



Indian Health Service

Division of Diabetes Treatment and Prevention

Advancements in Diabetes Seminar The Traditional Western Apache Diet Project

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Seth Pilsk:

Good afternoon everybody. Everybody, thank you for attending and we want to thank Kelli and Jan who both introduced us and also Ann Bullock at IHS. And we want to say hi to all of the folks at the San Carlos Hospital who are listening over across the river. Kelli already introduced me and Twila will introduce herself in a minute, but what we really want to talk about today are the specific suite of health problems here at San Carlos and really go into where they came from and how we learned where these health issues came from and some real -- what we hope are possible strategies for real solutions.

To start with, you can see on your screen this pretty picture and it is pretty, but it's not just a picture of a pretty landscape. This is actually a picture of a thriving community. You don't see human beings in it but humans are part of this community too. And it also really shows kind of from a Native perspective a model of what an approach to addressing chronic disease can actually look like. And it might seem a little farfetched and that's probably why Twila and I work for Forestry. We don't work for any kind of public health organization. But to help us kind of describe and model this approach, the CDC is really helping us. We are operating under a CDC grant under the Good Health and Wellness in Indian Country Program which is within the Chronic Disease Prevention and Health Promotion Division. And maybe they're rolling the dice a little bit with us, but they're being very supportive of this approach.

As we go ahead, I really would like you all to think about the difference between treatments which is at least here really what the Western healthcare community does and healing and prevention which is much more here in the realm of a traditional approach. And with that, I'm going to give this to Twila to introduce herself and get us going.

Twila Cassadore:

Good afternoon everybody. My name is Twila Cassadore. I'm a member of the San Carlos Apache Tribe. I've been with this project again for several years. Again, thank you for having us here.

So we're going to start with this first here, it's called the Nayenezgani Story and it explains why we're different than non-Apache people. Nayenezgani for us in Apache, he is the first Apache man. He is the son of the son. And as he was growing up into adulthood his father showed him two worlds. He showed him a brown world. And in this world it had cattle, it had horses, pigs, blankets, manufactured goods and money. Then he showed him another world, on this right side it had a



beautiful world. It was full of colors. It had agave. It had acorns, pinons, berries, nuts, clean water, deer and rabbit. And his father showed him the two worlds and asked him which one of these world does he wants to live on and he chose the beautiful world of course.

On his left side he showed him a rifle and his right side he showed him a bow and asked him which one of these he wants to use as he's going to be living in this world. And his son chose the bow and arrow. This is just a story to explain why we're different from other non-Apaches.

Seth Pilsk:

We started over 25 years ago and we really started thinking about the connection between the real health problems of today and the traditional knowledge. One of the elders we worked with started with this very simple quote. On the surface it seemed so obvious and simple, but the more we really went into it, the more it started to resonate with us. And that's really if people lived the way they lived before the reservation, we wouldn't have the health problems today. And this seems so obvious and it's so central to how people on the Res think, especially people our age and up and we're in our 50s. So we really started thinking about that and decided we needed to really describe that more and that's what started our project. This is against the backdrop of the very, very serious problems in the community. For a lot of people who study Indian Country now, San Carlos and our neighbor to the north, White Mountain, are now considered two of the worst reservations in the country for health and social problems. We have really epidemic problems of chronic health disease, suicide, attempted suicide, and cutting. Substance abuse, Meth is one of the biggest industries on the Res and is part of the fabric of the community now, and sexual violence and the whole suite of problems that those are associated with.

At the same time, we're seeing a huge increase of dumping on the Reservation land and also changes on the landscape that border on ecosystem collapse, and that's mainly due to the past 150 years of poor land management. So all of these problems really combine to have a culture of almost hopelessness among younger people on the Res and our work with elders has really traced these problems from the conception of the Reservation to now and they've been able to really tie different waves of suicide or waves of chronic disease with historical events and processes.

