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## Development of gluten-free/milk-free french bread

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Approximately 6% of children and 4% of adults in the United States (US) have food allergies. Milk allergy is reported to be one of the most common food allergies affecting as high as 7% in the US. Celiac disease affects approximately 1% of the US population. Autism is estimated to affect over 673,000 in the US. Celiacs are required to be on a gluten free diet for life and are recommended to eliminate milk from their diet. The same recommendations are made for autism. The gluten grains identified are wheat, oats, barley and rye and any by-products or cross-bred grains of these products. Foods containing milk and milk by-products include those with casein, whey, curds, and glycomacropeptide (GMP). Since most meals contain some type of bread product, a study of several local specialty stores and groceries to establish the availability of gluten-free food bread that were also milk-free was performed. Of the bread products available only couple products were also milk-free. All the bread products were found in the freezer and contained ice particles. Additionally, the only types of bread were bagels and sliced bread. An earlier study revealed gluten-free bread products was the most unsatisfactory of all gluten free products. The conclusion of search for gluten free breads that were also milk free was that there was a need to develop a desirable bread product. Two gluten-free milk-free French breads were developed comparable to wheat French bread. Several gluten-free flours and combination gluten-free flours were tested using the Rapid Visco Analyzer (RVA). Texture, color, microbiological analyses and gluten testing procedures were performed. General and target sensory population studies were performed. The non-Celiac population results revealed marginal acceptability. The Celiac population sensory study rated the gluten-free milk-free breads as acceptable. Intent to purchase both gluten-free loaves of bread was rated acceptable.

## Biography

Annette C Bentley has obtained MS degree in Medical Education from the University of Medicine and Dentistry of New Jersey in 2003. She has also obtained a MS degree in Food Science from Louisiana State University in May of 2013. She founded and serves as the President of the American Celiac Society. She has published number of articles in the Journal of General Psychology and the Who Sprue (American Celiac Newsletter) the Lifeline (CSAUSA newsletter) and the Eucharistic Ministry. She has done many presentations at conference throughout the world.

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