



Indian Health Service

Division of Diabetes Treatment and Prevention

Healthy Eating for People with Diabetes via The Store Outside Your Door

Gary Ferguson, BS, ND and Desiree Bergeron, RD, LD

December 2013

Gary Ferguson

Again, I'm really honored to be here and talk about Our Store Outside Your Door program. So, just to start off with, I would like to share our vision that Alaska Native people are the healthiest people in the world or among the healthiest people in the world. This is the vision that our Board of Directors continually revisits. We really feel like the program that we are talking about today helps to serve that vision and we're seeing changes, and we're really excited about this program.

I'll start out by talking about our Alaska Native people and the time of contact, because since the time of contact our diets and our cultures have changed. When we look at the region that I'm from, the Aleut or Unangan people, we had colonizing influences in the 1740s. And when you look at the differences among our tribes, there are definitely lots of differences amongst our peoples and we're very diverse. Our 229 tribes, when you think of the differences -- and those who have been to Alaska can vouch for this, that we've got a very diverse group of people. When we look at the time of contact, that has definitely played into that as far as colonizing influences.

Looking at our diets, our diets traditionally were very high in healthy proteins and healthy fats, and very low in carbohydrates. When dietary surveys were done in the '50s, we started to see changes, and significant changes looking at the portion of carbohydrates that increased in the form of candy and soda pop. In the '80s, our overall diets looked very similar to the Standard American Diet or the S.A.D. diet. And it definitely is a "sad" diet, if you were to look at the village store and Desiree is going to get into that later on here, in some of our research.

So we have had definitely changing pictures in diets overtime, and our Store Outside Your Door project has been a labor of love for both of us in our various capacities. Desiree and I connected when I started working for the Consortium in 2007 and shared stories of our passion around this concept of the Store Outside Your Door in an Alaska magazine article, several years prior to us even calling at the Store Outside Your Door, talked about the store outside their door and the challenges that Alaska Native people have in having a lifestyle.

I'm going to talk about Weston Price. Weston Price was a dentist that worked with a lot of our indigenous peoples around the world and worked with our Yup'ik and Cup'ik people in Western Alaska. In 1933, he found that our people were examples of physical excellence and dental perfection that's just seldom been excelled by any race in the past or present. And here are some nice pictures of some of our mouths. Of course, we used our teeth for various traditional activities and so, they may be worn down, but he found that our strong rugged babies, and there was virtually no dental decay other than wear and tear, until we found the store grub or the village stores that came in as a result of colonizing influences.

And when we looked at the changes in dentition, there was definitely dental caries and that's something that I think many of us don't realize is, is that our traditional diets, when we eat them and don't eat a lot of our Western refined foods, our dental caries are reduced significantly. Dr. Price found this in the '30s



in our Alaska Native people. What he found was the first generation of children born after the adoption of store grub had dental arch deformities, they had crooked teeth, and they had changes in facial form. And what he commented in 1933 was we had few problems more urgent or more challenging than reversing these trends. And here, he shows pictures of that first generation of children born after the adoption of store grub.

About the same time as Dr. Price, there was another physician who was a researcher and he was looking at cats. It was actually a study on adrenal glands but what he found was that cats, on an optimal cat diet, which is raw meat, raw milk thrived. And four generations were still healthy. And there's a parallel here; and so, we're going to go in a journey here around cats. And so what he found was processed diets of canned milk, condensed milk and cooked meats, the cats in their first generation of kittens got sick in older age.

The second generation, they got sick in middle age. The third generation was sick from birth, and had behavior problems. And the fourth generation couldn't be sustained. And some interesting parallels when we look at diabetes and chronic disease in our younger generations now that are suffering with chronic disease due to many influences, but we really feel diet is a huge part of that. And here's a picture of a moose in Homer and of course, we know moose shouldn't be eating McDonald's and neither should we regularly of course.

