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**Designing a Nutrition Curriculum for Native Hawaiians and Pacific Islanders in San Diego**

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### **Abstract**

NHPI have a higher percentage of obese adults in comparison to other racial groups (Lasseter et al., 2015). This may be due to risky behaviors, lack of physical activity, and lack of vegetable and fruit intake (Moy et al., 2010). The goal of this capstone was to develop a culturally-tailored nutrition curriculum based on qualitative feedback from NHPI key informants and focus group participants. This qualitative study was guided by a logic model, primarily adopted from the Pili ‘Ohana Project, which used a community-based participatory research (CBPR) approach to collect data through community informant interviews, focus groups, and a survey (Kaholokula et al., n.d.). Using a similar approach, this capstone used data from two key informant interviews and two focus group interviews to inform the type of materials developed and receive feedback. A grounded theory approach was used to analyze the data and three themes emerged from the interviews: (1) lifestyle change, (2) helping others, and (3) barriers to healthy eating. These findings demonstrate the need to develop more public health programs targeting NHPI in San Diego County. It is important to focus more public health efforts on addressing health disparities in this rapidly growing population.

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## Introduction

The obesity epidemic is a major public health threat in the United States. According to Dietz (2015), approximately 35% of adults and 17% of children and adolescents were obese between 2011–2012. To classify someone as obese, their weight must be higher than what is considered a normal weight according to their height. The body mass index (BMI) of a person is used to measure if one falls within the normal, overweight, or obese category. For adults, a BMI of 18.5 through 24.9 is considered normal weight and a BMI of 30 or more is considered obese (CDC, 2017). A study conducted by Hammond (2010) showed that the estimated medical costs of obesity are as high as \$147 billion a year in the U.S., which is more than any other country.

According to the Centers for Disease Control and Prevention (2016), 35% of approximately 39,144,818 adults in California are overweight and 24.7% are obese. Despite some progress in California, racial/ethnic, socioeconomic, and geographic disparities in obesity rates persist. The rates of obesity are highest among those with very low income and lowest among higher income Californians. According to the California Department of Public Health Nutrition Education and Obesity Prevention Branch (2014), low-income Hispanics, Native American/Alaskan Natives, Pacific Islanders, and African Americans were disproportionately affected by obesity compared with other race/ethnic groups. Additionally, there are higher obesity rates in different racial groups such as Latinos and African Americans compared to NHW. Over one-third of African American females (41.6%) and Latinas (35.9%) were obese compared to 21.6% of white females (California Department of Public Health Nutrition Education and Obesity Prevention Branch, 2014). A third group with high obesity rates are Native Hawaiians and Pacific Islanders (NHPI). It is important to address health disparities, especially concerning obesity, to improve health and well-being.

**Obesity among Native Hawaiians and Pacific Islanders in the U.S.**

There is growing research documenting obesity rates among NHPI and potential interventions to tackle the epidemic. Previously, NHPI were aggregated by the US Census as “Asian and Pacific Islander” (API), thereby masking many health disparities faced by NHPI. Disaggregation of NHPI from Asians did not occur until the 2000 Census (Bacong, Holub, & Porotesano, 2016). NHPI ancestry includes the original inhabitants of Hawaii, Samoa, Tonga, Guam, Chamorro and the people of Melanesia, Micronesia, and Polynesia (Hixon et al., 2012).

In the United States, more than 1.2 million people identify themselves as NHPI. This population is becoming one of the fastest growing ethnic groups in the United States. According to the U.S. Department of Education (2017), the NHPI population was one of the fastest growing race groups between 2000 and 2010. Between those years, the NHPI population grew 40%, a rate close to that of Latinos and Asian Americans. The NHPI population increased from 398,835 in 2000 to 540,013 in 2010 (U.S. Department of Education, 2017). By 2030, the NHPI population is expected to reach over 2 million in the United States (U.S. Department of Education, 2017). At over 527,000 people, Native Hawaiians are the nation’s largest NHPI ethnic group, followed by Chamorro, Guamanian, and Samoan. Though smaller in number, Melanesian and Micronesian ethnic groups also grew significantly over the decade (U.S Department of Education, 2017).

Common lifestyle behaviors among NHPI are smoking, lack of physical activity (PA), and lack of fruit and vegetable consumption. Only 20% of NHPI met recommendations required for PA and 1% met recommendations for fruit and vegetable intake (Moy et al., 2017). These lifestyle behaviors can affect health and lead to health issues such as obesity. According to Lassetter et al. (2015), more than half of NHPI in the U.S. are either overweight (31.7%) or

obese (31.0%). Obesity is a major public health concern in the United States and contributes to numerous health risks, especially in the NHPI community. NHPI have a higher percentage of obese adults in comparison to other racial groups (Lasseter et al., 2015).

According to Curtis (2004), the rates of overweight and obese persons are as high as 75% in the populations of Nauru, Samoa, American Samoa, the Cook Islands, Tonga, and French Polynesia (Curtis, 2004). High obesity rates are a risk factor for hypertension, heart disease, and diabetes in the NHPI community. Moy et al. (2010) found that NHPI living in the United States experience higher prevalence of obesity and related diseases, lower levels of fruit and vegetable intake, and lower levels of PA compared to the general U.S. population. Thus, compared to other ethnic groups, NHPI consume less nutritious food, are less active, more obese, and have a higher prevalence of chronic diseases.

### **Chronic diseases within the NHPI community**

Chronic diseases are not easily cured by medications or prevented by vaccines. They often develop slowly, are long-lasting, and are the leading causes of morbidity, mortality, illnesses, and disabilities. People of all socio-economic status and age groups are affected by chronic diseases and NHPI are no exception. Improper management of chronic diseases can lead to shorter lifespans and preventable hospitalizations. Additionally, many chronic diseases can be genetic, which increases risk. The environment can also contribute to the risk of chronic diseases as well as lifestyle choices, such as PA and diet. Chronic diseases that are highly prevalent among the NHPI community include cardiovascular disease, hypertension, and diabetes.

**Cardiovascular Disease.** Cardiovascular disease, or heart disease, is one of the leading causes of death across all gender and race/ethnic groups. Cardiovascular disease includes

conditions such as structural problems, blood clots, and diseased vessels that affect the heart (WHO, 2017). According to Tung and Barnes (2014), NHPI are three times more likely to be diagnosed with coronary heart disease in comparison to Non-Hispanic Whites (NHW). They are also seventy percent more likely to die from heart disease compared to NHW (Tung and Barnes, 2014).

Several factors such as medical conditions and lifestyle choices can put NHPI at a higher risk of developing heart disease. Risk factors include obesity, diabetes, high blood pressure, and poor diet. Many studies have shown a positive correlation between heart disease mortality and BMI (Akil and Ahmad, 2011). Obesity adversely affects cardiovascular structure and function. The total cardiac output and blood volume are increased, thus increasing cardiac workload (Akil and Ahmad, 2011).

Diet affects heart health, and an unhealthy diet increases one's risk of developing heart disease. According to Anand et al. (2015), poor quality diets are high in unhealthy fats, salt, refined grains and added sugars. They are also low in vegetables, fruits, fish, legumes, nuts, and whole grains. Furthermore, they are often high in processed food products and lack freshly prepared dishes and whole foods (Anand et al., 2014). NHPIs' typical dietary intake includes foods high in sugar, fats, carbohydrates, and processed meat. Vegetable and fruit consumption among NHPI is low, with only one to twenty percent meeting the current recommended guidelines from the Centers for Disease Control and Prevention (CDC) (Tung and Barnes, 2014).

**Hypertension.** Hypertension is a significant risk factor for cardiovascular disease. It results when the pressure in blood vessels rises above normal levels (CDC, 2017). When someone is hypertensive, their systolic and diastolic blood pressure is greater than 140/90 mmHG (Merai et al., 2016). In the U.S, hypertension affects one-third of adults age 18 years or

older and approximately one half of them have uncontrolled hypertension (Merai et al., 2016). Those that have uncontrolled hypertension are either aware of it but not receiving treatment, are being treated but their blood pressure is still uncontrolled, or they are completely unaware of it (Merai et al., 2016). Among all those affected with hypertension in the U.S, NHPI suffer disproportionately.

Hypertension prevalence is high among some NHPI ethnic groups. According to the Asian Pacific Islander American Health Forum (2010), a study in San Diego County reported that 42.5% of Chamorros (35.0% of men and 48.4% of women) reported having a hypertension diagnosis. The high rate of hypertension among NHPI is largely explained by the high prevalence of obesity, but other factors also come into play (Asian Pacific Islander American Health Forum, 2010). Diabetes and heart disease can also be risk factors for hypertension.

**Diabetes.** Diabetes is a major cause of morbidity and mortality globally (Maskarinec et al., 2009). Like cardiovascular disease and hypertension, diabetes may also be caused by obesity. Due to the increase in obesity in the U.S., there has been a sudden rise in the prevalence of type 2 diabetes (T2D), which is one of the most common chronic diseases associated with obesity (Okihiro and Harrigan, 2005). T2D is a metabolic disease that affects the way the body processes blood sugar, or glucose (Maskarinec et al., 2009). This leads to high levels of glucose in the blood stream (Maskarinec et al., 2009). The severity of diabetes varies depending on the person. Some people with T2D may only need minor lifestyle changes while others may need more permanent therapy such as insulin and medications.

T2D is very common among non-Hispanic ethnic minorities such as NHPI. NHPI who suffer from high rates of obesity experience a high risk of diabetes. According to Tung (2012), the age-adjusted prevalence of T2D in NHPI who are 18 years or older is three times higher in

comparison to NHWs. In addition, they also have a higher prevalence of complications related to diabetes (Tung, 2012). NHPI had the highest age-adjusted incidence rate for end-stage kidney failure from diabetes compared to NHWs, Hispanics, Asians, and non-Hispanic Blacks (Tung, 2012).

### **Physical activity among NHPI in the U.S.**

Regular PA and healthy eating is recognized internationally as a behavior important for the prevention and treatment of several major chronic diseases and conditions (Moy et al., 2010). A large proportion of NHPI are not meeting the current PA recommendations for health benefits. In a study by Moy et al. (2010), 80% of NHPI adults in San Diego were not meeting current PA recommendations compared to 16% of the general U.S. population. Nearly half of NHPI in California engaged in less than 10 minutes per week of walking for leisure or transportation (Moy et al., 2010).

Most NHPI are not meeting the recommended 20 minutes of daily PA for maintaining a healthy lifestyle. Increasing PA can help reduce body fat and can help halt weight gain. In a study by Black et al. (2011), it was shown that simple physical activities such as gardening and farming decreased severity of obesity in Samoans. PA coupled with nutrition interventions helped reduce weight gain in urbanized Samoan populations (Black et al. 2011). Poor nutrition and physical inactivity are the most common behavioral risk factors of obesity. Individuals who are at a healthier weight are less likely to develop chronic diseases such as hypertension, diabetes, and heart disease.

### **Acculturation to western lifestyles**

Curtis (2004) stated that for thousands of years NHPI maintained a healthy lifestyle by following their traditional norms and values; however, this changed when the Europeans first arrived in the seventeenth and eighteenth centuries. Integration of European influences led NHPI to lose many of their traditional eating habits. The traditional foods of the islands such as fresh fish, meat, local fruits and vegetables, yams, taro, and breadfruit were replaced by rice, sugar, flour, canned meats, canned fruits and vegetables, soft drinks and beer. Thus, food preferences became much higher in sugars and fats. Consequently, European influences led to the loss of traditional food preparation and food growing skills (Curtis, 2004).

Since the seventeenth century, obesity has been a major health issue in the NHPI community. Adoption of a western lifestyle may be one reason for the rise of the obesity epidemic among NHPI. Increased consumption of imported, processed foods led to higher caloric intake and increased obesity rates. In a study conducted by Cassels (2006), it was shown that the proportion of energy coming from mostly saturated fat was much higher in Micronesians living a modern, western lifestyle in California compared to Micronesians living a traditional way of life in Palau. The traditional lifestyle groups relied more on energy from complex carbohydrates than the modern lifestyle groups.

Davis et al. (2004) stated that in westernized settings, processed foods are more available and consumed more often. Furthermore, processed foods tend to be cheaper than healthy foods. Thus, some may try to stretch their budget by purchasing more inexpensive, processed foods. Since most Pacific Islanders live in the continental U.S., many left their healthier, traditional diet and adopted a western diet (WHO, 2010). For example, McEligot (2010) found that Native Hawaiians residing in Southern California had higher obesity rates and most did not eat the recommended servings of fruits and vegetables. Eighty-seven percent of Native Hawaiians in

Southern California were either overweight or obese and were not meeting the American Diabetic Association's dietary guidelines for vegetable, fiber, and whole grain consumption. In addition, a study by Moy (2012) found that NHPI in California reported significantly higher consumption of unhealthy, energy-dense foods and fewer met fruit and vegetable intake guidelines compared to NHWs.

