاسو پوهېږئ چې د توفو جوړښت د سخت پخې شوي هګۍ د سپین برخې سره ورته دی؟

Mark only one oval.

- هو
 نه

8. آیا تاسو پوهپږی چې توفو یو پروتین بډایه خواره دي؟ 8.

Mark only one oval.

- هو
- نه
- زه نه پوهېرم پروتین څه شی دی

9. له لارې وازمویئ؟ WIC اوس چې تاسو پوهپږی توفو څه بول دی، آیا غواری دا د 9.

Mark only one oval.

- !هو، زه غواړم دا وازمویم
- شلید، زه لیواله یم
- زه غواړم د توفو په اړه نور معلومات ترلاسه کړم
- زه لا هم ډاډه نه یم
- نه، توفو زما لپاره نه دی
- نور...

10. ستاسو جنسیت کوم دی؟ 10.

Mark only one oval.

- ښځه
- سړی
- زه نه غواړم ځواب ورکړم
- نور...

11. 11. ستاسو ደ ልዩ ስድስት ዓመት ድረስ? 11.

Mark only one oval.

- 18 ልዩ ድረስ
- 18-24
- 25-34
- 35-44
- 45-54
- 55 ዓመት ድረስ

12. 12. ስታሎ ስጦት ወይንም ስታሎ ስጦት ወይንም ስታሎ ስጦት? (ስታሎ ስጦት ወይንም ስታሎ ስጦት)

Mark only one oval.

- ስጦት ወይንም ስታሎ ስጦት
- ስጦት
- ስጦት ወይንም ስታሎ ስጦት
- ስጦት ወይንም ስታሎ ስጦት
- ስጦት
- ስጦት ወይንም ስታሎ ስጦት

Figure D7. Amharic version of the tofu awareness survey tool

የWIC ቶፊ እውቀት መርማሪያ

ይህ መርማሪያ በፈቃድ እና በስውር ነው። የWIC ተሳታፊዎችና ሰራተኞች መካከል ያለውን ቶፊ እውቀት ለማስረጃ የሚደረግ የምርመራ ፕሮጀክት ነው። ምላሾችዎ የተሻለ እና የህዝብ ጤና ምርምር አላማዎች ብቻ ይጠቀማሉ። መርማሪያውን አላስገቡም ብለው የWIC አገልግሎቶችን አትነሱም።

1. Q1. ቶፊ ምን እንደሆነ ታውቃላችሁ?

Mark only one oval.

- አዎ
- አይ
- ሰምቼዋለሁ፣ ነገር ግን አላረጋገጥሁም

2. Q2. ቶፊ ከዚህ በፊት በደምብ በሞከሩት ነው?

Mark only one oval.

- አዎ
- አይ

3. Q3. ቶፊ በWIC የምግብ ጥቅል ውስጥ እንደሚገኝ ታውቃላችሁ?

Mark only one oval.

- አዎ
- አይ

4. Q4. ቶፊን በWIC በኩባንያ ምርጫ አድርገው ተመርጠዋል?

Mark only one oval.

- አዎ
- አይ

5. Q5. (ከማይተረጉሙ ወደ Q4) ቶፊን ለምን አልመረጡትም? (ሁሉንም ይመርጡ)

Mark only one oval.

- ቶፊ ምን እንደሆነ አላውቅም
- እንደ አማራጭ እንደሚገኝ አላውቅም
- እንዴት እንደሚበሰል አላውቅም
- ቶፊን አልወድም
- አልተቀረበልኝም
- ቤተሰቤ ቶፊ አይበላም

6. Q6. ቶፊ ከሶይ በሆነ ተለዋዋጭ ነው ታውቃለችሁ?

Mark only one oval.

- አዎ
- አይ

7. Q7. ቶፊ እንደ የታቀደ እንቁላል ነጭ እንደሚመስል ታውቃለችሁ?

Mark only one oval.

- አዎ
- አይ

8. Q8. ቶፍ በፕሮቲን የበለፀገ ምግብ እንደሆነ ታውቃላችሁ?

Mark only one oval.

- አዎ
- አይ
- ፕሮቲን ምን እንደሆነ አላውቅም

9. Q9. አሁን ቶፍን በWIC በኩባንያ ምርጫ ማድረግ ትፈልጋላችሁ?

Mark only one oval.

- Option 1
- አዎ፣ ማሞከር እፈልጋለሁ!
- ምናልባት፣ እውዳለሁ።
- ቶፍ ስለ ምን እንደሆነ ተጨማሪ መረጃ እፈልጋለሁ
- አሁን አልተረጋገጥሁም
- አይ፣ ቶፍ ለእኔ አይሆንም
- ሌላ...

10. Q10. የታዎ ምንድነው?

Mark only one oval.

- ሴት
- ወንድ
- መልስ ማቅረብ አልፈልግም
- ሌላ...

11. Q11. የዕድሜ ክልልዎ ምንድነው?

Mark only one oval.

- ከ18 ዓመት በታች
- 18-24
- 25-34
- 35-44
- 45-54
- 55 እና ከዚያ በላይ

12. Q12. ዘር ወይም ብሔራዊነትዎ ምንድነው? (ሁሉንም ይመርጡ)

Mark only one oval.

- ሕስጋኒክ ወይም ላቲኖ
- ነጭ
- ጥቁር ወይም አፍሪካ-አሜሪካን
- የኔትቭ አሜሪካን ወይም የአላስካ ነዋሪ
- አሲያዊ
- የመካከለኛ ምዕራብ ወይም የሰሜን አፍሪካ

Appendix E

Multilingual Survey Tool Results and Visualizations

This appendix presents screenshots of selected survey results collected from WIC participants at the Takoma Park clinic. The figures include visual representations such as tables and charts summarizing responses related to tofu awareness, preferences, and cultural considerations. All data were generated directly from the multilingual Google Form and represent the combined responses of participants gathered during the survey period from May 8 to June 8, 2025. Results were collected in English, Spanish, French, and Amharic; however, no responses were submitted in the Haitian Creole or Dari versions of the survey.

Figure E1. Visual summary of English responses

WIC Tofu Awareness Survey

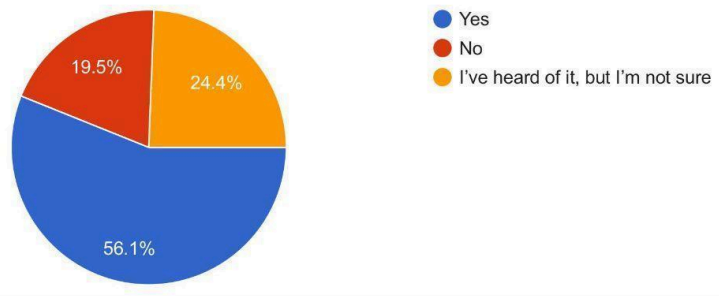
41 responses

[Publish analytics](#)

Q1. Do you know what tofu is?

 Copy

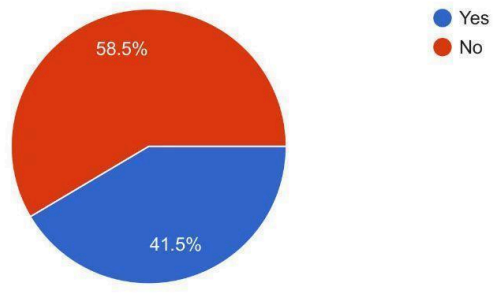
41 responses



Q2. Have you ever tried tofu before?

