Community Health Improvement Plan

Using Social Support to Effect Individual Behavior Change

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Approved by

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ABSTRACT

The purpose of this paper is to develop a health promotion strategy for the American Indians living on Confederated Tribes of Umatilla Indian Reservation using their history and cultural values applied to the socio-ecological framework to effect individual behavior change. This framework illustrates the complex interactions within a community.

Although Umatilla County is ranked low in the State of Oregon for health outcomes and health behaviors, CTUIR members experience even greater health disparities. Integrating traditional values and activities with Healthy People 2020 objectives may be a way in which to improve the health of the community. To be successful, this intervention will require both support of the Tribal leadership and community engagement.
INTRODUCTION

The burden of chronic disease is higher for the American Indians living on the Confederated Tribes of Umatilla Indian Reservation (CTUIR) than many other populations in the State of Oregon. According to the CDC between 2004 and 2008, other than hypertension in Black Americans, American Indians and Alaskan Indians (AIAN) had higher rates of morbidity and mortality due to circulatory, respiratory or chronic diseases such as diabetes than those of White non-Hispanic, Black American, Asian or Hispanic populations.¹ Data specific for the State of Oregon supports these findings and also depicts higher rates of unintentional injury and suicide for AIAN. For example, in the State of Oregon between 2005-2009, AIAN had higher rates of mortality due to diabetes (6.8% vs. 3.4%), chronic lower respiratory disease (6.4% vs. 6.2%) and liver disease (5.5% vs. 1.4%) then non-Hispanic whites.² In Umatilla County, the rate of diabetes for AIAN is 34% compared to 13% for the County and 8% for the State.³ Possible explanations for the continued disparities include racial differences including genetic predisposition, religion, diet, living conditions and cultural practices.⁴

Historically, this has not always been the case as the Cayuse, Umatilla, and Walla Walla tribes that comprise the CTUIR did not have contact with Europeans until the early 1800’s during the time of the Lewis and Clark expedition. Traditionally, the tribes of the Columbia Plateau of the Pacific Northwest were hunters and gatherers, living a territorial lifestyle. Tribes were in motion, moving from low elevation river winter and spring base camps where fish were plentiful to high elevation camps in the summer and fall for big game, root and berry gathering. Water was the essence of life and fish, big game, roots and berries were dietary staples. Lewis and Clark may have opened the Pacific Northwest to new opportunities for settlers, but this
expansion brought small pox and measles as well as conflict to the American Indians of the Columbia Plateau. In a span of 50 years, the American Indian populations of the Pacific Northwest were impacted by immigrants, epidemics, and warfare. The traditional territories for the Cayuse, Umatilla and Walla Walla tribes were reduced from nearly 4 million to less than 1 million acres over this relatively short time period, and drastically altered their way of life.

CTUIR is located in Northeast Oregon in Umatilla County. The County is ranked 22\textsuperscript{nd} out of 33 counties in the State for health outcomes and 33\textsuperscript{rd} for health behaviors.\textsuperscript{5} A recent County community health assessment (figure 1) indicates that although the County ranks low statistically, CTUIR members experience even higher rates of chronic disease and reported poorer health than Umatilla County, the State of Oregon and the US general

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<td><strong>Umatilla County Health Assessment, Comparison Data</strong>\textsuperscript{2}</td>
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<td>Diabetes</td>
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<td>Asthma</td>
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<td>Arthritis</td>
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<td>Current Drinker</td>
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<td>Current Smoker</td>
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<td>Rated health as fair or poor</td>
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<td>Uninsured</td>
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<td>Rated physical health as not good on 4 or more days in the previous month</td>
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\textsuperscript{2}2009 BRFSS data
population. Although there has been no clear explanation for the greater disparities in health and socioeconomic status for the American Indians living on CTUIR, gaining an understanding of the history, social and political struggles that have impacted the traditional ways of life may provide some answers and tools. The purpose of this paper is to develop a health promotion strategy for the American Indians living on the CTUIR by using their history and cultural values applied to the socio-ecological framework to effect individual behavior change.

**HISTORY**

The Paleolithic period defines the time in which man was primarily a hunter and gatherer, beginning about 2 million years ago and ending with the advent of agriculture, about 10,000 years ago. Yet long after this period, prior to contact with Europeans, many AIAN societies flourished as hunters and gatherers, particularly in the Pacific Northwest. In this region the American Indians lead a mobile life dictated by seasons, territory, habitat, and the availability of plants and animals.

Paleopathology studies of Native North Americans demonstrate, that native societies were not living in a pristine disease free environment, but that infectious diseases caused by staphylococcus and streptococcus bacteria were common causes of morbidity and mortality. Most infectious illnesses were acute and epidemic unlike current illnesses which tend to be chronic and episodic. Examinations of ancient burial sites demonstrate a correlation between the increases and severity of infections with the transition to a more agricultural lifestyle; this has been attributed to an increase in population density, sedentary behavior, and low quality diet. Shorter life spans and higher childhood mortality attributed to complications related to iron
deficiency anemia and other vitamin deficiency diseases have also been associated with the transition to agriculture.\textsuperscript{8,9} The incidence of chronic disease and cancer in modern humankind has been directly associated with the change in environment related to agriculture (diet and lifestyle). Recent studies indicate that 72\% of the total daily energy consumed today is in the form of dairy products, refined sugars, cereal, refined vegetable oil and alcohol which were unavailable prior to agriculture.\textsuperscript{10}

Archeology and oral tradition have the Cayuse, Umatilla, and Walla Walla tribes inhabiting the Columbia Plateau of the Pacific Northwest region for at least the last 10,000 to 12,500 years.\textsuperscript{7} Historically, villages in the Columbia Plateau, were comprised of small groups that spoke similar dialects, were self-governed, and self-sufficient. They relied on a territorial lifestyle that was dominated by the patterns and preservation of available food, and coming together in larger groups for seasonal gatherings.\textsuperscript{6} This ‘Seasonal Round,’ an organized process for hunting and gathering based on food availability and the seasons, determined where to travel to and for which harvest, within the established territorial boundaries.

