Journal on Race, Inequality, and Social Mobility in America

Volume 1 | Issue 1 Article 5

2017

Reviving Traditional Native American Food with the Hunt. Fish. Gather. Program

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Cover Page Footnote
This publication was made possible by Grant Number 1P30DK092950 from the NIDDK, and its contents are solely the responsibility of the authors and do not necessarily represent the official views of the NIDDK. This publication was made possible with the support from the Kathryn M. Buder Center for American Indian Studies.

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Introduction

Eating a balanced diet helps to foster and promote long-term overall health (Freeland-Graves & Nitzke, 2013; U.S. Department of Agriculture [USDA] and U.S. Department of Health and Human Services [USDHHS], 2010). An essential component of a healthy, balanced lifestyle is eating a diverse assortment of foods that give energy and provide vital nutrients (Freeland-Graves & Nitzke, 2013). Although there is no exact definition of "healthy food," the *Dietary Guidelines for Americans, 2010* defined unhealthy foods as those with high amounts of sodium, high amounts of calories from saturated and/or trans fats, added sugars, and refined grains (Freeland-Graves & Nitzke, 2013; Guenther et al., 2013; USDA & USDHHS, 2010;). Healthy foods include nutrient-dense foods, for example whole grains, fruits, vegetables, poultry, lean meats, beans, nuts, and seeds (Freeland-Graves & Nitzke, 2013; Guenther et al., 2013; USDA & USDHHS, 2010).

Evidence shows that eating a balanced diet can bolster protective factors that prevent and reduce the risk of chronic diseases and health disparities, including cancer, heart disease, hypertension, stroke, diabetes (obesity, cardiovascular disease, and high blood pressure (Martínez-González et al., 2015;USDA & USDHHS, 2010; Van Duyn & Pivonka, 2000). In particular, lack of exercise and poor diet are among the leading factors contributing to overweight and obesity prevalence in the United States (USDA & USDHHS, 2010). Eating nutritious foods and being physically active not only have the potential to decrease the prevalence of obesity and overweight across the nation but can

also increase life expectancy and quality of life, reduce mortality, and decrease health care costs (USDA & USDHHS, 2010). Lifestyle changes centered on healthy eating, losing weight, and increasing physical activity are critical to delaying, managing, and preventing the onset of obesity and diabetes (Bantle et al., 2008; Boden, Sargrad, Homko, Mozzoli, & Stein, 2005; Centers for Disease Control and Prevention, 2014).

Healthy eating habits can also have mental health benefits (Sarlio-Lähteenkorva, Lahelma, & Roos, 2004). Fish have high concentrations of omega-3 fatty acids, which when eaten regularly can reduce the likelihood of depression onset (Tanskanen et al., 2001). Additionally, Stoll et al. (1999) found that omega-3 fatty acids created a significant period of remission in bipolar disorder participants compared to placebo groups. Similarly, Smith (1998) reported that participants who ate cereal for breakfast felt less stressed and reported lower depression and emotional distress (p. 400). The types of cereal are not provided in the study; however, Smith further explained that this effect could be due to the micronutrients in cereal that improve mood and the healthy habit of eating breakfast, which is supported by Powers, Stephens, Russell, and Hill (2016). Other studies have found that increased fruit and vegetable intake may improve mood and decrease anxiety (Beezhold, Radnitz, Rinne, & DiMatteo, 2015; Munoz, Fito, Marrugat, Covas, & Schroder, 2009). Ultimately, eating a healthy and balanced diet produces many physical and mental health benefits, which protect against chronic diseases and reduce health disparities.

Traditional Native American Foods and Practices

To improve health and protect against chronic diseases, people can consume traditional Native American foods. Traditional Native food begins with food systems, which are defined as "food within a particular culture available from local natural resources and culturally accepted. It also includes the sociocultural meanings, acquisition/processing techniques, use, composition, and nutritional consequences for the people using the food" (Kuhnlein & Receveur, 1996, p. 418). By examining traditional food systems, an understanding of tribe-specific foods, along with their cultural importance (Cordain, 2007), knowledge and traditions, can be gained as well as preserved (Gurney, Caniglia, Mix, & Baum, 2015).

Food is an integral part of individual and collective identity as it helps understand culinary history and can compel people to ruminate on societal structures—especially culture (Oyangen, 2009). Food is part of the human construction of culture, self, and identity (Fischler, 1988; Reddy, 2015). Native Americans have strong spiritual and cultural beliefs surrounding land and food, wherein all things should be treated with respect (Anderson & Moratto, 1996; Turner, 1989; Portman & Garrett, 2006; Rhodes, 1991). Native people believe that foods collected from nature are gifts that should only be taken as needed, never overindulging, out of respect, harmony, and balance to the great creator (Turner, 1989).