 Copy

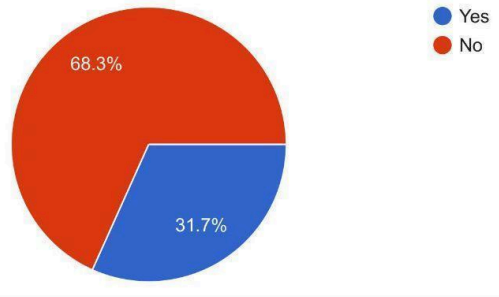
41 responses

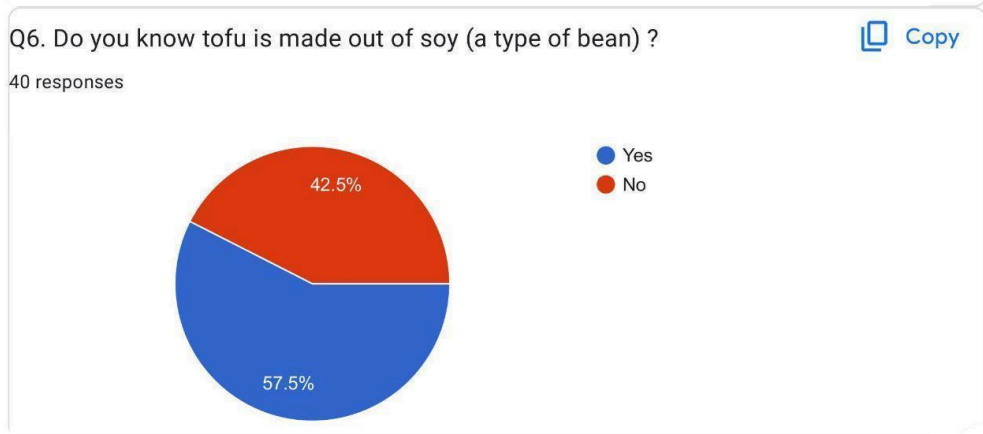
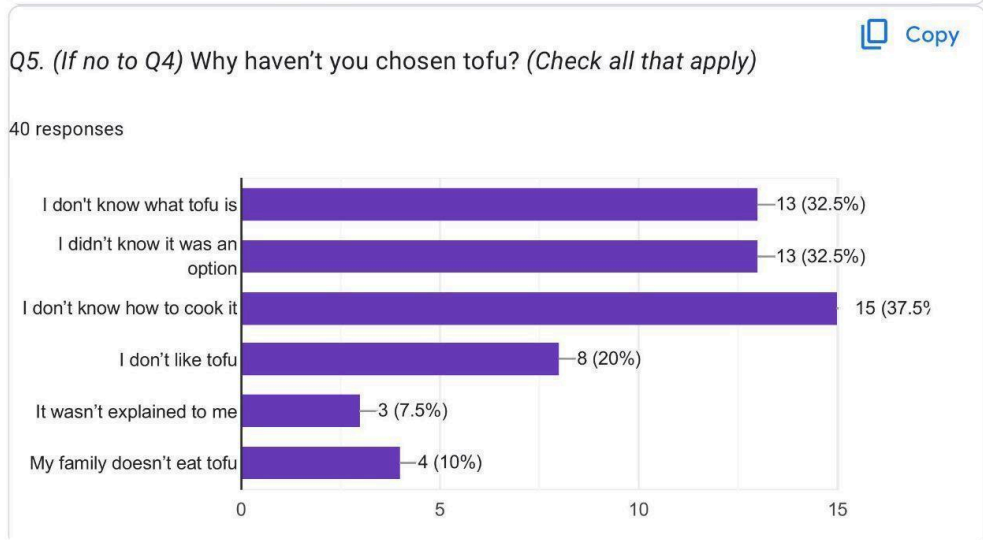
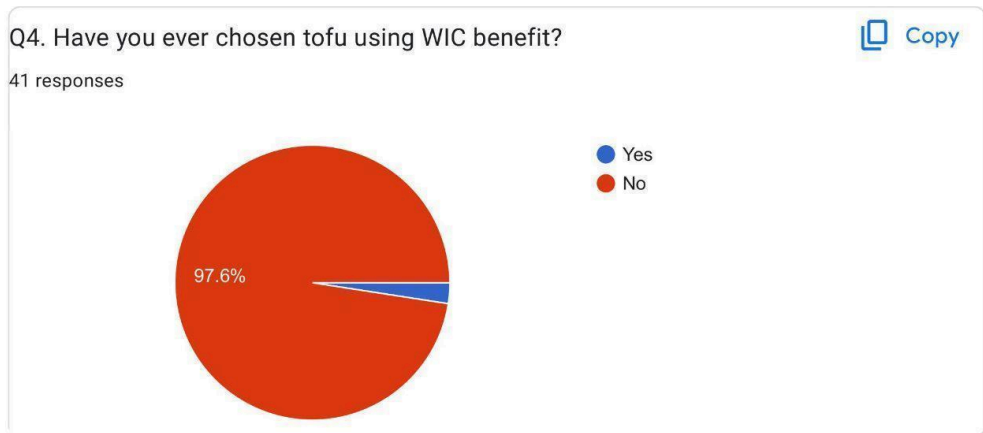


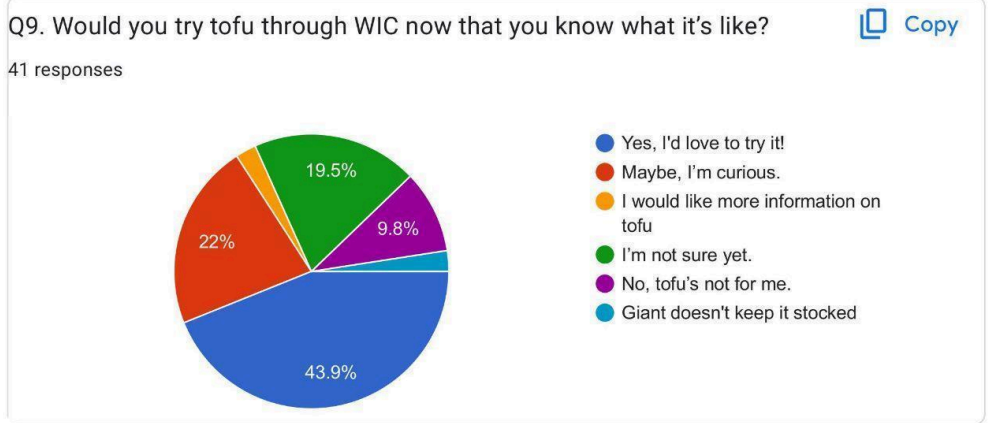
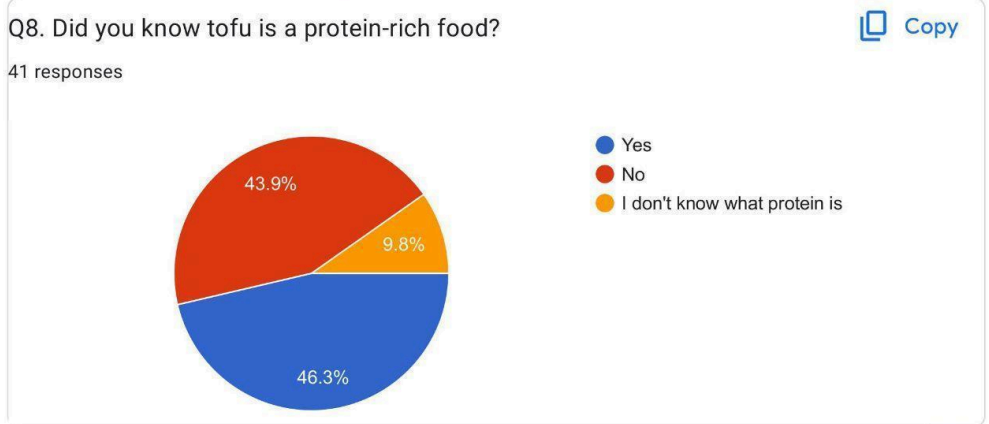
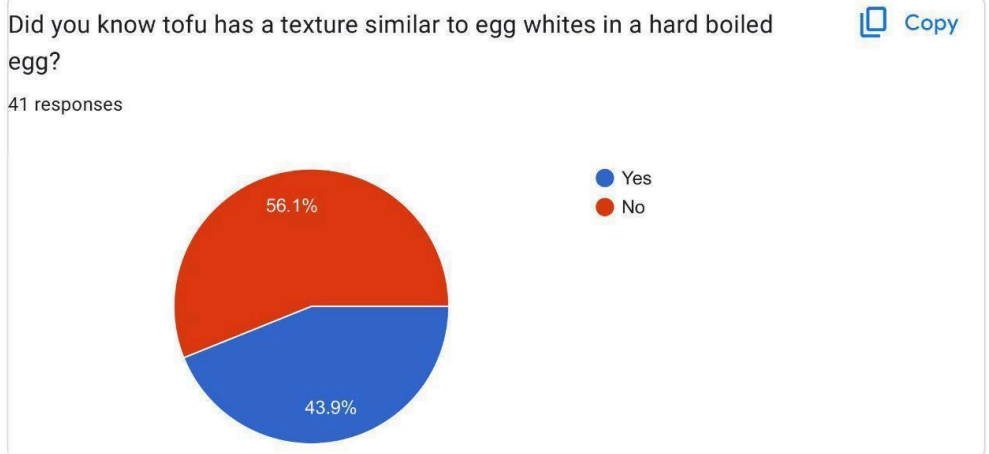
Q3. Did you know that tofu is available in your food package at WIC?