The creation of the Oregon Territory in the early 1800’s brought thousands of settlers and the lust for land into the Pacific Northwest. The rapid influxes of settlers led to conflict, war and disease, culminating in the treaty of 1855 for the Columbia Plateau American Indians. The treaties called for the American Indians to cede their lands and relocate to designated reserves. Hunting, fishing and food gathering rights in traditional territory (ceded lands) were negotiated for, sustained and continue today for the tribes of the Columbia Plateau. The Cayuse, Umatilla and Walla Walla Tribes ceded over 2 million acres in Oregon and 1.8 million acres in
Washington, creating a 512,000 acre reservation. Continued changes to the treaty have resulted in continued reduction of land mass and today the reservation measures 172,000 acres (see Figure 2). American Indians living within Umatilla County account for 4% of the total population.\textsuperscript{6,7}

After nearly 100 years of living on the reservation, the Cayuse, Walla Walla and Umatilla tribes ratified a Constitution in 1949, thereby creating a Confederated Tribe. Tribal membership is determined by “All persons of Indian blood whose name appears on the census roll as of July 1, 1949, having at least one parent or grandparent enrolled and at least one fourth degree Indian blood.”\textsuperscript{11} Governance is determined by The General Council (all members of CTUIR over the age of 18) who elect a Board of Trustees. Tribal elections for General Council officials and Board of Trustees are held every 2 years.\textsuperscript{11}
HEALTH DISPARITIES

There are 569 federally recognized tribes within the United States, with the greatest proportions found in the West (43%) and South (31%). American Indians and Alaskan Natives are defined as the descendants of the original inhabitants of the Americas, who maintain tribal affiliation. In 2010, AIAN represented 1.5% of the overall US population.

With the nearest grocery store 20 minutes away by car and available food restricted to several fast food restaurants, a casino, and two convenience stores, the reservation could be described as a food desert. This is odd given that the majority of the reservation is rural and surrounded by wheat fields and farmland. The governance center of the CTUIR is located in the village of Mission, in which there are few intact sidewalks and a one mile walking trail with a steep incline. Community schools are limited to a Head Start program and a small charter high school; most other children are bused to Pendleton schools. The charter high school falls under the jurisdiction of the Pendleton school district, which participates in the federal food and nutrition program. Eligible students receive free lunch from the program, which a majority of the charter student body qualifies for. Although this district provides ‘a rainbow’ assortment of vegetables at other city schools, according to Principal Ronda Smith, the charter high school students typically receive a bowl of iceberg lettuce and packaged dressing which has to be collected by the staff via a daily drive to Pendleton..

In the fall of 2011, Umatilla County Community Partners, which includes CTUIR, completed a Community Health Assessment using a self-report survey instrument. The survey was mailed to a random sample of 800 County residents with a 45% response rate (n=342, 95% CI=5.28%).
To achieve this rate of return letters were sent to Umatilla County residents informing them of the random survey, which were then followed by two other mailings that stated the survey was coming and to look for it. Umatilla County Community Partners in collaboration with health education researchers from the University of Toledo identified the BRFSS as a valid and reliable survey. The adult survey for the county was comprised of 115 survey items, a majority derived from the BRFSS survey.\(^2\)

The CTUIR participated in an over sampling, and mailed an additional 600 surveys to a random sample of tribal members. This survey was similar to the county and contained 117 items. Although the CTUIR participated in the same schedule of pre-survey mailers, there was only a 23% response rate. The low response rate from CTUIR was noted as a limitation in the report.

This report contained data specific to CTUIR members (Table 1) and clearly delineates the increasing health disparities. CTUIR members have a higher rate of diabetes (34% vs. 13%), asthma (27% vs. 20%), and arthritis (50% vs. 32%), and they are also more likely to report poor physical and mental health as compared to other Umatilla County residents. American Indians living in the County are also more likely to be uninsured than other County residents, and rely almost exclusively on tribal health services for their health care.\(^3\)

A review of health indicators at the Tribal Health Center reveal a high percentage of obesity, ranging from 25% to 74% between the ages of 2 and 74, with the highest rate found in the 35 to 44 year olds. According to these data, 47% of children between the ages of 2 to 5 have weights that are greater than the 85\(^{th}\) percentile and one third of the children between the ages of 6 to 19
are considered to be obese. Other data collected on the CTUIR in 2011 included an elder’s survey (Appendix A) conducted by the Tribal Health Senior Center which works under a Title VI grant. The data in this survey are consistent with the Community Health Assessment with the exception that CTUIR elders live more independent lives. The Community Health Assessment report demonstrate that although Umatilla County is ranked low for health outcomes and lowest for health behaviors, the American Indians of the Cayuse, Umatilla and Walla Walla tribes experience even greater disparities in health.

CULTURE AND THE COLUMBIA PLATEAU SEASONAL ROUND

Although slightly different for each tribe of the Columbia Plateau, the Seasonal Round (see Figure 3) explains tribal movement based on the season and availability of plants and animals. Transhumance is the term used to describe the seasonal movement of people from lower elevation winter camps to higher elevation summer camps for food gathering as opposed to

Figure 3 CTUIR Seasonal Round

Source: http://www.trailtribes.org/umatilla/sites/showonecontent.asp@contentid1652.htm
nomadic lifestyle. Winter and early spring found villages congregated along low elevation waterways, moving east and south in the early summer into higher elevations and returning to the low elevation waterways laden with food in the fall to store for winter use. The Seasonal Round defined the way of life for the American Indians of the Columbia Plateau, but after the arrival of the Europeans this lifestyle changed. Civilization, farming and livestock management were brought to the American Indians, changing their way of life.

In the mid-1800’s after many deaths from epidemic diseases such as small pox and measles, a resurgence of traditional practice and religion gained momentum. The exact origins are unclear, but point to a Wanapum prophet of the Columbia Plateau, who rejected the teachings of the missionaries and encouraged a return to the ancient traditions, incorporating food gathering, social customs and religion to improve tribal health and wellness. The Seven Drum (Washat) religion is filled with ‘animism’ symbolism, in which plants and animals possess will and intelligence. The creation story begins with the purity and importance of water, the connection to the earth, and the plants and animals’ devotion, support and sacrifice to the people. Today, the Seasonal Round celebrations are referred to as ‘New Food’ or ‘First Food’ Feasts, and are an essential part of seasonal and community celebrations that pay reverence to those animals that first gave support to man, providing sustenance and social meaning. New Foods/First Foods are an integral part of the Seven Drum (Washat) religion.

