

Dairy Foods Can Promote Healthy Aging

By Sharon Gerdes

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The first baby boomers turned 65 in 2011. As more of the boomer generation reaches retirement age, the number of consumers 65-plus in the United States will burgeon from 40 million in 2010 to 72 million in 2030. Similar statistics can be seen around the world, with the highest percentages of seniors in Japan and Western Europe, and the highest population of seniors in China, whose citizenry swelled to 132 million people age 65-plus in 2011.

One of the many challenges that seniors face is muscle wasting, also known as "sarcopenia," from the Greek word meaning "poverty of the flesh." After age 40, adults can lose muscle mass at a rate of up to 1% a year.

"In the future, sarcopenia will be known as much as osteoporosis is now," said Dr. Roger Fielding, director, Tufts Nutrition, Exercise Physiology and Sarcopenia Laboratory, Boston, who estimates that roughly 10% to 20% of seniors are at risk of losing some of their independence because of sarcopenia.

The dairy industry has been exploring the role of high-quality dairy protein to slow this muscle loss. As part of this effort, the U.S. Dairy Export Council and the Dairy Research Institute conducted several market research studies to examine the elderly's perceptions of "healthy aging" and to determine which dairy foods— and which messages about the role of protein and muscle health — would appeal to seniors.

Seniors should eat more protein

Research from the 2011 International Whey Conference held in Chicago suggests that the elderly may need higher levels of protein to maintain muscle mass, and that protein is more efficiently used by seniors when its intake is spread more evenly throughout the day. Stuart Phillips, McMaster University, Ontario, suggests that seniors consume from 1.2 to 1.6 grams of protein per kilogram of body weight per day (up from the current 0.8 gram recommendation), and that they consume doses of 20 to 25 grams to maximize response. Stuart emphasized whey proteins, which are high in leucine, for muscle benefits.

Dairy-based beverages are an excellent way to add dairy protein to the diet of seniors, and both whey protein and milk protein concentrates and isolates function well in beverages. The

advertisements for Ensure Muscle Health from Abbott Laboratories have helped to raise awareness of the role of protein and muscle health. A concept screen, conducted in summer 2011, found that the food "Chocolate Pudding Enhanced with Milk Protein" scored high on Purchase Interest, Liking and Ability to Solve a Problem. A nostalgic "Bread Pudding for the Ages" scored higher with adults 55-plus on Most Likely to Use. Adults age 55-plus might also like the appeal of cottage cheese, both in a cottage cheese spread and as an alternative dressing in a "Satisfying Pasta Salad." Formulas for these products can be found on the www.InnovateWithDairy.com website.

Marketing messages that resonate

Food and dairy companies that want to tap into the growing market for healthy aging products need to market to boomers, based on their needs, not their age. Fortunately, this group is less price-sensitive when it believes that healthy foods will deliver a relevant and credible benefit. The Dairy Research Institute is developing new regulatory reference documents that address "healthy aging" and "protein throughout the day." These documents discuss the scientific background and levels of protein needed for relevant claims.

Focus groups conducted in late 2010 revealed that a universal concern among the elderly is the loss of independence. Older adults in three groups, ages 45 to 54, 55 to 64 and 65 to 74, shared that strong bones, strong muscles and strong joints comprise part of the quintessential formula for healthy aging, along with diet and exercise that would help them achieve their ultimate goal of being independent, healthy and vibrant in their golden years.

A subsequent online qualitative messages test of adults ages 46 to 65 found that broad statements about dairy protein and maintaining muscle were most appealing. The single most popular message was "Protein from dairy helps to build and maintain the muscles that support your skeletal system and keep you mobile as you age." The message that was most believable was simple and straightforward: "Protein from dairy helps to build and maintain muscle."

A consumer protein attitude, awareness and usage study completed in late 2011 showed that informing consumers is one key to senior acceptance. Vikki Nicholson, senior vice-president global marketing, U.S. Dairy Export Council, Arlington, Va., said, "Interests and attitudes increase among women age 65-plus once informed of the benefits of whey protein. Men age 65-plus stand out because of their interest in perceived cholesterol-lowering properties of whey."

There is a strong case for more dairy protein to maintain muscle health in foods targeted to seniors. Other promising areas for dairy ingredients in the healthy aging arena include: lactose in low-glycemic formulations; permeate to enhance flavor and as a source of minerals for bone health; and bovine galacto-oligosaccharides for digestive health.