

ANALYSIS OF CONSUMPTION DATA FROM IBGE FAMILY BUDGET SURVEY AND ITS IMPACT ON THE QUALITY OF DIETARY RISK ASSESSMENT

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Consumption data currently available in Brazil comes from the Family Budget Survey (POF), carried out by the Brazilian Institute of Geography and Statistics (IBGE). Such data is the base to estimate the food consumption that, in turn, is part of the dietary risk assessment calculation for pesticide residue in food. The quality of this data has direct influence on the quality of the risk evaluation for the consumer in Brazil, indicating how realistic its outcome is. The main idea behind the IBGE survey, as its name implies, is to know the average families' budget intended for food, taking into account just what was purchased for residential consumption [1]. It is therefore a budget survey, rather than consumption and its data does not exactly reflect the Brazilian reality. The discussion of this work is based on POF 1995/1996 [1], yet the issues brought herein are relevant also for the survey carried out on 2002/2003 [2]. The purpose of this work was to perform an analysis of consumption data currently available in Brazil, indicating the points that can impact the dietary risk assessment and suggest alternatives for improvement. The methodology applied was the literature review. Two important points about the POF are herein discussed: the data interpretation and the difficulty of obtaining the consumption value of each raw material from the consumption information of a formulated product. In the former case, interpretation problems may occur in identifying the consumption of crop which have different varieties, for instance, bean, banana or orange. In such cases, it is recommended to select the area of higher total consumption (sum of all varieties) and adopt this value for the intake calculations. This is because the point is not the consumption of each variety, but the total consumption of the crop. In the latter case, the difficulty stands in determining the consumption of a raw material when it is part of a recipe composed by several ingredients, because it is necessary to consider the proportion of each one of them in the final product. For a formulated product, the analysis is more complex because it is not simple to define how much each ingredient in the mixture represents, so that to define how much of each crop was ingested. In this case, it is necessary to have default recipes for the main formulated products. This procedure already exists in the United States, where a computerized database containing the recipes is made available by DEEM-FCID, translating the foods of the consumed form into the related data *in natura* [3]. The consumption data currently available allows extrapolation for the raw material consumption only in extremely conservative way, resulting in an unrealistic dietary risk assessment. The development of a database with standard recipes is required, in order that, crops presented in formulated products can be quantified correctly when identifying their total consumption. The new POF 2008/2009, which is currently being carried out by IBGE, will represent a more faithful consumption data of the population, since it is considering the total effective food consumption (and not just the purchased and residential, as previously). It is hoped that this new survey allows a deeper analysis of the Brazilian consumption, perhaps even allowing a risk assessment by age group, or acute risk assessment. The detail level, with which this new data will be published, is what will help define the quality of the dietary risk assessments that will be made in Brazil in the coming years.

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