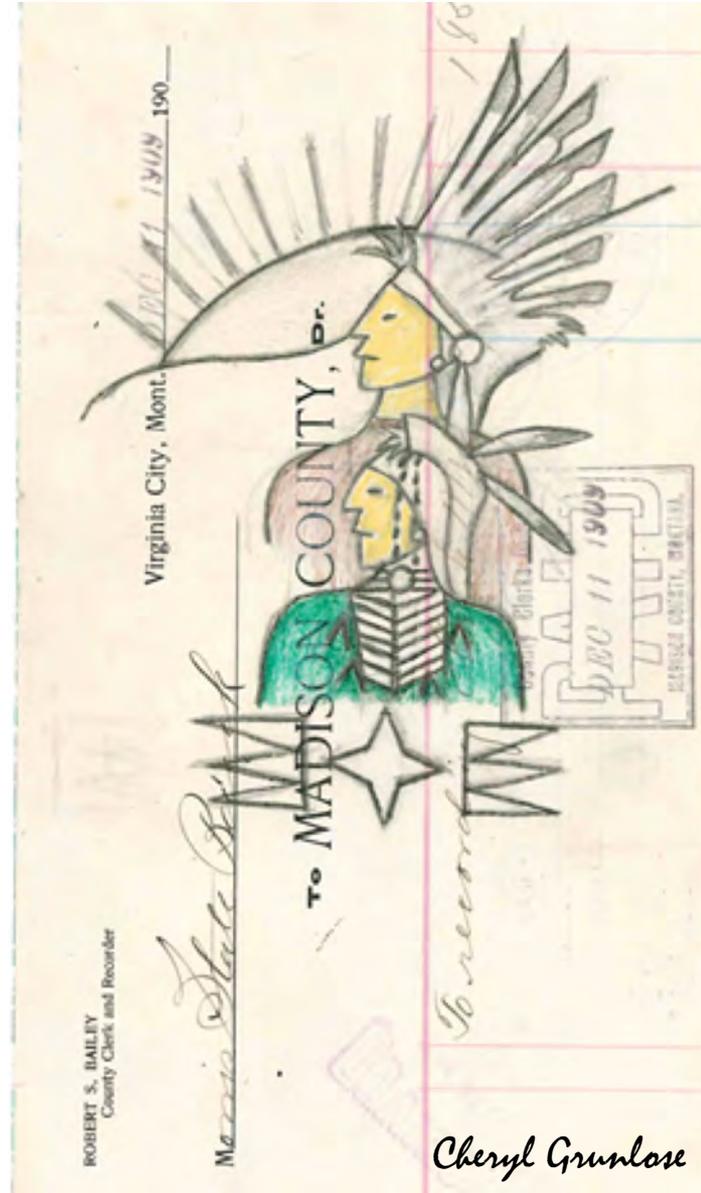


# Nxstan

## A Culturally Tailored Intervention to Prevent Diabetes in American Indian Men

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Cheryl Grunlose



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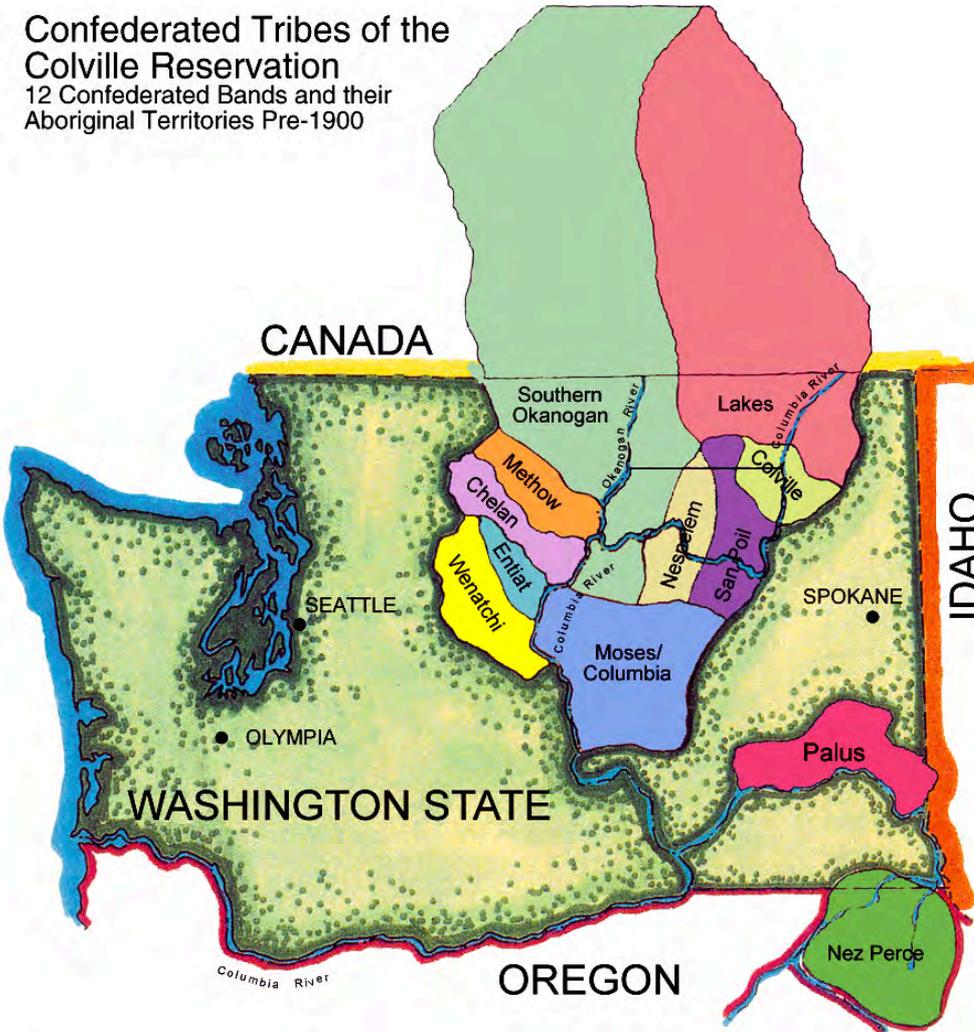
Recruiter/Assessor - Korey Carden, AA, Washington State University

# Background

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- Diabetes and cardiometabolic risk factors disproportionately high for American Indian men compared to other U.S. racial/ethnic groups.
  - Modest weight loss through diet and exercise can reduce risk for type 2 diabetes.
  - DPP - 32% of 171 AI participants were male.
  - SDPI-DP - 25% of 2,553 AI participants were male; 27% of the male participants did not complete the study.

# Nxstan

Confederated Tribes of the  
Colville Reservation  
12 Confederated Bands and their  
Aboriginal Territories Pre-1900