 Copy

41 responses







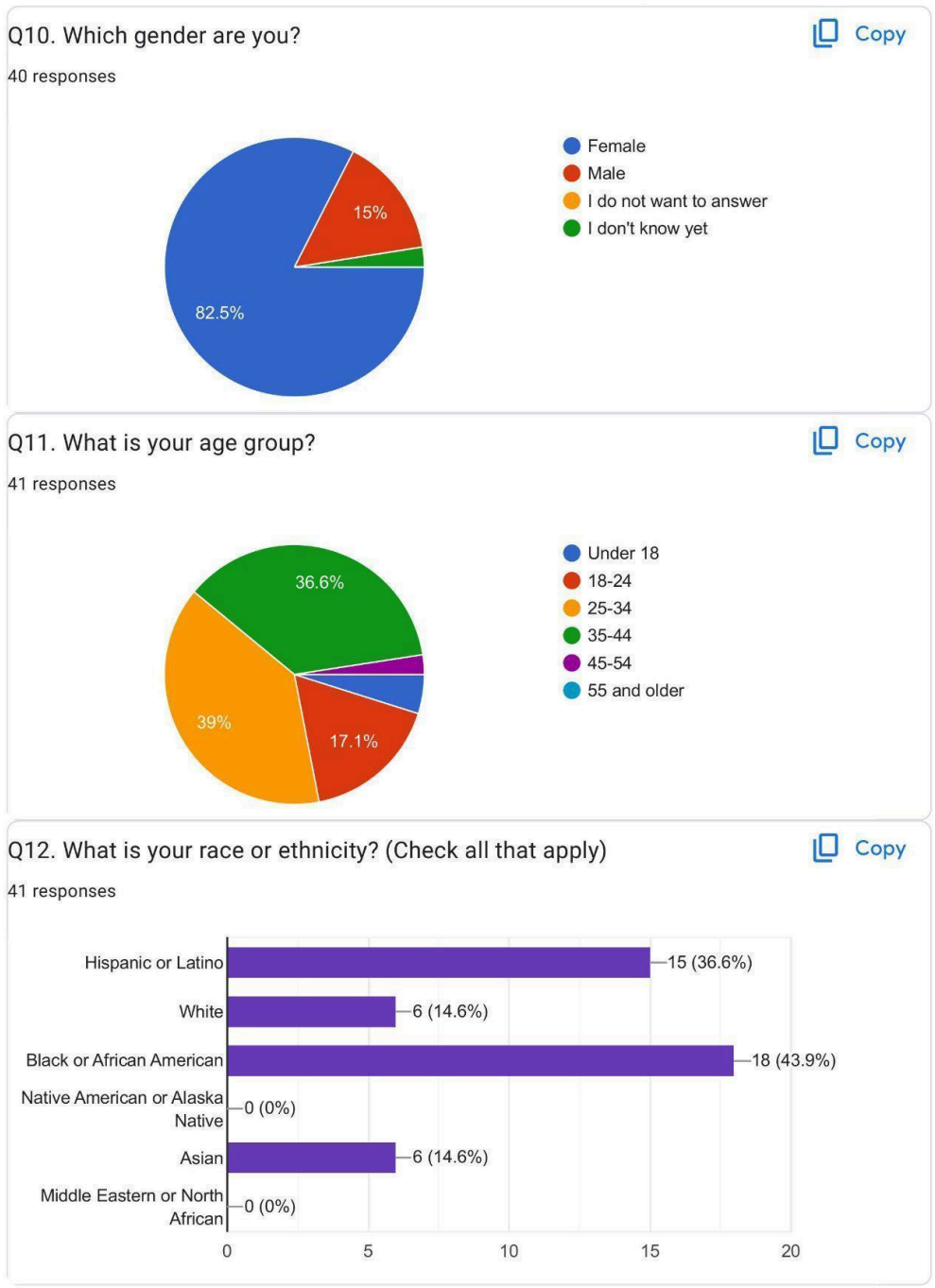


Figure E2. Visual summary of Spanish responses

Encuesta de Concientización sobre el Tofu en WIC

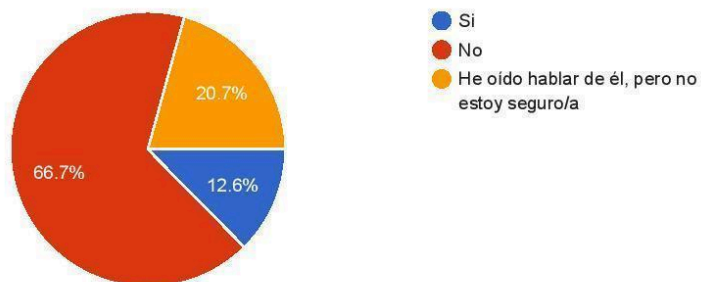
118 responses

[Publish analytics](#)

P1. ¿Sabe qué es el tofu?

 Copy

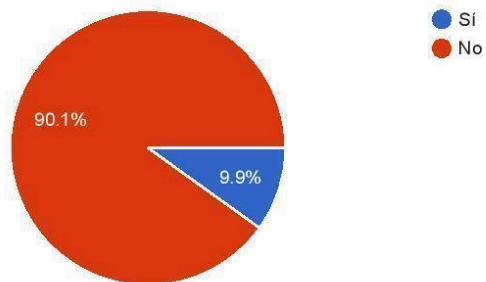
111 responses



P2. ¿Ha probado el tofu alguna vez?

 Copy

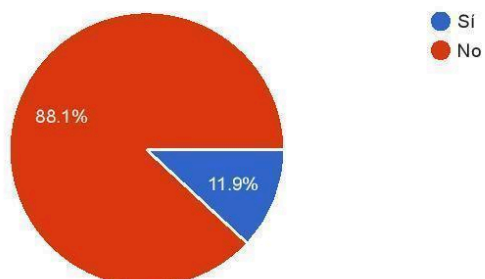
111 responses



P3. ¿Sabía que el tofu está disponible en su paquete de alimentos de WIC?



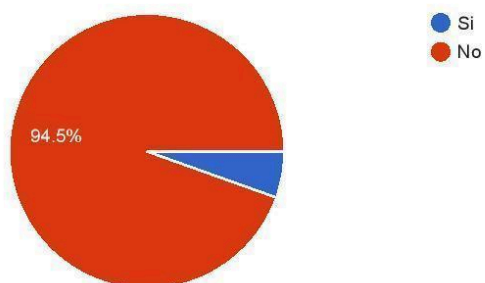
109 responses



P4. ¿Alguna vez ha elegido tofu usando su beneficio de WIC?



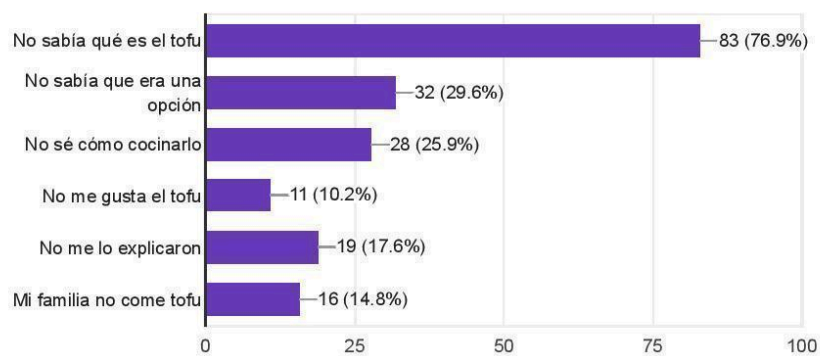
110 responses



P5. (Si respondió "No" en la P4) ¿Por qué no ha elegido tofu? (Marque todas las que correspondan)



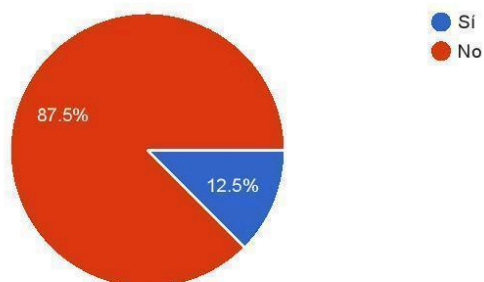
108 responses



P6. ¿Sabe que el tofu está hecho de soya (un tipo de frijol)?



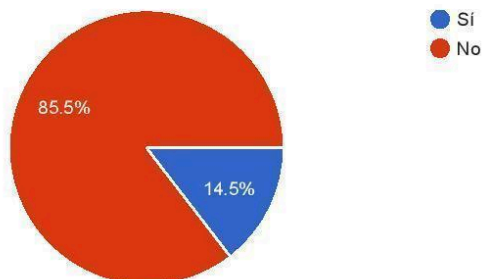
112 responses



P7. ¿Sabía que el tofu tiene una textura parecida a la clara de un huevo duro?



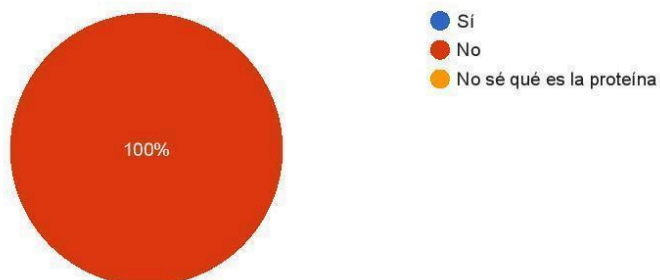
110 responses



P8. ¿Sabía que el tofu es un alimento rico en proteínas?



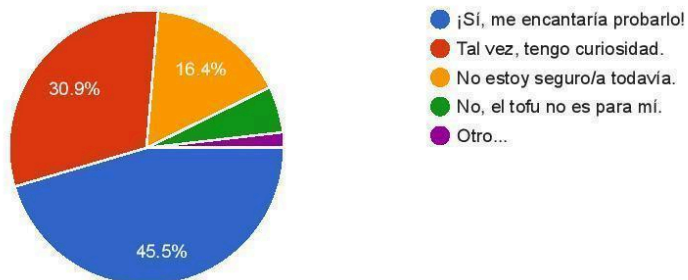
1 response



P9. ¿Le gustaría probar el tofu a través de WIC ahora que sabe cómo es?