### **Obesity among NHPI in San Diego County**

San Diego County is home to one of the largest NHPI populations in the country. According to Hixson et al. (2012) the Native Hawaiian and Pacific Islander population has grown 25 percent over the past decade, reaching just over 31,000 people. According to a California Department of Public Health report on Nutrition Education and Obesity Prevention (2014), 25 percent of NHPI in San Diego County are overweight or obese. Few studies have explored Pacific Islander health and research in San Diego County. Despite this lack of research, it is known that NHPI suffer disproportionately from high obesity rates, and some studies are currently underway to reverse this trend.

The Pacific Islander Community Health (PIC Health) study at Rawmana Fitness, conducted by Dr. Christina Holub and colleagues, has shed light on the need to build a healthy eating curriculum for the NHPI community in San Diego County. The primary goal of the pilot study was to increase PA among NHPI through a 12-week culturally-tailored intervention. The intervention focused on culturally-tailored physical activities, moderate-intensity workout or cardio classes, as well as muscle strengthening classes and stretching. Fitness classes were led by a trained community health promoter twice per week. Preliminary results from a pretest-posttest indicate that participants decreased BMI by an average of 2.3 BMI points (3.6 points for women), increased fruit and vegetable intake, decreased soda consumption, and most participants

moved from “contemplation” to “action” for stages of change related to PA. One limitation of the pilot study, per qualitative feedback from participants, was the need for a healthy eating curriculum, specifically for “newly active” NHPI in San Diego. This community request served as the basis of the current capstone project. The curriculum materials created for this project will be implemented into the next PIC Health study starting in January 2018. They will also be disseminated to the rest of the NHPI community in San Diego via the PIC Health Advisory Board.

Nutrition education is especially important because consumption of unhealthy foods may hinder the benefits of PA. Advancing knowledge of healthy eating as a supplement to PA may help to curb obesity rates (Moy et al., 2012). By meeting these requests this capstone helped to fill a gap in NHPI nutrition education and improve NHPI health in San Diego County.

Promoting healthy eating among the NHPI population in San Diego County can help to decrease health disparities in this population. Developing a culturally tailored nutrition curriculum that incorporates how to cook and eat healthy can play a role in promoting lifelong healthy eating habits. Encouraging healthier eating habits that incorporate Pacific Islander traditional foods can help increase healthy eating and healthier food choices among the NHPI community in San Diego which can lead to lower obesity rates.

### **Research Goal**

The goal of this project was to develop a culturally-tailored nutrition curriculum for the NHPI community in San Diego County using a community-based participatory research (CBPR) model. This approach was modeled after the Pili ‘Ohana Project (Kaholokula et al., n.d.). A grounded theory approach was used to analyze qualitative data from participant interviews and

identify emergent themes. The resultant themes were used to inform the development of curriculum materials.

### **Research Question**

What information would NHPI's find beneficial in a nutrition curriculum to supplement their physical activity program?

### **Project Objectives**

**Objective 1.** Conduct two key informant interviews with NHPI participants to identify specific nutrition needs in the community and inform questions for the focus groups.

**Objective 2.** Conduct two focus groups with NHPI community members. Themes from focus group interviews were used to inform curriculum development. All NHPI focus group participants were part of the PIC Health study.

**Objective 3.** Adapt education materials from the island-specific Pili 'Ohana Lifestyle Program curriculum towards a broader NHPI population in San Diego. For over eight years, the Pili 'Ohana project has analyzed health disparities among NHPI using CBPR. However, Pili 'Ohana is specific to NHPI living on the islands (Pili 'Ohana, 2006). This capstone adapted information from the Pili Lifestyle Program to make it applicable to the NHPI population in San Diego County.

### **Methods**

The purpose of this capstone was to fulfill a request from past PIC Health Participants to develop a culturally-tailored nutrition curriculum. This was achieved through building community partnerships, understanding cultural influences on eating habits, and assessing food disparities and barriers. The capstone laid the foundation for future interventions with NHPI

regarding healthy eating habits. Rawmana Fitness is part of PIC Health, which was the community partner for this project. Curriculum materials will be implemented in the next PIC Health study beginning in January 2018 and disseminated throughout San Diego County via the PIC Health Advisory Board.

The conceptual model for this capstone is guided by a Logic Model (Figure 1), primarily adopted from the Pili ‘Ohana Project, which used a CBPR approach to collect data through community informant interviews, focus groups, and a survey (Kaholokula et al., n.d.; Sharma, M., Branscum, P., & Atri, A., 2014). This capstone used a similar approach to develop a culturally appropriate healthy eating curriculum for NHPI. The qualitative research phase includes conducting key informant interviews and focus groups. This provided a framework to build a healthy eating curriculum from the perspective of the target population. Furthermore, qualitative research was utilized to understand cultural eating practices, current knowledge of healthy eating habits, and identify barriers and solutions.

### **Participant Recruitment**

Eleven NHPI from San Diego County were recruited from Rawmana Fitness to participate in key informant interviews and focus groups. Focus group participants included those in the previous PIC Health pilot study at Rawmana Fitness. Ensuring confidentiality and anonymity is very important. Therefore, to avoid using any names or information that could identify the participant, each respondent received a unique number. The participant number was used to identify the transcription.

### **Key Informant Interviews**

Two key informant interviews were conducted to gather information from community leaders and health professionals who understand the community and are trusted by NHPI. These

leaders were targeted to gain an understanding of the NHPI diet. The interviews were conducted face-to-face by Janell Bryant, Alma Detten, Dalia Leon, and Jasmin Leon at Rawmana Fitness.

### **Focus Groups**

Two focus groups of mixed genders were conducted. Both focus groups consisted of past participants of the PIC Health Study. The purpose of the first focus group was for the researchers to gain insight into NHPI eating habits, the foods they eat, barriers to healthy eating, and available resources. The second focus group provided feedback on nutrition curriculum materials developed after the first focus group.

The first focus group consisted of seven participants and the second focus group included two participants. One researcher lead each focus group discussion while a second researcher took notes. The discussion was audio-taped for later review by the researchers. The purpose of these focus groups was to gain insight into the needs of the NHPI population regarding tailored materials. The second focus group addressed themes from the first focus group, which were incorporated throughout the healthy eating curriculum.

### **Data Analysis**

Interviews from key informants and focus groups were audio-taped, transcribed, and uploaded into ATLAS.ti software used for qualitative coding and analysis. Using a voice recorder allowed for free engagement in the conversation and prevented loss of important details. After each interview was completed, content was examined to determine what was learned and what still needed be discovered or needed elaboration. Once the content was examined and all information was gathered, the recordings were transcribed.

The audio recordings of the key informants and focus group interviews were transcribed into written form so that they could be studied in detail and coded. Express Scribe, a qualitative

transcribing software, was used to facilitate data transcription. Two capstone members listened to the audio file and typed the entire recording verbatim into a text editor.

### **Open Coding**

When the interviews had been transcribed verbatim, they were coded and analyzed using the software ATLAS.ti. Open coding was used to break down the transcribed data into units of meaning or concepts, which were categorized and labelled. Categories were determined based upon common or repeated statements during the interviews. All researchers contributed to coding and extracting themes from the interview and focus group transcripts. Each transcript was read and notes were made of words or short phrases that summed up what was said in the text. That allowed for identification of themes that emerged from the data. As additional data were gathered, coded concepts were compared to existing data and re-categorized. Upon further review of data, codes were continually assigned that reflected the emerged concepts.

After going over all the words and phrases (codes) gathered, they were collected onto a clean set of pages. Doing this allowed for reduction in the number of themes used. Once a shorter list of themes was compiled, overlapping or similar themes were identified. These themes were further refined and reduced in number by grouping them together. At the end, a list of themes was compiled. These themes were used to inform the creation of nutrition curriculum materials.

### **Results**

Two key informant and two focus group interviews were conducted in August 2017 and October 2017. All members of the first and second focus groups were past participants in the PIC Health study. The first focus group informed the type of materials developed while the second focused group provided feedback on materials developed after the first focus group.

Seven participants were included in the first focus group, and two participants from the first focus group composed the second focus group. Three main themes emerged from the key informant and focus group interviews: (1) lifestyle change, (2) helping others, and (3) barriers to healthy eating.

### **Theme 1: Lifestyle change**

Changing one's lifestyle to improve health was a recurring theme throughout all key informant and focus group interviews. Various aspects of lifestyle change were discussed, including changing mindset, time needed for change, and improving eating habits. While key informants mostly focused on the challenges of creating sustained positive change, focus group participants largely discussed their intention to change, and the pros and cons of their continued actions.

**Changing mindset.** Key informants discussed the need to develop an open mindset as a necessary precursor to making healthy lifestyle changes. During the interviews, key informants described mindset as one's openness to change. More specifically, they referred to mindset as one's openness to improve their exercise and eating habits. The difficulty in changing one's mindset was expressed by both key informants. Body size acceptance and being closed minded to receiving help were two of the main barriers discussed.

You know we're having a really hard time figuring it out, how do we get the mindset to change? (*Key informant*)

It's pride, it's I don't need your help and I'm fine where I'm at, comfortable in their own skin at 300 and 400 pounds or 600 pounds...And so my challenge begins there and the mindset has been shut down and they're close minded to any kind of help...And they're unwilling to do anything because in their mindset, I am fine just the way I am. (*Key informant*)

Its constant education on the mindset and what food does and what food could do to destroy the body and what food could do to heal the body. And if they're unwilling to

have an open discussion about that then nothing happens and the challenge is opening up their minds, how our words are used and how they are affected, to not shut down. (*Key informant*)

One key informant discussed methods of overcoming closed-mindedness, of which open communication was the key component. Helping one realize what is important in life can help them decide that they need to develop healthier eating habits.

Well you overcome that behavior by constantly having open communication. Right, it's the ability to have sit down and have them discover for themselves what life is all about and what matters to them. (*Key informant*)

But is getting them here. Yeah, and it's the outreach and we have to go to them because they will never come to us. Right, we have to go directly knocking at their doors to see what they want and whether they want to participate or not and having communication. (*Key informant*)

**Time needed for change.** Key informants discussed the importance of having a long enough program to establish lifestyle change. Lifestyle change is contingent upon changing one's mindset, which takes time. Change in dietary habits must be sustainable to truly establish lifestyle change and improve health. According to one key informant, the minimum time of the program should be six months. Less than six months would not be long enough for participants to take what they learned and consistently apply it to their own life.

They can go as long as they want, but I require 6 months in order for me to change some of these habits. Some people say that it takes 19, 20, 21 days to change habits. I say that's BS. It takes a lot longer because it has to be habitual. (*Key informant*)

It's hard, that is why the program of 6 months has to take place. Because it does not take 2 weeks 3 weeks, it takes time to constantly enroll people into a different mindset of what food does to them. (*Key informant*)

**Improving eating habits.** Participants from both focus groups discussed ways they are actively improving their eating habits. Making healthy substitutions to replace unhealthy foods was a large component of their change in lifestyle. All focus group participants from the PIC

Health study were at least in the “contemplation” stage of the transtheoretical model (TTM) regarding PA, and many had moved into the “action” stage. Being in the contemplation stage means that one can recognize that they need to change their behavior, and start to think about the pros and cons of their continued actions. Many participants’ comments reflected the type of thinking characterized by the contemplation stage, while some also described behavior changes that were characteristic of the action stage regarding healthy eating. Those in the action stage had made specific changes to eliminate poor eating habits and acquire new healthy behaviors.

Compared to what I’m really eating, I’m not anywhere near here. So it’s giving me another perspective of what I should be doing. (*Focus group participant*)

I went from like white rice to brown rice to quinoa. Substituting beef for, you know, turkey, things like that. (*Focus group participant*)

Brown rice, or wheat pasta instead of regular. After you do it awhile you kind of forget. (*Focus group participant*)

## **Theme 2: Helping Each Other**

Helping each other was a recurring theme throughout the key informant and focus group interviews. Role modeling and social support were two sub-themes from the interviews. While key informants focused on helping the NHPI community in general, focus group participants discussed reaching out to each other and being good examples to their families and future generations.

**Role model.** Both key informants mentioned that role models can help change the mindset of the NHPI community. For example, if community health advocates become role models by leading programs that they also take part in, others would be more open to following their example. Community members would then increase their trust in these advocates because they did it themselves, and exemplified the program’s positive results. To help the NHPI

community, it is important to become a community member and a role model that leads by example.