When we talk about fast food, many of our communities, when we get talks in communities, we talk, "Well, do you have a McDonald's here?" And people say, "No. We don't have McDonald's at all, so we don't have fast food." And then, we start talking about what is fast food? We start talking about Swanson's meals, which I grew up as, that was my fast food. In our family, we cooked a lot of our foods and eat a lot of traditional foods, but occasionally, the Salisbury steak meal was like one of our special treats as a kid. Fast food comes in the freezer case too, DiGiorno's Pizzas, and Hot Pockets. There's a variety of our fast foods that come out of the local store. So, fast food is definitely present in our villages as well.

Here's an infographic talking about the increase in diabetes from 1995 to 2010, and we've had a 136% increase amongst our peoples. One of the things that this infographic is trying to also portray is- (brief audio issues)

Before we talk about the change, one of the things that is in the philosophy, I'm a naturopathic physician and a lot of the work that I do is guided by the philosophy of the medicine. One of the primary comments in the philosophy is, it's stated: First, remove obstacles to cure. So first, take away what's shooting us in the foot. Take away the things that are burdening our people. And we know that our people are dying younger. And of course, we're living longer due to increases in treatment of infectious disease, but chronic disease is now killing us. And across the country, we're seeing children buried by their parents; and this is due to chronic disease and a significant amount of that is lifestyle related.

As a naturopath, I love plants. For those of you from Alaska, this is our Cow Parsnip or we call it the Pushki; the region that I'm from, which is a Russian name for it. And ideally, we want to be vital and healthy throughout our entire life spectrum, all the way until we're elders, and have a very short morbidity line of getting sick and then dying. That's the grace that all of us hope to have. And so much of that is connected to lifestyle. This is Maslow's Hierarchy of Needs.

When we talk about nutrition, we're talking about some of our basic needs for food. And when we start talking about food security, nutrition security, we're talking about some of the base needs that we have in order to develop into the high functioning people that we want to be. And by addressing food and nutrition, we address those basic needs, so we can be connected to our community and help address some of the other challenges that we face in being healthy, vital people.

Another principle in the medicine of naturopathy is “vis medicatrix naturae”, which basically means that nature is medicine, and our traditional and cultural ways are powerful. There’s a deep honoring of our traditional indigenous diet as well as our medicines. It’s really an important principle that not only as of our indigenous people but is also of our beginnings of Western medicine and Hippocrates, considered the father of medicine said, “Let food be your medicine and let your medicine be your food.”

This is very closely aligned with our traditional values of Alaska. And throughout this poster, which is a poster that you can download from the Alaska Association of School Boards, was a project that highlighted the indigenous values of our people across the state and look at, what are your values? And if you look at this poster and all of our culture values, you’d find that food and food systems are constantly referred to, is to respect the land, the animals, subsistence, the importance of our traditional customary foods that’s ever-present in our values and it’s a really important part of us as indigenous people of Alaska.

And this is where I hand it over to Desiree to introduce herself and also, to continue the conversation. Desiree?

Desiree Bergeron

Okay, thank you. Good morning everyone! And I know it's not morning where you are but it is still morning here in Alaska. I'm sorry you can't be with us. It's actually one of our really beautiful crisp, clear, cold days and our sun is almost coming over the mountain. We love seeing the sun right now, because our days are so short here. So, we're just feeling the sunshine and really enjoying presenting to you.

My name is Desiree Bergeron and I'm a Registered Dietitian. I always like to start off my slideshow with this slide here, because it shows some of our artwork, and this is a beautiful tile mosaic that hangs in Bethel, Alaska. It really shows that our food is not just about nutrition and nourishment. It's about being one with the environment, and respecting the animal, and having a relationship with the animal. All elements of the animal go to nourish us, go to keep us warm, and are represented in our artwork and used in our dances. I just think this slide really shows the importance of our traditional food beyond nutrition.

And a little bit more about myself, I always like to start with this slide. It kind of reminds me that everything I learned, I learned from my family. Here, you see my dad, who is actually teaching my kids how to fillet one of our beautiful King Salmon at fish camp. Fish camp is something that we always do yearly in the summer, usually in June. My family is from southeast Alaska, so we grew up on islands around the ocean and with mountains. Down there, we have food all year round. We're very rich with traditional food resources. And so, I feel very fortunate that I was raised learning how to live off the land, how to cut fish and I'm fortunate enough that I'm still learning and I get to teach my children. And I have 12-year-old and a six-year-old. And it's my goal that they live this traditional food lifestyle, that they have a taste for traditional foods, and that they know how to live off the land, because we now understand that our traditional foods are the most nutrient-dense, and they're not only good for our bodies, they're good for our spirit and connection with the land.

