

Research Proposal for the Oklahoma Wheat Research Foundation (OWRF)
and
Oklahoma Wheat Commission (OWC)

Title: Value-Added Wheat Product Development – “Overnight Wheat”

Investigator(s): Renee’ Albers-Nelson, Dr. Darren Scott and Andrea Graves, all of the Robert M. Kerr Food & Ag Products Center

Cooperator(s): n/a

Funding History: No previous funding has been received.

Abstract:

Besides the influx of ancient wheats being used in all types of snack and breads and a 2012 proposal entitled, “Value-Added Opportunities and Alternative Uses for Wheat and Barley”, by Dr. N.C. Doty, published by the Agricultural Utilization Research Institute, that mentions wheat being used as a cat litter, there have not been many new exciting wheat products brought to the marketplace. One popular cereal grain product that has grown in recent years, gaining popularity first on Pinterest, is “overnight oats”. While oats retain a reputation of possessing a high nutrient value and helpful components to combat cholesterol, the idea of the consumer taking the time to make such food products is interesting. The panic buying of consumers during the COVID-19 quarantine indicated gluten-free products are not as completely popular with consumers as believed. Why couldn’t whole wheat grains be used to produce an “overnight wheat” product similar to the “Quaker Rolled Overnight Oats”?

Objective(s):

- (1) Determine if wheat can be used to create an “overnight oat” product.
- (2) Determine which OSU wheat varieties have the best flavor profile for such a product.

Procedures:

Trial and error product development procedures will be followed, with experimentation in some grinding/milling of the wheat grains to see what works best. Determine if gluten proteins will be a hinderance to a successful product outcome. A small internal sensory will be performed to make quick assessment of test results.

Timelines:

Research will begin in July of 2020 and will be completed by June of 2021.

| Month | Work |
|-------|--|
| 1-2 | Determine marketability and find/purchase supplies |

| Month | Work |
|--------------|---|
| 3-6 | Work in lab on product development technique |
| 7-8 | Small internal sensory for likeability |
| 9 | Small volunteer consumer panel |
| 10-12 | Present results to board and begin initial marketing effort for a successful product. |

Justification: Producing a new, novel wheat-based product will draw the consumer focus back to wheat, its nutrition and history of being the main vegetable protein source for humans on the planet. This is all good for the entire wheat-chain.

Report of Accomplishments: n/a

Budget:

| Supplies | Cost |
|----------------------|-------------|
| Food Processor | \$1,000 |
| Coffee grinder | |
| Flavors | |
| Wheat seed | |
| Sensory Room | \$700 |
| Salary | |
| Renee' Albers-Nelson | \$0 |
| Dr. Darren Scott | \$0 |
| Andrea Graves | \$0 |
| Total | \$1,700.00 |

Relation to Other Research: Determining ways in which to add value to the grain industry is part of the mission of the Robert M. Kerr Food & Ag Products Center.

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Requested funding level: \$1,700.00

Principal Investigator



April 20, 2020

Renee’ Albers-Nelson

Date

Principal Investigator



April 20, 2020

Darren Scott

Date

Principal Investigator



April 20, 2020

Andrea Graves

Date

Department Head



April 20, 2020

Roy Escoubas

Date

OCES Assistant Director


Randy Taylor Apr 24, 2020

Apr 24, 2020

Randy Taylor

Date