Traditional Native foods are minimally processed, locally produced, high in nutritional value, and low in trans-fat (Dwyer, 2010). They can include, but are not

limited to, plants (wild berries, maize, beans and squash), seafood, and lean red meats (bison, rabbit, elk and deer). Precolonization, Native Americans used more than 1,500 of the 15,000 plant species in North America for food (Explorer, 2009; Moerman, 2009). Among the variety of plants cultivated, there were three common to all regions - corn (maize), beans, and squash, also known as the "Three Sisters" (Colby, McDonald, & Adkison, 2012; Landon, 2008). The O'odham people, whose diet is similar to other tribes in the southwestern region, ate plant-based foods, fish, and meat from lizards, rabbits, and deer (Watson & Preedy, 2009). Northwestern Native American diets consisted of seafood, wild game (deer, duck, and rabbit), and salmon, an integral staple food that made up a large portion of their diet (Ruby, Brown, & Collins, 2013). Southeastern Native American diets were largely made up of rabbits, squirrels, raccoons, and deer (Hudson, 1992). Although traditional Native American staple foods varied precolonization, some foods and practices were common among all North American tribes.

In traditional Native American food systems, there were food-related behaviors, known as food habits. Food habits include the methods in which groups and/or individuals chose, ate, and made use of available foods (Axelson, 1986). Traditional Native food habits, such as hunting, fishing, and gathering, were not mutually exclusive to one another. For instance, Great Plains Native American food habits included following wild game such as American bison and deer (Flores, 1991; Lueck, 2002). However, they also could settle long enough to cultivate corns, beans, and squash if

necessary (Harshberger, 1896). In addition, they gathered numerous berries, turnips, potatoes, and cattail shoots (Colby et al., 2012). In comparison to the Plains Native food habits, the Pacific Northwest Native food habits were based largely on fishing for salmon, but they also gathered and hunted foodstuffs (Ruby et al., 2013). The food habits of Pacific Northwestern Natives can be compared to Eastern Natives who found it difficult to find fish, and for this reason mostly cultivated crops and hunted deer (Gallatin, 1836). As described above, Native people did not solely practice one particular food habit, although they may have favored one particular habit over another due to regional ecosystems and available resources.

History of Native American Foods and Practices

Traditional foods and food habits were the means by which Native people of that time secured the necessities to life. However, colonization, forced relocation to reservations, and assimilation gave rise to the current detachment between Native people and their long-established food sources and knowledge, making food systems, and habits extraneous (Gurney et al., 2015).

There are significant barriers to eating traditional Native foods; two most notable barriers are accessibility and loss of knowledge (American Planning Association, 2007; Colby et al., 2012; Companion, 2008; Dwyer, 2010; Edwards & Patchell, 2009; Gurney et al., 2015; Jernigan, Salvatore, Styne, & Winkleby, 2012). The issues surrounding accessibility can be traced back to the frequent instances throughout history that have ultimately added to the disruption and disconnect of Native people from their foods, food

systems, and habits (Edwards & Patchell, 2009; Gurney et al., 2015). For example, colonization triggered the forced removal of Native Americans from traditional hunting, fishing, and gathering areas and eventually would confine Native people to reservations, where accessing traditional foods was substantially more difficult (Adams, 1995; Anderson & Moratto, 1996; Edwards & Patchell, 2009; Struthers & Lowe, 2003; Wolfe, 2006). The intended extermination of millions of American bison left many tribes without means to a substantial food source (Hornaday, 2002; Lueck, 2002). Forced assimilation, such as boarding schools (removal of Native children from homes and placement into schools that were meant to teach them Western ways) and acculturation, facilitated the decline of traditional food practices and the adoption of European food practices (Gordon, 1964; Vogt, 1957). The criminalization of Native spiritual practices also had a detrimental impact on accessing foods that were used for healing and ceremonial purposes (Cohen, 1998; Edwards & Patchell, 2009; Gurney et al., 2015; Portman & Garrett, 2006).

Another barrier is the loss of knowledge of traditional practices surrounding food (Companion, 2008; Gurney et al., 2015). Throughout history, farmers introduced new Western methods, showing Native children taken from their homes different farming techniques that involved plowing, planting, and clearing fields, all of which contributed to the loss of traditional knowledge of food cultivation (Gurney, et al., 2015; Krohn & Segrest, 2010). This loss is continually reinforced as Native people are increasingly integrated into Western society (Kuhnlein & Receveur, 1996). Along with traditional

food knowledge, Native culture, medicine, songs, and rituals have also been and are continuing to be being lost (Colby et al., 2012; Gurney et al., 2015). This loss has and will continue to result in a decrease of culturally specific foods and activities, a decrease in diet diversity, and a decrease in cultural morale (Kuhnlein & Receveur, 1996). Food amounts to more than simply nutrients in the body for Native Americans; it is deeply rooted and intrinsically intertwined with ceremonial practices, religious rituals, family, spirituality, and especially land (Edwards & Patchell, 2009; Gurney et al., 2015). As noted above, limited access and the loss of knowledge have resulted in considerable cultural loss. For Native communities, however, the benefits of traditional Native foods for health and well-being still continue to this day.