110 responses



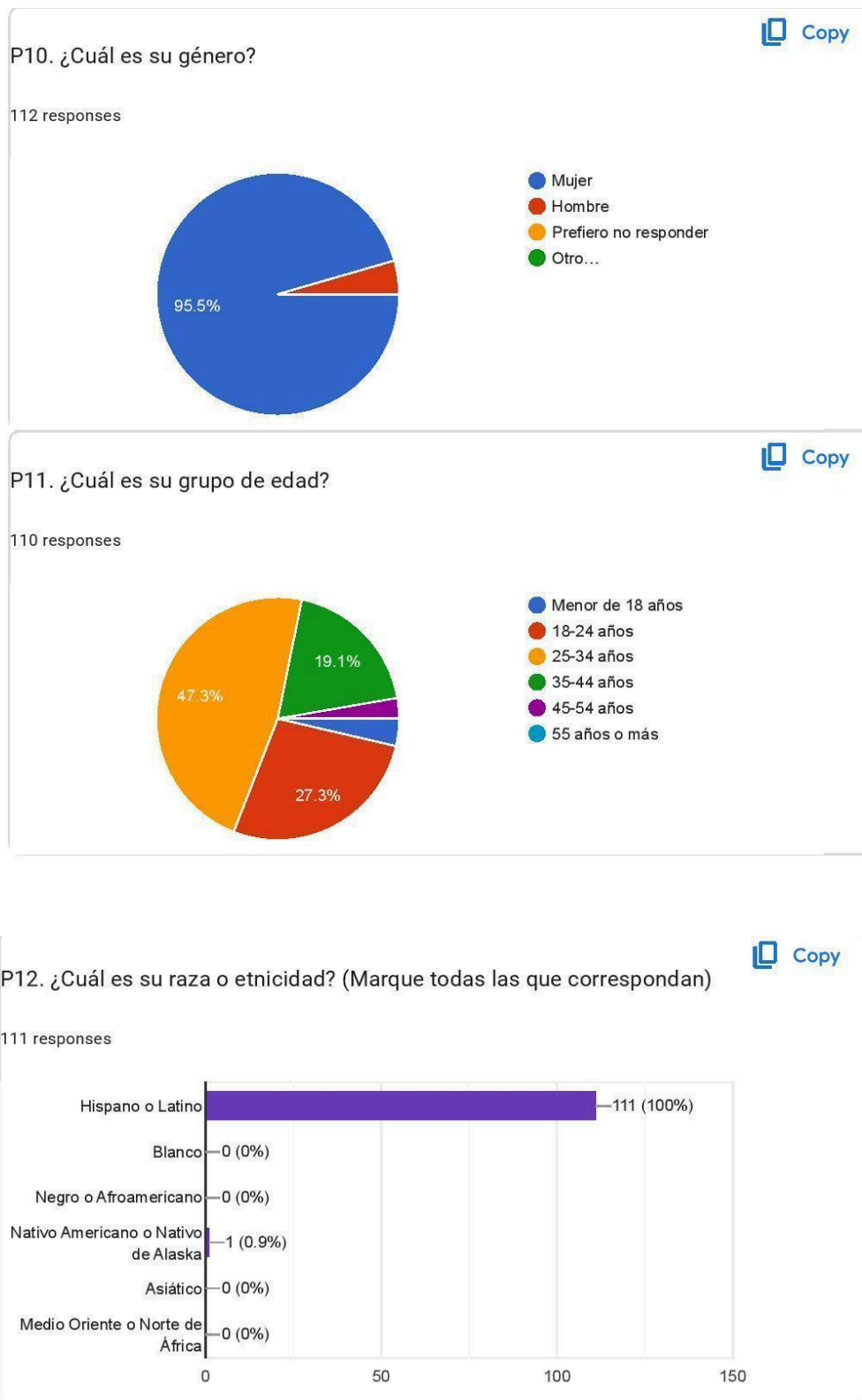


Figure E3. Visual summary of Dari responses

نظرسنجی آگاهی از توفو در WIC

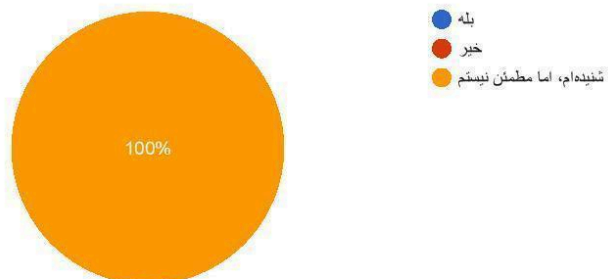
1 response

[Publish analytics](#)

 Copy

Q1. آیا می‌دانید توفو چیست؟

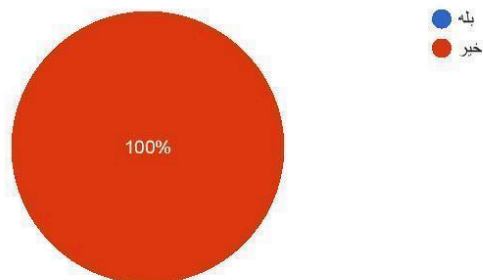
1 response



 Copy

Q2. آیا تا به حال توفو را امتحان کرده‌اید؟

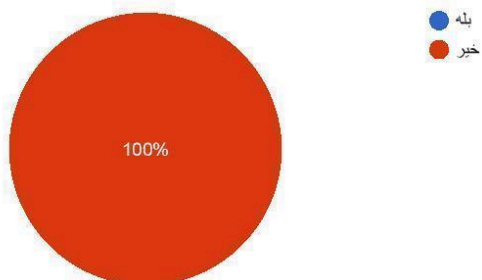
1 response



شما موجود است؟ WIC آیا می‌دانستید که توفو در بسته غذایی Q3.

Copy

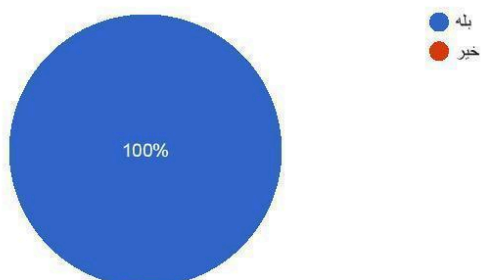
1 response



انتخاب کرده‌اید؟ WIC آیا تا به حال توفو را با استفاده از مزایای Q4.

Copy

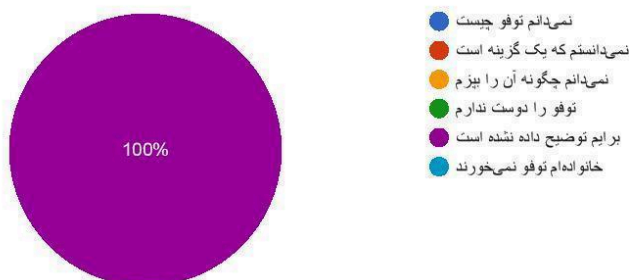
1 response

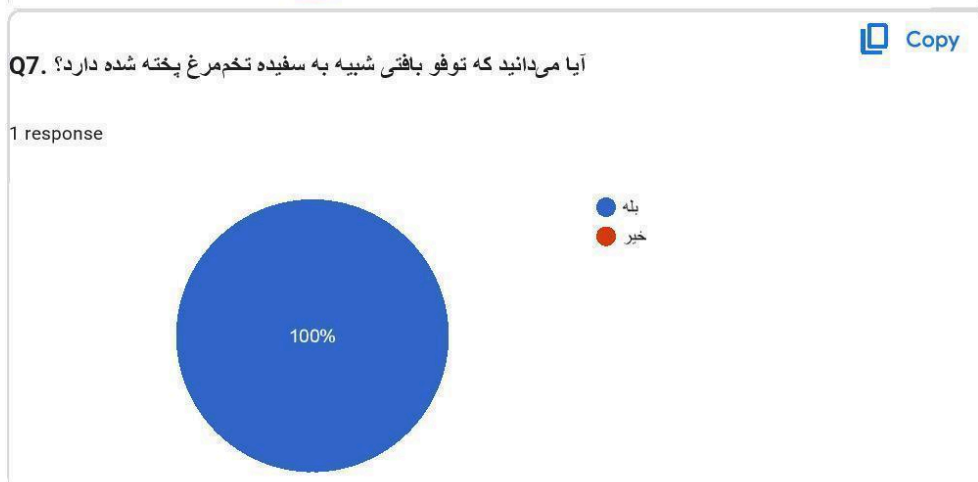
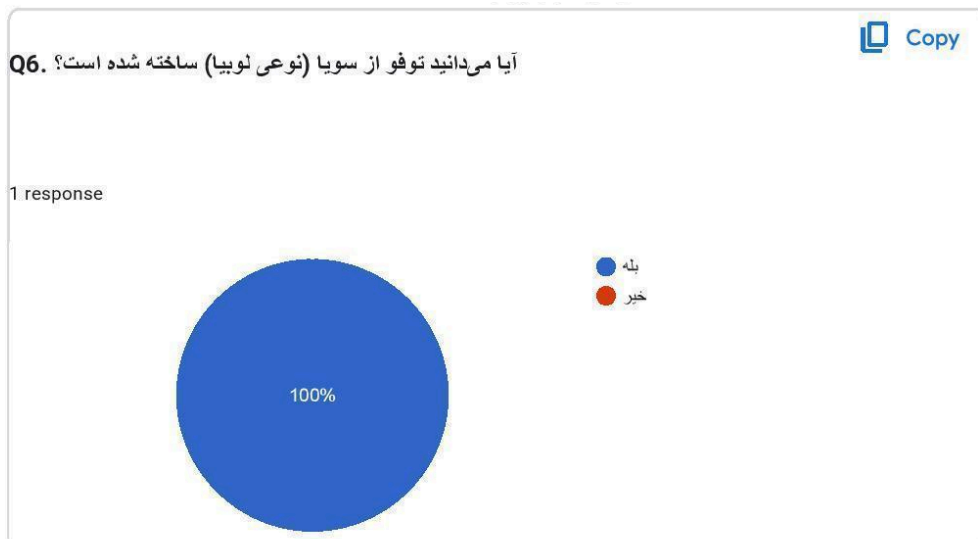