In a summary of American Indians today, the Pulitzer Prize winner N. Scott Momaday reflects, “I believe that the American Indian is possessed of a vision that is unique, a perception of the human condition that distinguishes him as a man and as a race… the sense of the place, of the
sacred, of the beautiful, of humanity – the Indian has and continues to have a singular and vital role in the story of man on this planet. There, in the center, he stands in good relation to all points in the wide circle of the world.\(^{(13, p.26)}\) Although simplistic, this worldview can be described as one in which language, spiritual life, cultural beliefs and practice, and the natural environment are intertwined. The Seasonal Round defines the complex interactions between the individual, community, culture and the environment, where creation stories provide identification and meaning to one’s life. Symbolic capital has been used to discuss cultural aspects of human economic activities; it is measured in terms of honor, prestige and recognition. Although traditional subsistence activities such as hunting, fishing and gathering are no longer used to sustain households, participation is a means to acquire symbolic capital and the connection to the land is a way to express ethnic identity for the American Indians of the Columbia Plateau.\(^{14}\)

**SOCIO-ECOLOGICAL FRAMEWORK**

Both the health impact pyramid and the socio-ecological framework, provide a foundation to explore the complex interactions identified in the Seasonal Round. According to the health impact pyramid (see Figure 4), applying public health interventions at the community level has the greatest potential to influence individual behavioral changes.\(^{15-18}\) In his commentary on the framework for public health, Frieden puts forward that although interventions directed at socio-economic factors (poverty, nutrition, sanitation and housing) have the greatest potential to improve health, the most effective public health actions are those which influence individual behavior by addressing the social norms.\(^{15}\) Interventions such as the creation of a smoke-free workplace, improved access to nutritious foods, and built environment designed to promote bicycling and walking all have the potential to change individual
behavior by addressing the social and contextual activities which define the norms and thereby creating a community environment in which individual behavior can change. Fundamentally the use of the socio-ecological framework will delineate the interactions between the individual, family, and community stressors which public health, Tribal governance, and
The socio-ecological framework (see Figure 5) illustrates these interactions and provides guidance on where community health activities interact with individuals at both the organizational and community level to address health behaviors. The previous history, culture and health disparity discussions of the CTUIR assist with the application of the socio-ecological framework by identifying some of the community’s social and symbolic capital that influences health disparity. Within the context of the socio-ecological framework recognizing the interactions between the built environment and healthy behaviors should also be appreciated. Willow et al., for example, use the socio-ecological framework to illustrate the relationship and interconnectedness on many levels of obesity in adolescents to physical activity and healthy eating. Safe neighborhoods, access to parks, healthy foods in the home, school and community, along with family structure, values, attitudes and knowledge of healthy weight all have an influence on adolescent obesity.

COMMUNITY HEALTH OUTREACH APPROACH

Formidable work on community-based participatory research indicates that collaboration with community on research, program development, and implementation provides needed insight of community values that both benefit the program and improve community participation. These studies suggest that whether the work relates to adolescent health, obesity and school lunches, or community health behaviors and chronic disease, that by eliciting the community voice provides an opportunity to tap into community strengths and weakness and focus on what the community views as the leading health determinants.
Eliciting the voice and input of community health staff, especially tribal members are the first priority in program development. Initiating a New Foods proposal within the Community Health Outreach Program begins with department collaboration. Moving away from individual interventions to a community approach requires an introduction of staff to the socio-ecological framework which will allow staff participation in drafting and incorporating the New Foods initiative into program development. Utilizing the Umatilla County Health Assessment data to initiate the community health improvement and strategic plans was the vehicle used to accomplish this. Most of the staff associates New Foods with the activities of hunting, fishing, root digging and gathering. Incorporating healthy eating (lean meats and high fiber diet of the hunter/gatherer) and increasing physical activity in a cultural context have proven to be a challenging concept for some. Many of the staff, especially tribal members, views the Community Health Department role as that of teaching, assisting, and supporting First Foods activities (hunting, fishing and gathering).

Community interventions identified in Healthy People 2020 to address diabetes, heart disease, stroke, diabetes and social determinants of health include social support activities that focus on changing physical activity behavior, and creating social and physical environments that promote good health for all.\textsuperscript{25} The objectives for physical activity, weight status and chronic disease through community movement of the Seasonal Round demonstrate community interactions that are needed to influence individual health behaviors.

The CTUIR Tribal leadership has identified adolescent health, obesity and chronic disease as health priorities, all of which were also identified as priority areas in the Umatilla County
Community Health Assessment. Like the prophets of the mid-nineteenth century, Tribal leadership recognizes that a return to traditional values and activities is a way in which to improve the health of the community. For the American Indian of the Columbia Plateau, the terms *New Foods or First Foods* elicit a cultural connection to the land, where food has both nutritional and spiritual values. Simply put, New Food/First Food is itself a definition of the fundamental cultural, spiritual and subsistence activities of the American Indians of the Columbia Plateau. It is cultural identity. It is a way to acquire symbolic capital. Within the tribe, over the past 5 years or so, the Department of Natural Resources (DNR) and Language have adopted ‘New Foods/First Foods’ in program development.

The land management program of the DNR encompasses the New Foods/First Foods ideology beginning with clean water to sustain fish and humans, and timber management to support big game, roots and berries. The plan has been drafted in such a way that community members understand and support the practice. The language department teaches children the native language using the symbolism of New Foods, and hosts children on root digging and berry picking field trips so they may learn the necessary and appropriate digging skills which align with traditional practices and taboos. The elders believe the language, food and singing are interconnected. The goal of the Community Health Department will be to use the concept of New Foods/First Foods to create a healthy body that will be able to participate in the traditional activities needed to hunt, fish, and gather.

The CTUIR Department of Science in coordination with researchers from Oregon State University’s College of Public Health is currently working on a project examining traditional
subsistence lifestyle of the Cayuse, Umatilla and Walla Walla Tribes. The study is looking at activity expenditures in the traditional lifestyle as well as the food quality and quantity for the fish-based diet of the CTUIR. The study indicates a river-based diet with approximately 40% of the diet coming from fish, 32% from roots, and with the remaining 28% coming from greens, game, fowl and berries. As key community stakeholders, both the Department Of Science (DOS) and Department of Natural Resources (DNR) would seem likely partners in working towards the full development and implementation of this initiative.

THE SEASONAL ROUND CONCEPT IN PROGRAM DEVELOPMENT

New Foods are identified in six categories, water, salmon, deer, elk, roots, and huckleberries. A New Foods Feast begins with and ends with water as the essence of life: salmon, which was the first animal to support man, is high in omega 3 fatty acids, and together with deer and elk represent lean meat, providing a heart healthy diet. Roots and berries contribute fiber and are nutrient dense foods. A healthy body requires a good diet along with physical activity. The Seasonal Round can be used as a means to describe a supportive community in motion, respecting the environment, celebrating life and eating a healthy diet. If applied in this manner it can provide a foundation in which to build a health promotion campaign, within the framework of the socio-ecological model using evidence-based recommendations.