Benefits of Traditional Native American Food

Native American traditions, culture, practices, and knowledge surrounding food have the potential to improve the physical and mental health and well-being of all people, both Native and non-Native Americans (Barnhardt, 2005; Dwyer, 2010; Kuhnlein et al., 2009). Research on both Native and non-Native people has shown that the consumption of traditional Native foods has positive physical and mental health outcomes, contributing to the reduction of chronic diseases, illnesses, and other health related issues (Alkon & Norgaard, 2009; Bye, 2009; Cavanaugh, Taylor, Keim, Clutter, & Geraghty, 2008; Companion, 2008; Dwyer, 2010; Edwards & Patchell, 2009; Fazzino, 2008; Jernigan et al., 2012; Kuhnlein, 1995; Kwon, Apostolidis, Kim, & Shetty, 2007; Loring & Gerlach, 2009; Moerman, 2009; O'Connell, Buchwald, & Duncan, 2011; Stang, 2009).

Consuming foods such as maize, squash, and beans, which have high amounts of protein and fiber, helps to reduce the risk of diabetes and may contribute to lower blood sugar levels and blood pressure (Dwyer, 2010; Kwon et al., 2007). Maize, beans, and squash also have the potential to control postprandial hyperglycemia and hypertension and decrease microvascular difficulties from oxidative stress (Kwon et al., 2007). A variety of wild berries that were gathered in North America by Native people contain high levels of antioxidant properties and have confirmed anticancer effects as well as helping to protect against cardiovascular diseases (Deighton, Brennan, Finn, & Davies, 2000; Li, Hydamaka, Lowry, & Beta, 2009; Zhang, Seeram, Lee, Feng, & Heber, 2008). Meat sources have often been linked to adverse health due to high fat content (Biesalski, 2005); however, consuming lean red meats provides the body the necessary protein and nutrients such as vitamin B12, iron, and zinc (McAfee et al., 2010; Wyness, 2015). One example can be seen in bison meat, which has similar antioxidant properties to wild berries. Bison has been found to be a nutrient-rich food high in protein and containing linoleic acid, which is also suspected to be anticarcinogenic (Chen, 2009).

Apart from the physical benefits of eating healthy traditional food, Native American foods and food cultivation habits, can benefit mental health as well (Dwyer, 2010). For example, a study conducted of the Inuit peoples of northern Canada revealed that eating traditional foods and practicing traditional hunting methods had powerful effects on mental health and spiritual healing (King, Smith, & Gracey, 2009; Kirmayer, Fletcher, & Watt, 2009). Research has shown that mental health difficulties may have a

reverse causality relationship with exacerbating unhealthy eating and dietary patterns (Brown, Birtwistle, Roe, & Thompson, 1999; Dwyer, 2010; Lacey & Houser, 2001; Sarlio-Lähteenkorva et al., 2004; Su, Story, & Su, 1997). Dwyer (2010) noted that a traditional Native diet has the potential to reduce physical and mental ailments, as well as help increase the effect of protective factors against many chronic diseases.

Importance of Awareness and Understanding

Eating a traditional Native diet is an option for any person looking to lead a healthy life. Because of the great loss in access to and knowledge of traditional Native foods, most people are not aware of this option. Critical components in choosing healthier foods require raising awareness, educating, providing access to, knowledge of, and understanding around healthier food choices (Barreiro-Hurlé, Gracia, & De-Magistris, 2010; Ippolito, 1999). Research shows that people who understand and are aware of the consequences of particular foods are more likely to make healthier eating choices (Barreiro-Hurlé et al., 2010; Ippolito, 1999; Moorman, 1990).

Education regarding healthy food options has the potential to impact people's long-term health. Moorman (1990) asserted that consumers with prior nutritional knowledge utilize nutritional information more than those with no previous knowledge. Findings from Kuhnlein and Moody (1989) showed that after participant knowledge of traditional foods was raised they increased their consumption of traditional foods. Therefore, raising awareness and understanding of traditional Native American foods may lead to healthier eating habits.