چرا توفو را انتخاب نکردید؟ (همه مواردی که اعمال می‌شود را (خیر است Q4 اگر پاسخ) انتخاب کنید) Q5.

Copy

1 response

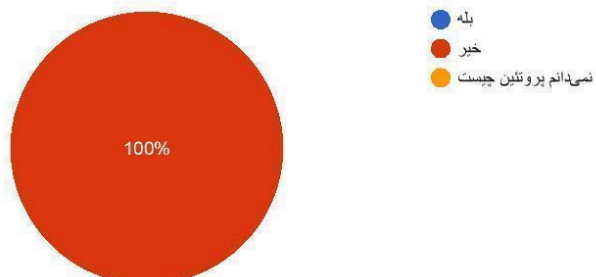




Copy

Q8. آیا می‌دانید که توفو یک منبع غنی از پروتئین است؟

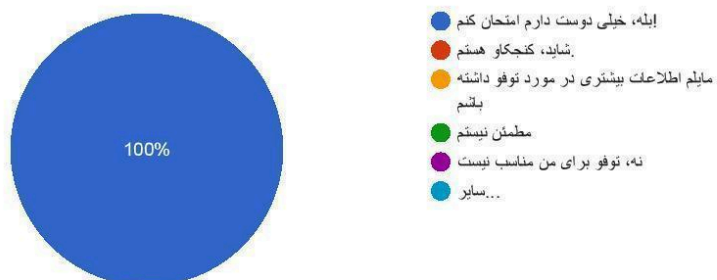
1 response



Copy

Q9. امتحان کنید؟ WIC حالا که با توفو آشنا شده‌اید، آیا مایل هستید آن را با استفاده از مزایای

1 response



Copy

Q10. جنسیت شما چیست؟

1 response



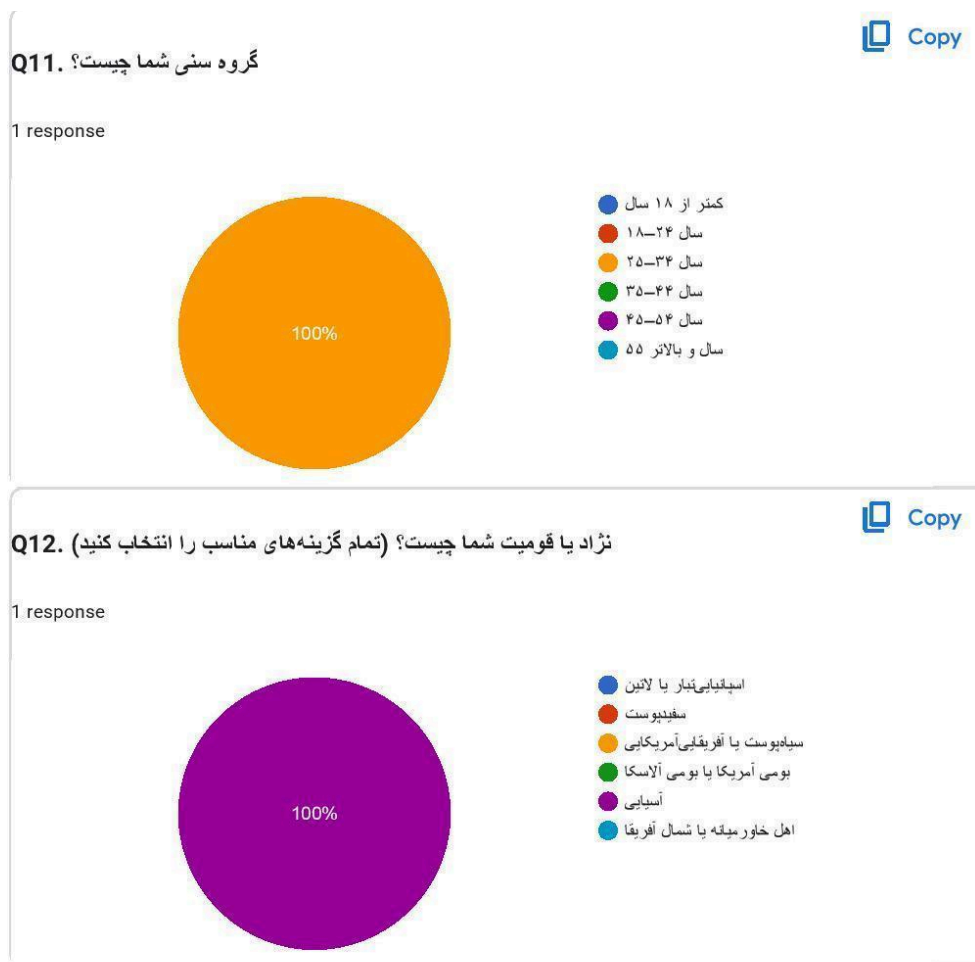


Figure E4. Visual summary of French responses

Enquête sur la Connaissance du Tofu chez WIC

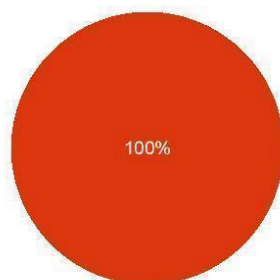
1 response

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Q1. Savez-vous ce qu'est le tofu ?

 Copy

1 response

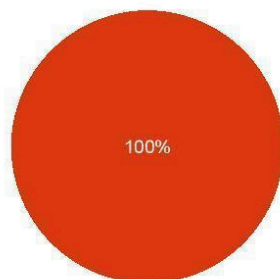


- Oui
- Non
- J'en ai entendu parler, mais je ne suis pas sûr(e)

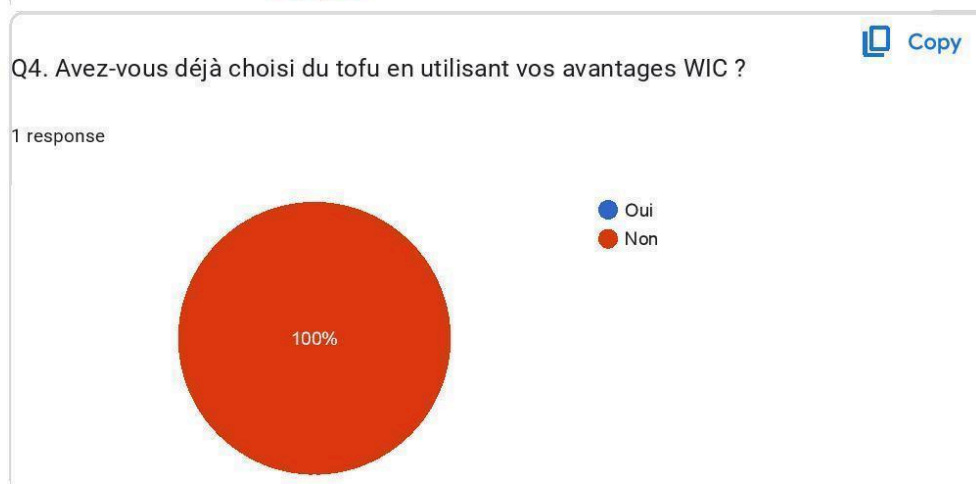
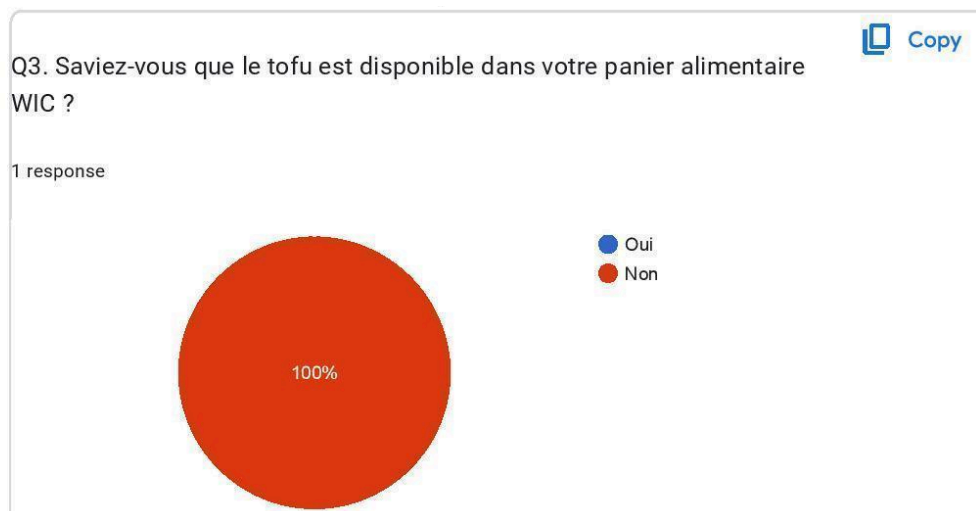
Q2. Avez-vous déjà goûté du tofu ?