So, I'm going to get right into some of the work that we've been doing here at Alaska Native Tribal Health Consortium. I started here doing research in southwest Alaska, and our villages in southwest Alaska are very remote. They're usually comprised of two to up to a thousand people in these remote communities that generally you can only fly into. Sometimes in the summer, you have boat access. But this was some of the footage that we got of the grocery store. You can see here that this is the vegetable aisle. So there are just a couple types of vegetables, fresh, they're in very bad condition, you can't tell but the lettuce is very rusty and they're also very expensive. And so, as a dietitian, it was really hard for me to know that this is what's available in our community, this is what's available for our

people and yet, we're supposed to be as dietitians telling people to eat five to nine servings of fresh fruits and vegetables a day.

And so, having this conundrum, that's part of the reason why we looked to what our ancestors did in the past and really try to promote the Store Outside because not a lot of people, and especially, in my generation, know how to use, utilize the foods right outside the door. So, we thought, let's do the Store Outside Your Door.

One of the original projects that I started working on was the Traditional Food Guide for Alaska Native Cancer Survivors. We wrote this under Lance Armstrong Foundation funding. We wrote it for providers because a lot of our medical providers here in Alaska, mostly have not been raised here in Alaska. They don't know a lot about the Alaska Native culture or the local foods. And what we wanted our providers to know is that our foods are good for you, they're safe for you even when you're undergoing medical care such as cancer treatment and they're often what's best for you. They're very comforting when you're away from home and in the hospital or under medical care. So, we wrote the Traditional Food Guide.

In the Traditional Food Guide, we have lots of beautiful pictures of our foods. And here, you see a picture of fiddlehead fern. This is something that we harvest in the spring time when it's tightly coiled. Here, you see it sautéed. I liken it to brussel sprouts, very, very tasty, yummy dish; very good for you.

Here, you see that this is a cutout from the Traditional Food Guide and we've got the native names for it, when you need to harvest it. We have precautions, such as you don't want to eat it when it's mature because it's toxic. You only want to eat the fiddlehead fern when it's tightly coiled. And then, we go into the Nutrition which is located at the bottom of the page. (brief audio issues)

So, one cup of fiddlehead fern has over -- it looks like a 100% of your Vitamin A needs for the day, and Vitamin C. It's an excellent source of fiber. So here, we're able to show that these foods are very, very nutritious for us.

Here's another one of my favorites. It's fireweed. It's harvestable throughout our whole entire summer. This is one that is flowering near the end of the summer, but my favorite is to have it when it looks like this, which is just when it's kind of sprouting out of the ground in the spring. And these are kind of one of the first things you see pop out at the ground after the snow melts. And you can just pluck them and steam them, just like this and they taste exactly like asparagus; and they're so good, so you can store them in the freezer, you can put them in a salad, and you can do so many things with these. And here, you see the nutrient breakdown for the fireweed which, one cup also is an excellent source of Vitamin A and C and a good source of fiber. This is stuff that you can go right outside your back door, harvest, store and consume all winter long. It's so good for you.

Here's another one of our foods, from the Arctic region of Alaska, Muktuk, which is the whale skin and blubber. We highlight whale in our Traditional Food Guide, and the meat itself, there you can see a three ounce portion, is an excellent source of protein and iron. It also is a source of Omega-3s. This is a really power-packed meat for you. And there, you can see, for a man or for an elderly woman, you've got 100% of your iron needs in just that three-ounce portion.

We always love to show this slide, which is really cool. Seal is one of our foods that's eaten coastally all across the state of Alaska, and we eat the seal meat, we render down the seal fat for seal oil. And so here, we like to show one serving of seal and it has just as much iron as two servings of caribou which, caribou is another one of our foods that we eat a lot of here in Alaska. One serving of seal has basically one, two, three, four, five, six -- so, one three ounce portion of seal has the same amount of iron as six cheeseburgers.