These problems are really even more remarkable when they're seen against the backdrop of traditional Apache life before the Reservation. We now know from countless interviews and historical evidence that before the Reservation, Apaches were some of the healthiest and happiest people around. People were able to run between 80 to 100 miles and if they didn't die of violence during the war period, lived really long lives with very good dental health and active sex lives until their 80s. And if that's not a good indicator of health, I don't know what it is.

A lot of this was because of the lifestyle of the pre-Reservation Apache world. These were people who were intimate with the natural world even compared with other tribes. Apache people knew every single living thing, every plant, animal, insect, every cloud, every kind of wind, every kind of mirage or echo, they had a name for it, they knew a song for it and they had a prayer, and they knew how to work with it in a very symbiotic relationship, all to leave as light a footprint on the natural world as possible, to leave it just as they found it. And to live this way took a lot of conscious energy and a lot of literacy. And knowing all these things is really what make up the components of traditional Apache health literacy. And of course this changed really drastically. Apache land was coveted by White people because of all the wealth for agriculture, timber, grazing and especially mining. It was government policy to get Apaches off the land in order to open it up for business.

So to do this, they confined Apaches at the point of a gun onto the Reservations which were founded as concentration camps. And in doing so took away Apache people's autonomy and self-sovereignty. They also removed their access to all of their traditional sources of power and health which is embedded in the natural world. And chief among these was food. All of a sudden, Apaches didn't have anything to do all day like they used to. They were not allowed to go out on the land and get their food. And this had a double effect of changing people from people who lived a life of meaningful

activity every single day to living on the Reservation around the fort with nothing to do. They even replaced their names with tag numbers and tried to get them only to do White activities and no traditional activities.

At this moment it's something that elders still talk about as the source of a lot of problems. So before the Reservation, there was almost no such thing as chronic disease as we know it, suicide, substance abuse or sexual violence. From this moment on, those became apparent in the community and have gotten worse with every succeeding generation.

This is also where today's diet came in starting from this moment.

Twila Cassadore:

So when you look at today's diet, it's very low in fiber. It's high in saturated fat, low in healthy fats, high in cholesterol, high in sodium and added sugars, high in processed foods.

And Reservation health rates, 18% of the family diagnosed with diabetes, over 50% overweight or obese, 49% of our children.

Seth Pilsk:

These figures are two years old. Our diabetes prevention can probably update these. But this is a real massive change from the 50s. There was a study done at Whiteriver in the 1950s where doctors found almost no instance of chronic heart disease or diabetes, and very little obesity and now it's completely changed in that 60- to 70-year span.

I think with this crowd, I don't have to go over all these, but this is just an extensive list of conditions that are related to obesity, which I'm sure all of you are intimately familiar with.

The interesting thing about these is elders talk about these diseases as stemming from that first moment of being confined on the Reservation. They have specific ways of tying it to that change. Recently, there is more and more literature linking these very same suite of diseases with childhood toxic stress. And this is exactly what the elders talk about, is kids are actually now being set up to have these very conditions, and that's something our work really focuses on which we'll be going into a minute.

And so what we really are focusing on are traditional healthcare models. We know that before the Reservation, people were very healthy and very happy. Now they're not and so at the same time we have this big western-based public healthcare system and yet things seem to be getting worse. What elders talk about is that the hospital in Western healthcare is very good at treatment of symptoms. But at least here, it's not very good at healing or prevention. For them it means because the modern Western healthcare system is actually not very meaningful to people, it's meaningful superficially for treatment but not meaningful enough for healing. According to elders, living a traditional life is so inherently healthy on every level and in every way, that's what we're looking at to our model for good health, healing and prevention in the future.

Since 2011, we've really been concentrating on the diet. We've created a database of information about the traditional diet. We've done hundreds of interviews with elders to really learn in depth about this diet and we're focusing on diet because food and the diet was really the basis of everybody's everyday life and the real gateway to a connection with the natural world which is the source of power. Key to our work is we were able to, based on all these interviews, compile 96 sample pre-Reservation daily menus, that's eight per month for nutritional analysis. And if you're sick of hearing my voice, don't worry, Twila will be taking the lead here pretty soon. This is just an example of the kind of analysis that our nutritionist has been working on. Her name is Latisha McKuen and she's actually almost done with the initial analysis to quantify the diet.