Hunt, Fish, Gather

One study that aimed to increase awareness and understanding of traditional Native foods was the Hunt. Fish. Gather. (H.F.G.) program at Washington University in St. Louis (WUSTL). This program was the culmination of planning, implementation, and evaluation of a community-driven research effort led by Kathryn M. Buder Center for American Indian Studies (Buder Center) scholars in hopes of changing food policies, increasing cultural inclusivity at on campus, and increasing awareness and understanding of Native foods among participants. Buder Scholars are Native or non-Native master's and doctoral students in the Brown School[1] interested in working to serve the Native population. The H.F.G. program originated from a discussion at a luncheon between key WUSTL administrators, Bon Appétit (the University's catering service), the scholars, and the Buder Center director. The Buder scholars and director had many discussions about personal traditional Native food history and created a program based on these conversations. In the academic year 2014–2015, scholars collaborated with Bon Appétit, to establish increased knowledge of traditional Native foods and practices at WUSTL and to help define what it means to be truly healthy, with a focus on mind, body, spirit, and environment. The name *Hunt. Fish. Gather.* was chosen because it captured the essence of many Native American food habits regardless of region or tribe. Students chose the

[1] The Brown School was previously called the George Warren Brown School of Social Work.

DOI: https://doi.org/10.7936/K78P5ZX6

Wampanoag translation of *Hunt. Fish Gather*., Ahchâôk. Ômâôk. Keepunumuk., and reached out to this community, and received permission to use the words.

On April 1, 2015 the Buder Center and Bon Appétit sponsored Chef Nephi Craig (Apache/Navajo), the founder of the Native American Culinary Association, to lead a presentation and demonstration. Chef Craig spoke about restoring Native American food habits, the history of Native foods, foods before colonization, historical culinary trauma, community, the individual benefits of Native foods, and the resurgence of Native foods. In an attempt to better increase awareness and understanding of traditional Native foods, he gave a comprehensive demonstration of the food preparation process. During this demonstration, he prepared a Three Sisters dish and distributed it to participants, along with a sample of cedar tea and quinoa. Additional portions of the program run by Chef Craig, which are not reflected in the evaluation, include a sit down dinner and a cooking seminar for chefs at the WUSTL campus to learn more about how to utilize traditional foods in their recipes.

This paper seeks to answer three research questions: (a) Does a Native cuisine program (H.F.G.) increase participant awareness of Native cuisine preparation? (b) Does a Native cuisine program (H.F.G.) increase participant awareness of Native health values regarding foods? and (c) Does a Native cuisine program (H.F.G.) increase participant understanding of the cultural importance of Native foods.

Methods

Participants

Survey data were collected from participants attending the H.F.G. program at the WUSTL campus. Attending participants consisted of students, faculty, staff, community members, Bon Appétit employees, and others from the St. Louis surrounding area. The Institutional Review Board (IRB) approved the survey prior to data collection. The program was open to the public, and 78% of the participants completed the survey (*N*=39).

Survey

The survey consisted of eight questions; three were basic 5-point Likert scale questions with answers ranging from "decreased significantly" to "increased significantly," one demographic question, one question asking if participants ate any Native samples on campus within the last week, and three 4-point Likert scale questions with answers ranging from "not at all" to "frequently" and "outstanding." The survey included a space for additional comments regarding the demonstration, future possibilities, and favorite dishes, as well as opportunities to explain any answers (see Appendix A for complete survey). Additional food samples were to be prepared during the demonstration; however, time limitations allowed only one dish to be made: Three Sisters Salad. Therefore, no significant information was collected from this question on the survey. Participants who attended the program and filled out the survey were entered into a raffle for one of five Amazon gift cards of $20, administered by email.

Additionally, participants had the option to choose whether they would like to be further interviewed. Interviews were conducted by telephone or in person. Interviews lasted no longer than 20 minutes. Participants were asked five questions on their experience of H.F.G. and each interviewee received a $20 Visa gift certificate for their time.

Procedure

The H.F.G. program was held at the WUSTL campus. This location was strategically chosen because it is the central location for Bon Appétit and WUSTL collaborators; it allowed for any WUSTL community member to attend, it was easily accessible, the space was free, and Bon Appétit needed access to a kitchen to prepare the sample. Before the demonstration attendees were given surveys and asked to fill them out before they left. Completed surveys were collected at the end of the demonstration by Buder scholars, put in an envelope, and then handled by the Buder Center director thereafter.

Statistical Analysis

A One-Sample Wilcoxon Signed Rank Test was used to identify significant findings from the demonstration surveys. Data from the survey were primarily categorical- and ordinal-level data, which is to say parametric analyses would have been an inappropriate method for both describing the data and making inferences based on significance tests. The primary questions of interest from this survey include Questions 1–3 (see Appendix A), which are Likert-item responses and therefore ordinal data, or Question 4, which is categorical. When reporting descriptive information regarding each

of these questions, parametric values and analysis like the mean or one-sample *t* tests have little to no meaning. Statistical inferences therefore were made based on the median.

