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**EFFECTS OF DIET AND NUTRITION  
IN THE  
LIVES OF NATIVE AMERICAN SCHOOLCHILDREN  
ON THE  
WIND RIVER RESERVATION OF WYOMING**

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*Oral Presentation*



# PROPOSAL

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## ❖ Interests

- Our interests were in Native American populations in Wyoming, child welfare/policy, as well as health/nutrition.

## ❖ Correlation and Significance

## ❖ Initial Research

- Obesity epidemic
  - Diet-related diseases/health conditions
  - Common Native American health issues

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# METHODS

❖ Participants

❖ Questionnaire/Survey

- Demographics
- Health Conditions
- Nutrition Program Participation
- Food Availability, Attainment, Preparation

# PARENT SURVEY

## Demographics

School Name: \_\_\_\_\_ Child's Age: \_\_\_\_\_ Child's Grade Level: \_\_\_\_\_

Gender: \_\_\_\_\_ Tribal Affiliation: \_\_\_\_\_

## Health

Does your child have any health conditions? Yes \_\_ No\_\_

If so, please list condition(S):

\_\_\_\_\_

If so, was this condition(s) diagnosed prior to birth or after birth? \_\_\_\_\_

On average, how much money do you spend on groceries in a week?

\_\_\_ \$0-\$25

\_\_\_ \$25 - \$50

\_\_\_ \$50 - \$75

\_\_\_ \$75 - \$100

\_\_\_ \$100 - \$150

\_\_\_ \$150 - \$200

\_\_\_ \$200 - \$250

\_\_\_ \$250 - \$300

\_\_\_ \$300+

Do you feel that you have a general understanding what serving sizes?

Do you feel that your household has a general understanding what healthy serving sizes are?

If so, Please explain: \_\_\_\_\_

Does your household know how to read the nutritional content on food labels? Yes \_\_ No \_\_

# PARENT SURVEY CONTINUED...

Please check any and all food items that your household purchasing in a week.

- |  |   |
|--|---|
| <input type="checkbox"/> Fresh Vegetables    | <input type="checkbox"/> Canned Vegetables      |
| <input type="checkbox"/> Fresh Fruit         | <input type="checkbox"/> Canned Fruit           |
| <input type="checkbox"/> Fresh Meat          | <input type="checkbox"/> Canned Meat            |
| <input type="checkbox"/> Fresh Milk          | <input type="checkbox"/> Canned Milk            |
| <input type="checkbox"/> Vitamin Supplements | <input type="checkbox"/> Bottled Juice          |
| <input type="checkbox"/> Fortified beverage  | <input type="checkbox"/> Frozen Juice           |
| <input type="checkbox"/> Flour               | <input type="checkbox"/> Potatoes               |
| <input type="checkbox"/> Peanut Butter       | <input type="checkbox"/> Frozen Meals           |
| <input type="checkbox"/> Sugar               | <input type="checkbox"/> Baking Powder          |
| <input type="checkbox"/> Bread (Wheat)       | <input type="checkbox"/> Crackers               |
| <input type="checkbox"/> Bread (White)       | <input type="checkbox"/> Cheese                 |
| <input type="checkbox"/> Ketchup             | <input type="checkbox"/> Fresh Deli Meats       |
| <input type="checkbox"/> Mayonnaise          | <input type="checkbox"/> Prepackages Deli Meats |
| <input type="checkbox"/> Mustard             |   |

## Child food intake

- |  |     |                          |    |                          |
|--|-----|--------------------------|----|--------------------------|
| Does your child eat breakfast regularly? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| Does your child eat Lunch regularly?     | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| Does your child eat Dinner regularly?    | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| Does your child eat snacks regularly?    | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |

# TEACHER SURVEY

## Demographics

School Name: \_\_\_\_\_ Child's Age: \_\_\_\_ Child's Grade Level: \_\_\_\_

Gender: \_\_\_\_\_ Tribal Affiliation: \_\_\_\_\_

## Student Attendance

Does the student attend school on a regular basis? Yes \_\_ No \_\_

If not, approximately how many days a week does this student not attend school? \_\_\_\_\_

## School Policy

Is your school closed campus? Yes \_\_ No \_\_  
(Do the students have to stay on campus for lunch?)