And so what our initial findings from this, that wild plant foods made up the bulk of the diet followed by agricultural foods which are corn and squash, and the least amount of the diet was actually wild meat. This just gives an overview of the elements of the diet.

And so just from a nutritional standpoint, we have found that the diet is actually extremely healthy, very high in fiber and protein. In fact, those levels seem to be about twice the level of the USDA recommended allowances. It's low in saturated fat; high in healthy fat, low in cholesterol, very low in sodium and of course no processed sugars. In fact, very little salt was added to the diet. Salt is mainly used for prayer not for food. And the big thing is it's really rich in whole foods and because it's mainly wild foods, it's very filling with very little volume.

Twila Cassadore:

So the traditional Apache diet is seasonal in nature. The diet varied according to the seasons, tying individuals and the whole community to the natural order of seasons in terms of nutrition, activity and ceremony.

Seth Pilsk:

And in fact what the elders say is that following the food harvest throughout the year actually ties individuals to the rhythm of the earth herself. This is really important in maintaining health and identity.

Also, food production is what kept everybody going every day. It's what gave people day in, day out, meaning and purpose in life, knowing that they're going to get up and do something meaningful and contribute to their community. That was completely tied to people's identity and in many ways we find it still is in the community. In fact, political leaders were chosen by their ability to organize food production groups. And maybe most importantly is this last part.

Twila Cassadore:

So project's finding - the traditional Apache relationship with food is deeply personal, respectful and spiritual. The Holy People, Nigosdzan, food plants and animals and obtaining a state of Gozho are all interconnected. Nigosdzan is Mother Earth, Gozho, there's no word for it. This is a beautiful word.

I'm Metosotan. I am from the Apache Band here in San Carlos. I have been -- I'm just going to talk about me. This is me. I have been drug-free since 2002. And reconnecting with myself and my identity was done through harvesting. And harvesting some of these food in the locations that were my ancestors are from, the clan maps of where some of these places we've gone to and reconnecting with who I am and it rooted me back to where I came from. It gave me a sense of purpose. I was excited to get up the next day to learn about something new. I knew some of these plants before but not as in-depth as I do now. For me, it was just a part of healing. It healed me through harvesting. For some people that are like me, it's going out there is what embraces you, it welcomes you, and you just feel really good about yourself. You feel good about sharing this food, sharing the knowledge, knowing some of the prayers, knowing some of the songs, knowing this is who we are. It's sort of like it mends you. It wraps itself around you and strengthens you and gives you something that you don't get in the clinical setting, that you don't get in therapy, but what I got healing is from harvesting and being out there with the elders, and being out there with family, and going to these places where the spring waters are clean, where the food is so abundant and it's so good, and not knowing that we have this around us. It's very healing. It's very powerful.

For me, that's what I want to share about what we do. But being able to share that with other individuals struggling with the same thing that I once struggled with and being able to see that difference in them when they're out there and reconnecting with who they are and where they're from and knowing about the food that really sustained our people for centuries. Thank you.

Seth Pilsk:

So we've been able to really take that feeling that Twila is talking about and start using it as a strategy. And so we started working with a lot of people especially younger people and especially kids to see what works and doesn't work. And so we've really been able to come up with this strategy which is using the traditional Apache Education Model. Even though a lot of kids don't speak Apache anymore, they still have a very strong cultural sense. And Apache language is almost at the tip of their tongue. And they don't respond too well to teaching in the classroom or indoor settings but they respond very well to that outdoor Apache setting which is all based on doing and experiencing things. Without being lectured to; just by showing them. And when they do something, like harvesting food, they get credit for it. They can see the eyes of their friends and of their family. And also, we have to make sure that everything is Earth-based and we're going to go over some of our activities in just a minute so you'll see what we're talking about.

On the Apache side, if it doesn't directly relate to the land, it usually doesn't mean much, so everything has to directly relate to the land, and the natural world and following that natural rhythm and seasons. And we always try to make it very personal.