The suggestion that I give you guys is that you have to take this on your own. If this work does not affect you then it will not affect others. If you are becoming the advocate for health you got to take on health 100%. So when they see you they want to mimic what you do. Because words these days are nothing but words. You look back at what people have done, it's all words, no action. (*Key informant*)

People have to be able to see that what you are trying to tell them you are actually doing and they can see the change in them (*Key Informant*)

If you don't become a participant and you're just part of the coaching thing then you don't get nothing out of it (*Key Informant*)

Aside from becoming role models to the NHPI community in general, most focus group participants mentioned that setting an example for their own family as well as future generations was important to them, especially when it came to healthy eating.

But in that I just try do my best to cook something and, you know, trying to set an example for them especially for the grandkids cuz they live with those two (*Focus group participant*)

I think we need to make a difference and sort of be that good example because it has to start somewhere and letting it go on to future generations. (*Focus group participant*)

Becoming a role model was perceived as something that could change the mindset of NHPI when it comes to healthy eating and leading a healthier lifestyle. Setting an example does not only help the current NHPI community, it can help future generations.

**Social Support.** Most participants mentioned motivation as an important factor that helped them stay on track. When participants felt like giving up, having someone to motivate them increased the chances of them staying on a healthier path, especially when it came to healthy eating.

We both kind of like influence each other. But he will tell me no more. Sometimes I will be like the devil and he will be like no it's not the weekend yet. (*Focus group participant*)

So in the guilty conscious my kids will make me lead more towards the good foods and healthy foods because then I want to be around for them you know so I guess my kids more than my wife. (*Focus group participant*)

Oh yeah, my oldest daughter she's a personal trainer on the side and she is a fitness nut so she has me on a diet. (*Focus group participant*)

Family and peer motivation influenced most participants to eat healthier. Family motivation was perceived as leading a healthier lifestyle to live longer for the family while peer motivation was perceived as helping friends to stay on the right track and not give up.

### **Theme 3: Barriers to Healthy Eating**

Barriers to healthy eating was a constant theme in the key informant and focus group interviews. There were several barriers mentioned that prevented participants from eating healthier. These barriers included cultural habits, emotional challenges, environmental barriers, and being consistent. While key informant interviews mostly focused on the challenges that the overall NHPI population face, the focus group participants largely discussed the daily challenges that they face and the factors preventing them from starting to eat healthier.

**Cultural Habits.** Key informant interviewees discussed how cultural habits have substantial influence in the way one eats. They also discussed how NHPI tend to adapt certain eating behaviors from their culture. Culture influences eating habits and patterns, including the types of foods that NHPI might eat. One key informant mentioned how limiting portion size was a major challenge influenced by cultural habits. Lack of knowledge was another challenge expressed by a key informant.

It's hard because it's the way that we eat and we've always ate is based on culture. Our cultures teach us that it is better to have enough than have very little and that we have to eat everything that is on our plate and we celebrate life with food and that's just not in the Polynesian that one Polynesian community that's every community. (*Key informant*)

Well, I myself as a Polynesian, I have grown up with that mentality of the way that they eat (*Key informant*)

You are going to get a lot of people that are just gonna say oh it's just cultural the way we eat the way we are is just cultural. I would say not part of our indigenous culture but part of our colonize culture has been of poor eating. (*Key informant*)

One focus group participant mentioned how they felt there were mixed messages from leaders, which may influence someone not to change their eating habits.

To me I also see it as a mixed message in some of the cultural aspects. Because in the Samoan culture we still have a cheap system and is sad that they are kind of like the role models and or a lot of them probably have a BMI of fifty plus. Uhm its almost like a mixed message of your culture with your leaders. (*Focus group participant*)

**Emotional Challenges.** One key informant discussed how emotional challenges may influence eating habits. The key informant discussed how there are life obstacles that prevent people from living healthier lifestyles. Not finding the problem would prevent a person from changing their eating habits. One must first know what is blocking their path and preventing them from eating healthier. Once they discover what the obstacle was they can start changing the way they eat.

Well, I myself as a Polynesian, I have grown up with that mentality of the way that they eat...I wanted to start this business to help this community because I already knew that ten years ago what people were going through. The emotional and the psychological and physical stress that they are going through. (*Key Informant*)

Because if something is holding you down and if you're obese because of something that is wrong in your life that holds you there. It's getting them to find out what is holding them back that will not allow them to move forward and taking care of themselves. (*Key Informant*)

**Environmental Barriers.** Key informants discussed how the built environment poses challenges to eating healthy, such as exposure to fast food restaurants. Availability and convenience of fast food restaurants can lead people to eat unhealthier foods.

The special challenges are living out in the real world. Because you are constantly being bombarded with McDonalds' and Taco Bell and Del Taco and everything else and those are the challenges. If you took all of those out and there was nothing else, you can actually go home and eat healthy. Those are the challenges. (*Key Informant*)

**Being Consistent.** Key informants discussed the challenge of eating healthy food regularly. Consistency is necessary to adapt healthy eating behavior as part of one's lifestyle. One key informant stated that if PIC Health participants exercised regularly yet continued to eat unhealthy, they did not see results. It is necessary to consistently eat healthy while working out.

The challenges of the program are getting people to come and stay to follow through and follow through. (*Key Informant*)

It has to be consistent. If you're not consistent then nothing happens. (*Key Informant*)

You can work out as much as you want and stretch out as much as you want but you never lose the way if you go home and you don't eat the stuff that we tell you to eat or you don't eat the food to heal your body but you go home to have Taco Bell. Right, or you go home to have a Big Mac and then the fries and then the super-size and then the, does that makes sense. The program works it's whether they decide or if they make a choice to actually follow through. The downfall is the follow through. (*Key Informant*)

Commitment is an important aspect to consider when trying to change the way one eats. Key informants discussed how commitment was very influential when trying to change one's eating behavior. Those who were committed and followed through experienced positive change.

It's that easy but is not what you need to have is whether you are committed. The difference is the word committed. Because you can be inspired to do whatever the hell you want you'll never follow through. But if you say that you are committed to doing something and actually are following through doing something than something will happen. Things then will change. (*Key informant*)

Focus group participants went on to discuss how consistently eating healthy was a constant struggle for them. However, they acknowledged that they felt much better when they ate right

consistently. When they continued eating healthier foods, they saw a positive difference in themselves.

But, um it is a struggle to sort of. I think the struggle is being consistent. But I like it. I see the difference on how it makes me feel after I eat. (*Focus group participant*)

### **Creating Materials for Healthy Eating**

Based on the findings for this project, we developed over 15 educational materials. These materials will be implemented during the second phase of the PIC Health study beginning in 2018. Participants from the first phase of the PIC Health study requested a nutrition curriculum to supplement their PA, so these materials are intended to fulfill this need.

Thematic findings and participant suggestions informed the development of our materials. For example, improving eating habits was a large component of Theme 1: Lifestyle Change expressed by focus group participants. Many focus group participants discussed ways in which they made healthy substitutions to foods they cooked regularly at home. The Menu Makeover activity, Eating Out Guide, and Beverage Guide provide useful suggestions for making healthy swaps for unhealthy foods.

Role models and social support were the main components of Theme 2: Helping Each Other. The My Menu Makeover Activity gives participants an opportunity to provide support by sharing a healthy recipe that they made. Thus, using My Menu Makeover to create a healthy recipe fits with Theme 1: Lifestyle Change and sharing it with others fits with Theme 2: Helping Each Other. The Daily Food Journal supports Theme 2: Helping Each Other because it gives participants a chance to support each other through shared experiences as they make changes in their diet.

Staying consistent was a common barrier to Theme 3: Healthy Eating expressed by key informants and focus group participants. The Daily Food Journal, My Grocery List, and 10 Keys to a Healthy Diet, promotes consistency by encouraging individuals to self-monitor their progress, plan for buying healthy foods, and remind themselves about ways to stay healthy. Emotional challenges were another barrier to Theme 3: Healthy Eating discussed by key informants and focus group participants. Materials addressing this theme include the Daily Food Journal and Change Your Negative Thoughts into Positive Thoughts.

Other materials were created based on suggestions from focus group participants regarding what they wanted to know and what they would find helpful. These materials include the Beverage Guide, Healthy Smoothies, Good Carbs vs. Bad Carbs, Overnight Oats, Good Fats vs. Bad Fats, and the Eating Out Guide.

All materials are organized into a ten-week lesson plan (Appendix A) with materials and talking points. Since lifestyle change was a theme from our interviews, we chose to structure the lesson plan according to the Transtheoretical Model (TTM), or the “stages of change” model.

Although TTM begins with the precontemplation stage, the curriculum begins with materials related to the subsequent stage, contemplation. The reason for this is because survey data from the first PIC Health Pilot study showed that participants were all at least in the contemplation Stage of TTM regarding PA. Thus, the first four weeks of the lesson plan are based on the contemplation, or “getting ready” stage of TTM. During this stage, people intend to change within the next 6 months, and are weighing the pros and cons of changing. Thus, the first four weeks of materials provide explanations about the benefits of healthy eating and consequences of unhealthy eating.

The next two weeks of the lesson plan are based on the preparation, or “ready”, stage of TTM. During the preparation stage, individuals intend to change within the next month, and often have already made some action within the past year. Materials during these two weeks, including Eating Healthy on a Budget, My Grocery List, and Nutrition Facts Label Explained, assists with preparing one to eat healthy.

The last three weeks focus on the action stage of TTM. This stage is characterized by active modification of behavior and acquiring new healthy behaviors. The Eating Out Guide, Menu Makeover, Change Your Negative Thoughts into Positive Thoughts, and 10 Keys to a Healthy Diet, helps individuals actively continue with their behavior change.

### **Discussion**

Changing one’s lifestyle is difficult, especially when one has lived by certain habits their entire life, and cultural norms can strongly influence one’s behaviors and habits. Overall, these are challenges that the key informants discussed as problems facing the NHPI community. Most focus group participants, however, were already making changes to improve their eating habits. While all focus group participants were part of the PIC Health Pilot study and at least in the contemplation phase of TTM, comments during the interviews suggest that most are now in the action phase of TTM regarding nutrition. Many participants discussed ways in which they are improving their diet by using healthier ingredients in their cooking.

The benefits of following a role model when making behavior changes were expressed by key informants and focus group participants. Having a friend or family member as a role model can help to motivate individuals to become healthier. Also, as discussed by the key informants, the leader of a program is much more effective at inspiring behavior change when they have applied the intervention to their own lives.

Lastly, barriers to healthy eating come in many forms, including cultural norms, emotional challenges, and environmental barriers. Staying consistent is key to establishing long term change and increasing one's ability to overcome challenges.

One benefit of including PIC Health participants in the focus groups is that the qualitative data came from individuals who were already actively trying to eat healthier. Since the participants had requested a nutrition curriculum to supplement their PA, they are more likely to utilize the materials. Their motivation and interest provided a springboard into exploring many different nutrition curriculum topics.

One limitation of using PIC Health participants only in this project is that it led to the development of materials that may not be applicable to those in the early stages of diet change; for example, those who are still considering making changes to their diet. Since the materials were tailored towards those who are already starting to make healthier changes, it may be difficult for others in the beginning stages to apply the materials in the earlier stages of behavior change.

### **Strengths and limitations**

Previously, little attention has been placed on creating a healthy eating curriculum to specifically target NPHI in San Diego county. Therefore, one strength of this study is that a culturally-tailored, healthy eating curriculum for NHPI in San Diego was created based on the findings of this project. NHPI can use materials from this curriculum to help them make healthier eating choices, which eventually can lead adoption of healthier lifestyles. Another strength of our study is that our curriculum is adaptable. Anyone who wants to create a healthy eating curriculum for a specific group can adapt and use our materials. The materials will be disseminated throughout San Diego County via the PIC Health Advisory Board.

One limitation in our study was the sample size of the second focus group was smaller than the first focus group, thus limiting the data. Another limitation would be that our results are less generalizable to other ethnic groups as we are very focused on NHPIs in San Diego who had participated in a previous pilot study. The materials we created for our curriculum are focused on NHPI only and not on other ethnic groups.

### **Implications**

The need to develop more public health programs targeting NHPI in San Diego County is increasing. California had the highest yearly growth rate of NHPI from 2005 to 2006 and San Diego County has the second largest population of NHPI in California (Moy et al., 2012). Therefore, it is important to focus more public health effort on addressing health disparities in this rapidly growing population.

Thus far, there has been very little research on improving NHPI health in San Diego County. As previously discussed, one current study on NHPI health is the PIC Health study. The participants in this study requested nutrition education to supplement their PA program. Meeting this need is especially important, since healthy eating paired with PA may improve health and help curb obesity rates (Moy et al., 2012).

NHPI suffer disproportionately from health disparities such as obesity, cardiovascular diseases, and diabetes. Therefore, sharing this capstone's nutrition curriculum with the rest of the San Diego NHPI community is important to improving health outcomes and reducing disparities in this population.

