HEALTHY FOR LIFE

By

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A Project Presented to

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Master of Social Work

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ABSTRACT

HEALTHY FOR LIFE

Nichole Brandon

Health concerns related to obesity and diabetes are increasing in our country. Some ethnic groups are affected by diabetes more than others. As youth, we often learn from our parents about meal planning, inherited recipes, and information about our cultural diet. We are not always taught if our food choices are healthy or nutritious. The idea for this project is to teach youth what they put into their bodies today could affect their future health and to make better choices regarding food intake. Participants will learn about health disparities, truth about sugar, traditional diets, nutrition, preparing healthy food, effects of genetically modified organisms, use of pesticides, and definitions of diabetes. Qualitative data will be collected using a focus group and then assembled for this project.
ACKNOWLEDGEMENTS

First, I would like to thank my committee members, Dr. Cesar Abarca, Marlon Sherman, Rod Lindsey, and the youth at LIFE Center, for without them this project would not have been implemented. Special thanks to the students at LIFE Center for their attendance, participation, and feedback for this project.

Also, I would like to thank my husband John Brandon, who has provided me with support in this long journey, provided understanding and stood by my side through it all. Life has given us many challenges and hopefully we can continue making our dreams come true one step at a time.

My mother, Diane Jue, thanks for giving me self-confidence and for making me believe I can do anything. My dad, Jack Jue, thank you for teaching me to care about others and look at the world with an open heart. My big brother, Eric Jue, thanks for all your support, for always making me feel special, and nourishing my body with great food. Danni and Eric, Nina is very proud of your independence and willingness to work hard, two things that will get you far in life.

French Gulch Hotel staff, thanks for checking on me and providing that little push when I needed it.
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The name of this project is Healthy for Life. It shares knowledge about the health disparities in Native American communities, shows the benefits of traditional nutrition, implements strategies to choose healthy food, explains how decolonizing the diet can help return to traditional ways to improve community health, wellness, and balance. Colonization is when European settlers migrated to North America to inhabit the land. Colonization made a significant impact on the Native American diet by moving them out of their natural regions, killing off herds of buffalo, over use of trapping, introducing farming techniques, and making Native Americans dependent on government rations. These rations included unhealthy food such as: lard, flour, sugar, salt, yeast, baking powder, and powder milk. Hunting and gathering methods disappeared as Native Americans were forced out of native lands and government took possession over hunting areas as well as the act of slaughtering animals in effort to sabotage or kill off Native Americans through starvation. Physical activities also decreased as their food dependency grew on the government. Other activities, such as dancing, ceremonies, and family gatherings declined because of colonization.

Working together with the educational organization named, Local Indians for Education (LIFE) Center, we developed curriculum aimed to teach the youth ages eight to fourteen the benefits of good nutrition, raise awareness about diet-related diseases within the Native American community, learn about devastating environmental practices by farming corporations for profit, discover past cultural Indigenous food gathering
practices, and prepare meals together in a traditional practice. The local Native American communities consist of several tribes, including: Wintu, Winnemem-Wintu, Pit River, and Alaskan, to name a few.

Project Aims

This project focuses on the health disparities in Native American communities. This project’s efforts are concentrated on local Native American youths ages 8-18, who participate in the after-school learning educational program at the LIFE Center in Shasta Lake City, California. The youths involved will gain knowledge about the rise in health diseases related to poor nutrition and learn ways to have a sustainable future by increasing their knowledge about diet.

Project Approaches

An education curriculum was developed through researching journals, books, websites, and also shared information from elders that taught about traditional diets, including the history of hunting and gathering in Northern California, taught methods of traditional farming, provided information and explanations on heart disease and diabetes and the long-term effects of too much sugar, and provided information on environmental consequences of food production and ways to promote healthy food sustainability for their future.


Anticipated Outcomes

Proposed outcomes for the youth who participate in programs at the LIFE Center will be to gain knowledge about their ancestral diet, learn about health disparities and the way colonization changed the way Native Americans eat through curriculum provided. They will learn statistics about diabetes and other nutrition-based diseases and how they can affect their family’s future health.

Also, they will explore what their familial ancestors consumed when they were hunting, gathering and farming and will consider practicing these traditions as a way of life. The hope is for youth to make healthier choices with nutrition in order to decrease health disparities in their community and pass on the knowledge of sustainable nutrition and eating traditional diets.

Project Assumptions

Assumptions are that youth learn to improve their diet and make better food choices in school settings as well as at home. The current diet choices may not be appropriate to the Native American culture. Children of the LIFE Center have had previous experience with traditional Native American food such as salmon and deer. Youth can also take home and share information provided to help others in their family or community.
Rationale

Significance of this project is to decrease health disparities in underserved populations plus to provide youths with knowledge that will impact their future existence. The hope is that learning to consume traditional and healthier foods will decrease obesity and overall, reduce statistics of diabetes in the Native American culture.
REVIEW OF LITERATURE

The following literature will help to understand the urgent problem the unhealthy diet is creating in Native Americans. Health disparities will continue to increase if we do not start by educating Indigenous youth at a young age to make changes in their diet and learn to eat healthy. Equally important is for youth to understand the condition of the food we put in our body whether it is processed or effected by pesticides, herbicides, or fertilizers. Last, traditional farming will help to understand how we can move forward with eating home grown food to help preserve the health of Native Americans.