So for a lot of the kids, they're in bad situations at home, broken families. The Apaches have a clan system, which is your maternal side of the family. And a lot of that system is broken down so what we try to do is give kids and younger people the tools to kind of recreate that traditional support system, not only of human relatives but of their non-human relatives of plants, animals, and birds especially. So we really concentrate on people's clans and what Twila was talking about was reconnecting people to actually where their clan is from. That's where their DNA is from and we're finding that's an extremely powerful experience. And to teach kids about their support system through their clan to teach them the plants, animals, and birds that they're related to and how to actually access them for support.

And what we find over and over again is that connection to the land and having that contribute to their personal identity can give kids a tremendous amount of resiliency and strength. It's like it builds up their immune system and even if they're dealing with all these issues that contribute to childhood toxic stress, it leads some kind of resistance to it and another path without going in to all those negative behaviors.

And so these are some of our current activities. We're finishing that nutritional analysis. We're starting to take people on field trips so that they can learn firsthand the plants that -- this morning, we just finished a field trip, teaching a couple of younger people, one of them is a young ceremonial singer, about traditional tobacco. We're compiling all kinds of natural world information about plants, animals, birds, insects, elements of the earth and sky so that people can still have access to that vocabulary of health literacy. We're putting together food calendars so people can follow the wild plant harvest. We're about to start what is called a New Moon Run. The new moon is a very powerful and important thing in Apache culture and the kids used to run to it every month and so we're trying to revive that.

And we're also designing a year-round outdoor Apache curriculum of activity and especially food harvesting, all around the year. It's much better suited to teach outside than in any classroom. And we're putting together food books with recipes. Twila has developed a great strategy for getting people to restart their own family garden. We put it together a history presentation, a little bit of what we showed you earlier. We have also been putting together traditional Apache parenting and college curriculum. And Twila has been doing a lot of work with one of our rehab centers up on the White Mountain Reservation to incorporate these outdoor activities into part of a drug rehab program. And we're also just starting to talk to our diabetes prevention office about a clinical program, which will give people the option to kind of actually go on the traditional Apache diet and activities as a way to respond to their diabetes diagnoses.

Twila Cassadore:

So as the title says, Rats are Gross, Gluscho is Beautiful. The young people you see, this is part of the hunt that we do during our wintertime. It takes teamwork. It takes communication. It takes knowing the landscape, knowing your surrounding and for them to help each other.

So they go on this long hunt. It's just like watching a basketball game, you just see them run and run and run and before you know it, it's like three or four hours later, they're still not thirsty. They're still not hungry. They kind of put everything aside all electronics or whatever they had they forgot about. And the only thing we take with us is water. So the girls go and participate in this even the young boys and we take this -- we take it home. They clean it, then we also eat it.

For these young kids, they're excited. They're excited to go share it with grandma. So one of them I took home and her grandma knew where she went though and her grandma asked her, "Where did you go today?" And she told them, "I went with Twila. We went gluscho hunting." And her grandma asked her, "Did you kill it?" And she goes, "Uh-huh." Then grandma asked her, "Did you eat it?" And then the little girl put her head down, and she looked at grandma, goes "Uh-huh." And then grandma goes, "Did you like it?" And she shakes her head, "Yes."

The only way I can explain is like grandma pulled out this book that's sitting on her shelf for decades, the dusty book and she brought it down. She shared so much information with this young girl, talking about, "Where grandma used to hunt? How she does she hunts? Who she went with? How they cooked it? How's the different ways of cooking?" And all these stories came out from this little girl just going on this one hunt. And it brought this bond. It brought this energy back and then allowed that within our community, seeing that come back. The story is coming back. And I just compare it to that dusty book that's been sitting on the shelf for decades that passed one generation but now is going down to this next generation. All these stories and wonderful ways of cooking and eating are being shared now just by doing this hunt.