The nonparametric One-Sample Wilcoxon Signed Rank Test was implemented to assess differences in each median from Questions 1–3. The nature of the questionnaire required that each response be compared against a null initial, or "0." Instead of comparing the mean against a null initial, a One-Sample Wilcoxon Signed Rank Test compares the median against this "0," or baseline awareness and understanding. Data were imported from Microsoft Excel 2013 to IBM's SPSS. Data were coded to represent decreases, neutrality, and increases in awareness and understanding of Native food practices (-2 = "Decreased significantly", -1 = "Decreased slightly", 0 = "Neither increased nor decreased", 1 = "Increased slightly", 2 = "Increased significantly"). A composite score measuring awareness was computed by adding scores from Questions 1 and 2. Understanding was assessed as the independent Question 3. Initial descriptive statistics were run for all relevant questions.

Results

Thirty nine (78%) out of 50 participants completed the cultural demonstration survey. Of the 39 participants, 59% were students attending WUSTL, 20% were community members, 10% were faculty members, 5% identified as other, 3% were staff members, and 3% of data was missing (see Table 1). Frequency tables for each question and the composite awareness score indicate that the vast majority of participants experienced an increase in both knowledge and understanding (see Appendix B, Tables

3–5). The inferential analysis of the One-Sample Wilcoxon Signed Rank Test showed that there was a significant increase in participant awareness of Native cuisine ($p<0.05$) and a significant increase in awareness of Native health values regarding food ($p<0.05$) as a result of the Native cuisine program. Additionally, overall awareness of Native foods also showed a significant increase among participants ($p <0.05$). Finally, participants experienced a significant increase in understanding of the cultural importance of Native foods ($p <0.05$; Table 6).

Discussion

Research shows that increasing knowledge surrounding healthy foods increases the likelihood that a person will change dietary behaviors (Saksvig et al., 2005; Wardle, Parmenter, & Waller, 2000). The underlying assumption of the study was that increased awareness and understanding of traditional Native foods could change dietary behaviors, creating healthier eating habits. Findings from the H.F.G. program suggest that participants who attend the program had increased awareness around and understanding of Native food cultures.

Participants expressed their enthusiasm about learning more about Native American culture and foods. They suggested a need for a period in the program to ask questions of the presenter and a possible panel of Native people. Moreover, participants asked how they could obtain information on access to ingredients and recipes. Respondents also indicated that future programs should include additional cooking

demonstrations by other Native chefs, recipes and cookbooks, better advertising for the program, and more information altogether during the presentation.

The findings in the H.F.G. program were similar to Kuhnlein and Moody's (1989) findings that educating people about traditional Native foods increased awareness and understanding and ultimately increased traditional food use (p. 131). However, Kuhnlein and Moody (1989) were able to measure increases in traditional food use longitudinally, but the H.F.G. program is unable to measure this possibly increased awareness and understanding in the current study design. Future research should consider the long-term evaluation of this program and additionally measure unhealthy eating habits as well as participant consumption of traditional foods. It is also important that cultural respect and sensitivity are used when conducting research with Native people and communities.

Limitations and Recommendations

There were some limitations in the present study. First, given the health disparities that Native populations face, it is important to be able to identify Native populations who attend programs like H.F.G. so that researchers are better able to measure program effectiveness for both Native and non-Native people. Therefore, a limitation to this study was a lack of demographic questions in the survey pertaining to race and ethnicity. Not including such questions may have impeded the ability to conduct thorough analysis of the results. Additionally, it is important to note that findings in this study cannot be generalized to Native people since the racial and ethnic makeup of participants was not identified. Adding a race and ethnicity question is recommended.

Second, the sample population was not large. The sample size may have been limited due to competing events held at WUSTL resulting in lower attendance due to conflicting time schedules. Programs intended for the local and academic communities have to be scheduled strategically to ensure participant attendance. A second recommendation is to schedule programs well in advance to avoid conflicts with other unversity events.

Third, because of the seating options available at the location, some participants watched the demonstration from the balcony and were not able to be surveyed. Surveying balcony participants would have been ideal but was not accomplished because it was not anticipated that participants would choose this location to view the demonstration. If held at the same location in the future, it is recommended that there be additional staff to survey participants who might otherwise be excluded because of where they chose to sit. However, qualitative responses from the H.F.G. suggested finding a new location altogether. The particular location made it difficult to hear the presenter during this time. Participants also voiced concerns about their view of the demonstration being blocked. The demonstration of the Three Sisters dish was prepared on a flat surface, which made it difficult for the audience to see. For future programs, another recommendation is to add enhanced audio aids, visual aids, and more seating.