Capitalizing on the Seasonal Round concept the Community Health Department will implement the slogan ‘Know Your Roots; Walk, Run, Dance and Sing for Better Health’, and has proposed two goals; the first is to establish a community-based walking group program through increased social support to those who wish to improve their health and physical activity, and the second is
to highlight the health benefits of the hunter/gatherer diet unique to the American Indians of the Columbia Plateau.

To assist with reaching the first goal, the CDC booklet titled, *Social Support for Physical activity: Establishing a Community-Based Walking Group Program to Increase Physical Activity among Youth and Adults, An Action Guide*, will be used in program development and implementation. This guide provides action steps on how to determine community readiness, and how to identify leaders, key stakeholders, and partners. Resources, recommendations and outcomes are also reviewed.

In a systematic literature review, Kahn et al., asked the question, “What interventions are effective at increasing or maintaining physical activity in the community?” They found strong evidence that interventions focused on building, maintaining, and/or strengthening social networks, such as buddy system, workplace wellness programs and/or walking clubs will improve energy expenditure and increase participation in physical activities. This review also found that individually-adapted health behavior change programs were effective across diverse settings and populations, and that programs were most effective if they focused on the individual’s readiness to change.

The second goal of the Know Your Roots initiative is to highlight the health benefits of the hunter/gatherer diet unique to the American Indians of the Columbia Plateau. Studies have shown that the health benefits of adapting a 21st century hunter gatherer diet include lower blood pressure, reductions in weight and glucose intolerance. Hunters and gatherers were
historically considered to be fit and free of cardiovascular disease and diabetes. According the O’Keefe et al. the Paleolithic diet was high in lean meats, omega 3 fatty acids, fiber, vitamins and nutrients essential for a healthy diet.\textsuperscript{6}

**KNOW YOUR ROOTS INITIATIVE**

Understanding the oral tradition of the creation story of the Columbia Plateau Indian tribes assists in drafting the message. The creation story begins in a mystical time before the creation of human beings when animals spoke. After the creation of human beings it was evident that they needed help and protection. New Food/First Food refers to the animals and plants that promised to support and protect humans. The importance of the food is tied to the order in which the animals and plants promised their support and is reflected in the serving order of a New Foods Feast.

According to the creation story water is the essence of life; it is the only fluid that adolescents and adults need, and contrasting this with decreasing high sugar drinks is an important component. Salmon is high in omega 3 fatty acids, and along with big game provide the lean meat required in a heart healthy diet. Tribal fishermen and hunters provide the community with salmon, eel, elk, and venison; the Community Health Outreach Program can assist by identifying elders, single mothers and other at risk families that would benefit from receiving stores of these fish and meats. Even without participating in hunting and fishing, community members can be encouraged to identify and purchase leaner cuts of meat, poultry and fish from the grocery store. Roots and berries follow in the serving order and represent nutrient dense foods, high in vitamins and essential nutrients. To realize the greatest health benefits, encourage community members to reduce or avoid consumption of fried, highly processed packaged foods, commercially baked
foods, calorie dense snack foods and high sugar drinks by increasing access to nutrient rich foods available.

Collaborating with tribal leadership is required to address the food desert and food insecurity that exists on the reservation. Increasing access to fresh foods through community gardens, farmers markets, and providing more fresh produce at the small tribally run convenience store will also be included in these discussions. Another goal of the program will be to create bi-annual community challenge to increase consumption of new foods for one week, even if families do not have hunters, fishermen or gatherers in the home, they can substitute similar items from grocery, gardens and farmers market. Frassetto et al. provide examples for adapting a hunter, gatherer diet in the 21st century that are based on readily available foods, are easily followed and incorporated into the diet. 27

The lifestyle of the hunter and gatherer societies was very active and incorporated cardio-vascular activities like walking, running and climbing as well as lifting, carrying, and stretching. To replicate community movement through the seasons we will propose the development of walking clubs, groups forming a ‘community’ with the goal of reaching a virtual destination within traditional territory of the ceded lands. Following the Seasonal Round, movement and relocation begin in the spring. Replicating this, the Community Health Department will identify walking leaders, recruiting individuals to form walking support groups, with a minimum of 3 participants in each group.
At the start of each season the program will have a new virtual location and distance goals based on traditional movement and activities of the tribes. Pedometers will be given to all participants to track their walking as they undertake these virtual journeys. Following the objectives of Healthy People 2020 individuals, adolescents and adults will be encouraged to participate in aerobic physical activity for a minimum of moderate intensity for at least 150 minutes (or 75 minutes per week of vigorous intensity), as well as muscle-strengthening on 2 or more days of the week (Healthy People 2020 objectives PA-2 and 3).

Historically villages moved as a group and they worked to ensure that all members arrived safely at the destination. For this reason, the duration will not be accumulated by the group, but rather each individual will complete the journey with the support and encouragement from the group. Traditional activities such as hiking to hunt, fishing or gathering can also be used to accumulate miles. To capture the movement we will propose that all participants ‘Journal Your Journey’ through written and digital storytelling. The digital storytelling will be captured by the Community Health Department, compiled for the seasons, and displayed in the community cultural and governance center during the winter months, which are traditionally the time of storytelling.

Success of the program will require that culturally appropriate educational material outlining the benefits of walking, and eating a heart healthy diet is readily available. Incentives such as T-shirts, water bottles, and pedometers to track progress are also important components of the program. Successful integration of the program through the Community Health Outreach Programs, as well as other CTUIR departments is crucial for sustainability.
**LOGIC MODEL**

**Situation**
Umatilla County ranks 33 out of 33 for health behaviors. The American Indians of the CTUIR experience even greater health disparities than other residents of Umatilla County, including chronic disease and higher rates of Diabetes across the lifespan.

**Priorities**
Apply Healthy People 2020 objectives for physical activity, weight status, and chronic disease to increase healthy eating (lean meats and high fiber of the hunter/gatherer) and increase physical activity in a cultural context and social support.