Health Disparities

The following information is gathered from data collected from the US Centers of Disease Control (CDC) and Indian Health Services (IHS) to show the prevalence of diabetes in American Indian and Alaskan Native communities. Some American Indian and Alaskan Native communities show a percentage as high as 60% of all adults diagnosed with diabetes type II, while the national average according to the CDC for this population is 15.9% of adults (NA, 2014). As of 2014, the CDC reports 29.1 million or 9.3% of the population of undiagnosed and diagnosed diabetes (NA, 2014). Most people will incur long term complications from diabetes that develop early in life along with Cardio Vascular Disease (CVD), which is the highest cause of death for American
Indians and Alaskan Natives. CVD is three to four times likely to develop if one has diabetes (McLaughlin, 2010). Many factors that contribute to high rates of diabetes among the general population include genetic, environmental, behavioral, economic, social, fetal exposure to hyperglycemia, lack of physical exercise and obesity (McLaughlin, 2010). In addition, minimal access to preventative health care may be linked to predisposition towards insulin resistance as can living in socially and stress producing environments (McLaughlin, 2010).

**Food Production and Quality**

Nelson (2008), discussed taking back control over the production and quality of the food we consume because it is controlled by corporations that are using toxins, carcinogens, and genetically modified organisms, (GMO) which mutate in our DNA in order to be economically competitive (Nelson, 2008). Pesticides and fertilizers are also harmful to our bodies. Additives are used to make food last longer and corporate powers have systematically taken away the food sovereignty of all Americans. Nelson teaches about Native food traditions, honoring the sanctity of food, how it is nurtured from the creator and how we can be responsible for knowing where our food comes from in order to make the right decisions of what we put into our bodies (Nelson, 2008).
Traditional Farming Practices

American Indians are embracing the ‘decolonized diet’. This is a movement among American Indians to rediscover ancestral foods, revisit old ways to grow crops, point out how fry bread is not native, help communities by growing own food, and reconnection to the land (Shah, 2014). More people are realizing they can grow a significant amount of food on a small parcel of land and have the ability to take back their food security and sustainability (Shah, 2014). Projects like “Little Earth Urban Farm” in Minneapolis, Minnesota, are developing within the native communities after taking notice of the alarming obesity and diabetes epidemic in American Indian communities (Shah, 2014). In New Mexico, indigenous food programs are working to preserve native seeds from hundreds of years ago and heritage seeds are being planted and harvested for Indian communities (Shah, 2014). Discovering old traditional ways of farming and planting heritage seeds is part of the cultural recovery, which in turn will lead to better nutrition and decrease the health disparities in American Indian communities.
METHOD

Introduction

The youth at LIFE Center participated in a focus group. Conducting focus groups or workshops will create an environment aimed at education as well as how we feel, our attitudes and beliefs about selected topics and the willingness to make changes in our diet. I provided a simple easy to understand curriculum on hunting and gathering methods, traditional diets, diabetes and cardiovascular disease, effects of sugar, harmful pesticides and fertilizers, and choosing organics instead of processed food. I then allowed children to ask questions. The qualitative approach of the focus group was to assess what the youths already knew about diet and nutrition and then add information through discussion. The benefits of nutritious food were explained, recipes were provided, and directions on preparing meals were explained. Handouts were provided on the topics with some questions to start the focus group. Facts and research was explained relating to the weeks topic. Lastly, nutritious snacks and meals were provided using LIFE Center kitchen and food to promote eating well.

Recruitment for participation took place at the LIFE Center. With a group of 15-20 youth from the LIFE Center ages eight to eighteen, utilized the workshop bi-weekly for one and a half hours to discuss the topics selected. Youth who wished to participate signed up for project and were given an informed consent form to take home and obtained signatures from parent/guardian granting permission to participate.
**Project Element**

The developed project taught a short curriculum aimed at sharing with the youth the harmful influences of poor diet, lack of physical activity, and how food is made in the environment. Information was provided on diseases affecting the Native American population as a result of poor nutrition.

We utilized the center to have an open discussion regarding eating habits, likes and dislikes of food, as well as allergies. We explored youth’s knowledge of traditional diets of their ancestors or passed down recipes from elders. We discussed traditional farming, hunting and gathering. Youth gained knowledge of harmful effects of pesticides and fertilizers. Youth learned about diabetes type I and II, cardiovascular disease, and kidney disease. Recipes used were aimed at using healthy food to increase fruits vegetables and improve their diet. The youth were taught to make healthier choices with nutrition in order to decrease health disparities in their community and pass on eating traditional diets to the next generation.

