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**ABSTRACT BOOK**

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Francesco Cubadda, Federica Aureli,  
Silvia Ciardullo and Marina Patriarca

*Department of Veterinary Public Health and Food Safety*

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## **T40 ESTIMATION OF THE DIETARY INTAKE OF CADMIUM BY A BRAZILIAN TOTAL DIET STUDY**

Roseane Pagliaro Avegliano (a), Vera Akiko Maihara (b), Fábio Fernando da Silva (c)  
(a) *Coordenadoria de Assistência Social, COSEAS, Universidade de São Paulo, São Paulo, Brazil*  
(b) *Instituto de Pesquisas Energéticas e Nucleares, IPEN-CNEN/SP, São Paulo, Brazil*  
(c) *Empresa Junior de Informática, Matemática e Estatística, IME Jr, Universidade de São Paulo, São Paulo, Brazil*

Estimates of toxic element dietary intakes from Total Diet Studies (TDS) have already been carried out in many countries. However, this kind of study is still rare in Brazil. In the present study, the cadmium concentration was determined in 30 food groups of a Market Basket in São Paulo State. The food consumption data source used was a Household Food Budget Survey (IBGE-POF 2002-2003), which contained 5,441 food items. Seventy-one foods were grouped in 30 composites, which resulted in a Market Basket. The criterion of selection was food consumption above 2g/day/person. The food items were collected, prepared table-ready at restaurants of the University of São Paulo (raw, washed, peeled and cooked). The inedible parts were discarded. After preparation, the food items were weighed and grouped in accordance to the percentage that they represent in their food composites. Each food composite was then homogenized in a domestic blender, frozen and freeze-dried for about 48 hours. Thereafter, the composite was again homogenized in a blender. Cadmium was determined by Graphite Furnace Atomic Absorption Spectrometry. Certified reference materials (NIST SRM Total diet, SRM Oyster Tissue, SRM Bovine Liver, SRM Apple Leaves) were analyzed to evaluate accuracy. The sea fish group presented the highest Cd concentration (50.6 ng/g wet weight), followed by tuberous vegetables (30 ng/g ww) and biscuits groups (13.3 ng/g ww). The daily intake of Cd was estimated at 1.4 µg, which does not represent any risk to the population studied.