This study used the infrastructure established by USDA’s Nutrient Data Laboratory (NDL) for the National Food and Nutrition Analysis Program (NFNAP). NFNAP incorporates prioritizing foods and nutrients for analysis, statistically valid sampling plans, qualified analytical laboratories, and a rigorous quality control program. Samples of white, maitake, oyster, and enoki mushrooms were collected from 12 retail outlets around the country.

**Sampling:**
- State where samples were procured were selected proportional to the state population (US Census, 2005).
- Samples collected within states were selected proportional to the county population.
- Sample Consolidated (Metropolitan Statistical Area) where samples were collected were selected proportional to CMAA population.
- Retail outlets with sales data were selected in 12 prime markets (Figure 1).
- Mushrooms were not available in retail outlets in the sampling plan, so samples were obtained from fall ginseng, mushrooms were not found in all of the retail outlets, so additional samples were obtained from two growers.
- Samples were obtained under existing contracts and cooperative agreements managed by USDA’s Nutrient Data Lab (NDL). All mushrooms were analyzed raw. White mushrooms were also analyzed stir-fried and microwaved, so that retention factors could be developed and used to calculate roasted values for other mushroom varieties.

**Methods:**
- **Analysis Methods:** The methods used were those of AOAC international as follows:
  - **Protein** was analyzed by Kjeldahl (990.03); **fat** by acid hydrolysis (954.02), moisture by vacuum oven (934.01) and ash by gravimetric measurement (943.01).
  - **Dietary fiber** was analyzed by the enzymatic-gravimetric method (991.43).
  - Minerals were analyzed by ICP (990.27).
  - **Thiamin** and **riboflavin** were analyzed by the fluorometric method (342.23 and 970.65, white, maize, and potato), **niacin**, and **vitamin B6** were analyzed by microbiological methods (944.13, 945.41 and 945.15). Folic acid was done by the enzymatic method (989.09).
  - **β-glucan** was determined by enzymatic spectrophotometric analysis (Magazine "Mushroom and Yeast Belt Bunyan Across Procedure", 2005).

- **Mushroom Council** was also able to use the data to promote mushrooms to the public and to provide information on the nutrient content of mushrooms to its members.

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