**Data Collection**

Collection of data consisted of note taking about youth responses and questions regarding weekly curriculum. Youth were asked to share their thoughts on recipe or snack provided and responses were noted. Youth shared some knowledge of what they learned by volunteering after each workshop and responses were noted. Observational
data was also collected and included in notes after each workshop. Notes were then summarized about the experience for final project and shared with the LIFE Center.

**Project Implementation**

The curriculum developed was delivered on February 23rd, March 2nd, 9th, 23rd, 30th, and April 13th, 2015. Workshops were aimed to teach the youth at LIFE Center about health disparities in Native American population. The youths learned about traditional diets and how good nutrition is important to living a long healthy life. Participants discussed what they know about traditional hunting and farming practices from their culture, along with being introduced to methods of hunting and gathering. Youths were introduced to food quality and learned about organic farming without pesticides, herbicides or fertilizer. They learned ways to be sustainable in their own environments. They learned what organic food is, why it is important to health, and to avoid processed food to improve overall health.
RESULTS

For the purpose of the Healthy for Life project, a sign-up sheet was provided for the youth at and twenty informed consents were given out to parents before the group started. I received ten back on my first session and the verbal assent was read aloud to youth participants. The youths all agreed by raising their hands.

The staff at LIFE Center decided to let me develop the curriculum for the project and they would support me by being present, collecting consent forms, and making copies. The staff members were open and agreeable to the workshop curriculum, stating, “The youth would be more responsive to learning about health and nutrition by hearing it from another person”. Most workshops were delivered for first thirty minutes and the last thirty minutes was spent on eating snack, providing feedback, question and answer session, and then physical activity was encouraged after.

The first week workshop aimed at teaching past hunting and gathering methods of the Native Americans. There were eight participants ranging from 8-13 years. A grandparent and staff member were also present to help keep the youth’s attention. Few of the youth recognized past practices of hunting by show of hands and most did not know what types of food was gathered by their ancestors. When asked how their Native American ancestors hunted, one replied with skins, and the other replied by spearing fish. After an explanation of gathering, one youth stated her family gathered acorns. Youth participated by volunteering to read how farm animals, such as cow, pig, and chicken were introduced by Europeans. The youth were able to recognize the great deal of
changes of how we get our food today than what was done traditionally. To promote health, wellness, and increase vegetables in their diet, a healthy black bean salad was prepared and feedback on what they learned was the topic over snack.

The second week workshop was focused on understanding traditional diets and how they differ from today. The idea was to learn what changes have taken place in regards to our nutrition. They were able to point out how past practices of eating berries, acorns, nuts and fish were healthy compared with today’s choices of eating hamburgers, chips, and soda. The discussion also included how Native Americans drank mostly water and how some have developed allergies to lactose. They learned chickens and cows were not part of traditional diets and introduced through European farming. Youths were offered a snack of a vegetarian quesadilla and were asked to participate by sampling it. The discussion during snack was how acorns were an integral staple in their culture and how they used them to make mush and flat bread.

The third week workshop focused on health disparities. The youth learned the difference between diabetes type I and II. One youth volunteered to share on how her brother has diabetes and takes insulin to control it. This example was important to see that family members are developing these diseases because of poor diet and lack of physical activity. Also included in the discussion were kidney disease and heart disease. The director, Rod Lindsey came in to share his experience of having surgery to clear the arteries in his neck, reinforcing the fact that over time our bodies can develop diseases from poor diet. Snack during this workshop was fresh cut vegetables, carrots, broccoli,
sugar snap peas and apples. It was also point out how these nutritious great after school snacks are not costly.

The fourth week workshop discussed the effects of sugar and how much sugar is consumed in soda, cereal, and candy. To compare grams of sugar we went over handout, outlining beverages and candy. We discussed healthier choices when picking a snack or a meal. Rod Lindsey, joined us for the group to test the youth on what they learned. The youths’ learned over time, too much sugar leads to health problems. Most youth agreed to limit their soda intake and to choose water. The snack provided was fresh fruit, yogurt, and granola. The youth reported the yogurt was sour and the taste improved with the addition of fruit and granola.

The fifth week workshop taught about pesticides and fertilizers and how they are impacting the environment and effecting our health when consumed. They learned how they contaminate the earth and water supply. They learned they need to wash all fruit and vegetables good before eating or cooking. The learned alternative methods in the handout that are healthier for us and the environment. The youth did not know much about this subject matter and it was helpful to introduce the education at a young age. The next topic was how preservatives and processed food were also a health risk with over consumptions. I provided the youth with some examples, such as cans of soup, frozen pizza and burritos. The snack provided was smoothies made from frozen fruit, yogurt, and sherbet. The youth wanted to help make smoothies and participated by picking different fruits to blend.
The sixth week we focused on organic food and sustainability. Again we discussed the difference between organic food and processed food. The workshop detailed how organic food had more benefits, more vitamin content, and more antioxidants. The workshop also focused on sustainable agriculture to protect the environment. The discussion led to farming and how food is produced with a large amount of antibiotic and hormones. This was new information for the youth and they didn’t know what organic meant or sustainability. The snack on this day included organic fruits, apples, bananas, and tangelos.