We like to show this slide because it's really interactive when we actually have an audience, but the next slide here, we like to say, guess how many hot dogs it would take to have the iron of the three ounce portion of seal. I believe we're close to 60 here. So that's how many hot dogs it would take to get the iron that is in just once tiny piece of seal meat.

This is Dr. Ferguson's favorite, which is our crowberry. Some people call it a blackberry or a tundra berry. And, this is another one of our excellent nutrient packed foods. It grows all across the state of Alaska. It's almost like a blanket; you can't help but walk on it, those times when you're out on the tundra.

One of the things we like to talk about is that our berries here in Alaska, because they grow in harsher climates, they protect themselves by creating more antioxidants and so, we have these berries. And here, you see an ORAC scale of antioxidants. (brief audio issues)

So here, you can see down here on the bottom, there's the cultivated blueberry and that is the antioxidant rating of it, but as you get higher up on the chart, you can see the wild blueberry from the lower 48, much higher -- and our lingonberry, it's just off the charts. So, a lot of our berries are super high in antioxidants. I often hear elders saying that they don't take multivitamins; they just eat a cup of berries everyday for their Vitamin C and their antioxidant. So, I think that's really, really cool.

I'm going to give it back over to Gary, because we've got some new emerging research that is just hot off the press in regards to traditional foods and diabetes.

Gary Ferguson

So, I'm going to first talk about some research that that isn't like super new but it's definitely one that I like to highlight and these are silver salmon that are from my home area. I get the honor of traditionally harvesting salmon every year, when we go back and fish in the fall down in the south part of the Alaska Peninsula, in a community called Cold Bay, where I still have a family living in my hometown at Sand Point. Salmon is a big part of our culture. It's also part of our economy, a huge part of our economy as far as commercial fish.

Research is showing in the research that was conducted in the study that I'm talking about right now, was the Norton Sound area, which is further north, near the communities of Nome and as far south as the community of Stebbins. And it looked at, was looking at cardiovascular disease and the consumption of salmon and seal oil. Seal oil is another traditional food that you find throughout the state. It's traded. It's like liquid gold to many of us and it's one of those where, seal oil is definitely one of those high Omega-3 fatty acid foods that help protect us from cardiovascular disease and that's what we found in the study, was that these traditional and customary foods of seal oil and salmon, when you consume them regularly, decrease glucose intolerance. And so, it's less common among those who eat seal oil and/or salmon daily. And, we also found that it reduced cardiovascular disease and inflammations, systemic inflammation.

So these foods that we're finding, of course, we want to do a lot more research in our traditional and customary foods because we really feel like, when we think about berries and the research that Desiree was talking about as far as our berries, that study that looked at the ORAC values, there's been since studies done to look at our berries compared to other berries; and the researcher's premise, is that the harsher their environment, the more antioxidants and protective factors that those berries produce to protect themselves and those are conveyed to us. And so, a lot of our traditional healers, some of our mentors, Dr. Rita Blumenstein and others, tell us that especially as you go north, and you go further south, and the harsher the environment, the smaller our plants grow, and that they're power packed. The greens and the foods that we eat regularly and consume and dry or preserve by freezing or fermenting, those foods are super nutrient-dense.

One of the studies that -- this is hot off the press, this is courtesy of Josh Kellogg with the doctoral students at North Carolina State University and so, I'm giving him all the credit, these are his slides but very exciting research that he conducted in Southeast Alaska this last year, in cooperation with Southeast Alaska Regional Health Consortium and our Alaska Regional Native Health Consortium, and his North Carolina State University. And what he found in vitro testing -- so this is yet to be studied in humans but this is some preliminary research that's very compelling. And of course, it's based upon other research in Japan. There's been some really great testing as well. They're looking at our seaweeds or sea vegetables.

In this slide, we're talking about antioxidant activity and he treated macrophages, they are immune cells with the lipopolysaccharide to induce a radical oxygen species. And so in this case, the lower values indicate an inhibition of the radical oxygen species generation, the cell system. And the fractions with a star didn't significantly reduce the levels back to normal levels. And so, he found the most active species were the brown kelps, bladderwrack kelp, regular kelp, and sugar wrack.

