

Keast DR. Food sources of choline in the diets of U.S. older adults: NHANES, 1999-2004. Presented at the 31st National Nutrient Data Bank Conference in Washington, D.C., May 2007.

Background: Choline is important for brain function, and might lower serum homocysteine in older adults. DRI recommendations include Adequate Intake (AI) levels for choline, but choline is not currently in the food consumption survey databases used to produce nationally representative intake estimates. **Objective:** To assess intakes and sources of choline in diets of U.S. adults >50 years. **Methods:** USDA Standard Reference, Release 19, food composition data were accessed to complete a choline database. Total choline and amounts from sources of choline contained in survey foods were calculated using this database and USDA Food and Nutrient Database for Dietary Studies 2.0 recipes. Choline intakes (mean \pm SE) from foods among gender, age, and race-ethnic groups were estimated using SUDAAN for adults >50y in the 1999-2004 NHANES 1-day sample (n=6,243). **Results:** Intakes for men vs. women were 378 \pm 7 vs. 326 \pm 4, and 311 \pm 7 vs. 241 \pm 5 mg/day for those age 51-70 and >70y, respectively. Choline intakes were lower in blacks than whites of all gender-age groups. For 51-70-yr-olds, intakes from meat/poultry/fish, eggs, legumes/vegetables/fruits, and dairy products were 32, 20, 15, and 15% of total choline for whites, and 38, 23, 14, and 8%, respectively, for blacks. For >70 years, these 4 food groups contributed 29, 18, 17, 18% and 34, 24, 17, 12% of total choline intakes in whites and blacks, respectively. **Conclusions:** Choline intakes from meat/poultry/fish and eggs decrease with age in older adults. Eating recommended amounts of these foods will be important to meet the AI for choline in adults >70 years.