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Sri Lankan consumer perspective and prospective behaviour on anti-diabetic functional foods and nutraceutical products

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## **Abstract**

Herbal plant extracts and their isolated bioactive compounds have gained much popularity in the management of diabetes mellitus. Delivering their benefits across functional foods or nutraceuticals will offer great future prospects. This comprehensive survey evaluated the perspective, preference, and prospective consumption behaviour, on antidiabetic food products and nutraceuticals, by the Sri Lankan consumers and provides an insight into identifying the novel food types with higher consumer preference for further product developments. The data analysis and the interpretation were based on the ANOVA and cross-tabulation analysis. The survey data revealed that 27% of the respondents were moderately aware about antidiabetic food options and more than half of them (51.56%) preferred antidiabetic products in food form rather than the nutraceutical form. Further, 85.43% of the respondents preferred consumption of new food products incorporated with plant materials traditionally known to reduce the risk of diabetes. The majority of the respondents favoured consuming antidiabetic foods as a snack product (49.82%), followed by the other different types such as noodles (20.14%) and bakery products (19.11%) as a breakfast food, ready to serve fruit drink (33.75%), ready to serve herbal drink (23.34%), tea (32.49%) as beverages, yoghurt (37.10%), curd (23.23%) as dairy products. The nutrient content of the product (response with 25.27%) and the taste (24.56%) were the major factors that the respondents indicated as they may consider when selecting a novel food item in the market. It was further inferred that consumers mostly prefer the tablet form if given as a nutraceutical (38.80%). According to the Chi-Square test (at p<0.05) the age of the respondents was the major determinant of the consumer awareness of the anti-diabetic foods/beverages, as well as their interest in purchasing anti-diabetic foods or nutraceuticals in the market. According to findings, the majority of respondents preferred to consume functional foods in antidiabetic form than nutraceuticals, and these findings will be helpful in deciding on novel functional food types for future development.

**Keywords:** Antidiabetic, Consumer's preferences, Functional foods, Medicinal herbs, Nutraceuticals

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