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Nutrition and cognition

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Cognitive ability refers to any mental process that involves symbolic operations like perception, memory, thinking, awareness and capacity for judgment. Ageing, nutrition and health status are the important factors affecting cognitive ability. A preclinical or sub clinical phase of declining cognitive function may eventually result in neurodegenerative diseases like dementia, alzheimer's and parkinson's. The possibility that nutritional manipulation may protect against cognitive decline is an inviting prospect. Vitamin B6, folate and B12 play a positive role in cognition, whereas the role of Vitamin E and iron is controversial and that of zinc may be adverse. Polyphenols (esp. anthocyanins) have shown positive impact on cognition; however the role of dietary choline is inconclusive. Glycemic index of food controls glucose handling in the brain and n-3 fatty acids contribute to neuronal plasticity and integrity thus enhancing cognition. However diets high in Trans and saturated fats adversely affect cognition. Human epidemiologic studies provide convincing evidence that dietary patterns practiced during adulthood are important contributors to age-related cognitive decline and dementia risk. Data on the cognitive abilities in relation to nutritional status and food intake especially among younger age groups is sparse. Such data would enable the healthcare specialists to identify the problem early in life and formulate suitable preventive lifestyle strategies. Detailed information, that will be provided in the presentation on the role of nutrients/nutraceuticals/foods would certainly create awareness and/or clarify the relevant concepts in the minds of enthusiastic scientific fraternity.

Biography

Neha Vaidya is a research scholar at College of Homescience, Nirmala Niketan, University of Mumbai. She has completed her Masters in Foods and Nutrition (public health nutrition) from The M.S.University of Baroda with 'A' grade and B.Sc (foods, nutrition and dietetics) from University of Mumbai with distinction. Her Masters dissertation was funded by UGC. She worked as a project coordinator on an DST funded All India Coordinated research project on Anemia at Agharkar Research Institute, Pune for 8 months and also has teaching experience of a year. She has published an article in International Journal of pharmaceutical technology and presented paper at conference held by Nutrition society of India

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Use of sour cassava starch to bake a Costa Rican bread of high consumption

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Sour cassava starch is used in South America to produce traditional breads. Sour cassava starch has a good expansion capacity which provides a strong elastic structure to hold gases during bread making which allows baking without gluten. Costa Rica did not use it although it is a fresh cassava producer and exporter. Sour starch was obtained after a process of 30 days natural fermentation and subsequent solar dehydration. A consumer study was designed to know the "Costa Rican bread preferences" in order to reproduce gluten free breadusing cassava sour starch as a raw material. An Experimental design was carry out using different types of mixtures to produce a bread using sour starch in a 50% bases. Yogurt and egg were protein substitutes in this recipes, rice flour was used to improve texture. Nine formulas were tasted in theconsumer study. Texture analyses were tested for each product. An analysisof"cluster" was doneto determineconsumerssegments. Consumerswere grouped into foursegments, according to loavesliking. Segment 1grouped9consumers and itwas discardedby beinganon-representative group. The secondgroup represented26consumerswhoshowed rejectionfor the loaves and itwas discarded.Segments3 and 4were formed by32 and 37people respectivelyandwere selectedto determine themostwelcomedevelopment. Most of the breads were considered neutral in the degree of liking consumers showed. From these two consumer clusters, according to the highest degree of liking, a formula was chosen to continue in an optimization process.

Biography

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