And also, with these hunts, it comes in the part of healing too. I'll take several different ages of girls with different groups throughout the year and mostly in the wintertime. There's a group of girls I took, and one of them, she is my best hunter. I mean it takes skills to hunt this thing. It's not easy, and it takes patience but we'll go and surround one. They'll get one, pin one down, and he's there fighting for his little life and going, "Oh look how cute!" Then boom, they'll kill it.

And so I have one girl, she is my best hunter. She'll probably kill like 10 in a day. This girl was molested as a child in her own home. So for this young girl, she's growing up, and she's growing up with me for many years now. She comes to my door in the wintertime and says "Twila, is it time to hunt?" And she's very excited to come and join us on these hunts. But when she's hunting, she's releasing that hate. She's releasing that negative-ness. And throughout the year, she's actually grown to have her self-esteem, her grades are actually improving. She is more motivated to do other things and she doesn't let it depress her and she is learning to cope by hunting and harvesting and reconnecting with our culture and seeing that positive side of what this is doing for people that are not in reach of services that are in our community, but knowing that this is a very effective way, in a positive way for them to cope and to heal and to grow, to strengthen them also.

Seth Pilsk:

And the good thing about this is most of this knowledge and activity is still embedded in the community and the way the elders say, for the past 150 years, everybody has been taught that if you're going to be happy and successful in this world, you need to aspire to wide measures of success, but now, maybe it's at a point where people can actually aspire to their own Apache measures of success and happiness. And from our prospective, it always means this connection to the earth which is that original source of health and happiness, and it's not dependent on funding. It's not dependent on the hospital. It can be independent of those things which mean it can be sustainable and it also means that it's independent of the year to year budget cuts where fights are being

frightening. And so we really are hopeful that is a sustaining model. And of course, it's very exhausting work, you can see how exhausted we are and that's our contact information. And at this point, we would like to open it up to any questions or comments.

Jan Frederick:

Thank you, Seth and Twila. This is Jan again. We have a few questions from some of our participants and then I also wondered in relation to the first question. The first question is, is this CDC program still active and I wondered if you could tell us about your CDC grant and exactly what it's called and what you're investigating.

Seth Pilsk:

Okay, hopefully, I'll get it right. This particular grant is called -- I think it's called An Integrative Approach to Chronic Disease in Indian Country and it's midway through the grant cycle, but it's closed. We do understand that the good health and wellness in Indian Country program is about to offer a new similar grant and the CDC can answer best when that announcement is coming out. I think it's pretty soon. And I also believe in a couple of years, they might re-advertise this particular grant program we're in. So they are really looking at this as a way to go in the future.

Not all the grantees are taking the approach we are taking. A lot of them seemed to be very embedded in the western healthcare system. But from what I've seen of the other grantees, each and every one of them is starting to really emphasize the traditional cultural component. So it seems like universally people are arriving at the same conclusion, and I don't know if that answered the question specifically enough.

Jan Frederick:

Yeah. That's great. Thank you, Seth. A second question from a participant is how are you getting more families to garden?

Twila Cassadore:

I started a grassroots organization called Native Mothers Against Meth Use due to the increasing meth use in our community and methform babies. And so going on outreaches, going door to door, this is a volunteer time. It's going door to door, meeting with families.

But I have a lot of seeds from my own garden. I have seeds that the White Mountain Tribes, our neighbors, gave to us and there are a lot of agriculture seeds like squash, corn, chili, tomatoes, pepper, and sugarcane. So with each visit, I would just leave seeds with them. I put a little out there, I never explain, I just say, "I have these seeds."

Out of the one year that I've been -- I went to about a hundred -- about 120 homes all together. Other than that, over 20 gardens came up just by leaving the seeds. And it just got their curiosity. A lot of people do remember how to plant, a lot of them had gardens at one time but to give it to them and not tell them anything about it and just say, "These are seeds from White Mountain," or "These are seeds from my garden," I just want to leave it with them, and now, you have gardens. And now, it's actually growing more smaller gardens in our community.