Summary of Findings

The youth were given a chance after each workshop to provide feedback on what they learned and their thoughts on the healthy snack. First week, they participated in discussion of how ancestors hunted and reported they learned about traditional hunting, how to make a salad, and how to prepare a healthy dressing. The second week, they openly discussed what vegetables they liked and how they were willing to try them and not continue eating them if they didn’t taste good. They offered examples of different food they have tried such as, Elk and Bison. The third week the youths provided feedback on understanding how the body stops creating insulin and people need medications to control it. They also reported they learned heart disease was caused by poor diet and clogging of the arteries. The fourth week the youth were surprised how much sugar was in soda and cereals. They commented on not liking the taste of yogurt
without the fruit and granola. The fifth week, the youth didn’t seem to know much about the impact of pesticides and fertilizers. They also were not aware of preservatives and processed food. The feedback from them was to pick more fruits and vegetables so they don’t get diabetes and heart disease when they get older. The sixth week findings showed the youth did not know about organic food, processed food, or sustainable agriculture. It was important this educational material was introduced early for them to make more changes in their diet and food choices. The feedback was minimal, they tried to find reasons to not like the healthy organic fruit by reporting it taste funny or different. After explanation the youth understood the meaning of organic means to grown without pesticides or fertilizers.
DISCUSSION

Implications to Population, Problem, or Location

The implications for this project was to promote health and well-being in the local Native American community by developing workshops to inform the youth about health disparities specific to Native American culture and environment.

The workshops provided education to youths on historical diets, diseases such as diabetes, heart disease and kidney disease. Also included were the detrimental effects of sugar and processed food on the body, which ultimately leads to the health disparities mentioned. The workshops discussed harmful effects of pesticides, herbicides, and fertilizers and the importance of picking organic food and agricultural farming to promote sustainability.

Implications to SW Research, Policy, or Practice

This project is applicable to other social work fields including public health to increase health and wellness in all populations. The underserved could benefit from the curriculum provided to improve diet and learn about harmful effects of commercial farming. This project would be beneficial for early childhood intervention to decrease obesity in young children by simply increasing vegetables, fruits, and lean meats. Promoting exercise and physical activity for thirty minutes a day can promote changes in
the sedentary lifestyle we live. The snacks planned and provided were all nutritious and cost effective.

This project can be implemented into policy for LIFE Center and possibly other after school programs. This project could be implemented in public health through Rancherias. This project could be altered for after school sport trainings. Overall, it will help prevent disease in the community by focusing on good nutrition and exercise.

**Ethical Considerations**

The youth at LIFE Center may be reminded of historical trauma when discussing colonization. They may be reminded of their culture that was partially lost as they learn through this program how to reengage in traditional practices in regards to health and diet. The youths participating in this project will be provided access to the nearest mental health treatment center or discuss with an elder any uncomfortable issues that may arise during this project.

I, am a Native American woman, from the Taos Pueblo tribe of New Mexico. Both my maternal and paternal grandmother had diabetes type II. My grandmother on my father’s side was blind, dependent on insulin, eventually died in her late forties as well as her youngest child, my aunt, who lost her leg, eyesight, and eventually her life. My maternal grandmother had diabetes type II, insulin dependent until her fifties when she developed Alzheimers and her caretakers controlled her diabetes with diet until she passed.
Currently, my father has diabetes, he is seventy, and he controls it with diet and an occasional insulin shot to maintain his health. My personal belief is that if we learn at a young age what is healthy and nutritious, the information will benefit us in the choices we make for our diet. I continue to increase my consumption of vegetables, fruits, and lean meat. I do not follow a traditional diet, but am in the process of planting a garden and have invested in a chicken coop and nineteen chickens for fresh eggs.

**Sustainability Plan**

The plan for sustainability is to complete a six week curriculum twice during the school year. The idea is to repeat the program for decreasing health disparities by learning good nutrition through traditional means and using the workshop curriculum. The next program will be held during the Fall 2015.

A grant proposal will be discussed over summer at LIFE Center board meeting and written before end of 2015. After completion of Spring program 2016, using grant funds, a sustainable community garden will be planted for the community using LIFE Center youth participation and property. This garden will also help sustain families and elders in the community by donating fresh vegetables for the program to those with lower socio-economic challenges. Also, it will help with projects aim of healthy organic vegetables consumption. Briefly, we have discussed applying for a grant to implement a gardening project to go along with the workshop in the future (see Table 1).
Table 1: Sustainability Plan

<table>
<thead>
<tr>
<th>Start Date</th>
<th>Finish Date</th>
<th>Action Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 2015</td>
<td>April 2015</td>
<td>6 week Curriculum (Spring)</td>
</tr>
<tr>
<td>June 2015</td>
<td>July 2015</td>
<td>Grant discussion at LIFE Center, Board Meeting</td>
</tr>
<tr>
<td>August 2015</td>
<td>September 2015</td>
<td>Write Grant</td>
</tr>
<tr>
<td>October 2015</td>
<td>November 2015</td>
<td>6 Week Curriculum (Fall)</td>
</tr>
<tr>
<td>February 2016</td>
<td>April 2016</td>
<td>6 Week Curriculum (Spring)</td>
</tr>
<tr>
<td>April 2016</td>
<td>July 2016</td>
<td>Plant garden with grant fund</td>
</tr>
</tbody>
</table>

Project Limitations

Limitations include youths not seeing the importance of nutrition with other challenges they are facing. Youths may not want to make positive nutrition changes right away. Each year after being exposed to this curriculum, the youths may see the importance of nutrition in their everyday life.