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**Table 1. Codebook**

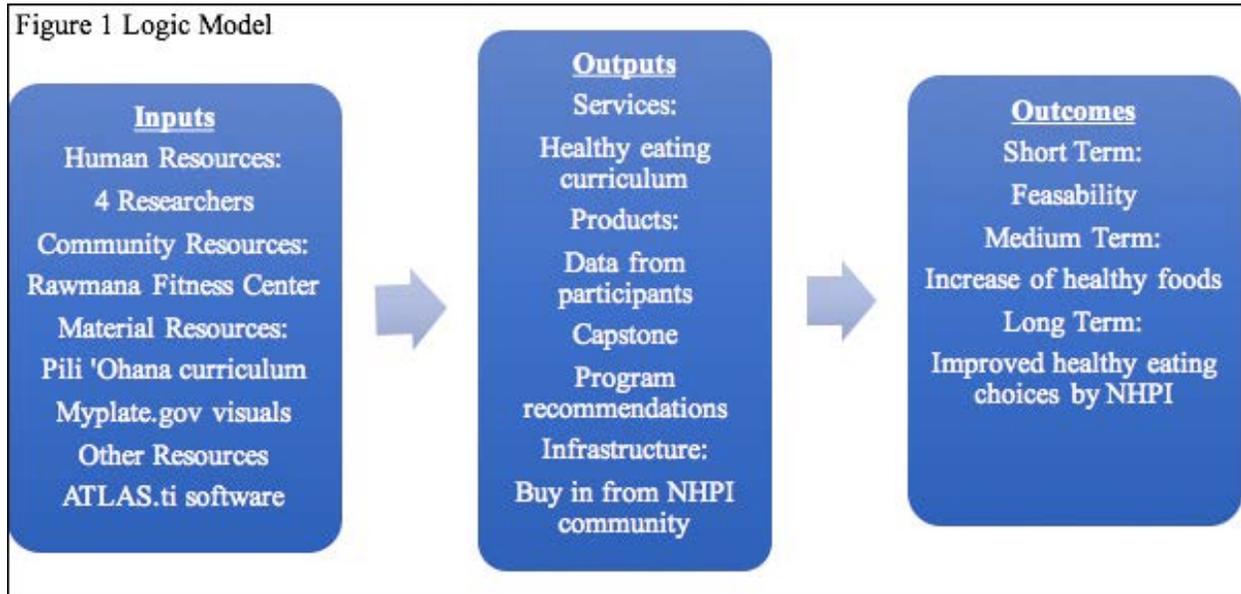
<b>Codes</b>	<b>Decision Rule (When they say....)</b>
Time Needed for Change	Time is needed to change a mindset and develop new habits
Improving Eating Habits	I went from like white rice to brown rice to quinoa. Substituting beef for, you know, turkey, things like that
Role Model	If you don't become a participant and you're just part of the coaching thing then you don't get nothing out of it
Motivation	So in the guilty conscious my kids will make me lead more towards the good foods and healthy foods because then I want to be around for them you know so I guess my kids more than my wife
Cultural Habits	It's hard because it's the way that we eat and we've always ate is based on culture. Our cultures teach us that it is better to have enough than have very little and that we have to eat everything that is on our plate and we celebrate life with food and that's just not in the Polynesian that one Polynesian community that's every community
Emotional Challenges	The Emotional and the psychological and physical stress that they are going through
Environmental Factors	The special challenges are living out in the real world. Because you are constantly being bombarded with McDonalds' and Taco Bell and Del Taco and everything else and those are the challenges. If you took all of those out and there was nothing else, you can actually go home and eat healthy. Those are the challenges
Being Consistent	It has to be consistent. If you're not consistent then nothing happens

**Table 2. Themes from Qualitative Interviews**

<b>Themes</b>	<b>Description</b>	<b>Quotes</b>
Lifestyle change	Giving and receiving help, changing mindset, time needed for change, diet changes, transtheoretical model (contemplation, preparation, action, maintenance)	<p>“It’s pride, it’s I don’t need your help and I’m fine where I’m at, comfortable in their own skin at 300 and 400 pounds or 600 pounds...And so my challenge begins there and the mindset has been shut down and they’re close minded to any kind of help...And they’re unwilling to do anything because in their mindset, I am fine just the way I am”</p> <p>“It’s hard, that is why the program of 6 months has to take place. Because it does not take 2 weeks 3 weeks, it takes time to constantly enroll people into a different mindset of what food does to them.”</p>
Helping each other	Being a role model, peer motivation, guidance	<p>“I think we need to make a difference and sort of be that good example because it has to start somewhere and letting it go on to future generations.”</p> <p>“But in that I just try do my best to cook something and, you know, trying to set an example for them especially for the grandkids cuz they live with those two”</p>
Barriers to eating healthy	Cultural habits, emotional challenges, environmental barriers create barriers to eating healthy	<p>“You are going to get a lot of people that are just gonna say oh it’s just cultural the way we eat the way we are is just cultural. Uhm I would say not part of our indigenous culture but part of our colonize culture has been of poor eating”</p> <p>“Because if something is holding you down and if you’re obese because of something that is wrong in your life that holds you there. So it’s getting them to find out what is holding them back that will not allow them to move forward and taking care of themselves.”</p> <p>“The special challenges are living out in the real world. Because you are</p>

<b>Themes</b>	<b>Description</b>	<b>Quotes</b>
		constantly being bombarded with McDonalds' and Taco Bell and Del Taco and everything else and those are the challenges. If you took all of those out and there was nothing else, you can actually go home and eat healthy. Those are the challenges."

Figure 1. Logic Model



**Appendix A: Key Informant and Focus Group Questions**

**Key Informant Interview Questions**

Interviewee Name:

Job Position:

Date:

We are graduate students in the Master of Public Health Program at California State University San Marcos. We are working on a research study centered on improving Native Hawaiian and Pacific Islander health (NHPI). The purpose of this study is to adapt a culturally-tailored healthy eating curriculum for the NHPI community. We are hoping that you can help us understand the necessity of a healthy eating curriculum among the NHPI population.

- 1). Tell me about your agency and who it serves?
- 2). Tell me about your involvement in the community?
  - What types of activities have you been involved in?
  - What tools have you used that have been particularly effective in reaching and motivating Native Hawaiians and Pacific Islanders?
- 3). What special challenges does trying to reach NHPI with a healthy nutrition message present?
  - What suggestions do you have in terms of how we might meet these challenges?
  - What do you think are the keys to successfully reaching NHPI with a healthy nutrition message?
    - Why do you feel that way?
  - What do you think are the keys to increasing healthy eating use among NHPI?
    - Why do you feel that way?
  - What do you think are the greatest obstacles to improving diet among NHPI?
    - Why do you feel that way?
- 4). Do you have any thoughts or ideas about programs, strategies, or activities that you think would be particularly effective for communicating a healthy nutrition message to NHPI?

Your time and opinions have been very valuable to us! Thank you.

**Focus Group 1: Interview Questions**

We are graduate students in the Master of Public Health Program at California State University San Marcos. We are working on a research study centered on improving Native Hawaiian and Pacific Islander health (NHPI). The purpose of this study is to adapt a culturally-tailored healthy eating curriculum for the NHPI community. We are hoping that you can help us understand the necessity of a healthy eating curriculum among the NHPI population.

- 1). What do you consider when choosing foods?
- 2). Who if anyone affects your decisions on what foods to buy or meals to make? (children, spouses, significant others)
- 3). Think about if you have ever tried to change the way you or your family eats. If you have, describe what you tried to change
  - What made you want to change?
  - How did you try to make this change?
- 4). Can you think of other ways that you and/or your family would want to learn about food, nutrition, and health?
- 5). What does healthy eating mean to you?
- 6). What do you hope to gain from a culturally-tailored nutrition curriculum for Native Hawaiians and Pacific Islanders?

Your time and opinions have been very valuable to us! Thank you.

**Focus Group 2: Interview Questions**

**Part A:** Read consent form and obtained consent from interviewee

**Part B:** Read Script (Below)

Thank you for agreeing to be part of this focus group. Our names are Alma Detten, Dalia Leon, Jasmin Leon, and Janell Bryant. We are graduate students in the Master of Public Health Program at California State University San Marcos. Our research study aims to improve Native Hawaiian and Pacific Islander health by developing a culturally-tailored healthy eating curriculum. Today, we would like to hear your feedback regarding some healthy eating materials that can provide nutrition information and guide eating choices for NHPI in San Diego.

The interview will not last longer than 1 hour. Our discussion will be audio recorded, so that we can listen actively and take notes afterwards. Once the study is over, the recording will be erased. No one, besides ourselves, will have access to the recording.

You are free to stop your participation before we begin the discussion, in the middle, or even after we are done. In the latter case, we will not use any notes or recording collected for the study. Do you have any questions about your participation or the volunteer nature of this study? Let's get started....

First, we are going to talk about some materials we drafted based on feedback from other participants.

**Instructions: Before starting, hand out a copy of materials to each participant.**

1. This is a (briefly describe material presented). What are your initial thoughts?
2. What do you think is the goal or purpose of this material?
3. What, if any, aspects do you like? (Probe: What catches your eye?)
4. What could be improved?

Note: After going through all pieces of material, ask the following:

5. Is there any additional information that you think would be helpful to encourage healthy eating? Do you have any other ideas for educational materials that would be helpful?
6. When you eat at home, what do you typically eat?
7. How often do you go out to eat? When you go out to eat, where do you typically go? What do you typically eat?
8. Which dishes does your family prepare that you consider connected to your culture?
9. What dietary practices are you now using that are beneficial to your health?

**Concluding the Interview.** Thank the participant for their time. Do not leave in a hurry. Allow a few minutes of winding down conversation. Immediately after leaving, write down any notes about the interview.

**Interviewer Notes.** What was the participant's demeanor during the interview? Did they seem helpful, motivated about future health interventions, agitated about the conversation, reluctant? Write down anything that stuck out during the interview and any other notes you think should be included:

**Appendix B: Lesson Plan**

**Week 1: Build Your Nutrition Muscle**  
**Stages of Change: Phase 1 (Contemplation)**

Lessons and activities	Materials and Talking Points
<p><b>Welcome!</b></p>	<ul style="list-style-type: none"> <li>Let’s start by sharing a little about our nutrition program.</li> <li>Each week during the pilot study, there will be 1-2 nutrition lessons and an activity. The nutrition materials will be posted on the PIC Health Facebook page and distributed during weekly workout sessions.</li> <li><b>Optional Ice-breaker activity:</b> introduce yourself and say your favorite food</li> </ul>
<p><b>Lesson 1: Performance Nutrition</b></p>  <p>The handout titled 'Performance Nutrition' includes sections for Pre-Workout, During Workout, and Post-Workout. It provides detailed instructions on hydration, carbohydrate intake, and protein consumption to optimize performance and recovery.</p>	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>1 “Performance Nutrition” handout per participant</li> </ul> <p><b>Talking Points:</b></p> <ul style="list-style-type: none"> <li>It’s important to give your body fuel before and after working out to improve your workout performance and recovery. Also, make sure to stay hydrated. This information sheet gives suggestions for what to eat and when so that you can optimize your workout.</li> </ul>
<p><b>Lesson 2: Keep an eye on portion sizes</b></p>  <p>The image shows four portion plates, each divided into sections for different food groups: vegetables, protein, grains, and fruits. The plates are color-coded (orange, yellow, purple, green) and labeled with portion sizes like 1/2 cup, 1/4 cup, and 1/2 oz.</p>	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>Portion Plates</li> </ul> <p><b>Talking Points:</b></p> <ul style="list-style-type: none"> <li>These portion plates show some examples of what a balanced meal looks like.</li> </ul>
<p><b>Activity: Nutrition Journal</b></p>  <p>The image shows two pages of a 'Daily Food Journal' booklet. It includes sections for recording food intake, physical activity, and sleep patterns, along with a checklist for daily health goals.</p>	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>1 weekly nutrition journal booklet per participant (2 pages double sided, fold and staple for binding)</li> </ul> <p><b>Talking Points:</b></p> <ul style="list-style-type: none"> <li>Use this journal to keep track of your regular eating, exercise and sleep patterns. Also, write down how you feel physically and/or emotionally both before</li> </ul>

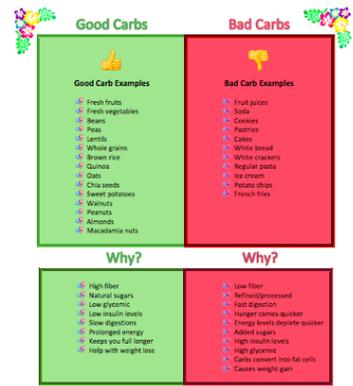
Lessons and activities	Materials and Talking Points
	<p>and after eating. For example, energized, tired, happy, anxious, stressed, content, or hungry, etc.</p> <ul style="list-style-type: none"> <li>• Slowly try adding in more healthy foods, exercise and sleep more. Use this journal to monitor your progress and keep you on track. Try to get in the habit of writing in it every day. We will provide a new journal to you each week during the pilot study.</li> </ul>