**Inputs**
- Assess community needs and readiness and determine fit of WP.
- Focus groups
- Establish measurement parameters, BP, WT, % of participants.
- Identify walking & Nova Foods leaders in CM & Community
- Develop Social Media Campaign
- Purchase incentives

**Outputs**

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<thead>
<tr>
<th>Activities</th>
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<tr>
<td>Walking Clubs</td>
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<td>DNA, Language</td>
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<td>CHD, CTUIR, DCFS, Head Start, Senior program</td>
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<td>Aerobic Activity</td>
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<td>- Step</td>
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<td>- Swim/cycle</td>
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<td>- Zumba</td>
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<tr>
<td>- Hunting</td>
<td></td>
</tr>
<tr>
<td>- Fishing</td>
<td></td>
</tr>
<tr>
<td>- Gathering</td>
<td></td>
</tr>
<tr>
<td>- Hiking</td>
<td></td>
</tr>
<tr>
<td>Cooking Classes:</td>
<td></td>
</tr>
<tr>
<td>1st Foods Cook Book</td>
<td></td>
</tr>
</tbody>
</table>

**Outcomes - Impacts**

<table>
<thead>
<tr>
<th>Short term</th>
<th>Midterm</th>
<th>Long term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community walking leaders identified</td>
<td>Improved fitness and endurance of community participants</td>
<td>Improved BP, Glucose intolerance, &amp; decrease in WT</td>
</tr>
<tr>
<td>Increased activity in community</td>
<td>Decrease in screen time</td>
<td>CTUIR members report improvement in physical and mental health</td>
</tr>
<tr>
<td>Community participates in bi-annual 1st Foods challenge</td>
<td>Journal your journey digital storyboard available in key community locations</td>
<td></td>
</tr>
</tbody>
</table>
METRICS THAT MATTER

Determining the correct metrics to follow will help to determine the success of the ‘Know Your Roots’ campaign. The number of participants actively participating in the walking program in the beginning, mid-season, and at the of year compared to how many welcome kits were dispensed may help to identify how many individuals or groups dropped out of the program. The Umatilla County CHA conducted in December of 2011, indicated that 34% of survey population has diabetes (Figure 1).

In order to effect individual behavior change we will need to keep all participants engaged in the walking program. Participants will be asked if there is there something that needs to be addressed or changed to improve the program. The use of a continuous quality improvement tool such as PDSA (Plan, Do, Study, Act) would also be beneficial.

Tracking the number of group activities and the number of participants in each activity will help to identify the best time(s) to offer activities, and also reduce inefficient use of staff time.

Government Performance Results Act (GPRA) numbers may help to determine whether the program has an influence on the community, such as a decrease in the number of obese patients, improved blood pressure, or controlled blood sugar (see Figure 5).

Figure 6: METRICS

<table>
<thead>
<tr>
<th>PROGRAM METRICS</th>
<th>Measurement</th>
<th>% of program participants baseline n=</th>
<th>% of program participants after 12 /24/36 week n=</th>
<th>YTHC chart review % DM patients at the start of program</th>
<th>YTHC chart review % DM patients after 1 yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP &gt;130/85</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMI &gt;30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMI &lt;25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDL &gt; 140</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HgA1c &gt;7</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Review CHA
Determine community readiness & resources

Identify staff to act as walking leaders
Jennifer/Robby reassigned to Adolescent wellness

Focus on maximizing social support for physical activity through digital journaling

Display digital story board in the winter visible community locations

Engage community partners, staff and key stakeholders
Inform them of intent

Train staff leaders
Nike camp
New foods

Organize the kick-off event – family fun run in the spring

Repeat the process in year 2 with more groups

Identify number of minutes per season and location for virtual journey

Publicize the walking group program throughout the community

Evaluate program effectiveness in # of participants & improved metrics (BP, WT, Lipids, BS)

Establish goals i.e.:
1. Week of New Foods
2. Increase walking activities through

Collaborate with core team & walking leaders review & refine program

Create a registration welcome kit T-shirts/pedometer for teams

PRODUCTION FLOWCHART
YOUTH & ADOLESCENT HEALTH/OBESITY

There is a disproportionally higher association of obesity in AIAN children and the emergence of Type II diabetes as compared to Hispanics and Blacks.\textsuperscript{28-29} Obesity in childhood is a good indicator of obesity in adulthood. A review of best practices to reduce obesity in children found programs that target Native American children scored high when ‘cultural variables’ such as culture, food, and activity customs were included, they enhanced program intervention outcomes.\textsuperscript{29} Culture is a learned and shared experience which can have a direct effect on activity and nutrition preferences. An increase in mobility, which leads to migration in and out of a community, as well as changes in the patterns of activities and attitudes of the community, which can lead to the abandonment of traditional activities.\textsuperscript{28} As a community moves away from the shared belief that exercise and nutrition are important, the risk for obesity and chronic disease increase.

The association of poverty and increasing consumption of energy dense food and drink is related not only to the cost and availability of foods, but the commitment to time for food preparation per week. An example of this is the Thrifty Meal Plan, which meets the recommended federal nutrition guidelines, although affordable at $27 per person, per week, the time required for food preparation is expensive at an estimated 16 hours per week. Caprio et al., estimate that the average working woman spends about 6 hours per week on food prep time and the non working woman spend about 11 hours per week.\textsuperscript{28} The authors coined the phrase “time poverty” to illustrate this point.
An adolescent health promotion program will be implemented by applying the socio-ecologic framework to the notion that children model both nutritional and physical activity undertaken by the community. This will be completed by reassigning staff to work exclusively with adolescent and tribal recreation and school programs, to create a safe environment with more opportunities for children to be active. Working with the schools and recreation personnel, the adolescent health promotion program will provide more opportunities for children to participate in afterschool group aerobic activities.

The afterschool program will be developed in 6 week blocks utilizing community volunteers for group led classes such as boot camp, karate, and volley ball, group walking exercises, Zumba and other activities that the participants identify. This program will target those adolescent students who are not already involved in school team sports (Healthy People 2020 objective AH-25). Each participant will need parental/guardian consent. Volunteer applications will also be required. Volunteers will undergo the same screening and background checks as new employee hires. This program will be largely dependent on community collaboration and participation. Collaboration between the Diabetes Prevention Team and Adolescent Health Promotion through the summer months will provide the ability to incorporate garden activities including food identification and food preparation.

**DIABETES AND CHRONIC DISEASE**

Although the literature lacks in strong recommendations for dietary changes in minority groups within the US (including AIAN), weight loss interventions have shown promising results in these populations. Applying this concept, Yellowhawk Tribal Health Center will participate in the
in the Indian Health Service initiative, Native Lifestyle Balance program. Native Lifestyle Balance programs began on Navajo Reservation in 2002 and now have a goal of expanding to other reservations. The goal of this program is to increase the proportion of persons with diagnosed diabetes who receive formal diabetes education (Healthy People 2020 objective D-14\textsuperscript{25}). The educational program is conducted over a 24-week period covering 16 core sessions that provide specific information on nutrition, physical activity, and behavior change in a cultural context. The program uses motivational interviewing while focusing on participants readiness to learn.\textsuperscript{31}

The Diabetes program staff has been working closely with the senior and summer recreation programs to help adolescents and elders appreciate the community gardens through weekly tour and food demonstrations. The goal of this effort is to make the community gardens more accessible to the community.