Other limitations were not being able to cook with the youth due to lack of space in the kitchen. After consideration, cooking was not ideal for this project because of safety concerns, in case of fire, or cuts or burns to the youth who wanted to participate.
In order to make the project more comprehensive, availability to a larger kitchen would be necessary.

If project was provided in pamphlet form, it is possible they would take it home and not read it. They would not be exposed to the nutrition and healthy snacks provided. The youths were more involved and willing to participate knowing they were provided a healthy snack to try.

The workshops were given weekly in succession as opposed to every other week because of time constraints and when the project was due.

Last, I was unable to teach about genetically modified organisms (GMO) seeds and heirloom seeds because of lack of time.

Conclusion

The youth of the LIFE Center learned about how health disparities are affecting Native American communities. Now they are more knowledgeable about Native American traditional diets and how they have changed from hunter gathering times. With this knowledge they may choose to return to past practices, continue with the same ones, or maybe someday invest in sustainable agriculture for their families and communities. They are now faced to improve their overall health by eating more fruits and vegetables and less processed and sugary foods. With a healthier diet and increased physical activity they can sustain a healthier lifestyle without the impact of disease for a better future.
REFERENCES


Appendix A Informed Consent Form

INFORMED CONSENT
HUMBOLDT STATE UNIVERSITY
MASTERS COMMUNITY PROJECT-HEALTHY FOR LIFE
CONSENT TO ACT AS A RESEARCH SUBJECT

PURPOSE AND BENEFITS

The purpose of the project is to share knowledge about the damaging effects of diabetes, show the benefits of nutrition, implement strategies to choose healthy food, decolonize the diet in order to return to traditional ways to improve community health, wellness, and balance. The information gathered in this project will be useful in providing knowledge to Native American youth and to teach them to make healthier choices with nutrition in order to decrease health disparities in their community and practice eating traditional diets.

PROCEDURES

If voluntary consent is given, you will participate in curriculum aimed at teaching the benefits of good nutrition, raise awareness about diseases within the community, learn about devastating environmental farming practices, discover past cultural Indigenous food gathering practices, and prepare meals together in a traditional practice.

CONFIDENTIALITY

The information received by participants and any identifying data will remain confidential. The responsible investigator and research team will be the only ones with access to data. Anonymous direct quotations will be used in documentation. Anonymity cannot be guaranteed in the class room setting. The information collected through this project will be included in my master's project manuscript, which will be available digitally to the public through the HSU library. Add more details as needed depending on what data will used for your manuscript, for instance, direct quotes, aggregated data,
etc..

You understand that the investigator will answer any questions you may have concerning the investigation or the procedures at any time. You also understand that your participation in any study is entirely voluntary and that you may decline to enter this study or may withdraw from it at any time without jeopardy. You understand that the investigator may terminate your participation in the study at that time.

If you have any concerns or questions regarding this project, or any dissatisfaction with any part of this study, you may contact the IRB Chair, Dr. Ethan Gahtan, at eg51@humboldt.edu or (707)826-4545. If you have any questions regarding your rights as a participant, you may report them to IRB Institutional Official at HSU, Dr. Rhea Williamson, at Rhea.Williamson@humboldt.edu or (707) 826-5169.

Please sign the consent form and return to Nikkie Brandon at LIFE Center. Thank you for participation and allowing me to be a part of your child’s education in regards to health.

Nikkie Brandon, HSU Primary Investigator, nab343@humboldt.edu, (530)410-4259.
Dr. Cesar Abarca, Committee Chair, Department Social Work, BSS544, cesar.abarca@humboldt.edu, (707)826-4552.

I have read and understand the information provided and agree to participate in the following project.

Please Sign and Print Name of child

________________________________________________________________________

____________________________________Date
Appendix B Youth Verbal Assent Form

YOUTH VERBAL ASSENT
HUMBOLDT STATE UNIVERISITY
MASTERS COMMUNITY PROJECT-HEALTHY FOR LIFE
CONSENT TO ACT AS A RESEARCH SUBJECT

PURPOSE AND BENEFITS

The purpose of the project is to share knowledge about the damaging effects of diabetes, show the benefits of nutrition, implement strategies to choose healthy food, return to traditional ways to improve community health, wellness, and balance. The information gathered in this project will help to provide knowledge and to teach you to make healthier choices with nutrition to prevent health problems in your future. A total of six workshops will be held every other Monday from 3-4:30PM at the LIFE Center. If you agree to participate please raise your hand.