He also looked at lipase inhibitory activity, and when you look at lipase inhibitory activity, lipase is again our enzymes that are a key in digesting fats eaten during a meal. They're present in the stomach as well as in the small intestine. They digest about 90% of the lipids consumed. The other 10% is done by mechanisms or other lipases. The activity of these enzymes is far beyond that which we need for a regular diet. So as we consume more fat in the diet, it's still broken down rapidly by these lipases and it gets ingested or digested.

So blocking of these enzymes is one way to decrease the fat absorbed from a meal and it leaves the body with less fat to deal with and process later on. And one of the drugs that is used, orlistat, there are other medications but this is one mechanism of action pharmaceutically that we like to look at in helping with obesity. And what Josh found in his research was that the kelp line, especially the bladderwrack and the false laver varieties of the brown and red kelps had this lipase inhibitory activity.

He also looked at glucosidase inhibitory activity; this is one that, for example, pharmaceutical acarbose works with this method, mechanism of action. And so what he found was that bladderwrack and ribbon kelp had this activity similar to acarbose and that's another way to lower blood sugar. So, it's definitely an exciting finding as far as our seaweeds.

He also looked at lipid accumulation and of course, our fat cells store fats that are found in our bloodstream. And as they grow larger, we become more obese, which also leads to increased inflammation and insulin resistance, which really is kind of like a vicious cycle of the metabolic syndrome that we like to prevent.

And so preliminary research with the extracts tested by both brown and red algae show that they decrease the amount of lipids accumulating in the cells by as much as 24%, which of course, this is in vitro testing. So, I think we still have a lot to learn as far as in humans, but it's one of those where this is some promising research around addressing obesity using seaweeds.

Some of the conclusions that, of course, we have collaborated with North Carolina State University now for almost 10 years, looking at our Alaskan plants. What Josh found with his research was that seaweeds from Alaska have potential to offset complications of obesity and diabetes by reducing oxidative damage, by inhibiting the digestion of certain dietary nutrients or the glucosidase and lipase activity and also, by reducing the accumulation of lipids in fat cells.

So, the next steps of course, are to look at investigating them in clinical and dietary interventions at a community level. And this is where he wants to do more research and he's doing a shout out, especially the indigenous community as far as working more with our Native community around this asset.

In Alaska, traditionally in southeast, of course, we still have a very large population of folks using kelps and seaweeds for their diet. But in my home area, we really decreased the consumption of those foods. To me, I feel like it's low-hanging fruit when we think of these nutrient-dense vegetables that are literally in the Store Outside Your Door.

You go down to the ocean edge and you know, provided it's clean and not toxic, but it's not near like manufacturing or some of our canneries. These foods are literally right outside our door. One of the things that we like to talk about when we think of our concept is that many of villages are looked at as food deserts, and especially from somebody coming in from the outside, they go into the village and go to the store and they're like, "There's no way I'm going to eat healthy here. I'm definitely getting obesity here and diabetes is coming."

And so, by reframing village life and looking at seasonal, hunting, fishing, gathering and growing your own food, our villages become these paradises. When you start to look through that lens of this door, outside your door, it really becomes a food paradise. We've traveled throughout the state producing our Store Outside Your Door webisodes and other media, through social media; and we've had amazing experiences with the foods that are hunted, fished, that are gathered and grown in our communities, and really have opened our eyes as we've learned with the community of these incredible assets of our foods and food systems.

And so, I'm going to hand it back to Desiree to talk more about our social media.

Desiree Bergeron

Okay, great! I think I'll start off by just adding on to what you were saying about the webisodes and unfortunately, I don't think we'll be able to play one today. If you haven't gotten a chance to view some of our work -- for the past three years, Gary and I have been producing a show called the Store Outside Your Door and it runs here on the local PBS station and it's getting incorporated into a local programming across the state. And it's been our goal to really -- I think this is cool, I mentioned earlier that I started off in research, where we were looking at the diets of our southwestern people and the webisodes kind of sprung out as an intervention of that research and have taken off since. I think that's the coolest part about the work that we do, is it's very community-driven. This was what the community desired and long after our grant funding has been over, our funds have been gone for two years; the Store Outside You're Door is still producing and gaining momentum.