Seth Pilsk:

And again, this is part of that real traditional approach of respecting people. You don't give people lectures. And what we find is when people try to do community gardens, it's usually through a program. They do raised beds, and need rototillers. They need all of this infrastructure and it seems a little more like a construction project and a science project to people than a gardening project.

And they always fail as soon as the main mover from a program leaves, that garden fails. So Twila's approach seems to be a lot more sustainable.

Jan Frederick:

Thank you. We have another question about food. Can you talk about traditional food plants that are gathered and how they are prepared and then along with that, could you also share your approach for interviewing elders to get this information and then also how you came to have the nutrition analysis of the traditional plants done?

Seth Pilsk:

There are over 200 wild plant foods, so there's a huge variety. And of course, they change every season, and it's a full-time job. It is literally a full-time job keeping track of them and saying what is in harvest. So it's a pretty big range and so it's not possible to answer that question completely directly. There is a lot of plant foods out there and a lot of wild game too. All in all, there is about 300 wild food species. So it's a lot. And because of that, the diet is much more varied than our modern diets. It's not like going to the grocery store.

And so there are -- right now, we're in the middle of the wild bulb season. There are several lilies and onions and wild carrots that are up right now. In fact, we just saw the latest one come up yesterday. So we're in the middle of the bulb season. And soon, the seeds season will be coming. And it just goes in cycles like that. There are a lot of berries, stocks, roots, tubers even edible flowers, nuts, and all kinds of food. And I can't remember the second part of your question.

Jan Frederick:

Sure. Can you tell us how arrange to have the nutrition analysis of the traditional foods done and then also how you -- what your process was for interviewing elders to find out more about the traditional foods and traditional ways of life.

Seth Pilsk:

I'll answer the second question first and Twila can explain it better, but formal interviews don't work. And so if you ask an anthropologist how to do an interview with an elder, that won't work here, and maybe Twila can explain that a little better of how you have to have relationship with an elder.

Twila Cassadore:

It took me years to actually get an elder to be comfortable to talk with me. It didn't take just going over one day saying, "I want to learn about this. It took years of growing a friendship, trust and being open-minded to what they were wanting to share with me.

Seth Pilsk:

And for me I was fortunate, I mean it took -- I've been here for 27 years so it took many years to develop that trust and I had an advantage because in Apache culture, you don't ask direct questions so much. If you want information about something you can't just come out and interrogate somebody. But, being white, they kind of knew that that's how I was going to be. So I was able to ask a lot more questions than a tribal member could and so that kind of worked out good. When they got used to me and realized I wasn't going to cash in on it, that I was okay, then they would let me ask all those really obnoxious, never-ending questions.

And then when we started thinking about the health connections, we thought we could just tell health professionals that the pre-res diet was really healthy. And of course, they all just said "Well, what proof do you have?" and then we realized, if we were going to make headway with the Western

healthcare system, we need to actually quantify what we were talking about and what we thought about. So that's when we got the idea to do the nutritional analysis. And we were actually surprised that that was okay with elders and community members, especially when they could see that it would benefit people's health here.

So when we would explain that if we were able to quantify the nutritional values, then we could design modern menus based on that quantification with a mixture of foods that you can gather, buy and grow. So we were kind of able to get permission to do it and then we went about trying to find a nutritionist who could do it and we lucked out and we found the right person who is really steeped with ethnobotanical information and also, knew how to use modern nutritional analysis tools.

Jan Frederick:

Thank you. A couple more questions, this one is about transportation. One of the things that is always brought up in our community it says, is the lack of transportation for after school activities, unless it's a sport. It seems like it just won't work, since a lot of youth cannot get home unless there is a bus service. Was or is this a concern with this project as well?

Twila Cassadore:

For our food it's -- in our community, it's in our surroundings, the landscape that we live on, it's really blessed in with nature so it's pretty much like in our backyard. There are a lot of kids that live in different sections, they have accessibility there -- maybe later on, it might be a concern about transportation and learning about plants they're further away but for now, most of our plants grow just locally.

