Appendix D: Demand Index Calculations

Demand indices are calculated using annual per capita consumption (1979-99), annual deflated retail prices (1979-99), and a demand elasticity (app. table 1) in the following steps (Purcell):

1. To obtain an estimate of the annual percentage change in retail price associated with the corresponding change in per capita consumption, the annual percentage change in per capita consumption is divided by the demand elasticity.
2. The "demand constant price" is calculated by adjusting the deflated retail price by the percentage change in price from step 1.
3. The percent difference between the actual deflated retail price and demand constant price is calculated.
4. Demand indices are then calculated by first setting the 1979 index equal to 100. The 1979 index is adjusted by adding the percentage difference calculated in step 3 for each year.

Appendix table 1—Retail demand elasticities

Broilers	Turkeys	Egg	Pork
-.5308	-.6797	-.1452	-.7297

Source: Huang, K.S. 1985. *U.S. Demand for Food: A Complete System of Price and Income Effects*, Technical Bulletin 1714, U.S. Department of Agriculture, Economic Research Service.