Lastly, only a posttest was administered during the H.F.G. program. As such, causality cannot be confirmed. Pretests allow for accuracy in measuring impact and minimize the chance of confounding. Establishing baseline knowledge and understanding

prior to interventions are crucial to quantifying impacts and to identify changes after programs and interventions are implemented. Additionally, following up with participants over time to monitor and assess changes in their dietary practices or an expansive randomized control trial would produce the highest validity for this study's findings.

It is important that people gain awareness of how the food they consume affects their health and how leading healthier lifestyles promotes overall well-being. Programs such as H.F.G. give people more information about healthy living, but this specific program also incorporates culturally appropriate policies, programs, and research. One recommendation is to continue this program because of its importance in providing information about traditional Native foods and systems.

Conclusion

The purpose of this paper was to analyze findings of the Hunt. Fish. Gather. program by investigating whether the program increased participant awareness of Native cuisine, participant awareness of Native health values regarding food and participant understanding of the cultural importance of Native foods. Findings from H.F.G. suggest that the program did increase awareness and understanding of traditional Native foods significantly.

Although Native American communities are noticing a decrease in the consumption of traditional foods, there is a great sense of hope that remains (Gurney et al., 2015). A current focus in Native communities has been on the revival of traditional

foods and habits that have wide-outreach in order to maximize impacts (Dwyer, 2010; Gurney et al., 2015; Kuhnlein, 2009). Shifting emphasis from health disparities that affect Native communities to the benefits of consuming traditional foods has the potential to decrease those physical and mental health disparities among Native and non-Native people.

In the United States, physical inactivity and poor diet were among the leading causes of death in 2000 (Mokdad, Marks, Stroup, & Gerberding, 2004). In 2012, the leading cause of death was heart disease, followed by chronic respiratory diseases, cerebrovascular diseases, and diabetes (Heron, 2013), all of which can be prevented, delayed, or managed by healthier diets, regular exercise, and managing weight (Fisher et al., 2002; McGill, McMahan, & Gidding, 2008; Mosca et al., 2004). Disproportionally, a considerable degree of Native Americans and Alaska Natives are affected by these health disparities compared to the general U.S. population. However, by consuming traditional Native American foods and practicing traditional habits, both Natives and non-Natives could benefit both physically and mentally. It is critical to note that programs such as H.F.G., which seek to increase awareness and understanding of traditional Native foods, can contribute to healthy diets and overall health. Future research is needed to not only identify traditional Native American foods and habits but also to gain a better understanding of how traditional dietary practices effect health and well-being.

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Appendix A

Hunt. Fish. Gather. Program Demonstration Survey

Ahchâôk. Ômâôk. Keepunumuk.

Thank you for attending our Hunt, Fish, Gather Native cuisine demonstration today. Below are a series of questions to gather information about your general interest and knowledge on the topics addressed at the event. You are always welcome to skip questions; we do request that you answer completely when possible.

At the Hunt, Fish, Gather demonstration, my awareness of Native cuisine preparation...

- ❍ Decreased significantly
- ❍ Decreased slightly
- ❍ Neither increased nor decreased
- ❍ Increased slightly
- ❍ Increased significantly

Please explain:

At the demonstration, my awareness of Native health values regarding food...

- ❑ Decreased significantly
- ❑ Decreased slightly
- ❑ Neither decreased nor increased
- ❑ Increased slightly
- ❑ Increased significantly

Please explain:

At the demonstration, my understanding of the cultural importance of Native food...

- ❍ Decreased significantly
- ❍ Decreased slightly
- ❍ Neither decreased nor increased
- ❍ Increased slightly
- ❍ Increased significantly

Please explain:

I am on campus today as a...

DOI: https://doi.org/10.7936/K78P5ZX6

- ❍ Student (please specify your program of study): _____
- ❍ Faculty member
- ❍ Staff member
- ❍ Community member
- ❍ Other: _____

Did you eat any Native samples on campus this past week?

- ❍ Yes
- ❍ No

TRADITIONAL NATIVE FOOD PROGRAM: HUNT. FISH. GATHER.

How frequently had Native foods been a part of your life at Washington University?
- ❍ Not at all
- ❍ Somewhat
- ❍ Occasionally
- ❍ Frequently

Please explain:

The extent of my prior knowledge of Native American values and cultures was...
- ❍ Not At All
- ❍ Very little
- ❍ Somewhat
- ❍ Outstanding

Because of this demonstration, my overall knowledge has increased...
- ❍ Not at all
- ❍ Very Little
- ❍ Somewhat
- ❍ Outstanding

Other comments regarding the demonstration

What would you like to see in the future related to this event?