Is your school open campus? Yes \_\_ No ++  
(Are the student able to leave campus for lunch?)

## Meal Program Availability

Does your school offer free or reduced rate lunches? Yes \_\_ No \_\_  
If so, is it utilized? Yes \_\_ No \_\_ Don't know \_\_

# TEACHER SURVEY CONTINUED...

## Nutrition Education

Does your school offer opportunities for nutrition education? Yes \_\_ No \_\_

If so, in what manner is this education administered? \_\_\_\_\_

## Nutrition knowledge

Do you feel that this student has a general understanding what healthy serving sizes are? Yes \_\_ No \_\_

Don't know \_\_

Please explain: \_\_\_\_\_

Does this student know how to read the nutritional content on food labels? Yes \_\_ No \_\_ Don't know \_\_

## Food Intake

Generally, what meal items are available for the student?

\_\_\_\_\_  
\_\_\_\_\_


Does this student generally eat the items available? Yes \_\_ No \_\_ Don't know \_\_



# ATTEMPTS

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- ❖ Proposal to IRB
- ❖ Approaches and Contacts
  - School District #14
  - Individual Tribal Members
  - Tribal Council Suggestion
- ❖ Denied Proposal



# DATA ATTEMPTS

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## ❖ Data Sets

- UNC Carolina Population Center
  - National Longitudinal Study of Adolescent Health
- Center for Disease Control
  - National Health and Nutrition Examination Survey NHANES

## ❖ Smaller articles and studies

# LITERATURE REVIEW

## ❖ Articles and Studies Found...

- Cunningham-Sabo, L., Snyder, M., Anliker, J., Thompson, J., Weber, J., Thomas, O., et al. (2003). Impact of the Pathways food service intervention on breakfast served in American-Indian schools. *Preventive Medicine*, 37S46. doi:10.1016/j.ypmed.2003.08.007.
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- Gittelsohn, J. (2006). Psychosocial Determinants of Food Purchasing and Preparation in American Indian Households. *Journal of Nutrition Education and Behavior*, 3-9.
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- Jackson, M. (1993). Height, weight, and body mass index of American Indian schoolchildren, 1990-1991. *Journal of the American Dietetic Association*, 93(10), 1136. Retrieved from Academic Search Premier database.
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- Miller, P. (1998). Hunger and food commodities on Montana's seven Indian reservations. *Journal of Poverty*, 2(3), 35-51. Retrieved from Social Work Abstracts database.
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## Study One

**Background** This article examines two Native American populations in Sacramento and Round Valley, California and their usage of supplemental food programs.

**Instruments** A cross-sectional survey as used to conduct this study in the form of an interview.

**Variables** Variables measured were:  
Level of familiarity with Supplemental Food Programs and Participation.  
Reasons for non-participation of Supplemental Food Programs  
Food Preference                      Nutritional advice usage and availability

**Sample** The sample used in this study was a total of 80 families. 40 resided in Round Valley and 40 from Sacramento. All were Native Americans

**Results** The study found that the families from Round Valley utilized USDA Food commodities and were concerned that the staples that were provided were highly processed and contained large amounts of sodium, sucrose, and fat. Families in the Sacramento states that the primary source of supplemental food sources were food banks and food closets. They were concerned that the food that was provided to them were highly sweetened and high in fat.

**General Discussion** We also wanted to study Native Americans; however, we wanted to study Native American Adolescents.



### Study Three

Background	This article examined a school-based diabetes prevention program.
Instruments	Anthropometry, 24-h dietary recall and 2 questionnaires, at baseline and follow-up were used to conduct this study.
Variables	Variables:  Anthropometric status  Dietary intake  Psychological factors
Sample	The sample used in this study was Native American students from 3 <sup>rd</sup> , 4 <sup>th</sup> , and 5 <sup>th</sup> grades. A total of 122 students.
Results	The study found there were significant increases in dietary intention, dietary preference, knowledge, and dietary self-efficacy and in the curriculum knowledge score between baseline and follow-up.
General Discussion	We also wanted to study Native Americans; however, we were looking at children from 6 <sup>th</sup> to 12 <sup>th</sup> graders. Variable: Dietary intake psychosocial factors and parent questionnaires.



# CONCLUSION

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- ❖ Issue is relevant.
- ❖ Literature on this specific topic is lacking.

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