Calcium Intake in the United States from Dietary and Supplemental Sources across Adult Age Groups: New Estimates from the National Health and Nutrition Examination Survey 2003-2006

Adequate lifelong calcium intake is essential in optimizing bone health, so this study used recent data from the National Health and Nutrition Examination Survey to quantify variation in calcium intake across adult age groups and to relate age-associated changes in calcium intake with energy intake. The goals were to assess differences in dietary calcium intake between supplemental calcium users and nonusers and to evaluate associations between age and calcium density in the diet. The analyses included data from 9,475 adults whose diets were assessed using 24-hour recalls and supplement use via questionnaire. Trends in median intakes for dietary calcium, total calcium, and energy across age categories were assessed using survey analysis methods. Nutrient density was represented using calcium to energy intake ratios. Although supplemental calcium use and calcium density were highest in older age groups, they were not sufficient in meeting recommended levels. The authors concluded that new approaches to increasing frequency and level of calcium supplement use and enhancing calcium density in the diet may be necessary to reduce osteoporosis risk among older Americans.

See pages 687-695.

Pulga (Flea Market) Contributions to the Retail Food Environment of Colonias in the South Texas Border Region

This is the first study to examine pulgas (flea markets) as an alternative food source for colonia residents, and provides preliminary data on food availability in this unstudied element of the retail food environment. Five pulgas were identified for study by local informants. Two separate teams of two promotores (indigenous community health workers) conducted observations, wrote field notes, and surveyed vendors in each pulga. The pulgas make available to colonia residents a variety of culturally important and appropriate foods, including imported Mexican goods and traditional Mexican and Mexican-American food items, such as prepared dishes and ready-to-eat items. Initial results indicate the potential importance of pulgas to the retail food environment of colonia residents. Thus, the authors conclude that it is important for policy makers and local practitioners to be aware of the full set of available retail food options and that further research on the retail food environment in largely Mexican-American and Mexican-immigrant locations such as South Texas should establish how often residents shop at pulgas and what items they purchase.

See pages 705-710.

Home Gardening Is Associated with Filipino Preschool Children's Dietary Diversity

Dietary diversification through home gardening is a sustainable strategy that can address multiple micronutrients deficiencies. This cross-sectional study aimed to determine the association between home gardening and the dietary diversity of preschool-aged children. Households with children aged 2 to 5 years were surveyed from Baras and Angono in the province of Rizal, Philippines during January 2008. Food security was determined based on the number of unique food groups consumed during the past 24 hours. Around 52.5% of children were from households with a fruit and/or vegetables garden. Children from households with gardens were significantly more likely to eat vegetables more frequently. The presence or absence of a garden was not significantly associated with food security. Having a home garden was positively associated with the child's diet diversity and with frequency of vegetable consumption.

See pages 711-715.

Increasing Vegetable Intake in Mexican-American Youth: A Randomized Controlled Trial

Despite the health benefits, vegetable intake in youth remains below recommended levels. The purpose of our study was to compare two methods for increasing vegetable consumption. It was hypothesized that participants randomized to both the exposure-only and the pairing condition would increase their vegetable consumption and increase the variety of vegetables consumed. A total of 78 Mexican-American middle school–aged children from a charter school in Houston, TX, were randomized to a pairing condition during Spring 2009 semester. Children in the pairing condition were provided a preferred taste (peanut butter) paired with vegetables weekly at school during a nutrition class for 4 months. Children in the exposure-only condition received vegetables weekly during a nutrition class that covered the same materials as the pairing condition. After 4 months, the pairing condition participants demonstrated significant increases in vegetable consumption as well as variety of vegetables eaten when compared to the exposure-only condition.

See pages 716-720.