**BUILT ENVIRONMENT**

The CTUIR planning department has had a beautification plan since 2009 which includes walking paths connecting governance center, business district, casino, housing, and Tribal Health Center, but due to finances has been unable to initiate construction. Collaborating with tribal leadership to acquire grants such as the CDC Healthy Communities is a long term goal. CTUIR in coordination with the Tribal Health Center has submitted several grant applications to the CDC, Oregon Health Authority, all of which have not met funding priorities. Currently the Planning Department is in the application process for an Oregon Department of Transportation
grant. The purpose of this grant application is to connect the Governance Center with the Casino providing safe access for pedestrian and bicycle traffic along a busy highway.

MATERNAL CHILD HEALTH

Primary health interventions to address health disparities begin in pregnancy and early childhood. With prevention in mind, a grant application for a Tribal Maternal, Infant, and Early Childhood Home Visiting program has been submitted to and funded by the Administration of Children and Families and the Affordable Care Act. This is a 5 year funding grant, with year 1 activities focused on building infrastructure and conducting a community needs assessment. Years 2 through 5 are focused on providing services and ensuring sustainability. The Community Health Department has proposed to adopt the John Hopkins Family Spirit program. It is a 39 month educational program focusing on pregnancy through 36 months postpartum for at-risk mothers, children, and families. The curriculum is formatted for American Indians and unlike other MCH home visiting programs can be administered by both Community Health Representatives (CHR) (para-professionals), and Community Health Nurses. The goals of the program are to address maternal psychosocial risks, prepare children for early school success, ensure mothers and children get recommended well-visits, link families with community resources and promote life skills and behavioral outcomes across the lifespan.32

Additionally a second grant was submitted to Indian Health Service for a Community Health Nursing expansion program. As the Tribal Health Center moves to adopt the patient centered medical home model, the Community Health Department has the goal of aligning a community health nurse with a primary care team, which includes a mental health practitioner team.
Currently there are three primary care providers and one women’s health provider in the medical clinic. The Community Health Department currently employs two CHNs and two CHRs. To meet the above goals including implementation of TMIECHV program, 5 CHN and 3 CHRs will be needed.

COMMUNITY ENGAGEMENT

As previously noted eliciting the voice of the community is an essential component for program development and implementation. The primary audience after staff engagement is tribal leadership including the Board of Trustees, Health Commission, and spiritual leaders. Presentations to and discussions regarding the intent of the program with the goal of eliciting their support and participation will be required. Community involvement can be attained through competitions and incentives such as participation in T-shirt design competitions, which has been successful in past community events. Incentives such as T-shirts, pedometers, and water bottles can also be to increase community involvement.

The community voice will be gained through the use of focus groups in an informal setting such as ‘Rez Café’. Participants of these forums are asked 3 questions, 1). What does a healthy Native community look like? 2) What does a healthy Native child look like? And 3). What is the role of cultural values and traditions in a Native community? This forum has been used to create a comfortable environment for all populations, from school-aged children through elders. Responses gleaned from several Rez Cafes within the community demonstrated a desire for a drug and alcohol free community. Participants felt that a healthy Native community would
provide support for children and families, and that culture is the foundation of the Native community.

**STAFFING and BUDGET**

The adaptation of the Know Your Roots initiative does not require additional staff at this time. The development of the Adolescent Health Promotion program had been completed with the reassignment of existing staff. The Community Health Department has approximately a 3 million dollar budget, which includes alcohol and drug prevention funding from tribal casino revenues that can be used to supplement cultural prevention activity expenses. The Circles of Care is a SAMSA planning grant program which has a mandate to identify the mental health care needs of children and adolescents birth to age 25, community resources, and readiness for change, all of which can also be utilized in obtaining the community voice. Another program, the Garret Lee Smith Suicide Prevention program, is the second SAMSA grant funded program that may be able to provide assistance with the expansion of the community gardens.

Several departments within Community Health have line items within their budgets to support patient incentives which can be used for items such as T-shirts, pedometers and water bottles. Addressing the built environment will require looking for additional grant funding in coordination with the Tribal Planning Department. The Tribal Health Center applied an Oregon State Healthy Community grant to address the built environment issues, but it was not funded. The CDC also has a large Healthy Community grant application which is directed towards increasing physical activity through improving the built environment. The Healthy Community grants focus on the built environment through building and strengthening community coalitions.
### TIMELINE KNOW YOUR ROOTS

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<th>Goals</th>
<th>yr 1 (2012)</th>
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<th>yr3</th>
<th>yr4</th>
<th>yr5</th>
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<td>2</td>
<td>3</td>
<td>4</td>
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<td><strong>Know Your Roots</strong></td>
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<td></td>
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<tr>
<td>• Work place walking</td>
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<tr>
<td>• School based</td>
<td></td>
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<tr>
<td>• Community based</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>• Focus groups</td>
<td></td>
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<td></td>
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<tr>
<td>• Develop welcome kit</td>
<td></td>
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<tr>
<td><strong>Diabetes Prevention Program</strong></td>
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<tr>
<td>• Native Lifestyle Balance</td>
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<td></td>
<td></td>
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<tr>
<td>• Develop cookbook</td>
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<td><strong>Community Health Nursing</strong></td>
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<td></td>
</tr>
<tr>
<td>• TMIECHV Grant</td>
<td></td>
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<tr>
<td>• IHS PHN expansion if funded</td>
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<tr>
<td><strong>Built Environment</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>• Identify grant funding</td>
<td></td>
<td></td>
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<tr>
<td>• Collaborate with CTUIR planning</td>
<td></td>
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<td></td>
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<tr>
<td>• Stage 1 – expand existing walking trail</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>• Interconnection of trails</td>
<td></td>
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</tbody>
</table>
CONCLUSION

The health disparities of the AIAN in Northeastern Oregon may be attributed to racial differences including genetic predisposition, religion, diet, living conditions, and cultural practices. Gaining an understanding of the history, culture, and religious practices may present clues in addressing these disparities. Community-based programs that focus on social support and are applied in a cultural context will possibly provide tools necessary to effect individual behavioral changes. Collaboration with the community on program development and implementation is also an essential component.