My favorite dish was....

Thank you for completing our survey. We appreciate your input.

The below information--if you choose to provide it--will be separated from your survey responses immediately.
- ❍ To enter a raffle for one of five $20 Amazon gift cards, please enter your email address:

- ❍ If you would like to help us get further understanding and be interviewed, please enter your name and contact information:

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Appendix B: Tables and Figures

Table 1: Participant Demographics

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	23	59.0	60.5	60.5
	Faculty Member	4	10.3	10.5	71.1
	Staff Member	1	2.6	2.6	73.7
	Community Member	8	20.5	21.1	94.7
	Other	2	5.1	5.3	100.0
	Total	38	97.4	100.0	
Missing	System	1	2.6		
Total		39	100.0		

Table 2: Frequency Table

		Cuisine Awareness	Values Awareness	Understanding
N	Valid	38	38	37
	Missing	1	1	2
Median		2.0000	2.0000	2.0000
Mode		2.00	2.00	2.00
Minimum		.00	.00	.00
Maximum		2.00	2.00	2.00

Table 3: Cuisine Awareness Frequency Table

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neither increased nor decreased	1	2.6	2.6	2.6
	Increased slightly	14	35.9	36.8	39.5
	Increased significantly	23	59.0	60.5	100.0
	Total	38	97.4	100.0	
Missing	System	1	2.6		
Total		39	100.0		

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Table 4: Values Awareness Frequency Table

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neither increased nor decreased	4	10.3	10.5	10.5
	Increased slightly	13	33.3	34.2	44.7
	Increased significantly	21	53.8	55.3	100.0
	Total	38	97.4	100.0	
Missing	System	1	2.6		
Total		39	100.0		

Table 5: Understanding Frequency Table

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neither increased nor decreased	3	7.7	8.1	8.1
	Increased slightly	9	23.1	24.3	32.4
	Increased significantly	25	64.1	67.6	100.0
	Total	37	94.9	100.0	
Missing	System	2	5.1		
Total		39	100.0		

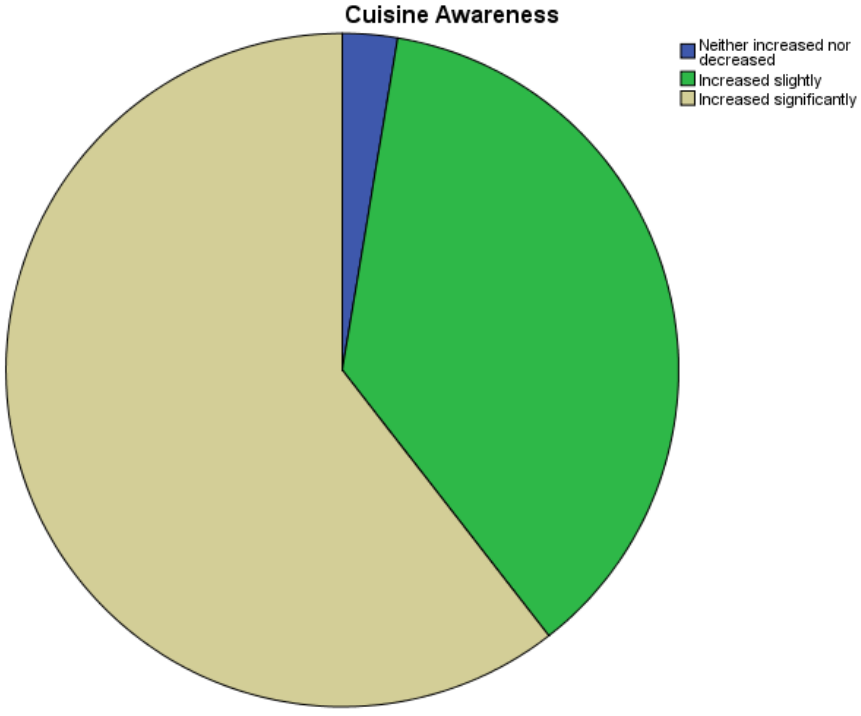

Figure 1. Cuisine awareness.

TRADITIONAL NATIVE FOOD PROGRAM: HUNT. FISH. GATHER.

