

Black Females Absorb Calcium More Efficiently

Compared to their white counterparts, young black women enter adulthood with stronger bones, according to a new ARS study. This difference may explain why black women have lower rates of developing osteoporosis later in life. The study examined 89 girls—51 white and 38 black—ages 5 to 16. The black girls absorbed calcium more efficiently and formed new bone at a faster rate. The findings suggest that recommended calcium intakes may need to be tailored to particular groups. Moreover, none of the 89 girls met recommended daily calcium intakes: three to four servings of calcium-rich foods for children ages 6 to 10, increasing to four to five servings at age 11. *Steven Abrams, USDA-ARS Children's Nutrition Research Center, Houston, Texas; phone (713) 798-7000.*

Jasmine Blocks Sprouting of Stored Potatoes

Jasmine fragrance could waft away the problem of spuds that sprout in the storage bin. ARS has patented this use of jasmonates, the compounds that lend aroma to jasmine flowers and perfumes. Sprouting lowers potato quality, as consumers know if they've ever kept store-bought spuds in the drawer too long. In large potato storage facilities, sprouting causes multimillion-dollar losses. Only one sprout-inhibiting compound is commercially available. But, ARS scientists found that jasmonates performed just as well, delaying sprouting for months. *Edward C. Lulai, USDA-ARS Red River Valley Potato Research Laboratory, East Grand Forks, Minnesota; phone (218) 773-2473.*

ARS Method Wins OK to Ship Florida Carambola to Japan

ARS researchers have helped turn carambola, a fruit from southeast Asia, into a profitable Florida crop that now appears headed to Japan. Carambola can be eaten fresh by itself or as a sweet, succulent accent for salads. When eaten dried, the star-shaped cross sections of the fruit also

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Carambolas, Arkin variety. (K5735-7)

make a tasty novelty food. An ARS scientist helped develop the most popular cultivar, Arkin, from seed he collected in Malaysia in 1972. But Florida growers couldn't ship carambola to California, a state where many Asian immigrants have fond carambola memories. The reason: No approved method existed to keep Florida carambola from carrying hitchhiking Caribbean fruit flies that could threaten California citrus. But in October 1989, an ARS-developed cold treatment won approval. It involved holding the fruit at 34°F for 15 days (later reduced to 12). California shipments began almost immediately. By 1992, they totaled 800,000

pounds valued at over \$1 million. Then Hurricane Andrew struck, devastating the crop. It's recovering, and Florida's largest carambola packer—Brooks Tropicals, Inc., in Homestead—projects shipping about \$250,000 worth to California and Arizona in 1995. Soon, Florida carambola may show up in Japan. Earlier this year, Japan approved their importation after they undergo ARS' cold treatment. *Walter P. Gould, USDA-ARS Subtropical Horticulture Research Station, Miami, Florida; phone (305) 238-9321.*

Red Yeast Could Put Salmon in the Pink

Farm-raised salmon need carotenoids, vitamin A-like compounds, to develop the desirable pinkish color. Now ARS scientists have found that strains of a carotenoid-making red yeast can be grown on what's left after making ethanol from corn. The leftovers include thin stillage, condensed distiller's solubles, and corn gluten feed. The main carotenoid made by the *Phaffia rhodozyma* yeast is astaxanthin. This pigment puts the pink in flamingoes and stream trout, as well as farm-reared salmon. Further research could make the yeast a natural, less expensive astaxanthin source compared to shrimp byproduct meal in U.S. aquaculture and to synthetic astaxanthin in Europe, Chile, and Japan. The Food and Drug Administration is considering a petition for using *Phaffia* to make astaxanthin. *Timothy D. Leathers, USDA-ARS National Center for Agricultural Utilization Research, Peoria, Illinois; phone (309) 681-6377.*