**“Good Practices” is  
the closest  
translation from the  
Nselxcin language.**

# Confederated Tribes of the Colville Reservation



2.1 million acres; ~7,500 residents; ~5,000 AI

# Specific Aims

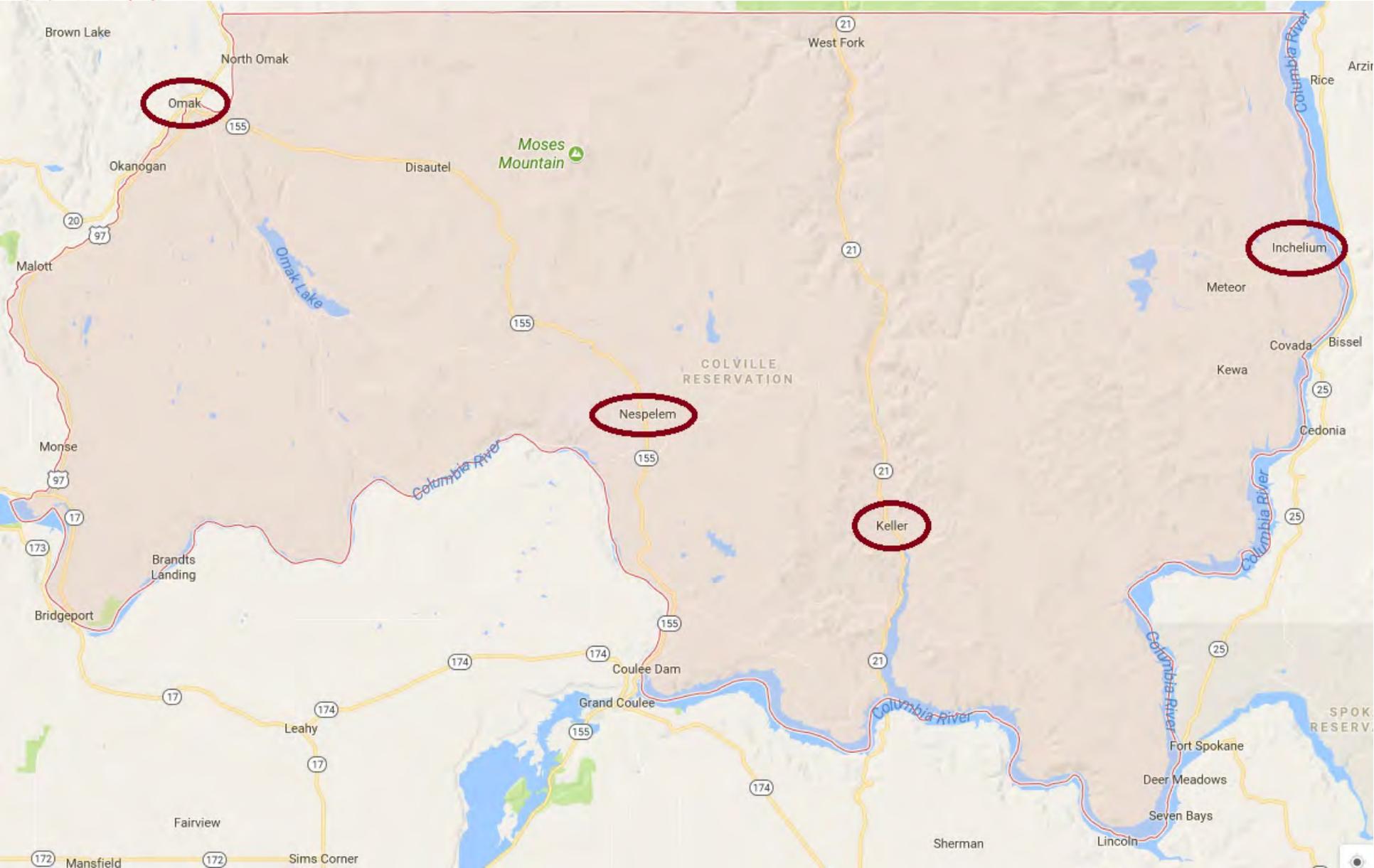
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1. To conduct focus groups with adult members of Colville tribe to inform the adaptation, manualization, and implementation of a culturally informed diabetes prevention program among overweight and obese American Indian men.
  2. To evaluate the effectiveness of a community-based, culturally informed diabetes prevention intervention.
    - Primary Outcome: weight loss, dietary fat and caloric intake, vegetable consumption, and physical activity
  3. To evaluate the sustainability of the diabetes prevention intervention by assessing participants' perceptions of program component fit through focus group discussions with study participants in the intervention arm and telephone interviews with participants who left the program.