PROCEDURES

If voluntary consent is given, you will participate in learning the benefits of good nutrition, raise awareness about diseases linked to poor nutrition, learn about devastating environmental farming practices, discover past cultural Indigenous food gathering practices, and we will prepare meals together in a traditional practice.

CONFIDENTIALITY

No identifying information will be collected and you understand that the investigator will answer any questions you may have. You understand that your participation in any study is entirely voluntary and that you may decline to enter this study or may withdraw from it at any time without jeopardy. You understand that the investigator may terminate your participation in the study at that time.
Appendix C Healthy For Life Sign Up Form

Healthy For Life

Please join me in learning about nutrition and preparing healthy food.

- Traditional diets
- History of hunting, gathering and methods of traditional farming
- Information on heart disease and diabetes
- Detrimental effects of sugar
- Environmental effects on food production
- Food sustainability
Where: Life Center
By Nikkie Brandon
When: January 2015
Please sign up
Appendix D Sample Lesson Outline

Week 1 -Hunting and Gathering Methods of Native Americans

- Hunting and Fishing (relied mostly on this method to survive)

  They migrated in large groups following herds of bison and caribou. Blackfoot and Sioux worked together to drive animals to ambush into a manmade pit, over a cliff, or set controlled fires or building fences to prevent escape. Others stalked deer and rabbits by setting traps. Fisherman hunted from canoes, set fish nets, or wooden traps. Weapons included bows and arrows, spears, harpoons, fish-hooks, and blowguns.

- Gathering

  Agricultural-stayed in one place and farmed the land
  Semi-nomadic-moving frequently from place to place hunting and gathering food

- Farming

  This method was used mostly in southern United States, Mexico, and Andean region of South America. They used irrigation, terracing, crop rotation, and planting windbreaks. The crops were enough to store through winter. Hopi, Navajo, Cherokee used garden plots. Native American also grew cotton, hemp, tobacco, and medicinal plants.
  Raising domestic animals (less common only turkeys and ducks)

Discussion:

Do you know what type your family/tribe practiced?
Do you know what they gathered?
Snack: Black Bean Salad with honey, olive oil, onion dressing

Reference


Retrieved from (http://www.native-languages.org/food.htm

Week #2 Traditional Diets -What did American Indians eat?

Popular foods:
Indian maize was an important food crop and if a tribe didn’t grow it they would often trade for it. Other food included beans, squash, pumpkins, sunflowers, wild rice, potatoes, sweet potatoes, tomatoes, peppers, peanuts, avocados, papayas, and chocolate.

Do you like any of these items listed?
What are your favorite vegetables?

**Meat diet:**

Most tribes had very meat heavy diets. Favorite meats included buffalo, elk, caribou, deer, and rabbit; salmon and other fish; ducks, geese, turkeys and other birds; clams and other shellfish; and marine mammals like seals or even whales. But almost any animal who lived in the Americas in ancient times was sometimes added to the menu, even animals you might not think of as food like porcupines, monkeys, or snakes. Many Native American tribes had strong beliefs against wasting food, so if they killed an animal for any other reason, they would eat it.

Why do you think we don’t eat as much meat in our diet?

**Natural food from environment:**

Other foods that could be found naturally in the Americas and were often eaten by American Indians included eggs, honey, maple syrup and sugar, salt, nuts (including peanuts, pine nuts, cashews, hickory nuts, and acorns,) fruit (including cranberries, strawberries, blueberries, raspberries, chokecherries, wild plums, and persimmons), and a wide variety of beans, roots, and greens.

What do you not see a lot of in these lists of foods? example, milk, chips, cookies, bread

**Beverages:**

Most Native Americans always drank water with their meals, but hot chocolate was a popular beverage in Mexico, and some Indians in Central and South America developed an alcoholic corn drink called *chichi*.

Can you share what you drank with dinner last night? Or lunch today? Do you think it was good for you?

Challenge: Drink only water for a week

**Native American diet after Europeans:**

Europeans introduced bananas, wheat, cow, and sheep. Other tribes were forced to change their traditional lifestyles a lot after Europeans took over. Since Europeans killed most of the buffalo, tribes that used to follow the buffalo herds had to find new ways of living. Today, some tribes raise buffalo on ranches. Many forests and jungles have been cleared, which makes it harder to earn a living by hunting. In rural areas of Canada, Alaska, and South America, some Native Americans and Inuit (Eskimos) still make their living by hunting and trapping, but this is becoming rarer. And of course, one of the biggest changes was Indian tribes being forced to move to reservations far from their original homelands. In many cases, these tribes had to give up their old ways of life in
their new location because the environment was different and the land was not suitable for their traditional agriculture.

Can you tell me some of the traditional food you enjoy today?
The Winnemem Wintu tribe states the Chinook Salmon is part of their traditional diet and they need it for their physical health.

What is the cause today why there is less salmon? Is there anything you can do to eat more salmon in your diet? How would you feel if you or your family could not have access to salmon at your family gatherings?

