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To: R. D. Kinser

Date: March 26, 1991

From: C. S. Hayes

Subject: KGF Visit

Frank Gullotta and I visited the KGF Technology Center in Glenview, Illinois on Friday, March 7, 1991. We were the guests of the Product Evaluation Division of KGF. The division is managed by Pat Beaver (Associate Director) and consists of seven sections (Research Kitchens, Sensory Testing - KGF Headquarters, Sensory Testing - KGF Technology Center, Taste Fundamentals, Applied Mathematics and Consumer Fundamentals Research).

Upon arrival at the Technology Center, we were met by Dr. James Andrade, Section Manager of the Applied Mathematics and Consumer Science sections. Dr. Andrade is a physiological psychologist and his sections design and conduct fundamental studies aimed at integrating consumer needs and perceptions into the product and package development process.

Dr. Andrade shared some very interesting and thought-provoking consumer studies that suggest that people are not particularly good at evaluating tastes and smells. The results of these studies support research findings from our laboratory that indicate that people are not good at evaluating flavor differences, particularly when the differences are small. The methods that his group have developed to address the complex issues surrounding the quantification of sensory, cognitive and behavioral factors as they relate to the human evaluation and acceptance of KGF products were quite impressive.

Following our visit with Dr. Andrade, we met with Dr. Pam Scott-Johnson, also a physiological psychologist, and a Senior Research Scientist in the Taste Fundamentals program. Dr. Scott-Johnson is conducting studies aimed at addressing the fundamental mechanisms involved in the perception of taste. Her work is currently directed toward a better understanding of the processes by which fat affects taste perception. Toward this effort, she is examining the electrophysiological responses of the chorda tympani nerve of the rat to various fats and fat substitutes.

The importance of Dr. Scott-Johnson's work for gaining a fundamental understanding of the role of fat in taste perception was apparent. The possibility of collaborative studies in areas that would be of mutual interest to PM and KGF was discussed. For example, it is possible that Dr. Scott-Johnson's technique could be extended to also investigate the vagus, glossopharyngeal and trigeminal nerve responses to tastants that would be of mutual benefit to PM and KGF.

Our project is currently in the process of purchasing a new computer system for our laboratory. Therefore, one of our objectives in visiting with Dr. Scott-Johnson was to evaluate her new Brain Wave computer system. Upon evaluation, the Brain Wave system appears to be a very good system for recording and analyzing electrophysiological responses in animals. However, it does not appear to be well suited for recording and analyzing human evoked potentials. The Neuro Scan system we have been evaluating appears to be better suited to our needs.

Our visit concluded with a delightful tour of the Sensory Testing and Research Kitchen facilities. Fortunately for them, but to our dismay, they had just concluded their cheesecake testing. Overall, the visit was both interesting and informative, and we are looking forward to further interactions with our Kraft colleagues.

C. L. Hayes

cc: R. Carchman
J. Charles
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