And so, speaking to sustainable community-driven projects, I think that's one of the wonderful things about Store Outside Your Door, is that we do go into communities, and it's not just about the food. For Gary and I, it's about connecting with the community members, interviewing elders, speaking their own language, telling their own stories and their own experiences about traditional foods, having our hunters show us how they have been hunting off the grounds for hundreds of years and having our chefs in the communities, our local cooks, show us how they utilize these foods. So every aspect of it is really about highlighting the community and their knowledge and sharing it with future generations. And so what we've got right now is a collection of over 30 webisodes that are all around five minutes or less, so they're easily viewable. We actually have them archived on YouTube.

We highlight them right here on the Facebook page. So we've got a Facebook page called Store Outside Your Door and we premiere our webisodes there but we also, when we're out in the communities, we're taking pictures of hunting and plants, and elders; and so, Gary and I are constantly snapping pictures with the iPhone or uploading things at night when we're actually in the communities. And so, it's really fun because we get a lot of community followers. We get a lot of community members saying, "Hey, that's my Grandma." "Hey how do I eat this?" Or thanking us for the information because -- since I've been working in traditional foods promotion, probably for about the past 10 years, I hear like these mythical things like, oh, we used to boil some plant and that's the juice

that we used to drink. We didn't use to drink Kool-Aid and Tang. But now, through the years of traveling around the Store Outside Your Door, we've identified that plant and we're highlighting that plant in one of our webisodes. And we've got an elder sharing with us, how her mother showed her how to harvest that plant and boil that plant. So I think it's really, really powerful that we're able to answer these questions, because a lot of this information is missing. It's not being passed down to our next generations. I just feel really happy that I have this as a resource for my kids, and so I can show them what plants to harvest and boil that make good juice.

But here, you see our Facebook page, if you haven't liked us and you're on Facebook, please do. It's also a means for us to track our demographic, who's following us and who's sharing our stuff and who we're reaching. So we use it in a lot of different mechanisms. This is our YouTube channel. Like I said, we've got all of our webisodes uploaded there, so take a look if you get a chance. Here are some of the pictures of us out on set, filming. This is from our first filming in southeast Alaska and we've got Steve Johnson, who's jigging for, I think he was jigging for sea cucumber, but we ended up actually getting kelp, which we pickled in the recipes.

So for us, when we go out to the communities and we don't know what we're going to highlight, we don't know what's going to come up on the end of that fishing pole but we do know that it's going to be healthy and it's going to be something we can turn into an amazing recipe. So we just go with the flow and we're always excited when we get something.

Here's actually, Gary and myself, and we're in Kodiak. We're filming how to harvest Dungeness crab and we went on to make a webisode about steamed Dungeness crab with a really yummy local cranberry sauce. So if that's not getting you hungry, I don't know what is, but we enjoy our jobs and it's not just about being a dietitian or naturopath, it's about really getting out there and connecting with the communities, too.

Here's one of our elders, showing us what plants are available to harvest, right on the tundra. And an amazing amount of this landscape is edible and is very, very good for you. Here, we're in Point Hope. It's a gorgeous sunny day and we've got a wonderful elder who's just sharing her stories and sharing her knowledge. And here, we've got some Cunulliq and this is one of our really yummy greens out available on the tundra and it's something that, I think, we say sour grass.

Gary Ferguson

They call it sour grass and it's also known as mountain sorrel.

Desiree Bergeron

Yeah, very yummy, just to pick and eat or this is one of the ones that we can boil too, right?

Gary Ferguson

You can make a tea out of this.

Desiree Bergeron

It's really yummy. So here, we've got some of the data, the breakdown of who's utilizing our Facebook page. You can see that we've got a little bit -- we've got a good following of women, we've got a good following of 35 to 44 year-olds. So this really helps us gauge that population that we're reaching and then helps us plan for the future, because for me, it's all about connecting with our youth. It's about giving our youth a taste for traditional foods. And so, that's kind of where it's going to show us that we

need to focus, we need to engage more and it's helped us plan for future filming and future things to highlight.