Week #3 Diabetes, Heart Disease, and Kidney Disease

**Diabetes** - refers to a group of diseases that affect how your body uses blood sugar (glucose). Glucose is vital to your health because it's an important source of energy for the cells that make up your muscles and tissues. It's also your brain's main source of fuel.

If you have diabetes, no matter what type, it means you have too much glucose in your blood, although the causes may differ. Too much glucose can lead to serious health problems.

Potentially reversible diabetes conditions include prediabetes — when your blood sugar levels are higher than normal, but not high enough to be classified as diabetes.

**Heart disease** - describes a range of conditions that affect your heart. Diseases under the heart disease umbrella include blood vessel diseases, such as coronary artery disease; heart rhythm problems (arrhythmias); and heart defects you're born with (congenital heart defects), among others.

The term "heart disease" is often used interchangeably with the term "cardiovascular disease." Cardiovascular disease generally refers to conditions that involve narrowed or blocked blood vessels that can lead to a heart attack, chest pain (angina) or stroke. Other heart conditions, such as those that affect your heart's muscle, valves or rhythm, also are considered forms of heart disease.

Many forms of heart disease can be prevented or treated with healthy lifestyle choices.

**Chronic kidney disease** occurs when a disease or condition impairs kidney function, causing kidney damage to worsen over several months or years.

Diseases and conditions that commonly cause chronic kidney disease include:

What is sugar?

Sugar is a simple carbohydrate that belongs to a class of chemically-related sweet-flavored substances. It comes in many different forms. The three main types of sugar are sucrose, lactose, and fructose.

The American Heart Association (AHA) have said that added sugars "contribute zero nutrients" and are just empty calories "that can lead to extra pounds, or even obesity, thereby reducing heart health."

In early 2014, however, the World Health Organization (WHO) called for a reduction of daily sugar intake to 5% of total daily calories in order to tackle public health problems, such as obesity and tooth decay.

- **Milk chocolate bar** (44g) - 5.75 teaspoons of sugar
- **Milky Way bar** (58g) - 8.5 teaspoons of sugar
- **Marshmallows** (100g) - 14.5 teaspoons of sugar
- **Caramel piece** (10g) - 1.7 teaspoons of sugar
- **Butterfinger bar** (60g) - 6.9 teaspoons of sugar
- **Dove chocolate bar** (37g) - 5 teaspoons of sugar
- **Starburst packet** (45 grams) - 5.5 teaspoons of sugar
- **Twix bar** - 2.75 teaspoons of sugar
- **M&Ms packet** (45 grams) - 5.75 teaspoons of sugar
- **Red Bull** (one can) - 7.5 teaspoons of sugar
- **Lemonade** (one glass) - 5.5 teaspoons of sugar
- **Orange squash** (one glass) - 2.5 teaspoons of sugar
- **Hot chocolate** (one mug) - 4.5 teaspoons of sugar
- **Fruit smoothie** (one glass) - 3.5 teaspoons of sugar

**Snack:** Strawberry yogurt with fresh fruit and organic granola.

Reference

Week #5 - Fertilizers and Pesticides

What is fertilizer? A material of natural or synthetic used to soils or plant tissue to grow heartier plants. This fertilizer lands up in waterways contaminating oceans, lakes, and rivers and killing aquatic life. Other options is using animal manure, cover crops plowed into the soil. What is pesticide? Substance used to kill or control pests that eat plants. (insects, rats, moths, worms, bacteria) Some examples of pesticides are insect repellant, flea medicine, weed killers.

**Other options include ladybugs, mint oils, garlic.**

There are pros and cons to each and both increase food production. They both can cause water pollution from the use of chemicals. They pose a risk on animal, plant, and human species. Pesticides prevent crop failure, reduce blemishes on fruits and vegetables ensuring a higher value for crops. Exposure to pesticides have caused headaches and neurological problems. Lawn pesticides are linked to cancer, birth defects, reproductive effects, liver and kidney damage. Toxins can seep into the ground and can harm wildlife and beneficial insects. Malathion used to kill mosquitos can effect immune, neurological, and respiratory systems.

**What you should do?**
Grow your own food using safer measures with no pesticides or fertilizers. Wash fruit and vegetables found at the store in salt water for two minutes. Try to buy organic foods they usually don’t use these methods.

**Preservatives**
Nitrites and sulfites in processed food inhibit growth of microorganisms (mold) and increase shelf life. Found in processed meats and fish. Your body converts nitrites in to carcinogenic substances called nitrosamines and increased consumption from processed meat increase stomach cancer. Sulfites used to preserve dried fruit, fruit juices, wine, and beer may increase risk of asthma attacks. Artificial colors may increase your risk of disease. Carmel color found in sodas contains two chemicals 2-methylimidazole and 4-methylimidazole that cause cancer of the lungs, liver, and thyroid, and leukemia. Food coloring yellow and red can increase hyperactivity.