# Intervention Staff



KOREY CARDEN & SONNY SELLARS

# Colville Districts



# Focus Group Guide

- 
- 
- Facilitators and challenges to healthy eating, physical activity, and weight loss
  - Perceptions of masculinity and effects on eating and activity habits
  - Activities men would be interested in doing
  - How Native men could support each other to increase physical activity and eat healthier to lose weight
  - Information and resources needed that could help Native men eat healthier to maintain a healthy weight

# Results

## Characteristics of male focus group participants

Characteristics of male focus group participants		
	Participants (N = 51 )	
Age; mean (sd)	42.9	(13.3)
Education; n (%)		
Less than high school	0	(0.0)
High school/GED/vocational school	9	(17.6)
Some college	21	(41.2)
College graduate	21	(41.2)
Marital Status; n (%)		
Currently married	21	(41.2)
Never married	23	(45.1)
Divorced widowed or separated	7	(13.7)
Employment Status; n (%)		
Working full-time	43	(86.0)
Working part-time	4	(8.0)
Not working	2	(4.0)
Retired	1	(2.0)
Self-reported Health Status; n (%)		
Excellent	0	(0.0)
Very Good	10	(20.0)
Good	26	(52.0)
Fair	12	(24.0)
Poor	2	(4.0)

# Quotes - Exercise



“One thing, now, when you run a deer or something like that, we go out and drive and get one. Head out in the four-wheeler or something. Before we walked all the time.”

“I wish we had more people that would go and lift weights, who would do something like that, even onsite in the community centers or in the community themselves.”

“Do exercise every day at the same time. That way you can plan it because I know, with me, scheduling’s really important. If I don’t set that time out, and it’s not every day at the same time, then I get pulled off onto something else, and I have to go there.”

# Quotes – Masculinity & Men's Roles



“A suggestion is to get away from the belief that healthy living is a feminine thing. Whether it's dieting or healthy eating, it's been viewed to be more of a female thing to do. When there's a salad or vegetables, men say that's girl food. But it's healthy food. I don't want to say masculine it up, but we need to change the way men think about healthy eating and losing weight.”

“Now and then I see an older man walking. Probably not so much the younger men, unless they're shed hunting.”

“That's the number one thing our Indian kids need is healthy Indian men in their lives, whether it's at school, home, or at the center, but somewhere in their life so they got somebody to look to as a role model.”

# Quotes - Recommendations



“Setting up group activities during a specific time like at lunchtime to go for a walk or something. Some people don’t like doing things on their own. Maybe get a group going.”

“I’d like walking and running, like fun runs. They’re timed, and you push yourself a little bit more. It’s something I liked growing up. There’s not too many fun runs around here; they only have them once a year. Have one every month or something like that.”

“If you have The Tribune or one place to go if we wanted to check out what’s going on in Omak, or Inchelium, or Keller. We don’t have that centralized point of information.”

# Nxstan Intervention



### Eligibility Screening

- a) Self-reported American Indian or Alaska Native
- b) Age 21-65 years
- c) Overweight or Obese defined as BMI  $\geq 25$  kg/m<sup>2</sup>
- d) Willing and able to attend 10 weekly classes
- e) No self-reported physician-diagnosis of type 1 or type 2 diabetes
- f) No orthopedic or joint problems that would be a barrier to physical activity

Obtain Informed Consent

### Complete Baseline Assessment

- Weight (lbs) and height (inches)
- Systolic/diastolic blood pressure
- Study survey
- Demonstrate syncing Fitbit to cell phone

Randomization

3-Month Face-to-Face  
Nxstan Weight Loss  
Intervention  
(N=100)

3-Month Wait List  
Control Group  
(N=100)

### Complete 3-Month Assessment

- Weight (lbs) and height (inches)
- Systolic/diastolic blood pressure
- Study survey

### Complete 3-Month Assessment

- Weight (lbs) and height (inches)
- Systolic/diastolic blood pressure
- Study survey

