## RIDGE 2007/08 EXECUTIVE SUMMARY

TITLE: Implementing strategies that increase healthy food consumption in local grocery stores on a Northern Plains Indian reservation

INVESTIGATOR(S): Blakely Brown and Tracy Burns

BACKGROUND OF STUDY: The contemporary American Indian diet is high in refined carbohydrate, fat and sodium and low in fruits and vegetables. Proliferation of fast food restaurants and convenience stores on or near reservations encourages consumption of high-fat, high-sugar foods. Research shows that if tribal members were to eat healthier foods, diet-related diseases such as type-2 diabetes, heart disease and obesity, may decrease. Small reservation stores frequently do not stock a full range of food (especially fresh fruits and vegetables), providing instead snack and convenience foods. Having community members identify strategies to improve the food environment of reservation stores can be the first step in implementing healthier food purchases and intakes in tribal members living on rural reservations.

METHODS: This project is implementing the community-based strategies identified in the Year 1 RIDGE grant. These strategies are being implemented in a local grocery store on a Northern Plains Indian reservation for the purpose of increasing tribal member awareness and purchase of healthy foods that are now available in the store. University of Montana IRB approval was obtained for the study to survey and interview adolescents and adults living on or near the reservation who shop at the local grocery store, and measure the acceptance and purchase of healthy foods that are now available in the store.

Subject description: The targeted population in the project are adolescents and adults (≥10 yr old) living on or near the Northern Plains Indian reservation. The participants are being recruited for the study while they are shopping at the local grocery store. The survey respondents are being asked to answer questions about their age, education level, annual salary, gender and ethnicity and are participating in food taste tests and cooking demonstrations. They are answering survey questions about which of the promoted foods they would likely purchase, or not purchase and how much they like, or don't like, the Healthy Stores point of purchase labels and educational materials (e.g. posters, recipe cards, and flyers) that have been created for the project. Approximately 98% of the subjects are American Indians.

<u>Recruiting subjects for the project</u>: The on-site project director and a Tribal Health clinic employee recruit subjects to the project through word of mouth and at the grocery store.

<u>Surveys and Measurements</u>: All survey measurements are taking place at the local grocery store. Seven survey instruments are being used for the project. These instruments are described below.

**Customer Demographic Survey**: Project staff approach and ask in-store shoppers to complete this 7-item survey, and invite them to participate in taste testing promoted food items. The demographic survey asks customers to provide anonymous information for their age, gender, ethnicity, tribal affiliation, education and income levels. After completing the survey the shopper can then participate in a food item taste test.

**Customer Evaluation Taste Test Survey:** This self-administered, 3-item survey is completed by the grocery store customers participating in cooking demonstrations and/or taste tests of various promoted food items. The survey questions ask the taste test participant to rate how much they liked the food they tasted, whether or not they would buy the food and an open-ended question asking ways the cooking demonstration/taste test could be improved. Incentives such as chip-clips, and recipe card packs are given to the taste test participants after they fill out the

customer evaluation form. To date, 170 people have stopped by the taste test table and of these, 126 people completed the taste test surveys. At the end of the project, 200 people will have completed the taste test surveys. Preliminary data show 92% of the taste test participants reported liking the food or liking the food very much; and 82% of those surveyed were either considering purchasing, or would definitely buy the promoted food item.

**Process Evaluation Taste Test Survey:** This process evaluation survey is being completed several times during the intervention by the on-site project staff. This survey instrument assesses the reach and fidelity of the healthy food strategies. Preliminary data show 71% of the shoppers had seen the Healthy Stores shelf labels; 43% were purchasing the food because they saw the shelf label while 26% purchased the food "often" or "almost always" because they saw the shelf label. Specific foods items showed 52% purchased baked vs fried, chips because they saw the shelf label; this was also the case (e.g., seeing the shelf label) for 45% of the people purchasing 100% whole wheat bread vs white bread, 31% of the purchases for 10% or less ground hamburger vs. regular hamburger and 37% of the purchases for 1% skim milk vs regular milk.

Intervention Exposure Evaluation Survey: This survey assesses the reach and fidelity of the Healthy Store project from the perspective of the grocery store customer. The project staff administers this survey to randomly selected grocery store customers throughout the intervention. The survey asks the customers whether or not they have participated in the taste tests, if they have seen the Healthy Store Project point of purchase labels and poster information, if they have heard the radio ads for the project, if they received any project incentives and how they liked, or did not like, the Healthy Store Project. Preliminary data for intervention exposures showed 47% of the shoppers had read the Healthy Stores poster which gives nutritional information about the promoted foods in the store and 55% had heard the radio ads promoting the Healthy Stores project and foods.

**Mass Media Process Evaluation Survey:** This survey evaluates the fidelity of the intervention audio and visual communication materials as well as the dose of these materials provided to the community. The mass-media log is completed once per each intervention phase (n=9). These data will be reported at the end of the project.

**Evaluation of Store Environment Survey:** This pre-posttest survey evaluates the availability of specific food items and shelf labels and reports these data at the end of the project.

**Nutrition Environment Measures Survey:** This pre- and posttest survey determines changes in the food environment of the reservation store and reports these data at the end of the project.

FINDINGS/DISCUSSION: The preliminary findings show the Healthy Stores project has been well received by tribal community members. Although the project did not assess dietary intake in the grocery store shoppers participating in the taste tests and other surveys, data indicate shoppers like the taste of the healthy foods and are purchasing them. Future studies could assess dietary intake of local shoppers or implement a Health Stores project targeting increased intake and sales of food assistance program foods, such as those in the WIC program.

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