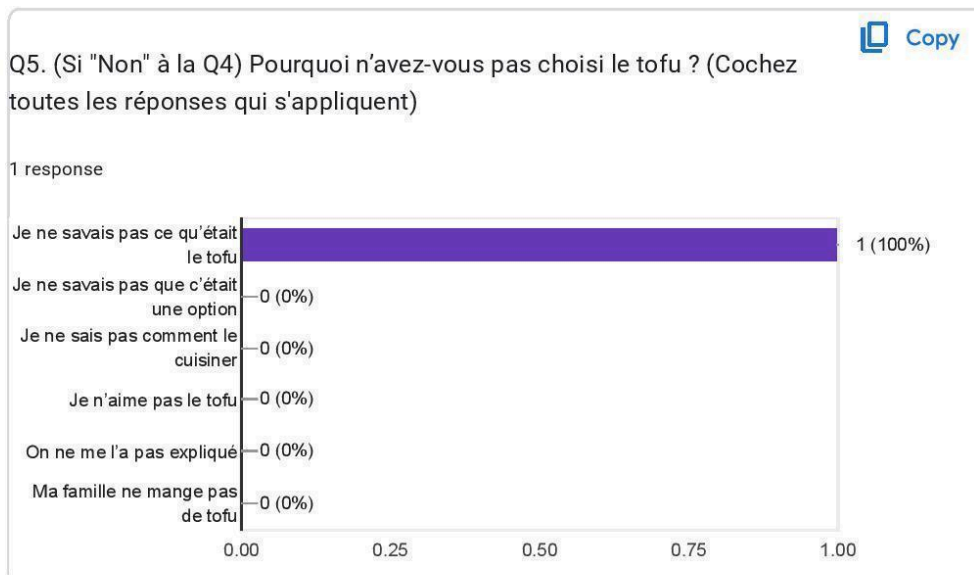
 Copy

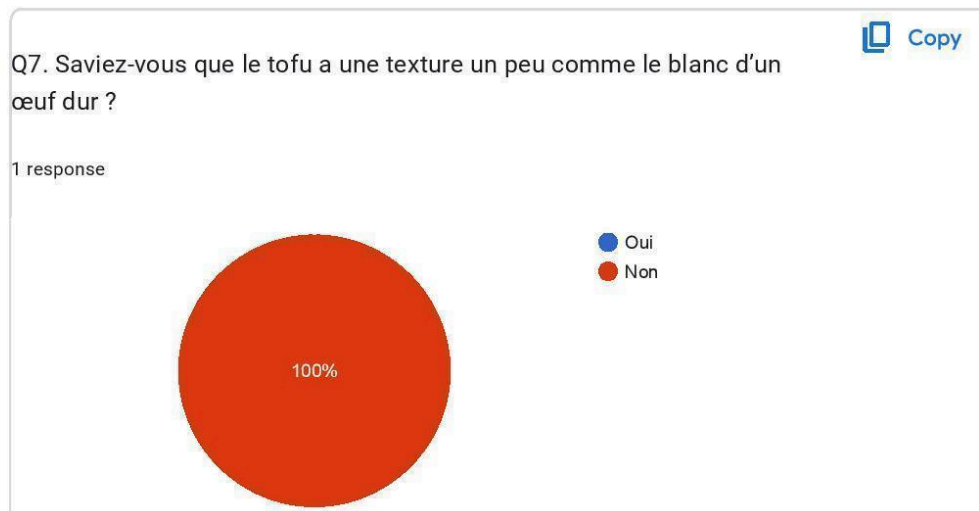
1 response

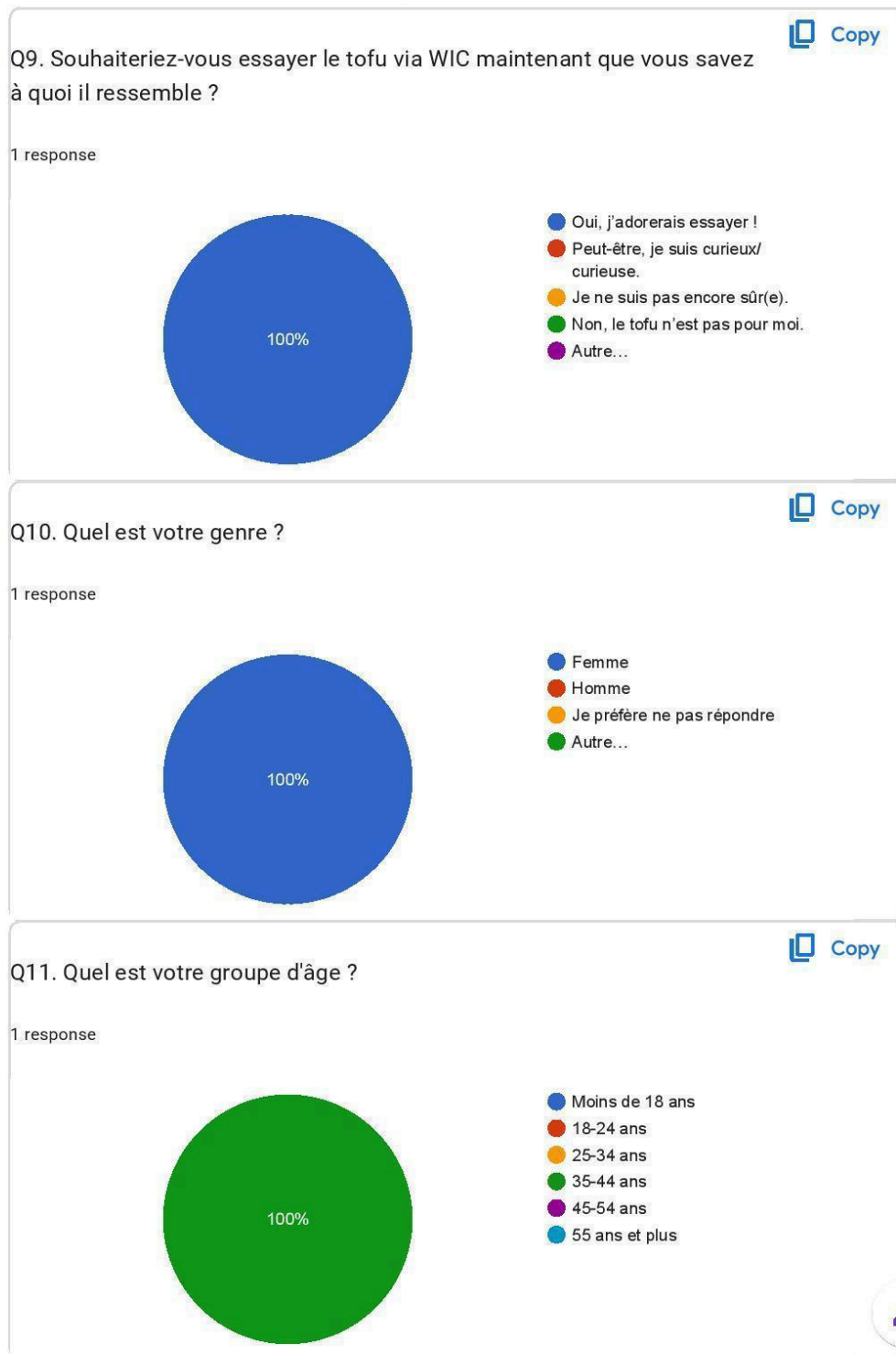


- Oui
- Non









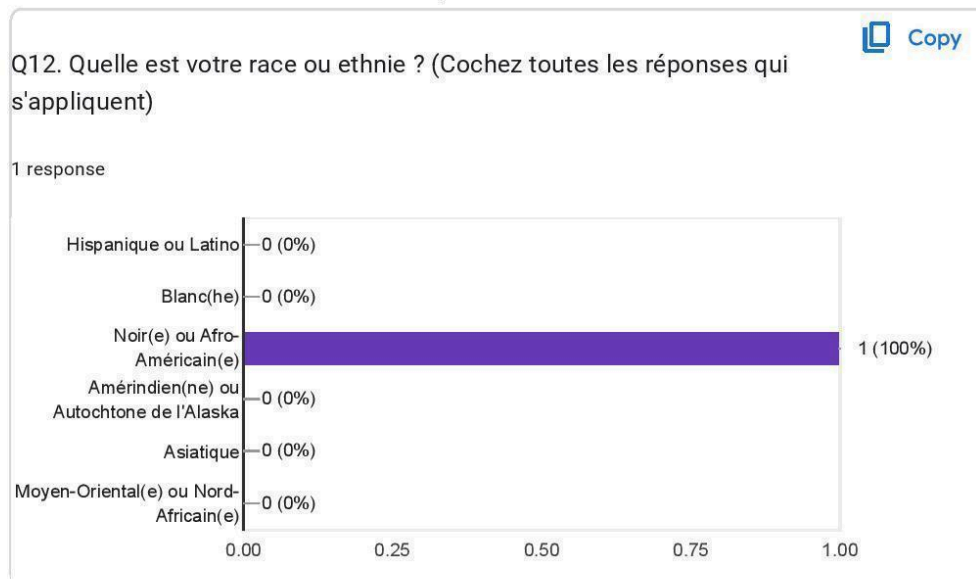


Figure E5. Visual summary of Dari responses

የWIC ቶች እውቀት መርመራ

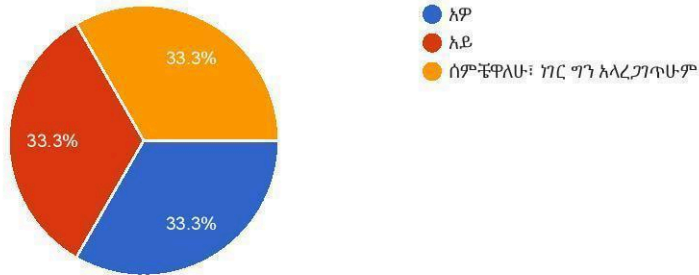
4 responses

[Publish analytics](#)

Q1. ቶች ምን እንደሆነ ታውቃለሁ?

Copy

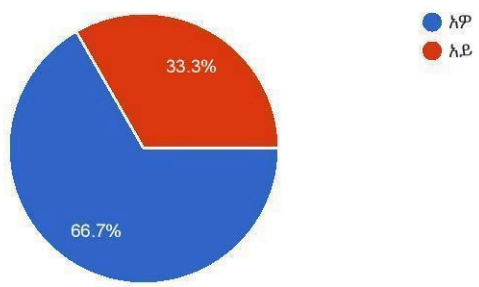
3 responses



Q2. ቶች ከዚህ በፊት በደምብ በሞከሩት ነው?

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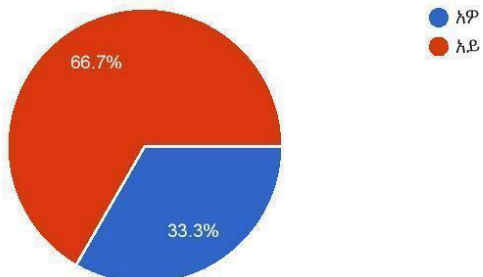
3 responses



Q3. ቶፊ በWIC የምግብ ጥቅል ውስጥ እንደሚገኝ ታውቃለችሁ?

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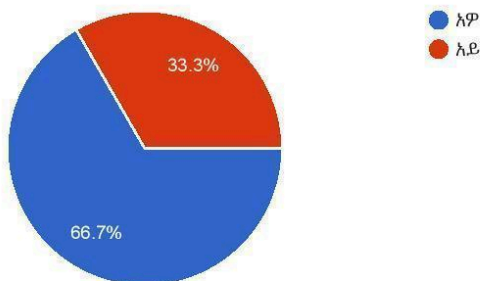
3 responses



Q4. ቶፊን በWIC በኩባንያ ምርጫ አድርገው ተመርጧል?

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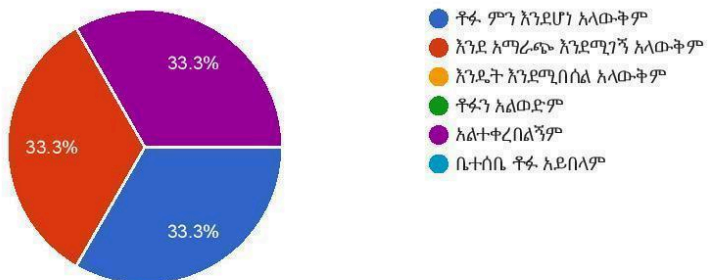
3 responses



Q5. (ከማይተረጉሙ ወደ Q4) ቶፊን ለምን አልመረጡትም? (ሁሉንም ይመርጡ)