**Week 2: Healthy Beverages**  
**Stages of Change: Phase 1 (Contemplation)**

Lessons and activities	Materials and Talking Points
<p><b>Lesson 1: Beverage Guide</b></p> 	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>• 1 beverage guide booklet for each participant (print double sided and fold)</li> </ul> <p><b>Talking Points:</b></p> <ul style="list-style-type: none"> <li>• This guide gives some beverage swap suggestions for choosing healthier drinks. Sugar sweetened beverages contain many empty calories that can affect your blood sugar and weight. Choose drinks that are lower in sugar and carbohydrates. And remember that water is always the best option to stay hydrated.</li> <li>• See the back of this handout for website resources on healthy eating tips.</li> </ul>
<p><b>Activity: Nutrition Journal</b></p> 	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>• Provide new weekly nutrition journal booklet to participants.</li> <li>• Discuss the previous week’s journal.             <ul style="list-style-type: none"> <li>○ Did you notice anything about your daily routine that you weren’t previously aware of?</li> <li>○ What daily habits would you like to change? How do you intend to change them?</li> </ul> </li> </ul>

Lessons and activities	Materials and Talking Points
	<ul style="list-style-type: none"> <li>○ What healthy lifestyle choices are you already making?</li> </ul>
<p><b>Recipe: Healthy Smoothies</b></p> 	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>• One “Healthy Smoothies” handout per participant</li> </ul> <p><b>Talking Points:</b></p> <ul style="list-style-type: none"> <li>• Smoothies are a great for an energy boost and to help you get enough servings of fruits and vegetables in the day. Smoothies are a healthier alternative to fruit and vegetable juices, because the extra fiber from the whole foods will slow your digestion and make you feel fuller longer. Smoothies also do not have the added sugars like many fruit and vegetable juices do.</li> <li>• Adding protein powder or yogurt adds protein to your smoothie (check the nutrition label to choose ones that are low in sugar).</li> </ul>

**Week 3: Good vs. Bad Carbs**  
**Stages of Change: Phase 1 (Contemplation)**

Lessons and activities	Materials and Talking Points
<p><b>Lesson 1: Good carbs vs. bad carbs</b></p> 	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>• 1 “Good carbs vs. Bad Carbs” handout per person</li> </ul> <p><b>Talking Points:</b></p> <ul style="list-style-type: none"> <li>• This handout provides examples of what foods have good carbs and what have bad carbs. Good carbs are healthier for you because they are higher in fiber, which slows digestion and keeps you full longer. Eating more good carbs also helps with weight loss and gives you more energy.</li> </ul>
<p><b>Activity: Nutrition Journal</b></p>	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>• Provide new weekly nutrition journal booklet to participants.</li> </ul>

Lessons and activities	Materials and Talking Points				
	<ul style="list-style-type: none"> <li>Discuss the previous week’s journal.                     <ul style="list-style-type: none"> <li>What have you noticed about how you feel before and after eating?</li> <li>What changes have you made to adopt a healthier lifestyle?</li> </ul> </li> </ul>				
<h3>Recipe: Overnight oats</h3> <p><b>Healthy Breakfast on the Go: Overnight Oats</b></p> <p>This recipe can be used as a base for any overnight oats combination! Add the ingredients to a mason jar, stir, leave in the refrigerator overnight, and enjoy in the morning!</p>  <p><b>Base Recipe</b></p> <ul style="list-style-type: none"> <li>1/2 cup plain nonfat Greek</li> <li>1/2 cup skim milk</li> <li>1/2 cup rolled oats</li> </ul> <p><b>Optional Add-ins:</b></p> <p><b>Protein</b></p> <ul style="list-style-type: none"> <li>Protein powder</li> <li>Peanut butter or almond butter</li> <li>Sliced almonds</li> </ul> <p><b>Fiber and omega-3 (“good”) fats</b></p> <ul style="list-style-type: none"> <li>Chia seeds</li> <li>Flax seeds</li> </ul> <p><b>Natural Sweetness</b></p> <ul style="list-style-type: none"> <li>Banana, pineapple, kiwi, strawberries or other fruit of choice!</li> <li>Vanilla extract</li> <li>Cinnamon (also a good source of fiber!)</li> <li>Toasted coconut</li> </ul> <p><b>Extra Sweetness (use sparingly!)</b></p> <ul style="list-style-type: none"> <li>agave, honey, maple syrup, brown sugar</li> </ul> <p><b>Sample Combinations</b></p> <table border="0"> <tr> <td><b>Peanut Butter Banana</b> Base recipe + 1/2 banana, mashed 1 Tbsp. peanut butter 1 tsp. honey 1 Tbsp. chia seeds 1 tsp. vanilla extract 1 tsp. cinnamon</td> <td><b>Tropical Delight</b> Base recipe + 2 Tbsp. diced kiwi 2 Tbsp. diced pineapple 1 Tbsp. toasted coconut flakes</td> <td><b>Apple Pie</b> Base recipe + 1/2 cup diced apples 1 tsp. ground cinnamon 1 tsp. maple syrup</td> <td><b>Strawberry Chia</b> Base recipe + 1/2 cup sliced or chopped strawberries 1 Tbsp. sliced almonds 1 tsp. vanilla extract Drizzle agave nectar or maple syrup</td> </tr> </table>	<b>Peanut Butter Banana</b> Base recipe + 1/2 banana, mashed 1 Tbsp. peanut butter 1 tsp. honey 1 Tbsp. chia seeds 1 tsp. vanilla extract 1 tsp. cinnamon	<b>Tropical Delight</b> Base recipe + 2 Tbsp. diced kiwi 2 Tbsp. diced pineapple 1 Tbsp. toasted coconut flakes	<b>Apple Pie</b> Base recipe + 1/2 cup diced apples 1 tsp. ground cinnamon 1 tsp. maple syrup	<b>Strawberry Chia</b> Base recipe + 1/2 cup sliced or chopped strawberries 1 Tbsp. sliced almonds 1 tsp. vanilla extract Drizzle agave nectar or maple syrup	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>Provide one “overnight oats” recipe to each participant</li> </ul> <p><b>Talking Points:</b></p> <ul style="list-style-type: none"> <li>Overnight oats are a delicious and healthy breakfast option. If you’re often hurrying in the morning, this is a great option for a quick and nutritious meal. The fiber from the oats and protein from the Greek yogurt will keep you full longer and give you energy.</li> <li>There are many ways to make overnight oats. Try some of the suggested recipe combinations on this handout or make your own!</li> </ul>
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**Week 4: Good vs. Bad Fats**  
**Stages of Change: Phase 1 (Contemplation)**

Lessons and activities	Materials and Talking Points
<h3>Lesson 2: Good vs. Bad Fats</h3> 	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>1 “Good vs. Bad Fats” handout per participant</li> </ul> <p><b>Talking Points:</b></p> <ul style="list-style-type: none"> <li>There are many different types of fats, some that will help decrease cholesterol levels and others that will raise cholesterol levels. This handout categorizes bad fats (trans-fat and saturated fats) and good fats (monounsaturated fats and polyunsaturated fats) to guide you in selecting healthier fats.</li> </ul>

Lessons and activities	Materials and Talking Points
<p><b>Activity: Nutrition Journal</b></p> 	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>• Provide new weekly nutrition journal booklet to participants.</li> <li>• Discuss the previous week’s journal.             <ul style="list-style-type: none"> <li>○ What changes have you made to adopt a healthier lifestyle?</li> </ul> </li> </ul>

**Week 5: Planning to Eat Healthy**  
**Stages of Change: Phase 2 (Preparation)**

Lessons and activities	Materials and Talking Points
<p><b>Lesson 1: Eating healthy on a budget</b></p> 	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>• 1 “Eating Healthy on a Budget” handout per person</li> </ul> <p><b>Talking Points:</b></p> <ul style="list-style-type: none"> <li>• Making a plan before going to the grocery store can help cut costs. It can also help you to buy more healthy and nutritious foods.</li> </ul>
<p><b>Activity: Nutrition Journal</b></p> 	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>• Provide new weekly nutrition journal booklet to participants.</li> <li>• Discuss the previous week’s journal.             <ul style="list-style-type: none"> <li>○ What changes have you made to adopt a healthier lifestyle?</li> </ul> </li> </ul>
<p><b>Recipe: Hawaiian Huli Huli Chicken</b></p> 	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>• 1 “Hawaiian Huli Huli Chicken” recipe per participant</li> </ul>

**Week 6: Grocery Shopping**  
**Stages of Change: Phase 2 (Preparation)**

<p><b>Lessons and activities</b></p> <p><b>Lesson 1: My Grocery List</b></p> 	<p><b>Materials and Talking Points</b></p> <p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>1 grocery shopping list per participant (print double sided)</li> </ul> <p><b>Talking Points:</b></p> <ul style="list-style-type: none"> <li>When it comes to grocery shopping, a little preparation goes a long way. Making a list will help you avoid missing key items and purchasing unnecessary items. This list is organized by food group, to help support a balanced diet.</li> <li>Remember to avoid shopping when you're hungry, which can lead to impulse purchases (often of the unhealthy variety).</li> </ul>
<p><b>Lesson 2: Nutrition Facts Label Explained</b></p> 	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>1 “Nutrition Facts Label Explained” handout per participant</li> </ul> <p><b>Talking Points:</b></p> <ul style="list-style-type: none"> <li>Nutrition Facts labels present a lot of information. This handout breaks down the nutrition label into different parts, which are color coded.</li> <li>Always start with looking at the serving size at the top and how many servings are in the container. Multiply the amount per serving by how many servings you eat.</li> <li>Try to limit those in red. Look at the % Daily Value to see you are getting too much of any one nutrient. Under 5% is low, while anything over 20% is high and should be avoided. Anything in between 5-20% is okay in moderation.</li> </ul>
<p><b>Activity: Nutrition Journal</b></p> 	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>Provide new weekly nutrition journal booklet to participants.</li> <li>Discuss the previous week's journal.             <ul style="list-style-type: none"> <li>What changes have you made to adopt a healthier lifestyle?</li> </ul> </li> </ul>