**Fats and Sweeteners**
Trans fats increase heart disease (who remembers what heart disease is?) these are found in breads, cookies, margarine, microwave popcorn. High fructose corn syrup found in soft drinks, salad dressings, desserts increase risk of obesity and diabetes. (who remembers what diabetes is?)

Week 6 Health Benefits of Organic and Sustainable Agriculture
Organic foods are grown or raised without chemical pesticides, antibiotics or hormones, according to the U.S. Department of Agriculture. Organic farmers take advantage of natural methods of fertilizing soil and controlling weeds and insects. Certain organic foods, such as milk and tomatoes, may contain health benefits that make these organic foods a healthier choice than their processed or conventional counterparts.

Increased Vitamin Content
Some organic foods contain more vitamins than processed foods, according to Organic Facts. For example, organic milk contains more vitamins than non-organic milk. Organic milk is believed to be of better quality because the cows that produce it eat a better diet, which includes grazing for large parts of the day. Organic fruits and vegetables also tend to contain more vitamins than processed ones, according to nutritionist Shane Heaton.

Increased anti-oxidant Content

Not only do many organic foods contain more vitamins than processed foods, they also contain more antioxidants, according to Organic Facts. Protect the body against certain diseases by helping promote cell health. The researchers at the University of California Davis believe that organic foods contain more antioxidants because plants create antioxidants in order to defend themselves from plant-eating insects. Conventionally raised plants do not need to produce as many antioxidants because any plant-eating insects that might prey on them are controlled with insecticide.

Lower Chemical Residues
Because organic foods must be raised and processed without insecticides, herbicides or similar chemicals, the finished product available in the store usually contains fewer of these chemicals than processed foods, according to Heaton. Although many pesticide residues may be harmless to humans, people who are sensitive to others may experience symptoms that can be alleviated by reducing the amount of conventionally processed food in the diet.


Sustainable Agriculture
In simplest terms, sustainable agriculture is the production of food, fiber, or other plant or animal products using farming techniques that protect the environment, public health, human communities, and animal welfare. This form of agriculture enables us to produce healthful food without compromising future generations' ability to do the same.

The primary benefits of sustainable agriculture are:

Environmental Preservation
Sustainable farms produce crops and raise animals without relying on toxic chemical pesticides, synthetic fertilizers, genetically modified seeds, or practices that degrade soil, water, or other natural resources. By growing a variety of plants and using
techniques such as crop rotation, conservation tillage, and pasture-based livestock husbandry, sustainable farms protect biodiversity and foster the development and maintenance of healthy ecosystems.

Protection of Public Health
Since sustainable crop farms avoid hazardous pesticides, they're able to grow fruits and vegetables that are safer for consumers, workers, and surrounding communities. Likewise, sustainable livestock farmers and ranchers raise animals without dangerous practices like use of nontherapeutic antibiotics or arsenic-based growth promoters. Through careful, responsible management of livestock waste, sustainable farmers also protect humans from exposure to pathogens, toxins, and other hazardous pollutants.

Sustaining Vibrant Communities
A critical component of sustainable agriculture is its ability to remain economically viable, providing farmers, farmworkers, food processors, and others employed in the food system with a livable wage and safe, fair working conditions.

Upholding Animal Welfare
Sustainable farmers and ranchers treat animals with care and respect, implementing livestock husbandry practices that protect animals' health and wellbeing.

Industrial Agriculture
During the mid-1900s, US agriculture began to industrialize, becoming increasingly mechanized and reliant upon resource-intensive inputs like synthetic fertilizers and chemical pesticides. Over time, farms became larger, more specialized, and centralized, creating a process of extreme consolidation that drove many small farms out of business, and ultimately resulted in market control by a handful of powerful corporations. Although industrial agriculture now produces great quantities of food at low prices, it is able to do so only by implementing practices that threaten the environment, human health, rural communities, and animal welfare.

Industrial Crop Production
Today, industrial crops are produced on huge monocrop farms, which rely extensively on chemical pesticides, synthetic fertilizers and genetically modified crop varieties. These practices deplete and degrade soil, reduce biodiversity, and generate air and water pollutants that degrade the environment and threaten the health of farmworkers, neighbors, and consumers.

Industrial Livestock Production
The majority of meat, eggs, and dairy products are now produced on enormous industrial livestock facilities. Also known as factory farms or CAFOs (concentrated animal feeding operations), these facilities confine thousands (and, in some cases, hundreds of thousands) of animals in cramped conditions without access to the outdoors. In addition to compromising animal welfare, factory farms generate a huge amount of waste, which pollutes air, water, and soil, degrading the natural environment and threatening public health.

A Sustainable Food Future
Although industrial agriculture currently dominates the US food system, public awareness of the problems caused by this model has grown rapidly, building extensive
support for sustainable agriculture, creating a robust market for sustainable foods, and
inspiring formidable demand for agricultural policy and regulatory reform. Sustainable Table works to support the transition to a sustainable food future by educating people about the benefits of sustainable agriculture (and the problems with the industrial alternative), and by providing tools and resources to help consumers make better food choices.

http://www.sustainabletable.org/246/sustainable-agriculture-the-basics