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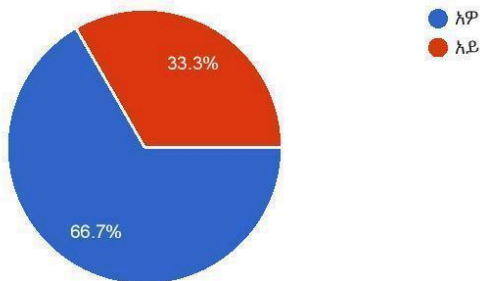
3 responses



Q6. ቶፍ ከሶይ በሆነ ተለዋዋጭ ነው ታውቃለችሁ?

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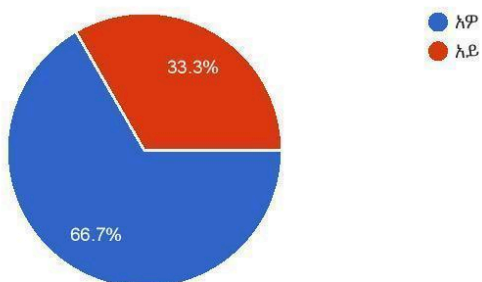
3 responses



Q7. ቶፍ እንደ የታቀደ እንቁላል ነጭ እንደሚመስል ታውቃለችሁ?

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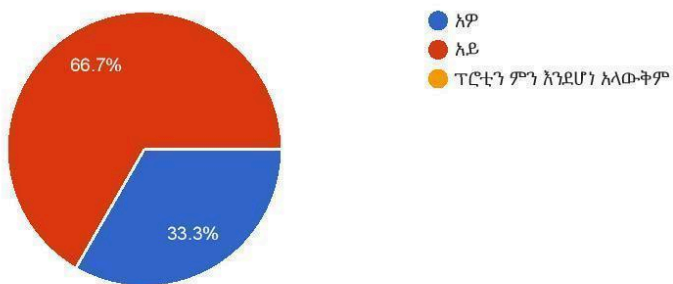
3 responses



Q8. ቶፍ በፕሮቲን የበለፀገ ምግብ እንደሆነ ታውቃለችሁ?

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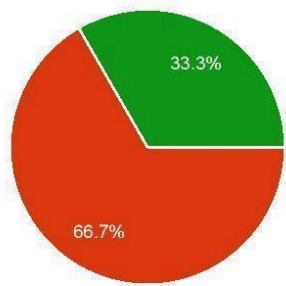
3 responses



Q9. አሁን ቶፋን በWIC በኩባንያ ምርጫ ማድረግ ትፈልጋላችሁ?

Copy

3 responses

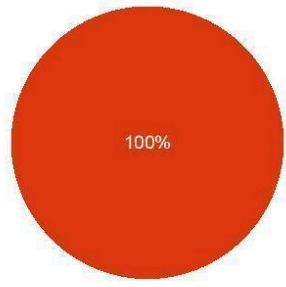


- Option 1
- አዎ፣ ማሞከር እፈልጋለሁ!
- ምናልባት፣ እውቃለሁ።
- ቸፍ ስለ ምን እንደሆነ ተጨማሪ መረጃ እፈልጋለሁ
- አሁን አልተረጋገጥሁም
- አይ፣ ቸፍ ለእኔ አይሆንም
- ሌሊ...

Q10. የታዎ ምንድነው?

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3 responses

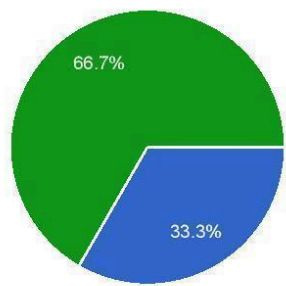


- ሴት
- ወንድ
- መልስ ማቅረብ አልፈልግም
- ሌሊ...

Q11. የዕድሜ ክልል ምንድነው?