**Week 7: Making Healthy Substitutions**  
**Stages of Change: Phase 3 (Action)**

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<p><b>Lesson 1: Eating Out Guide</b></p> 	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>1 “Eating Out Guide” for each participant (print double sided and fold in the middle)</li> </ul> <p><b>Talking Points:</b></p> <ul style="list-style-type: none"> <li>This guide provides healthier options when eating out. There are many “Fast Food Swaps” that can significantly cut down on calories. Try one next time you eat out.</li> </ul>																																																																																																												
<p><b>Lesson 2: Menu Makeover</b></p>  <table border="1" data-bbox="219 955 462 1207"> <thead> <tr> <th>High Fat Foods</th> <th>Quantity</th> <th>Fat (grams)</th> <th>Healthier Choice</th> <th>Quantity</th> <th>Fat (grams)</th> </tr> </thead> <tbody> <tr> <td>McDonald's egg sandwich</td> <td>1 sandwich</td> <td>19</td> <td>Egg, waffle</td> <td>1 sandwich</td> <td>4</td> </tr> <tr> <td>Wendy's hamburger</td> <td>1 sandwich</td> <td>19</td> <td>Salmon fish</td> <td>1 sandwich</td> <td>2</td> </tr> <tr> <td>McA's pizza</td> <td>1 slice</td> <td>8</td> <td>McA's apple</td> <td>1 slice</td> <td>0</td> </tr> <tr> <td>Wendy's chili (no cheddar)</td> <td>1/2 cup</td> <td>4</td> <td>Wendy's chili (no cheddar)</td> <td>1/2 cup</td> <td>1</td> </tr> <tr> <td>McDonald's sausage</td> <td>1 slice</td> <td>30</td> <td>Chicken sausage</td> <td>1 slice</td> <td>4</td> </tr> <tr> <td><b>Total Fat Swaps</b></td> <td></td> <td><b>76</b></td> <td></td> <td></td> <td><b>11.6</b></td> </tr> <tr> <td>Chick-fil-A chicken</td> <td>1 sandwich</td> <td>19</td> <td>Chick-fil-A chicken</td> <td>1 sandwich</td> <td>4</td> </tr> <tr> <td>McDonald's salad</td> <td>1/2 cup</td> <td>19</td> <td>McDonald's salad</td> <td>1/2 cup</td> <td>4</td> </tr> <tr> <td>McA's chicken</td> <td>1/2 sandwich</td> <td>14</td> <td>McA's chicken</td> <td>1/2 sandwich</td> <td>4</td> </tr> <tr> <td><b>Total Fat Swaps</b></td> <td></td> <td><b>52.4</b></td> <td></td> <td></td> <td><b>12.4</b></td> </tr> <tr> <td>Chick-A-peel</td> <td>1 sandwich</td> <td>8</td> <td>Chick-A-peel</td> <td>1 sandwich</td> <td>2</td> </tr> <tr> <td>Wendy's chili</td> <td>1/2 cup</td> <td>4</td> <td>Wendy's chili (no cheddar)</td> <td>1/2 cup</td> <td>1</td> </tr> <tr> <td>McDonald's French fries</td> <td>1/2 cup</td> <td>20</td> <td>McDonald's apple pie</td> <td>1 slice</td> <td>1</td> </tr> <tr> <td><b>Total Fat Swaps</b></td> <td></td> <td><b>36</b></td> <td></td> <td></td> <td><b>4.1</b></td> </tr> <tr> <td>Wendy's chili, pepper</td> <td>1/2 cup</td> <td>7</td> <td>Wendy's chili, pepper</td> <td>1/2 cup</td> <td>1</td> </tr> <tr> <td><b>Total Fat Swaps</b></td> <td></td> <td><b>7</b></td> <td></td> <td></td> <td><b>1</b></td> </tr> <tr> <td><b>Total Fat Swaps For The Day</b></td> <td></td> <td><b>171.8</b></td> <td></td> <td></td> <td><b>28.1</b></td> </tr> </tbody> </table>	High Fat Foods	Quantity	Fat (grams)	Healthier Choice	Quantity	Fat (grams)	McDonald's egg sandwich	1 sandwich	19	Egg, waffle	1 sandwich	4	Wendy's hamburger	1 sandwich	19	Salmon fish	1 sandwich	2	McA's pizza	1 slice	8	McA's apple	1 slice	0	Wendy's chili (no cheddar)	1/2 cup	4	Wendy's chili (no cheddar)	1/2 cup	1	McDonald's sausage	1 slice	30	Chicken sausage	1 slice	4	<b>Total Fat Swaps</b>		<b>76</b>			<b>11.6</b>	Chick-fil-A chicken	1 sandwich	19	Chick-fil-A chicken	1 sandwich	4	McDonald's salad	1/2 cup	19	McDonald's salad	1/2 cup	4	McA's chicken	1/2 sandwich	14	McA's chicken	1/2 sandwich	4	<b>Total Fat Swaps</b>		<b>52.4</b>			<b>12.4</b>	Chick-A-peel	1 sandwich	8	Chick-A-peel	1 sandwich	2	Wendy's chili	1/2 cup	4	Wendy's chili (no cheddar)	1/2 cup	1	McDonald's French fries	1/2 cup	20	McDonald's apple pie	1 slice	1	<b>Total Fat Swaps</b>		<b>36</b>			<b>4.1</b>	Wendy's chili, pepper	1/2 cup	7	Wendy's chili, pepper	1/2 cup	1	<b>Total Fat Swaps</b>		<b>7</b>			<b>1</b>	<b>Total Fat Swaps For The Day</b>		<b>171.8</b>			<b>28.1</b>	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>1 “Menu Makeover” handout per participant</li> </ul> <p><b>Talking Points:</b></p> <ul style="list-style-type: none"> <li>Swapping out unhealthy ingredients for healthier ingredients can greatly reduce the amount of fat you consume. This chart shows how many grams of fat you can save by making simple substitutions.</li> </ul>
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<p><b>Activity: “My Menu Makeover”</b></p>	<ul style="list-style-type: none"> <li>Cook your favorite cultural dish at home and add one or more healthy substitutions. Share your recipe with the rest of the group.</li> </ul>																																																																																																												

**Week 8: Staying Positive**  
**Stages of Change: Phase 3 (Action)**

Lessons and activities	Materials and Talking Points										
<p><b>Lesson 1: Change your negative thoughts into positive thoughts</b></p>  <p><b>CHANGE YOUR NEGATIVE THOUGHTS INTO POSITIVE THOUGHTS:</b></p> <table border="1"> <thead> <tr> <th>Negative thought:</th> <th>Positive thought:</th> </tr> </thead> <tbody> <tr> <td><b>All or Nothing</b> "I can't eat dessert ever again." "I shouldn't have eaten that cake. I can't do anything right."</td> <td><b>Work toward Balance</b> "It's okay if I eat that dessert and eat less of something else." "I won't let myself down because of one mistake. I will get up and back on track."</td> </tr> <tr> <td><b>Making Excuses</b> "It looks like it might rain, so I won't take a walk." "It's too busy/tired/out."</td> <td><b>It's Worth a Try</b> "I can try going for a walk and bring an umbrella." "It's hard to exercise when I'm busy, but I will exercise for at least 20 minutes."</td> </tr> <tr> <td><b>"I should..."</b> "I should have eaten less of that cake." "I must keep track of everything I eat."</td> <td><b>It's My Choice</b> "I will eat less next time." "I am choosing to write down everything I eat because it helps me succeed."</td> </tr> <tr> <td><b>I'm Not As Good As...</b> "Mary lost more weight than I did this week."</td> <td><b>Everyone's Different</b> "I won't compare myself to others. We can all succeed at our own rate."</td> </tr> </tbody> </table> <p>Note: This material was adapted from the Pill 'Ohana Lifestyle Program</p>	Negative thought:	Positive thought:	<b>All or Nothing</b> "I can't eat dessert ever again." "I shouldn't have eaten that cake. I can't do anything right."	<b>Work toward Balance</b> "It's okay if I eat that dessert and eat less of something else." "I won't let myself down because of one mistake. I will get up and back on track."	<b>Making Excuses</b> "It looks like it might rain, so I won't take a walk." "It's too busy/tired/out."	<b>It's Worth a Try</b> "I can try going for a walk and bring an umbrella." "It's hard to exercise when I'm busy, but I will exercise for at least 20 minutes."	<b>"I should..."</b> "I should have eaten less of that cake." "I must keep track of everything I eat."	<b>It's My Choice</b> "I will eat less next time." "I am choosing to write down everything I eat because it helps me succeed."	<b>I'm Not As Good As...</b> "Mary lost more weight than I did this week."	<b>Everyone's Different</b> "I won't compare myself to others. We can all succeed at our own rate."	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>1 "Change your negative thoughts into positive thoughts" handout</li> </ul> <p><b>Talking Points:</b></p> <ul style="list-style-type: none"> <li>Changing old habits is hard, and developing healthier eating habits takes time and patience. Don't put yourself down if you aren't meeting your goals as fast as you'd like to, or if you give in to eating an unhealthy treat. It's all about balance, consistency, and continuing to make healthy eating part of your lifestyle.</li> </ul>
Negative thought:	Positive thought:										
<b>All or Nothing</b> "I can't eat dessert ever again." "I shouldn't have eaten that cake. I can't do anything right."	<b>Work toward Balance</b> "It's okay if I eat that dessert and eat less of something else." "I won't let myself down because of one mistake. I will get up and back on track."										
<b>Making Excuses</b> "It looks like it might rain, so I won't take a walk." "It's too busy/tired/out."	<b>It's Worth a Try</b> "I can try going for a walk and bring an umbrella." "It's hard to exercise when I'm busy, but I will exercise for at least 20 minutes."										
<b>"I should..."</b> "I should have eaten less of that cake." "I must keep track of everything I eat."	<b>It's My Choice</b> "I will eat less next time." "I am choosing to write down everything I eat because it helps me succeed."										
<b>I'm Not As Good As...</b> "Mary lost more weight than I did this week."	<b>Everyone's Different</b> "I won't compare myself to others. We can all succeed at our own rate."										
<p><b>Activity: Nutrition Journal</b></p> 	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>Provide new weekly nutrition journal booklet to participants.</li> <li>Discuss the previous week's journal. <ul style="list-style-type: none"> <li>What changes have you made to adopt a healthier lifestyle?</li> </ul> </li> </ul>										

**Week 9: Keeping it Consistent**  
**Stages of Change: Phase 3 (Action)**

Lessons and activities	Materials and Talking Points
<p><b>Lesson 1: 10 Keys to a Healthy Diet</b></p>  <p><b>10 KEYS TO A HEALTHY DIET</b></p> <p>Developing healthy eating habits isn't as confusing or as restrictive as many people think. The essential steps are to eat mostly foods derived from plants (vegetables, fruits, whole grains and legumes (beans, peas, lentils)) and limit highly processed foods. Here are our guidelines for building a healthy diet.</p> <ol style="list-style-type: none"> <li>1. Consume a Variety of Foods</li> <li>2. Keep an Eye on Portions</li> <li>3. Eat Plenty of Produce</li> <li>4. Get More Whole Grains</li> <li>5. Limit Refined Grains, Added Sugar</li> <li>6. Enjoy More Fish and Nuts</li> <li>7. Cut Down on Animal Fat</li> <li>8. Shun Trans Fats</li> <li>9. Be Aware of Liquid Calories</li> <li>10. Limit Alcohol Consumption</li> </ol>	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>1 "10 Keys to a Healthy Diet" handout per participant (print double sided)</li> </ul> <p><b>Talking Points:</b></p> <ul style="list-style-type: none"> <li>Remember these simple steps to maintain a healthy diet. Keeping a healthy diet isn't as confusing or as restrictive as many people imagine.</li> </ul>
<p><b>Activity: Nutrition Journal</b></p>	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>Provide new weekly nutrition journal booklet to participants.</li> <li>Discuss the previous week's journal.</li> </ul>

Lessons and activities	Materials and Talking Points
	<ul style="list-style-type: none"> <li>○ What changes have you made to adopt a healthier lifestyle?</li> </ul>

**Week 10: Bringing it all together**  
**Stages of Change: Phase 3 (Action)**

Lessons and activities	Materials and Talking Points
<p><b>Activity: Nutrition Journal</b></p> 	<p><b>Materials:</b></p> <ul style="list-style-type: none"> <li>• Provide new weekly nutrition journal booklet to participants.</li> <li>• Discuss the previous week’s journal.             <ul style="list-style-type: none"> <li>○ What changes have you made to adopt a healthier lifestyle?</li> </ul> </li> </ul>
<p><b>Final Activity and Celebration:</b>  <b>My Menu Makeover Potluck</b></p>	<ul style="list-style-type: none"> <li>• Cook your favorite cultural dish at home and add one or more healthy substitutions. Bring your recipe to the potluck for the everyone to try.</li> </ul>

**Appendix C: Nutrition Education Materials**

## Performance Nutrition

### Pre-Workout

- About 1 or 2 hours before working out, have a small, healthy snack containing some carbohydrates, liquid, and protein
- Examples
  - ✓ ½ banana with natural peanut butter
  - ✓ A smoothie with non-fat yogurt and berries
  - ✓ ½ chicken sandwich and an apple
- If you like working out early and tend to skip breakfast, try eating something small and high in carbohydrates. Give your body the fuel it needs for a great workout!
- Examples:
  - ✓ ½ banana and a piece of whole wheat toast
  - ✓ ½ cup low-fat yogurt
  - ✓
- Also, don't forget to HYDRATE! Drink 2 cups of water an hour before you workout

### During Workout

- Drink water at least every 15 minutes while exercising
- Hydration is critical for optimal performance!
- Do you need a sports drink? Only consider having a sports drink if you:
  - ✓ Exercise for over 90 minutes
  - ✓ Workout in extreme environments
  - ✓ You begin your workout without any food (aka fuel)

### Post-workout

- Hydration: Drink at least 2 cups of water after your workout to rehydrate!
- Do you need a post-workout snack? It is most important when your workouts are high-intensity. For example:
  - ✓ If your workout was more than 60 minutes, food is necessary for optimal recovery
  - ✓ Eat your post-workout snack in 30 minutes or less after you finish working out
- Examples:
  - ✓ Low-fat milk
  - ✓ Low-fat Greek yogurt with fresh berries

### **Eat your snacks sooner for a better recovery!**

Reference: Recovery Nutrition. (2012). Navy Operational Fueling. Retrieved 31 May 2012, from [http://www.navyfitness.org/nutrition/noffs\\_fueling\\_series/recovery\\_nutrition/](http://www.navyfitness.org/nutrition/noffs_fueling_series/recovery_nutrition/)

**Daily Food Journal**

Use this journal to look at your regular eating, exercise, and sleep patterns. Slowly try adding in more healthy foods, exercise and sleep more. Keep track of how this improves your physical and emotional well-being!

