Per capita consumption of sauerkraut in the U.S. has exhibited a continuously declining trend, while per capita consumption of fresh cabbage has had a healthy increase during the last decade. The consumption trends of cabbage reflect today’s consumers’ strong interest in fresher and more exiting and complex food products. The incorporation of fresh cabbage to bagged salads and growth in away-from-home eating (which affects coleslaw consumption) are thought to be major factors to the increase in fresh cabbage consumption (Stanford, 2004). In contrast, sauerkraut sold in the U.S. market today is not that different from the sauerkraut made in the past.

In response to consumer desire for new products, Roberts (2002) developed for market testing various new sauerkraut formulations through the addition of savory ingredients to cabbage kraut in different amounts and blends. The new sauerkraut formulations were screened for consumer acceptance through a series of small sensory evaluation panels, and six formulations were found to be the most favored in the initial testing, including sauerkraut mixed with the following ingredients in concentrations indicated
in parentheses: garlic (1%), onion (30%), dill seed (1%), jalapeño peppers (10%), green peppers (20%), and both onions and jalapeño peppers (25% and 5%, respectively). In collaboration with Roberts, a wide-scale consumer study was conducted in 2003 to determine which of the six new sauerkraut blends would most likely be successful in the consumer market and to formulate marketing strategy recommendations.

Given that three-fourths of the total U.S. sauerkraut consumption is concentrated in the Midwest and the East, five major cities and their suburbs in these areas of the United States were selected for the study, including New York (NY), Philadelphia (PA), Cincinnati (OH), Chicago (IL) and Detroit (MI). Following the mail survey, an in-depth sensory evaluation was conducted in Ithaca, New York.

What We Learned About Sauerkraut Consumers

Sauerkraut has a large consumer market base. According to the survey, three out of every four individuals surveyed have had sauerkraut in the 12 months prior to the survey and, therefore, are identified as “sauerkraut consumers.” Sauerkraut consumers tend to be concentrated in the older age groups and are more likely to identify themselves as being of European descent. According to a USDA report, in proportion to their population shares, both men and women over the age of 40 are strong consumers of cabbage in its different forms, compared to younger consumers; and whites consume 91 percent of all sauerkraut, while Asians and Hispanics consume very little (Lucier and Lin, 2002). Contrary to the findings in the USDA study, results from this survey did not show that males are more likely to be sauerkraut consumers than females, and the effect of higher sauerkraut consumption among higher income consumers is not evident.

However, consumption frequency is very low even among sauerkraut consumers. Most (76 percent) only eat sauerkraut once a month or less often. Consumption of sauerkraut takes place mostly at home, with 60 percent of sauerkraut consumers indicating they usually
eat sauerkraut at home, and another 17 percent having had sauerkraut both at home and away from home. There was not a particular “key” type of food with which sauerkraut is consumed at home, and most sauerkraut consumed at home was bought at a retail store. Special events, such as fairs and festivals, sit-in restaurants and hot dog stands are indicated by consumers as locations where they eat sauerkraut away from home. Different types of sausages, pork, Reuben sandwiches and Polish/German dishes are the types of foods with which sauerkraut is commonly eaten away from home. Appetizers and salads, although only mentioned by a few, constitute interesting applications to explore for product development.

Among the six new sauerkraut formulations presented in the survey, the three receiving the highest interest among sauerkraut consumers were: sauerkraut with onion (47 percent of respondents indicated “interested” or “very interested”), sauerkraut with garlic (38 percent), and sauerkraut with dill (27 percent). Consumers who do not eat sauerkraut currently (non-consumers) are not a target market for new sauerkraut products. Eighty percent of non-consumers indicated no interest in any of the new formulations. Individuals identified as non-consumers of sauerkraut in this survey often indicated aversion to fermented, pickled, sauerkraut or cabbage-derived products and will not be persuaded to try new sauerkraut products.

Consumer Response to the New Sauerkraut Formulation

The three sauerkraut formulations that received the highest degrees of consumer interest – sauerkraut with onion, sauerkraut with garlic, and sauerkraut with dill – were tested for taste by a sensory evaluation panel. The panelists had to qualify as sauerkraut consumers – someone who had eaten sauerkraut at least once in the past year. Among the three products tested, the sauerkraut with garlic formula has the highest potential to succeed in the market. It received high ratings for overall acceptability, appearance and flavor, and high purchase intention results. While the overall acceptability and flavor ratings were high for the
sauerkraut with dill formulation, the ratings for its appearance were lower, especially by the younger panelists. However, the purchase intent results were favorable for this formula in spite of the somewhat objectionable appearance. Therefore, before introducing the sauerkraut with dill formula to the market, product developers need to explore ways that might improve the appearance of this sauerkraut formulation.

Although sauerkraut with onion generated the highest interest among the mail survey consumers, it was not well accepted by the sensory evaluation panelists. The statistically lower ratings assigned to sauerkraut with onion by panelists in different age groups could indicate an unfavorable market perspective for this formulation.

Promotion of the new flavors should focus primarily on younger consumers (under 34 years old). While many panelists are interested in the new sauerkraut formulations (73 percent indicated the new flavors are “exciting” or “interesting”), the younger panelist group exhibited a higher degree of enthusiasm towards the new sauerkraut formulations. Moreover, to promote an increase in sauerkraut consumption and to market the new formulations, it will be advantageous to widely promote the health benefits of sauerkraut and new uses for it. Many of the panelists (74 percent) indicated that they were very likely or somewhat likely to increase consumption of sauerkraut if there were any health benefits.

References


* The complete report of *Marketing Opportunities for New York Sauerkraut Products* by Sandra Cuellar and Wen-fei Uva can be found at [http://hortmgmt.aem.cornell.edu/](http://hortmgmt.aem.cornell.edu/) or by contacting Wen-fei Uva at WL32@CORNELL.EDU.

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