Utilizing the Seasonal Round to adopt a community health promotion program has been proposed for members of CTUIR and shows promise. The use of evidence-based practices and principles to engage community is central to this proposal. The socio-ecologic framework views individuals in the context of families, communities, and culture, where individual behavior can be influenced by the interactions of the physical, social and cultural surroundings. Healthy People 2020 recommendations include improving supportive relationships through social support interventions such as community walking programs which focus on changing individual physical activity behaviors. Using cultural concepts, the Know Your Roots initiative builds on these principles and will be used to address the persistent health disparities of the CTUIR population. Full implementation of the program will take approximately five years to fully implement through completion of walking path system. Improving prospects for the built environment grants calls for aligning staff, initiating workplace wellness program, engaging community members and building community coalitions to improve the grant application process.
## Appendix A

### Identifying Our Needs: A Survey of Elders IV, Comparison Data

<table>
<thead>
<tr>
<th>Comparison data</th>
<th>CTUIR data -55 and over</th>
<th>Aggregate Tribal data – 55 and over</th>
<th>National Data – 55 and over</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated health as fair or poor</td>
<td>33%</td>
<td>29.7%</td>
<td>17.3%</td>
</tr>
<tr>
<td>Diagnosed with Asthma</td>
<td>15%</td>
<td>12.7%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Diagnosed with Cataracts</td>
<td>31%</td>
<td>12.6%</td>
<td>40.2%</td>
</tr>
<tr>
<td>Diagnosed with HTN</td>
<td>65%</td>
<td>57.6%</td>
<td>56.7%</td>
</tr>
<tr>
<td>Diagnosed with Diabetes</td>
<td>32%</td>
<td>39.5%</td>
<td>16.8%</td>
</tr>
<tr>
<td>On Insulin</td>
<td>9.0%</td>
<td>13.1%</td>
<td>25.6%</td>
</tr>
<tr>
<td>On dialysis</td>
<td>0.0%</td>
<td>1.7%</td>
<td>NA</td>
</tr>
<tr>
<td>Diagnosed with Prostate cancer</td>
<td>9.4%</td>
<td>5.8%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Diagnosed with Breast Cancer</td>
<td>5.0%</td>
<td>2.3%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Difficulty bathing due to physical health</td>
<td>8.0%</td>
<td>15.9%</td>
<td>36.8%</td>
</tr>
<tr>
<td>Difficulty dressing due to physical health</td>
<td>5.0%</td>
<td>11.4%</td>
<td>36.8%</td>
</tr>
<tr>
<td>Smoke cigarettes daily</td>
<td>9.8%</td>
<td>18.0%</td>
<td>19.5%</td>
</tr>
<tr>
<td>Have family member that provides care</td>
<td>26.2%</td>
<td>39.2%</td>
<td>NA</td>
</tr>
<tr>
<td>Care grandchildren</td>
<td>19.5%</td>
<td>30.0%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Little or no level of functional limitation</td>
<td>61.7%</td>
<td>44.9%</td>
<td></td>
</tr>
<tr>
<td>Live on the reservation</td>
<td>41.1%</td>
<td>69.8%</td>
<td>NA</td>
</tr>
<tr>
<td>Happy all of the time/a good bit of time</td>
<td>84.7%</td>
<td>82.2%</td>
<td>NA</td>
</tr>
</tbody>
</table>
References


(5) Buan C. The first Oregonians: an illustrated collection of essays on traditional lifeways, federal-Indian relations, and the state's native people today. Portland Ore.: Oregon Council for the Humanities; 1991


(8) Barnes P. Health characteristics of the American Indian or Alaska native population, United States, 2004-2008. Hyattsville MD: U.S. Dept. of Health and Human Services Centers for Disease Control and Prevention National Center for Health Statistics; 2010


John Hopkins Bloomberg School of Public Health, Family spirit program overview.

KNOW YOUR ROOTS
WALK, RUN, DANCE AND SING FOR BETTER HEALTH
USING CTUIR CULTURE AND SOCIAL SUPPORT TO EFFECT INDIVIDUAL BEHAVIOR CHANGE

KAREN COOK
HEALTH COMMISSION PRESENTATION
10/25/2012
YTHD ALL STAFF
11/26/2012

OBJECTIVES

• Develop a community based health promotion program that
  • Use evidence based interventions to address health disparities
  • Integrates cultural values
  • Works with other CTUIR First Food programs
HEALTHY PEOPLE 2020

Foundation health measures:
General health
• Physically and mentally unhealthy days
• Self assessed health status
• Limitation of activity
• Chronic disease prevalence
Determinants of health
• Social factors, biology, and genetic
• Health services
• Individual behavior
Health-related quality of living and well-being

HEALTHY PEOPLE 2020

HIGHLY RECOMMENDS
• Social support interventions in community settings
• Focus on changing physical activity behavior
  • Through building, strengthening, and maintaining social support
• Proven effective
  • To improve participants' fitness levels,
  • To lower their percentage of body fat,
  • To increase their knowledge about exercise,
  • To improve confidence in the ability to exercise and socialize
BURDEN OF CHRONIC DISEASE CTUIR MEMBERS

2011 UMATILLA COUNTY HEALTH ASSESSMENT:

- American Indians in the County were more likely than the general population to:
  - Be overweight or obese (82% compared to 67% of the general population).
  - Be a current smoker (29% compared to 18% of the general population).
  - Have had a heart attack (11% compared to 5% of the general population).
2011 UMATILLA COUNTY HEALTH ASSESSMENT:

- American Indians in the County were more likely than the general population to:
  - Be overweight or obese (82% compared to 67% of the general population).
  - Be a current smoker (28% compared to 18% of the general population).
  - Have had a heart attack (11% compared to 5% of the general population).

