ICCN Poster Presentations

Food processing and human health

Consumer understanding and use of Nutrition Information Panels

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Providing adequate information on food labels to enable consumers can make an informed choice is one of the objectives of the Australian New Zealand Food Standards Code. In the recently revised Code several labelling changes have been introduced including mandatory nutrition information panels (NIPs). To assess the impact of these labelling changes, Food Standards Australia New Zealand (FSANZ) has conducted research on consumer attitudes towards and knowledge and use of food labels. NIPs were one of the most widely used label elements with over two thirds of consumers reporting their use, either most of the time or when buying a food for the first time. The majority indicated that NIPs were clear and easy to understand and they were sure they could trust the information. NIPs were mostly used when selecting breakfast cereals followed by dairy products, then fats, butters and spreads. The study demonstrated that most consumers did not have difficulties in reading and interpreting the nutrient information contained in NIPs on single products. However, when comparing two similar products using the NIPs, consumers generally did not consider the overall nutritional value of the foods, focussing on one nutrient only, primarily fat. Given the choice, many consumers opted for a product slightly lower in fat over one where the difference in another nutrient was greater in magnitude and significance. This suggests that consumers might have difficulties assessing the overall nutrient composition of a food and in judging the relative differences between nutrients. More consumers used the 'per serve' column than the 'per 100g' column when selecting the 'healthy choice' between two NIPs for similar products. Where the serve size was not the same, this may have led to unintended choices as the 'per 100g' column should be used for product comparison. The survey findings have indicated that for consumers to benefit from the labelling provisions contained in the Code, they need to be able to understand and interpret the food labelling information.

Fortification of Turkish traditional bread with vitamins-minerals and evaluation in vulnerable group diets

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Bread is one of the staple foods for Turkish people to provide daily recommended dietary allowances. An average 350-400 grams/day of bread is consumed and about 50% of daily energy is taken from bread. In low economic income groups, this ratio is about 60-70%. The adverse effects of vitamin and mineral deficiencies in individuals have been clearly shown by much national and local research. Vulnerable groups such as babies, growth-developing children and lactating expectant women are strongly affected from nutrient deficiencies. In this context, traditional bread is fortified and nutrified with vitamins-minerals according to recommended dietary allowances, dietary patterns, determined nutrient deficiencies of public, process losses and daily bread consumption levels of adults and 1-18 years of age individuals. In the study vitamins C,B1, B2, B6, B12, folic acid, niacin; minerals of iron, zinc, calcium is added to type 650-750 wheat flours by ultra micro encapsules. The formulations were optimized according to the organoleptic properties. The chemical analyses were carried out for the final product and provided to adults and 1-18 years of age individuals for consumption. Vitamin and mineral levels were determined respectively by HPLC and atomic absorption spectrophotometry. Widespread consumption of nutrificated bread it is expected to overcome the vitamin-mineral deficiencies related to unbalanced and insufficient nutrition in our country.