

ANNUAL REPORT

PROJECT NO: BL-K321

TITLE: An Educational and Marketing Campaign to Disseminate Evidence-Based Knowledge of Hard White Wheat to School-Aged Children, Parents, Teachers, Food Service Professionals, and Registered Dietitian Nutritionists (RDNs)

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ACCOMPLISHMENTS:

The purpose of this project is to disseminate the results of the research from the last two years and to provide education to a variety of audiences about the health benefits of wheat, and the inclusion of whole wheat, particularly Hard White Wheat (HWW), to support national health guidelines for whole grain consumption. The target audiences include elementary students, parents, teachers, school food service professionals, and Registered Dietitian Nutritionists (RDNs). The intention is to significantly improve their knowledge of the nutritional benefits of HWW, and significantly increase their awareness of children's preference for wheat products made from HWW. This will be accomplished after the implementation of a school based curriculum, trainings for school food service professionals, and a social media campaign for RDNs.

Specific Objectives:

1. Develop and deliver a curriculum targeted for 3rd and 4th grade school aged children that also educates parents and teachers in select Idaho schools.
2. Develop and deliver a training on the benefits of wheat products made from HWW to be adapted for school food service professionals in the National School Lunch Program and adapted for RDNs in the state of Idaho.
3. Develop a social media campaign and deliver it to RDNs in the state of Idaho to increase knowledge of different wheat varieties and young children's preference for HWW.
4. Deliver the adapted training and develop educational materials for RDNs and parents who are involved in Special Supplemental Nutrition Program for Women, Infants, and

Children (WIC) to increase awareness of nutritional benefits and available products using HWW.

A substantial amount of work has been completed to meet the objectives.

Objective 1) Develop and deliver a curriculum targeted for 3rd and 4th grade school aged children that also educates parents and teachers in select Idaho schools.

- Educational curriculums on the health benefits of wheat have been development.
- Two 4th grade classes in Moscow, Idaho were taught a one hour lesson about wheat using an adapted curriculum (November 2016). An estimated 40 children were present.
- A previously developed curriculum was adapted and presented at the Post Falls Boys and Girls Club (September 2016). Ten children were present ranging in age from 6-12 years.

Objective 2) Develop and deliver a training on the benefits of wheat products made from HWW to be adapted for school food service professionals in the National School Lunch Program and adapted for RDNs in the state of Idaho.

- Educational curriculum on the health benefits of wheat have been development for schools food service professionals and other populations.

Objective 3) Develop a social media campaign and deliver it to RDNs in the state of Idaho to increase knowledge of different wheat varieties and young children's preference for HWW. A number of activities have been completed to bring the health benefits of wheat and different wheat varieties to the awareness of the public and RDNs including;

- A newspaper article on Idaho wheat was written for and submitted to the Coeur d'Alene Press,
- Representative Caroline Nilsson Troy has an assignment to Idaho's Agricultural Affairs Committee. A letter was written and sent to her in support of the USDA's decision to require the National Lunch School Program to make at least half of all grains served whole. The letter encouraged further promotion of Idaho wheat to the National School Lunch Program to further stimulate Idaho's economy, while bringing Idaho's rich whole wheat and enriched wheat products to the rest of the country.
- Four articles have been written for the Idaho Academy of Nutrition and Dietetics Blog:
Article 1: "Whole Grain Healthy" (September 29, 2016).
Article 2: "The Shape of Food and the Influence of Children's Preferences" (October 21, 2016).
Article 3: "Wheat Varieties to Jazz Up Your Life" (November 10, 2016).
Article 4: "Wheat Varieties and the Influence on Children's Preference and Intake" (November 17, 2016).
- Handouts were created and distributed regarding the health benefits of wheat to students from North Idaho College that are members of TRIO and low-income.

- Presented research at the Society of Nutrition Education and Behavior Conference (SNEB) on children's reported preference and intake of various shapes of wheat products (July 2016).
- Developed and taught a lesson on the use of whole wheat to assist in lowering hypertension (September 2016).
- Presented research at the Food and Nutrition Conference and Expo (FNCE) to include the impact of color differences and repeated exposure on children's intake of whole grain wheat (October 2016).
- Photos and videos taken of adapted recipes to highlight the preparation of wheat products, which reinforce consumption and health benefits of different wheat varieties.

Objective 4) Deliver the adapted training and develop educational materials for RDNs and parents who are involved in Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) to increase awareness of nutritional benefits and available products using HWW.

- WIC-Education Board "Whole Grain Healthy" developed as educational material for RDNs and WIC participants in Panhandle Health District (October 2016).

PROJECTIONS:

While a substantial amount of work has been conducted in the last few months to disseminate information regarding the health benefits of wheat, including uses of HWW, to support national efforts for whole grain consumption, continued work is planned. A curriculum has been developed for elementary school-aged children and delivered in a few schools. Plans for the spring are to deliver the curriculum in various schools in Idaho and collect data on children's knowledge change. In addition, a curriculum for food service professionals has been drafted and will be finalized for delivery to schools in the spring. Focus groups with elementary school teachers are scheduled to obtain information about interest in and efficacy of the Bread in a Bag curriculum. A pilot of a preschool education curriculum has been drafted and will be delivered in the Child Development Lab. A WIC-Education Board will be created and delivered to Idaho Public Health in Lewiston, Idaho. A presentation will be given during the week of the Cereal Schools visit and an Ideas Page is in the development process.

PUBLICATIONS:

- Smith, B., Deobald, C., Worden, S., Keeney, L., & Ramsay, S. Eliminating Color Differences in Whole Grain Bread Prepared with Hard Red and Hard White Wheat: Application for Sensory Studies. *Journal of the Academy of Nutrition and Dietetics*, 2016, 116(9), A50.
- Worden, S., Keeney, L., Smith, B., Tsao, L., & Ramsay, S. Taste Preferences of Whole Grain Bread and Tortilla Products in Young Children: A Comparison of Hard White Wheat Versus Hard Red Wheat. *Journal of the Academy of Nutrition and Dietetics*, 2016, 116(9), A32.
- Keeney, L., Ramsay, S.A., Tsao, L.L., & Planck, S. Identification of preferences for bread shapes in young children. *Journal of Nutrition Education and Behavior*, 2016, 48, S49.