6-Month Weigh-in

3-Month Face-to-Face Nxstan  
Weight Loss Intervention

# Nxstan Study Design

Enroll 200 men June  
2017-September 2018  
(no cost extension  
request)

# Nxstan Intervention

- 
- Group classes – community and worksites
  - Physical activity at each class
  - 3-month lifestyle intervention – adapted Diabetes Prevention Program informed by focus groups
  - Delivered by male Colville peer educator
  - Facebook page
  - Incentives
  - Participant Goals:
    - Attend classes during 3-month intervention
    - Achieve a minimum weight loss of 7% of initial body weight, and
    - Perform at least 4 hours of brisk physical each week

# Recruitment



# Nxstan Class Topics

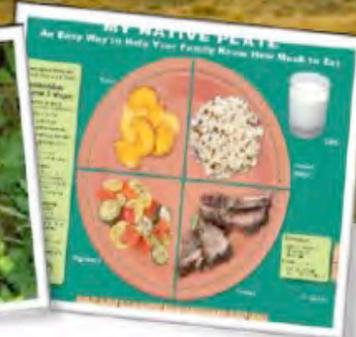


Class #	Lesson Plan
Lesson 1	Be Active Every Day!
Lesson 2	Eat Less Fat!
Lesson 3	Take Charge of What's Around You
Lesson 4	Stay in Balance Through Stress Management
Lesson 5	Eat Healthy When Eating Out
Lesson 6	Stay Motivated!
Lesson 7	Healthy Families, Healthy Communities
Lesson 8	Build Strength
Lesson 9	Develop Flexibility
Lesson 10	Grow Endurance
Lesson 11	Physical activity
Lesson 12	Physical activity



# Nxstan

## Session 2: Eat Less Fat!



Our traditional Native foods are low in fat, especially saturated fat. Reservation life has changed and limited our food choices. Packaged, processed, and fast foods, like TV dinners, canned foods, and fried foods contain a lot of fat, especially saturated fat. Too much fat in our diet, such as saturated fat, can raise our cholesterol. High cholesterol increases the risk for diabetes, blocked arteries, and heart disease. Eating healthy foods combined with physical activity is the best way to stay healthy!

Our bodies need some fat, but not as much as we usually eat every day. Fat should make up only 20 to 35 percent of all the calories you eat each day. Today we will review some food labels and show you how you can figure out how much fat is in the food you eat.

Fat contains more than twice the calories as the same amount of sugar, starch, or protein. Each gram of fat has 9 calories. If you eat a lot of high fat foods, you end up eating a lot of calories.

# Nxstan Curriculum

## Action Plan: Let's set a goal for this week!

Setting a goal can help you eat healthier. Make a plan to eat less fat and follow it.

- In the table below, write down 5 foods you eat that are high in fat.
- Circle one of the foods you listed.
- Choose one of the 3 ways listed in the table to eat less fat from that food, and write down what you will do this week to eat less fat from that food. Be sure it is **something you can do**.



My top 5 high-fat foods	The 3 Ways to Eat Less Fat		
	I will eat it only this (less) often:	I will eat only this (smaller) amount:	I will eat this (lower-fat) food

To reach my goal to eat less fat, I will need: \_\_\_\_\_

\_\_\_\_\_

Problems I might have are: \_\_\_\_\_

# Goal Setting

# Incentives

Incentives related to class topic – Nxstan t-shirt, measuring cups, stress ball, journal, water bottle, stretch band, Fitbit

End of class prizes for:

- Class attendance
- Meeting weight loss goal
  - Seahawks crock pot, cook books, gift card

Certificate of completion



# Strengths & Challenges



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## Strengths

- Men are engaged and eager to learn
- Creating community of physically active men
- Men are reaching their physical activity goals and starting to think about how to incorporate food goals into their lives

## Challenges

- Retaining men (schedules, summer, celebrations, etc)
- Difficulty reaching weight loss or healthy eating goals

# Thank You!