Gary Ferguson

And that, I just also want to mention as we look at the demographics, that social media gives us opportunities to look at the analytics and really drill into, in this case, the Facebook site shows us our fans, our people reached and our people engaged. So people engaged are people who are actually sharing posts or updates or commenting, so they are more "super user", they are folks that regularly connect with us.

And so, as Desiree was talking, we definitely have the young families. That's our demographic that we're focusing on is looking at young families who are actually providing food for the table. In Alaska, as many other states and in our indigenous populations, there are also elders who are raising up their grandchildren. That's a cultural way, grandpa and grandma raised many of us as well and I was very close to my grandparents growing up. I lived in my family's home but my grandparents played a huge role in what I ate as well as the culture that I was exposed to.

When you also look at the demographics, that extends right up into our elder category, that 14% of our elderly people, they include the 65 plus, that's a good chunk of our demographics are elders too. That's also a litmus for the genuine connection to our culture. A lot of the work that we do is culturally based in language and different cultural practices around the preparing of these foods. And a lot of the reason we do this work is because young people had come up to us from where we're doing our work. And I started in diabetes prevention, was the Special Diabetes Program for Indians grant manager when I started with my tribe, right after finishing Medical school. And youth would come up to me and when I was talking about nutrition or our traditional plants or foods and they would say, "I don't know how to do that. Nobody taught me how to do that."

They were very ashamed of it. One of the things that I found was like, "Don't be ashamed. You have to ask." There were actually elders in some of those talks. They were like, "Well, how come you haven't asked me?" So, we helped connect the dots with the elders who had this knowledge. We really feel like that's really what this program is about. It's about connecting the dots and helping the elders who have this knowledge, are PhDs in hunting, and gathering, and fishing. These folks are very valuable in the community.

When push comes to shove and that plane doesn't get in for a week because of bad weather, you're going to these people because they are the ones who are going to help you survive. That's what we get to highlight. And to our elders, that is important. We've gotten really great feedback from our elders that the work that we're doing is important. They support that and to us that is our direction. If they give us that support that means this is important for the future of our cultures.

Desiree Bergeron

And as I get a kick out, I've seen that we're reaching people in Norway, Russia, Denmark and I think that's so cool. So, I think we're close to wrapping up here. This is one of the projects we like to highlight because this is kind of in the works for us right now. This is super important for me. As I was going through my dietetics training, I realized that we've got a generation of kids who are growing up obese and who are more predisposed to Type 2 diabetes. I asked the elders at one of our elder conferences, what are we going to do? How are we going to get our kids to eat more traditional foods and address these problems? The elders uniformly said, we've got to introduce our foods when they are infants. That's key to having our kids grow up for a taste for those traditional foods. They have to be the first foods that are introduced and that our kids feel are normal. I really thought long and hard about my own children's exposure to food.

As I was in college, I had a daughter who was in WIC, so she utilized WIC foods. We had rice cereal and we had eggs when we were in college. That's kind of just how we survived. Then, after talking to the elders, I realized, it's really important to give our kids a taste for those traditional foods. With my son, who was born after college, his first food was herring eggs and his second food was moose meat, and so on and so forth. He's got an excellent taste for traditional food, he is now six. It's a work in progress for the 12-year-old. It's always a little bit different for her, but we keep introducing. She does grow familiar with them.

It's best to introduce those foods when they're infants. What we're trying to do here, in ANTHC, is similar to the Traditional Food Guide, is create a Traditional Infant Feeding Guide that can be used by our young families that could be given away on maternity wards and with the WIC program. So that our Alaska Native mothers know that traditional foods are safe to feed to our infants and should be among the first foods. They're high in protein, they're high in iron, and they're nutrient-dense. So, those are the foods that we want to be giving to our infants for strong, healthy babies. And so, that they grow up with a taste for those foods. Hopefully, continuing to eat those healthy foods and having a healthy lifestyle. We feel that's really key to addressing the obesity and diabetes epidemic that's happening right now with our Alaska Native people.

(brief audio issues) So we're wrapping up. Gary, unless you want to say a couple of things, I think we're open for questions now.