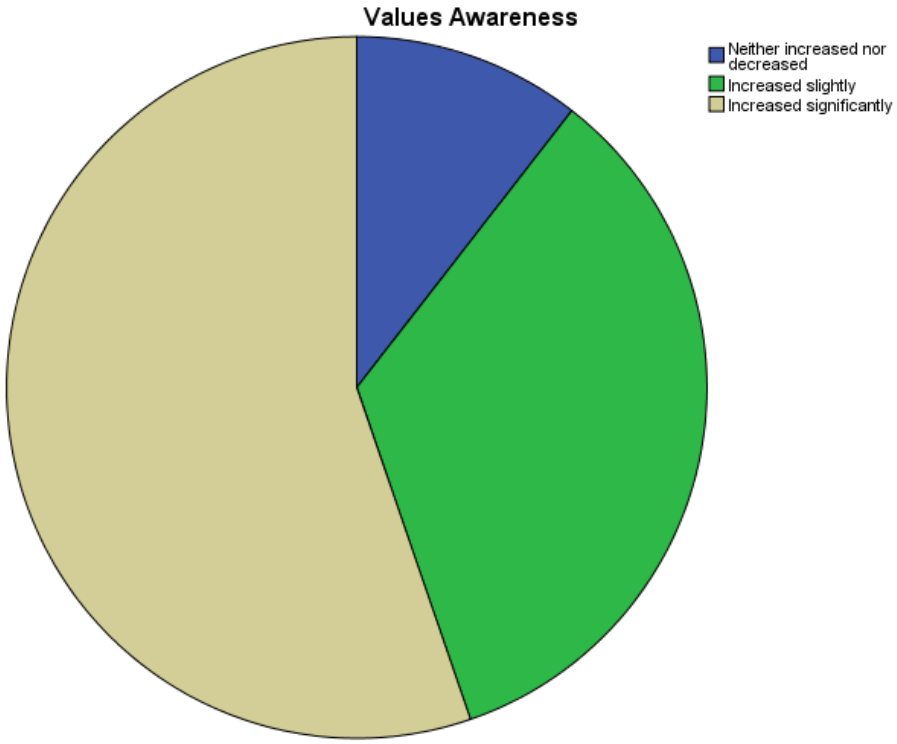

Figure 2. Values awareness.

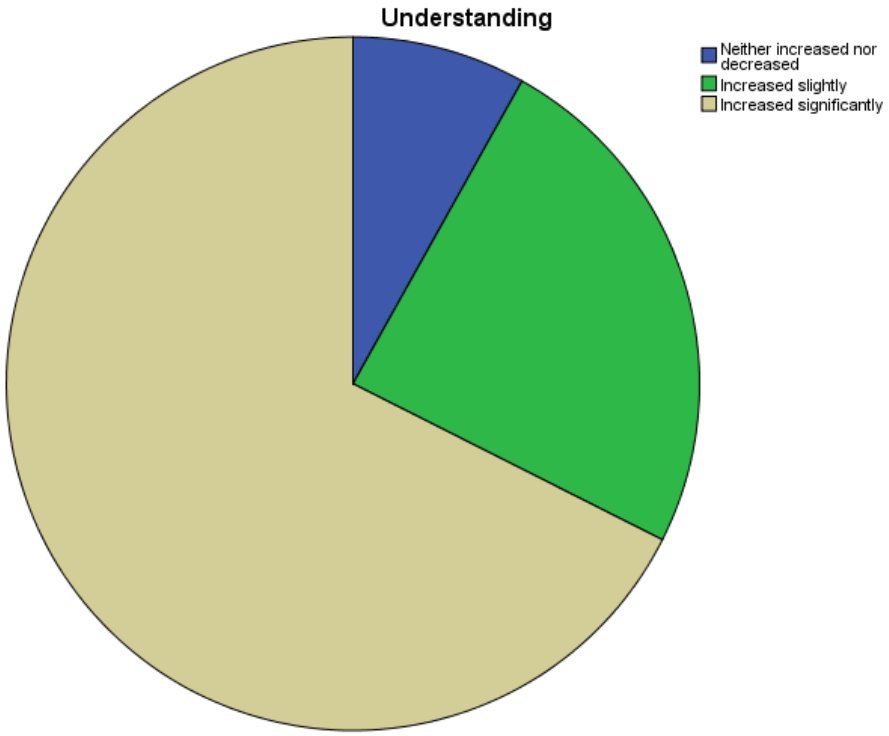

Figure 3. Understanding

TRADITIONAL NATIVE FOOD PROGRAM: HUNT. FISH. GATHER.

Table 6

One-Sample Wilcoxon Signed Rank Test

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of Cuisine Awareness equals 0.00.	One-Sample Wilcoxon Signed Rank Test	.000	Reject the null hypothesis.
2	The median of Values Awareness equals 0.00.	One-Sample Wilcoxon Signed Rank Test	.000	Reject the null hypothesis.
3	The median of Understanding equals 0.00.	One-Sample Wilcoxon Signed Rank Test	.000	Reject the null hypothesis.
4	The median of Awareness equals 0.00.	One-Sample Wilcoxon Signed Rank Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

DOI: https://doi.org/10.7936/K78P5ZX6