2011 UMATILLA COUNTY HEALTH ASSESSMENT:

- American Indian adults were more likely than the general population to:
  - Have rated their health status as fair or poor (33% compared to 18% of the general population).
  - Have rated their physical health as not good on four or more days in the previous month (43% compared to 24% of the general population).
  - Have reported that poor mental or physical health kept them from doing usual activities such as self-care, work, or recreation on four or more days in the previous month (26% compared to 15% of the general population).
### AMERICAN INDIAN CHRONIC DISEASE AND PREVENTION

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Diagnosed with diabetes</td>
<td>34%</td>
<td>13%</td>
<td>8%</td>
<td>10%</td>
</tr>
<tr>
<td>Diagnosed with asthma</td>
<td>27%</td>
<td>20%</td>
<td>16%</td>
<td>14%</td>
</tr>
<tr>
<td>Diagnosed with arthritis</td>
<td>50%</td>
<td>32%</td>
<td>27%*</td>
<td>26%*</td>
</tr>
<tr>
<td>Current drinker</td>
<td>41%</td>
<td>51%</td>
<td>58%</td>
<td>55%</td>
</tr>
<tr>
<td>Current smoker</td>
<td>28%</td>
<td>18%</td>
<td>15%</td>
<td>17%</td>
</tr>
</tbody>
</table>

* 2009 BRFSS Data

### PHYSICAL ACTIVITY IN AMERICAN INDIANS

Recent Literature Review of PA and AIAN

- 46% of AIAN in the US & Canada reported no leisure time physical activity
- Compared to 38% of non-minority counterparts
**BENEFITS OF PHYSICAL ACTIVITY**

- Increased physical activity levels in AIAN is positively associated with
  
  ✓ Protects against coronary heart disease and diabetes
  ✓ Reduction in Body Mass Index (BMI)
  ✓ Reduces the risk of chronic disease and premature death
  ✓ AIAN men and women report health problems as barriers to physical activity

**SOCIAL SUPPORT**

- Social environment is an integral part of physical activity behavior for AIAN

- Important to note that it was not only social support that was important, but culturally relevant support

  - If you know someone exercising
    - You are 5 times more likely to exercise compared to those who did not know anyone exercising

  - If you saw people exercising in your neighborhood
    - You are 4 times more likely to exercise compared to those who did not see anyone exercising

- Source: Cable, JD and Rhodes, RE. Physical activity and Native Americans: a review, Am J Prev Med 2006;31(1)
WHAT DOES CULTURE HAVE TO DO WITH CURRENT CHOICES?

- Current eating and exercise choices are related
  - to the loss of traditional culture
  - Dependence on government rations and food programs
  - Loss of traditional territory and activities which impacted lifestyle
  - removal of children to boarding schools impacted family structure, community and traditional connections.
  - Punishment for conducting traditional practices or speaking traditional languages

Focus on unlearning unhealthy habits

KNOW YOUR ROOTS
USING CULTURE FOR POSITIVE CHANGES

- Focus on the community as a whole
- Group activities/education tend to be more successful

- Talking Circles
- Community programs
- Incorporate
  - respect
  - cultural forces,
  - spiritual beliefs,
  - and traditional holistic healing methods

- Tie changes into traditional practices
- Encourage balancing of mind, body, spirit and nature
Food Associated Culture

First Foods

Physical + Ecological Processes

Access
DEVELOPING NUTRITIONAL GUIDELINES

Water  Salmon  Deer  Cous  Huckleberry
Fish    Big Game  Roots  Fruit

Hydration  Protein
Digestion  Omega 3 Fats  Protein
                          Low Fat
Carbohydrates  Vitamins
                          Sugars

Nutrition

Water  Hydration, Digestion
Fish  Protein, Omega 3 Fats
Big Game  Protein, Low Fat
Roots  Carbohydrates
Fruit  Vitamins, Sugars
CTUIR FOOD PYRAMID
Based on work done by Stuart Harris and DOSE

- Fowl
- Greens
- Berries 26%

34% roots

40% fish

TRADITIONAL WAYS

- Physical activity:
  - Highly active
  - Hunting and Fishing
  - Games and Dance
  - Walking to gather foods
  - Physical labor on a daily basis
TREATY RIGHTS
Using the First Foods to Learn to ‘Exercise Rights’
**KNOW YOUR ROOTS**

- Food:
  - Mainly hunter-gathering
  - Feast or famine cycles
  - Main part of the diet was comprised of protein food sources –
    - according to CTUR food pyramid - traditional diet was:
      - 40% was fish
      - 34% was roots
  - Traditional diets were virtually salt-free
  - Only small amounts of natural sugars (honey and stevia) were consumed
KNOW YOUR ROOTS
EXERCISE YOUR BODY

- COMMUNITY WALKING PROGRAM
  - Enroll teams of at least three – build a support system
  - 12 week seasonal sessions with
    - new goals each season, moving from relatively flat low elevation waterways to more challenging inclines of the higher elevations through the seasons
  - PA goal of 150 minutes of physical activity per week (each participant)
  - Journal – written and digital
  - Use cultural activities – dance, root gathering, hunting & fishing, powwow, family fun nights

Healthy Use of the Landscape

Exercise Your Rights – Exercise Your Body
KNOW YOUR ROOTS
EXERCISE YOUR RIGHTS, EXERCISE YOUR BODY
WALK, RUN, SING AND DANCE FOR BETTER HEALTH

- Develop a strong body to be able to participate in First Foods
- Seasonal Round
- Community in motion
- Connection with the environment
- Supportive of one another

PROMOTE UNDERSTANDING OF POTENTIAL FIRST FOODS LINKS TO HEALTH PROGRAMS

- Demonstrate First Foods links to Tribal identity, cultural continuity;

- Bring attention to relationships between First Foods, dietary benefits, exercise, health, wellness; and

- Review potential application example – “Exercise Your Rights, Exercise Your Body”
**KNOW YOUR ROOTS**

- **SEASONAL GOALS**
  - **Spring** — seasonal round begins — prepare/train for fun run
  - Encourage participation in traditional activities
  - roof gathering, fishing — focus activities on low elevation floodplains
  - **Summer** — new participants signed up
  - prepare/train for Salmon walk
  - Pow wow
  - Huckleberry picking
  - Gather medicinal herbs
  - Focus increasing intensity — diverse higher elevation environments
  - **Fall** — new participants signed up
  - Prepare/train for hunting season
  - Gathering/rules
  - Continue to increase intensity in higher elevations
  - **Winter** — create story boards from digital documentation
  - Focus on story telling
  - Traditional games and community gatherings

**COMMUNITY PARTNERS**

- Education and Language departments
- DNR, DOSE
- School sports
- Youth wellness program — afterschool, summer rec
- Get increased community volunteers
KNOW YOUR ROOTS
EXERCISE YOUR RIGHTS EXERCISE YOUR BODY
WALK/RUN/DANCE OR SING FOR BETTER HEALTH

Digital story board focus on healthy happy community –

Winter

display group experiences – journeys and adventures

Spring

Focus on Seasonal round activities: Hunting, fishing, dancing and singing. Community in motion. Respect and support

Each season groups undertake a virtual journey. Everyone makes the journey through support and encouragement.

Move through the seasons from floodplains to steeper inclines of higher elevations.

Summer