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3 responses



- ከ18 ዓመት በታች
- 18-24
- 25-34
- 35-44
- 45-54
- 55 እና ከዚያ በላይ



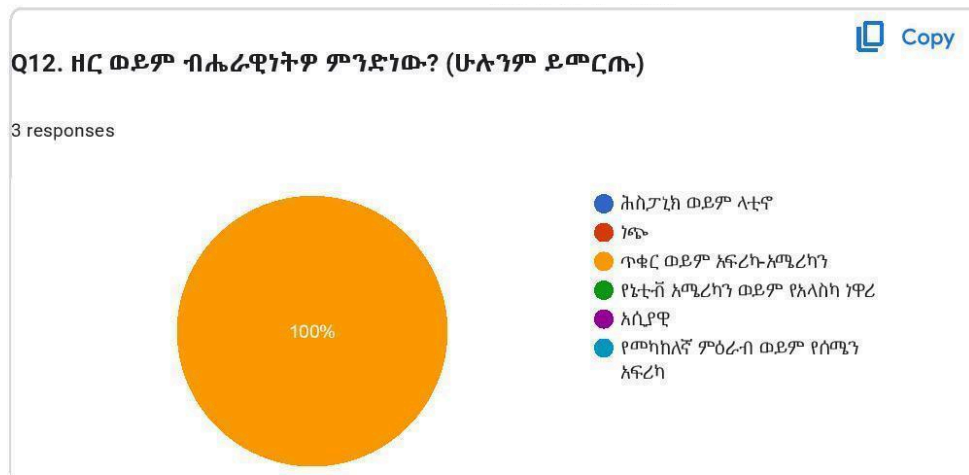


Figure E6. Visual summary of Amharic responses

PWIC ቶፍ እውቀት መርመራ

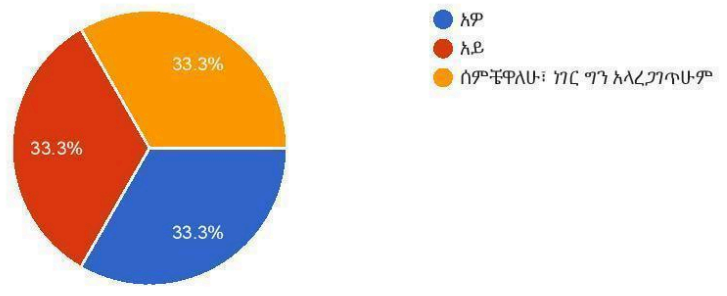
4 responses

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Q1. ቶፍ ምን እንደሆነ ታውቃለሁ?

Copy

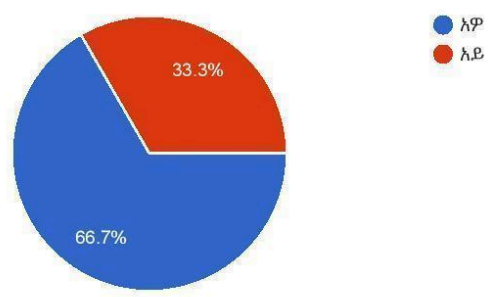
3 responses

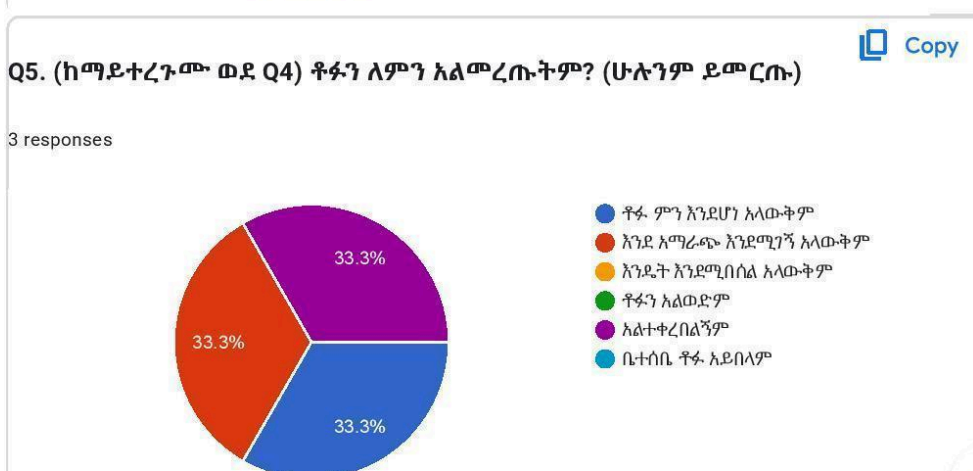
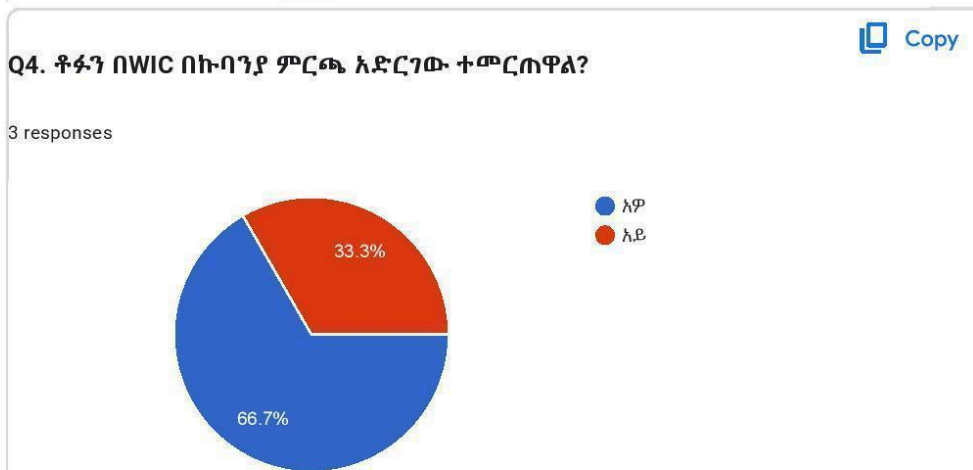
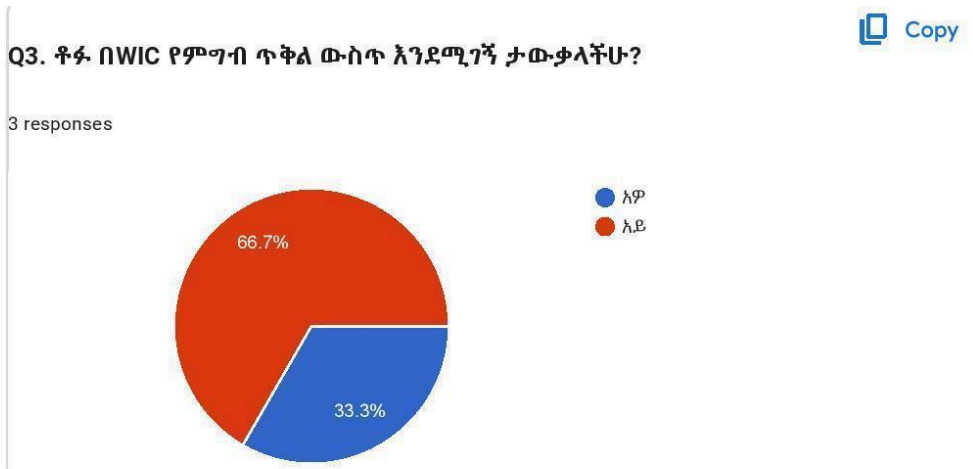


Q2. ቶፍ ከዚህ በፊት በደምብ በሞከሩት ነው?

Copy

3 responses

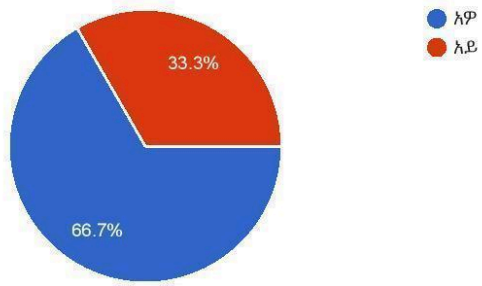




Q6. ቶፊ ከሶይ በሆነ ተለዋዋጭ ነው ታውቃለችሁ?

 Copy

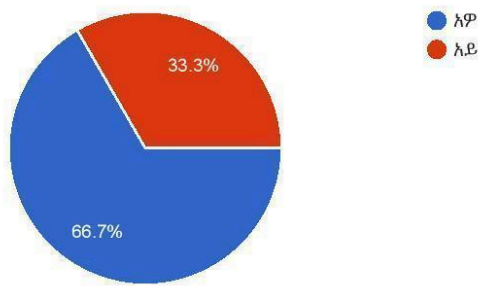
3 responses



Q7. ቶፊ እንደ የታቀደ እንቁላል ነጭ እንደሚመስል ታውቃለችሁ?

 Copy

3 responses



Q8. ቶፊ በፕሮቲን የበለፀገ ምግብ እንደሆነ ታውቃለችሁ?

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3 responses

