

Consumer Perception on Dairy Foods and Development of a Food Safety Cloud for the Dairy Industry in Sri Lanka

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Abstract

The means for consumers to get food safety information are limited and, therefore, the present research focuses on evaluating consumer perception on safety of dairy food products and presenting data via a Food Safety Cloud. Survey data were analyzed, and a web database was developed to present the results. Out of 120 participants, the majority (52.9%) consume dairy foods 2 to 3 times weekly with the highest preference (49%) being cheese. A substantial portion of participants (41.5%) demonstrated awareness of non-communicable diseases attributed to food additives. Gender and education significantly influence ($p < 0.05$) consumer awareness of nutritional composition in dairy products. Age and education significantly affect ($p < 0.05$) the final choice in purchasing dairy products. Types of food additives, their safety level, recommended amounts, and the side effects of consumption were analyzed for all dairy products and the data were fed to Ruhuna Food Safety Cloud. The Cloud enables consumers to access scientific information on food additives through a QR code for informed decision-making before purchasing dairy products. Additional research is required to validate the Food Safety Cloud. Ruhuna Food Safety Cloud should further be expanded by incorporating information on diverse food categories such as fish and meat products, bakery products, fruits, vegetables, and beverages.

Keywords: *Consumer Perception, Dairy Products, Food Additives, Cloud Computing, Food Safety Cloud*