<b>Today's Date:</b>	
<p><b><u>Breakfast</u></b>  <b>Time:</b> _____  <b>Food and beverages consumed:</b>                  _____                  _____</p> <p><b>How did you feel before/after eating?</b></p>	<p><b><u>Lunch</u></b>  <b>Time:</b> _____  <b>Food and beverages consumed:</b>                  _____                  _____</p> <p><b>How did you feel before/after eating?</b></p>
<p><b><u>Snacks</u></b>  <b>Time(s):</b> _____  <b>Food and beverages consumed:</b>                  _____                  _____</p> <p><b>How did you feel before/after eating?</b></p>	<p><b><u>Dinner</u></b>  <b>Time:</b> _____  <b>Food and beverages consumed:</b>                  _____                  _____</p> <p><b>How did you feel before/after eating?</b></p>
<p><b><u>Today's Workouts</u></b></p> <p><input type="checkbox"/> Flexibility  <input type="checkbox"/> Strength  <input type="checkbox"/> Cardio  <input type="checkbox"/> Rest day</p>	<p><b><u>Hydrate Yourself!</u></b>                  Drink at least 8 glasses per day</p> 
<p><b><u>Notes:</u></b></p>	<p><b><u>Getting enough sleep?</u></b>                  Aim to get 7-8 hours per day</p> <p>_____ HOURS</p>

**Beverage Guide**  
(Page 1)



**Sports Drink Swaps**  
(Beverage Guide: Page 2)

Instead of...	Try...
<p>Powerade Serving Size: 8oz Calories:50 Carbs: 14g</p> 	<p>Coconut Water Serving Size: 8oz Calories: 45 Carbs: 11g</p> 
<p>Gatorade: Calories: 80 Carbs: 21</p> 	<p>Watermelon Water: Calories: 60 Carbs: 15g</p> 
<p>Vitamin Water Calories: 120 Carbs: 32g</p> 	<p>Aloe Water Calories: 110 Carbs: 27g</p> 

**Beverage Swaps**  
(Beverage Guide: Page 3)

<b>Instead of...</b>	<b>Try...</b>
<p>Cola Serving Size: 8oz Calories:100 Sugar: 26g</p> 	<p>Flavored Tea Serving Size: 8oz Calories: 2 Sugar: 0g</p> 
<p>Caramel Frappuccino Grande: Calories: 420 Sugar: 66g</p> 	<p>Chai Tea Latte Grande: Calories: 240 Sugar: 42</p> 
<p>Burger King Chocolate Ice Cream Shake Calories: 950 Sugar: 146g</p> 	<p>Burger King Strawberry Banana Smoothie Calories: 280 Sugar: 46g</p> 

**Website Resources**

(Beverage Guide: Page 4)

For more information on healthy eating tips, please visit the following websites:

Eat this, Not that (Tips and Tricks)

<http://www.eatthis.com/>

LiveStrong (Tips, tricks, recipes)

<https://www.livestrong.com>

Pili ‘Ohana Lifestyle Intervention (Tips and Tricks)

<http://www2.jabsom.hawaii.edu/pili/about.html>

Clean Eating Magazine (Recipes)

<https://www.cleaneatingmag.com>

Myplate.gov (Tips, tricks, and recipes)

<https://www.choosemyplate.gov/ten-tips>

Burger King Nutritional Information PDF

<https://www.bk.com/pdfs/nutrition.pdf>

Starbuck’s Nutritional Information

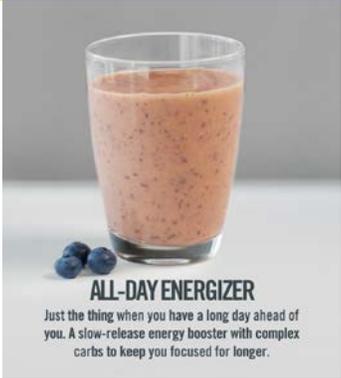
[https://www.starbucks.com/menu/catalog/nutrition?drink=all#view\\_control=nutrition](https://www.starbucks.com/menu/catalog/nutrition?drink=all#view_control=nutrition)

MyFitnessPal Blog (Recipes)

<http://blog.myfitnesspal.com/category/nutrition/>

Pinterest.com (Must have account)

**Smoothie Recipes**

 <p><b>ALL-DAY ENERGIZER</b> Just the thing when you have a long day ahead of you. A slow-release energy booster with complex carbs to keep you focused for longer.</p> <p>Instructions: Throw all ingredients into blender. Blend until smooth.</p>	<p><b>Ingredients</b></p> <ul style="list-style-type: none"> <li>½ Mango</li> <li>½ Banana</li> <li>Handful of fresh or frozen blueberries</li> <li>4oz apple juice</li> <li>1 tbsp. muesli</li> <li>2 tbsp. plain yogurt</li> <li>A few ice cubes</li> </ul>
 <p><b>LEAN GREEN</b> Super tasty and super healthy, this refreshing green smoothie is great just before a workout because it wakes you up without weighing you down.</p> <p>Instructions: Throw all ingredients into blender. Blend until smooth.</p>	<p><b>Ingredients</b></p> <ul style="list-style-type: none"> <li>2 slices of melon</li> <li>½ bag of fresh spinach</li> <li>½ mango</li> <li>Quarter of a cucumber</li> <li>4 oz of apple juice</li> <li>2 tbsp. plain yogurt</li> <li>Ice cubes</li> </ul>
 <p><b>PRE-GAME BOOST</b> Get a kick-start when you need it most. This super energizing, vitamin-packed smoothie is part of top athletes' pre-game regimen when they need to perform their best.</p> <p>Instructions: Throw all ingredients into blender. Blend until smooth.</p>	<p><b>Ingredients</b></p> <ul style="list-style-type: none"> <li>4 or 5 strawberries</li> <li>Handful of raspberries</li> <li>1 banana</li> <li>3 or 4 fresh pineapple slices</li> <li>4oz of orange juice</li> <li>Ice cubes</li> </ul>

**Good Carbs vs. Bad Carbs**

<p style="text-align: center;"><b><u>Good Carbs</u></b></p> <p style="text-align: center;"><b>Aka “Whole Carbs”</b></p> <ul style="list-style-type: none"> <li>▪ Fresh fruits</li> <li>▪ Fresh vegetables</li> <li>▪ Greek yogurt</li> <li>▪ Whole wheat pasta</li> <li>▪ Legumes (lentils, peas, beans)</li> <li>▪ Whole wheat bread</li> <li>▪ Brown rice</li> <li>▪ Quinoa</li> <li>▪ Oats</li> <li>▪ Chia seeds</li> <li>▪ Sweet potatoes</li> <li>▪ Walnuts</li> <li>▪ Peanuts</li> <li>▪ Almonds</li> <li>▪ Macadamia nuts</li> </ul>	<p style="text-align: center;"><b><u>Bad Carbs</u></b></p> <p style="text-align: center;"><b>Aka “Refined Carbs”</b></p> <ul style="list-style-type: none"> <li>▪ Fruit juices</li> <li>▪ Soda</li> <li>▪ Cookies</li> <li>▪ Pastries</li> <li>▪ Cakes</li> <li>▪ White bread</li> <li>▪ White crackers</li> <li>▪ Regular pasta</li> <li>▪ Ice cream</li> <li>▪ Potato chips</li> <li>▪ French fries</li> </ul>
<p style="text-align: center;"><b><u>Why?</u></b></p> <ul style="list-style-type: none"> <li>▪ Good for heart health</li> <li>▪ Doesn’t spike blood sugar</li> <li>▪ Helps with weight control</li> <li>▪ Keeps you full longer</li> <li>▪ Prolonged energy</li> <li>▪ High fiber</li> <li>▪ Slows digestion</li> <li>▪ Natural sugars</li> </ul>	<p style="text-align: center;"><b><u>Why?</u></b></p> <ul style="list-style-type: none"> <li>▪ Increases risk of Type 2 Diabetes</li> <li>▪ Tends to spike blood sugar</li> <li>▪ May cause weight gain</li> <li>▪ Become hungry again sooner</li> <li>▪ Energy levels decrease faster</li> <li>▪ Low fiber</li> <li>▪ Fast digestion</li> <li>▪ Added sugars</li> </ul>

Note: This material was adapted from *Eat This, Not That!* <http://www.eatthis.com/carbs-that-uncover-your-abs/> and *Happy.Healthy.Smart.* <https://healthyhappysmart.com/good-carbs-vs-bad-carbs>

**Healthy Breakfast on the Go:  
Overnight Oats**  
(Base Recipe shown below)



This recipe can be used as a base for any overnight oats combination! Add the ingredients to a mason jar, stir, leave in the fridge overnight, and enjoy in the morning!

**Optional Add-ins:**

**Protein**

- Protein powder
- Peanut butter or almond butter
- Sliced almonds

**Fiber and omega-3 (“good”) fats**

- Chia seeds
- Flax seeds

**Natural Sweetness**

- Banana, pineapple, kiwi, strawberries or other fruit of choice!
- Vanilla extract
- Cinnamon (also a good source of fiber!)
- Toasted coconut

**Extra Sweetness (use sparingly!)**

- agave, honey, maple syrup, brown sugar

<b>Sample Combinations</b>	
<p><b><u>Peanut Butter Banana</u></b> Base Recipe + 1/2 banana, mashed 1 Tbsp. peanut butter 1 tsp. honey 1 Tbsp. chia seeds 1/4 tsp. vanilla extract 1 tsp. cinnamon</p>	<p><b><u>Tropical Delight</u></b> Base recipe + 2 Tbsp. diced kiwi 2 Tbsp. diced pineapple 1 Tbsp. toasted coconut flakes</p>
<p><b><u>Apple Pie</u></b> Base recipe + 1/4 cup diced apples 1/4 tsp. ground cinnamon 1 tsp. maple syrup</p>	<p><b><u>Strawberry Chia</u></b> Base recipe + 1/4 cup sliced or chopped strawberries 1/2 banana, sliced 1 Tbsp. sliced almonds 1/4 tsp. vanilla extract Drizzle agave nectar or maple syrup</p>

## Bad Fats

### Trans-Fat

Artificial fats that are solid at room temperature. They increase bad (LDL) cholesterol levels, lower good (HDL) cholesterol levels, and increase risk of developing heart disease and stroke (American Heart Association, 2017). Avoid all trans-fats whenever possible.

#### Foods that may have trans-fats:

chips, pastries, dough nuts, biscuits, muffins, cakes, pies, margarine

### Saturated Fats

Found in meat and dairy products. Eating foods with less saturated fats can lower cholesterol. The American Heart Association (2017) recommends getting 5-6% of calories from saturated fat (no more than 120 calories, or 13g, of saturated fats if you eat 2,000 calories per day).

#### Foods with saturated fat:

Fatty beef, chicken fat, butter, full fat milk/yogurt, cream cheese, coconut milk, coconut oil

## Good Fats

### Mono-unsaturated Fats

Easily used as fuel and help decrease bad cholesterol levels, which can help lower risk of heart disease and stroke. Oils with mono-unsaturated fats are usually liquid at room temperature (American Heart Association, 2017).

#### Foods with mono-unsaturated fats:

olive oil, canola oil, peanut oil, avocado, almonds, cashews, macadamias, hazelnuts, pecans, eggs, peanuts

### Polyunsaturated Fats

Polyunsaturated fats are found in oily fish and plants. They include omega-3 and omega-6, which are essential fatty acids because they're crucial to our health but our bodies can't make them (American Heart Association, 2017).

#### Foods with polyunsaturated fats:

Omega-3: eggs, cereals, poultry, pine nuts, seeds, vegetable oil (e.g. sunflower, soybean, corn)  
Omega-6: salmon, sardines, tuna, mackerel, anchovies, trout, herring, walnuts

## Eating Healthy on a Budget

### Meal Plan:

- Make a list before going to the grocery store. This saves time and helps to avoid purchasing more than you need.
- Avoid shopping when you're hungry, which can lead to impulse purchases (often of the unhealthy variety).

### Buy in Bulk:

- Buy rice, pasta, beans, potatoes, and oatmeal in bulk to save money in the long run. These sources of carbohydrates will provide immediate energy for the body.

### Purchase Frozen Fruits & Veggies

- Frozen produce is a great source of nutrition because they have less additives and are full of vitamins, minerals, and antioxidants

### Avoid "Empty Calorie" Foods:

- Empty calorie foods tend to be cheap but provide no nutritional value. They contain added sugars, fats, and salts.
  - Example: soft drinks, cookies, ice cream, candy, chips
-

## Huli Huli Chicken

### Recipe Details

Prep Time	Cook Time	Yields	Serving Size
10 minutes	30 minutes	4 servings	2 skewers

### Nutrition Facts

Calories	156
Total Fat	2g
Saturated Fat	1g
Cholesterol	47mg
Sodium	320mg
Total Fiber	0g
Protein	18g
Carbohydrates	16g
Potassium	255mg
Vitamin A	2%
Vitamin C	15%
Calcium	2%
Iron	6%

*Percent Daily Values are based on a 2000 calorie diet*

### Ingredients

12oz boneless, skinless chicken breast, cut into 1-inch cubes (24 cubes, about 4 large breasts)  
 1 cup fresh pineapple, diced, or canned pineapple in juice  
 8 6-inch wooden skewers

### Sauce

2 Tbsp. ketchup  
 2 Tbsp. honey  
 2 tsp. orange juice  
 1 tsp. garlic, minced (about 1 clove)  
 1 tsp. ginger, minced

### Directions

1. Preheat a broiler or grill on medium high heat.
2. Thread chicken and pineapple cubes on skewers (about three each).
3. Add ingredients for sauce into one bowl and mix well; separate into two bowls and set one aside for later.
4. Grill skewers for 3–5 minutes on each side. Spread sauce (from the bowl that wasn't set aside) on to chicken and pineapple about every two minutes. Discard the sauce when finished.
5. To prevent chicken from drying out, finish cooking skewers in a 350°F oven immediately after grilling (to a minimum internal temperature of 165°F). Using a clean brush or spoon, coat with sauce from the set aside bowl before serving.