Jan Frederick:

Thank you. And then we have one last question. Recent research has shown that climate change might be linked to a prevalence of type 2 diabetes. Has climate change affected the ability to grow gardens of traditional foods on the San Carlos Apache Reservation?

Seth Pilsk:

Not yet but it probably will and so we've noticed the past two years is when we've really seen propound changes due to climate change. And so we imagine that it will affect the ability to grow gardens. For the short-term, we're still getting rain and so it actually might increase the growing seasons so that might be one benefit of a real bad thing. So right now, no, it hasn't affected people's ability but it sure might in the future and it probably will, based on all the models.

But when elders used to talk about climate change, they've been actually talking about it for over 20 years. They've noticed things like the decline of frog population and firefly populations and things like that. And the way they talk about it is, we've really mistreated the Earth itself and now it's turning back on us because we haven't lived correctly and respectfully.

And the way they talk about it is, that in of itself makes us weak and it is almost as if the Earth is kind of drying up and it seems like it actually diminishes our personal immune systems and open us up to all kinds of illnesses both physical and mental. And so there is this kind of larger universal lack of resilience that's going on and climate change is one manifestation of that.

Jan Frederick:

Thank you and then Seth and Twila, did you see there's one more question that just came in. Can you see that one on the bottom there of the chat box? It says "Are you preserving food with the kids too, like canning or drying?"

Twila Cassadore:

Our food is seasonal, it's not like having taco Tuesday they just because we can have Taco Tuesday. We follow the season so we're not actually collecting and storing and saving, we're just collecting what's up right now and just using that and then as the season changes, so does the diet.

Seth Pilsk:

There are some foods that you dry and you'll -- like some of the cactus fruit, you'll dry and eat it in the winter or seeds that you'll dry and save. So there are some of those and Twila has been working a lot with those. But it's kind of like there isn't a really set traditional set of those kinds of food that you store. So there is jerky, there is fruit drying and storage to a limited degree and you will keep those for one year but most of the food day in day out is what is up right now at the moment.

Jan Frederick:

Thank you. And then now we've got one more question as we keep going. There's a local project that is the doing a food assessment survey and ideas are bringing brought up. How do you get kids involved in something like that?

Seth Pilsk:

That's actually -- that seems like that's the kind of thing which is out of our area and we really try to work directly with community and not so much through -- yeah, not so much through programs, so we actually wouldn't know about that too much. We would probably be the wrong people to ask. And here, at a place like San Carlos, it is hard to get people excited about getting involved with programs. It's a hard sell. It's definitely possible and we have some people at San Carlos who are unbelievably hardworking and dedicated who are doing a lot of this work too and that's the kind of thing they really struggle with too and trying to get people involved with those kinds of programs.

Jan Frederick:

Well, Seth and Twila, we want to thank you again for your interesting and inspiring work in your community and we want to thank you for sharing that with us. I'm going to put up the screen that has the link to our evaluation and certificates in a minute. But before we do that, I'm going to ask Dr. Ann Bullock, the Director of the Division of Diabetes, if she has any closing remarks for us. Dr. Bullock?

Dr. Ann Bullock:

Well thank you and thank you very much Seth and Twila for that wonderful presentation. We've been -- talking in Indian country for a long time about the kinds of things you said and that food is more than food. I mean, it's important as that is to life. It's also important to culture, but then all of these things are so interrelated that used to sound like a Hallmark card thing or something for a while that we in Indian Country have known that this was something that is not to be dismissed. That our psychological, spiritual, emotional and physical health truly are integrated and diabetes is about more than just not a great diet and not exercising. Sure, it's about those things but it's about this much larger, wider context and deeper context and anything we can do to connect, help people connect to healthy foods that will help them in body but if those healthy foods are also connected to their culture and way of life and way of being even more profound.

While diabetes a big problem, so is as you've talked about the mental health issues and the drug issues and other things. All those things combine to drag down the health of our people. So looking at these things from a more holistic, wider and deeper perspective is a good thing. And you've helped us to think about that once again today. So thank you both for your presentation and for the great work you're doing at San Carlos.