Gary Ferguson

Yeah. So I'll just close also by going back to our vision and that Alaska Native people are among the healthiest people in the world. We know that when we address the social determinants of health, we're addressing many things, and nutrition and food security, nutrition security, is at the bedrock. It's one of those fundamental needs, as we also address domestic violence prevention and safe communities. Food and nutrition security is something that, the feel-good factor has been very high as we address Store Outside Your Door. With that, we can also address protective factors, being more resilient in our cultures and those that are actively hunting; fishing, gathering and growing their own food are also people who are practicing other resilience-based behaviors. We find that we're addressing suicide prevention, we're addressing these other very deep psychosocial factors that sometimes, when you drill into them by themselves, you get bogged down in the drama.

For us, we're really excited about this project because it helps bring the community together around something that they can do something about and address. We want to move into our Traditional Infant Feeding Guide which is a project that we want to do this next year. We've got the initial funding; we're still pursuing more funding to really do it the way we want to do it. And then also, we're working with other stakeholders around addressing hunter-fisher sharing, food gathering groups that maybe have broken down in communities or in regions. How do I make sure that folks have access to nutrient-dense food and traditional food?

Unfortunately, due to colonization, some of our communities are fractured and don't have access to some of the traditional customary foods. So, our goal is to bring that, bring the community together to really address this, so that the community owns the food security for all of its population. Traditionally, culturally, we would give our first fish or first kill, our first fruits to elders and other families. That's a way of honoring the fact that it's a gift-given to us. Our program is all about that. It's going back to really honoring food and food systems, and food sovereignty, and having access to these foods. So it's been a really exciting journey so far and we're excited to see it

So I'll close there now. I think we may have a couple of minutes for questions.

Desiree Bergeron

I see one already one question about the feeding guide, when it will come out and where. So, like Gary said, that's going to be, the Infant Feeding Guide will come out, I believe, in layers. We do have kind of a phase approach to this one as we get funding because what we'd like to do with the Infant Traditional Food Guide is we want to incorporate it into what we're doing with the Store Outside Your Door. We are looking for funding to do the webisodes. We want to go out to the communities and we want to highlight our moms who are feeding the kids traditional foods. So, we want to have a video series. We want to have all different layers of the Infant Traditional Food Guide. I believe that this year, we do have a little bit of funding for a pamphlet that will be kind of the beginnings of the Food Guide. Right now, we're doing all the research.

I would say, maybe, probably two years before we have a solid book that will come out. Hopefully, within that two years, we'll have little brochures coming out of what we're learning and also webisodes of what we're learning as well. So, little bits and pieces will fall out of the sky for the next two years and then we'll have a finished product after that.

Gary Ferguson

Yeah, we've pursued funding for the webisodes that will be focused on traditional practices of food introduction and how we traditionally introduce our foods as well as modern variations of doing that. There's been some concern by some of the dentists of premastication and so, we're working around that in a food-positive messaging and culturally-positive messaging of making sure that we're going to have healthy mouths to premasticate and introduce foods to their children.

I think we're just about out of time -- so, we're going to --

Wendy Sandoval

Hi, Gary. This is Wendy Sandoval from the Division of Diabetes. We would just like to thank you very much for this really insightful and very interesting presentation. I'm going to go ahead and put the link up to the CE evaluation. From there, people can get their certificate. We'd just like to remind people, of you haven't already signed in to the "Please sign in using your email" box, if you would please give us that. That's our only way to contact you.

I'm sorry about the interruption early on. I lost phone contact. I'm glad that didn't disrupt the presentation. But, Gary, can I get you and Desiree to introduce yourself quickly? I lost that part of the recording. Then, we'll see if there are any other questions that are coming in.

Gary Ferguson

Again, Gary Ferguson. I serve the Alaska Native Tribal Health Consortium as their Director of Wellness and Prevention. I'm a co-producer of the Store Outside Your Door series.

Desiree Bergeron

Desiree Bergeron, Registered Dietitian. My family is from southeast Alaska and I am the Nutrition Education and Research Program Manager for the Alaska Native Tribal Health Consortium