Recipe Source: Deliciously Healthy Family Meals  
<https://healthyeating.nhlbi.nih.gov/recipe/detail.aspx?linkID=1&cID=2&rID=126>

**My Grocery List**

Vegetable/Fruit Group	

Dairy/Protein Group	

Starch Group	

Grocery Checklist			
Vegetables	Fruits	Starch	Protein
<input type="checkbox"/> Asparagus	<input type="checkbox"/> Apple	<input type="checkbox"/> Cereal	<input type="checkbox"/> Beef loin
<input type="checkbox"/> Bell Peppers	<input type="checkbox"/> Banana	<input type="checkbox"/> Pasta	<input type="checkbox"/> Canned fish
<input type="checkbox"/> Broccoli	<input type="checkbox"/> Strawberries	<input type="checkbox"/> Rice	<input type="checkbox"/> Chicken
<input type="checkbox"/> Cabbage	<input type="checkbox"/> Blueberries	<input type="checkbox"/> Breadfruit	<input type="checkbox"/> Eggs
<input type="checkbox"/> Carrots	<input type="checkbox"/> Cherries	<input type="checkbox"/> Potatoes	<input type="checkbox"/> Fresh fish
<input type="checkbox"/> Cauliflower	<input type="checkbox"/> Grapes	<input type="checkbox"/> Sweet Potato	<input type="checkbox"/> Pork Loin
<input type="checkbox"/> Celery	<input type="checkbox"/> Grapefruit	<input type="checkbox"/> Bread	<input type="checkbox"/> Squid
<input type="checkbox"/> Cucumber	<input type="checkbox"/> Kiwi	<input type="checkbox"/> Crackers	<input type="checkbox"/> Tofu
<input type="checkbox"/> Lettuce	<input type="checkbox"/> Mango	<input type="checkbox"/> English Muffin	<input type="checkbox"/> Turkey
<input type="checkbox"/> Spinach	<input type="checkbox"/> Melon	<input type="checkbox"/> Pretzels	<b>Dairy</b>
<input type="checkbox"/> Sprouts	<input type="checkbox"/> Orange	<input type="checkbox"/> Popcorn	<input type="checkbox"/> Cheese
<input type="checkbox"/> Squash	<input type="checkbox"/> Papaya	<input type="checkbox"/> Sandwich Bun	<input type="checkbox"/> Milk
<input type="checkbox"/> Taro Leaves	<input type="checkbox"/> Peach	<input type="checkbox"/> Tortilla	<input type="checkbox"/> Yogurt
<input type="checkbox"/> Tomato	<input type="checkbox"/> Pear	<input type="checkbox"/> Taro/Poi	<input type="checkbox"/> Rice Milk
<input type="checkbox"/> Onions	<input type="checkbox"/> Pineapple	<input type="checkbox"/> Waffles	<input type="checkbox"/> Soy Milk

Note: This material was adapted from the Pili ‘Ohana Lifestyle Program

**Nutrition Facts Label Explained**

<b>Nutrition Facts</b>	
Serving Size 2/3 cup (55g) Servings Per Container About 8	
<b>Amount Per Serving</b>	
<b>Calories</b> 230	Calories from Fat 40
	<b>% Daily Value*</b>
<b>Total Fat</b> 8g	<b>12%</b>
Saturated Fat 1g	<b>5%</b>
<i>Trans Fat</i> 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 160mg	<b>7%</b>
<b>Total Carbohydrate</b> 37g	<b>12%</b>
Dietary Fiber 4g	<b>16%</b>
Sugars 1g	
<b>Protein</b> 3g	
Vitamin A	10%
Vitamin C	8%
Calcium	20%
Iron	45%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily value may be higher or lower depending on your calorie needs.	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g

**Nutrition Label Key**

**Serving Size: START HERE!**

**% Daily Value: Under 5% is low, 20% and above is high**

**Eat plenty of those in grey**

**Details on calories and nutrients**

**Limit your intake of those in yellow**

Note: This material was adapted from the Pili 'Ohana Lifestyle Program

**Eating Out Guide**  
(Page 1)



## Breakfast & Brunch

(Eating Out Guide: Page 2)

### Keep it clean.



- Choose an omelet or scrambled eggs using egg substitute or egg whites. Load up on the veggies to make this a powerhouse breakfast and keep you satisfied longer.
- Fact: Egg substitutes provide high protein, low fat, and no cholesterol

### Save the Pig.



- Skip the bacon or sausage. Instead try Canadian bacon or turkey bacon. Make sure meat is not cooked in butter. Ask questions when ordering your food about how it will be prepared.
- FACT: American bacon comes from pork belly meat containing 120-150 calories per ounce. Canadian bacon comes from leaner pork loin with only 30 calories per ounce!

### Step Outside of the Pastry Box.



- Instead of cookies, pie or cake try something different for desert, like flavored non-caffeine teas, fruit, or a low-sugar cereal with soy milk.
- Fact: Chocolate is a hidden source of caffeine and causes increased arousal and decreases the ability to develop and sustain the deeper stages of sleep.

## Lunch & Dinner

(Eating Out Guide: Page 3)

### Avoid Fried Foods



- Instead, choose foods without the skin or remove the skin yourself. Instead of white rice, try mixing up your dish with couscous and a side salad.
- Fact: Eating fried foods increases your risk for stroke, diabetes, and cancer.

### Avoid Sauce Dense Food



- Ask for sauces, dressing, creams, or gravies to be served on the side then use sparingly!
- Fact: Using half of the salad dressing on the side will save around 150 calories!

### Keep It Fresh



- Choose raw, steamed, stir-fried, boiled, or baked vegetables instead of creamed, scalloped, au gratin, fried or with butter or sauces.
- Fact: Frozen vegetables are processed right after harvest; thus, their peak nutrients are retained for a longer period of time.

**Remember: Everything in moderation! Do not use fat-free or sugar-free items, instead use low-fat or low-sugar items.**

**Fast Food Swaps**  
(Eating Out Guide: Page 4)

<p><b>McDonald's Quarter Pounder</b> <b>Serving Size: 1 Burger</b></p>  <p><b>Quarter Pounder with Cheese</b></p> <p>Calories: 770 Total Fat: 45g Protein: 51g Carbohydrates: 42g</p>	<p><b>McDonald's Salad</b> <b>Serving Size: 1 Salad</b></p>  <p><b>Southwest Grilled Chicken Salad</b></p> <p>Calories: 350 Total Fat: 11g Protein: 37g Carbohydrates: 27g</p>
<p><b>Pizza Hut Meat Lover's Pizza</b></p>  <p>Calories: 220 Total Fat: 13g Protein: 9 g Carbohydrates: 18g</p>	<p><b>Pizza Hut Veggie Pizza</b></p>  <p>Calories: 140 Total Fat: 5g Protein: 5g Carbohydrates: 18g</p>
<p><b>In-N-Out Cheeseburger</b> <b>Serving Size: 1 Burger</b></p>  <p>Calories: 480 Total Fat: 27g Protein: 22g Carbohydrates: 39g</p>	<p><b>In-N-Out Protein Style</b> <b>Serving Size: 1 Burger</b></p>  <p>Calories: 240 Total Fat: 17g Protein: 13g Carbohydrates: 11g</p>

Note: This material was adapted from the Pili 'Ohana Lifestyle Program

**Menu  
Makeover**

<b>High Fat Foods</b>			<b>Makeover Foods</b>			<b>GRAMS OF FAT SAVED</b>
<b>Eat Less of these High Fat Foods</b>	<b>Quantity</b>	<b>Fat Grams</b>	<b>Eat These Lower-Fat Foods Instead:</b>	<b>Quantity</b>	<b>Fat Grams</b>	
Scrambled eggs (w/milk and butter)	2 eggs	15	Egg, substitute	2 eggs	4	<b>11</b>
Spam, regular	2 oz.	16	Spam, lite	2 oz.	8	<b>8</b>
Milk, whole	1 cup	8	Milk, skim	1 cup	0	<b>8</b>
Fried Rice (vegetable)	¾ cup	6	Brown Rice	¾ cups	1.5	<b>4.5</b>
Portuguese Sausage	3 oz.	30	Turkey Bacon	1 oz.	8	<b>22</b>
<b>Total Fat Grams</b>		<b>75</b>			<b>21.5</b>	<b>53.5</b>
Chicken Katsu	3 oz.	18	Chicken Breast without skin	3 oz.	3	<b>15</b>
Macaroni Salad	½ cup	19	Salad, low-fat dressing		6	<b>13</b>
Rice (2 scoops)	1 ½ cup	0.6	Rice (1 scoop)	¾ cup	0.3	<b>0.3</b>
<b>Total Fat Grams</b>		<b>37.6</b>			<b>9.3</b>	<b>28.3</b>
Chili, regular	8 oz.	20	Chili, vegetarian	8 oz.	2	<b>18</b>
French Fries	3 oz.	8	Sweet Potato (steamed)	1 small	0.14	<b>7.86</b>
Ice Cream, Premium	½ cup	24	Frozen Yogurt with Fruit	½ cup	4	<b>20</b>
<b>Total Fat Grams</b>		<b>52</b>			<b>6.14</b>	<b>45.86</b>
Potato Chips, regular	1 oz.	7	Potato Chips, Baked	1 oz.	4	<b>3</b>
<b>Total Fat Grams</b>		<b>7</b>			<b>4</b>	<b>3</b>
<b>Total Fat Grams for the Day</b>		<b>171.6</b>			<b>40.94</b>	<b>130.66</b>

Note: This material was adapted from the Pili ‘Ohana Lifestyle Program

**Change your Negative Thoughts into Positive Thoughts**

Negative Thought	Positive Thought
<p><b>All or Nothing</b></p> <p>“I can’t eat dessert ever again.”</p> <p>“I shouldn’t have eaten that cake. I can’t do anything right.”</p>	<p><b>Work toward Balance</b></p> <p>“It’s okay if I eat that dessert and eat less of something else.”</p> <p>“I won’t let myself down because of one misstep. I will get up and back on track.”</p>
<p><b>Making Excuses</b></p> <p>“It looks like it might rain, so I won’t take a walk.”</p> <p>“I’m too busy to work out”</p>	<p><b>It’s Worth a Try</b></p> <p>“I can try doing for a walk and bring an umbrella.”</p> <p>“It’s hard to find time to exercise when I’m busy, but I will fit in 20 minutes of exercise.”</p>
<p><b>“I should…”</b> <b>“I must…”</b></p> <p>“I should have eaten less of that cake.”</p> <p>“I must keep track of everything I eat.”</p>	<p><b>It’s My Choice</b></p> <p>“I will eat less next time.”</p> <p>“I am choosing to write down everything I eat because it helps me stay on track.”</p>
<p><b>“I’m Not As Good As…”</b></p> <p>“Mary lost more weight than I did this week.”</p>	<p><b>Everyone’s Different</b></p> <p>“I won’t compare myself to others. We can all succeed at our own rate.”</p>

Note: This material was adapted from the Pili ‘Ohana Lifestyle Program

**10 Keys to a Healthy Diet**

Healthy eating habits don't have to be restrictive or confusing. Below are some guidelines for maintaining a healthy diet.

<p><b>1. Consume a Balanced Diet</b></p> 	<p><b>2. Be Aware of Portion Sizes</b></p> 
<p><b>3. Eat Plenty of Fresh Fruits and Vegetables (of all colors)!</b></p> 	<p><b>4. Eat More Whole Grains</b></p> 
<p><b>5. Eat Less Refined Grains and Foods with Added Sugar</b></p> 	<p><b>6. Enjoy More Fish and Nuts</b></p> 
<p><b>7. Eat Less Animal Fat</b></p> 	<p><b>8. Shun Trans Fats</b></p> 
<p><b>9. Be Aware of Liquid Calories</b></p> 	<p><b>10. Limit Alcohol Consumption</b></p> 

Note: This material was adapted from Berkeley Wellness <http://www.berkeleywellness.com/healthy-eating/food/slideshow/14-keys-healthy-diet/?ap=2012>