

R. Liyanage, S.B. Nawaratne, I. Wickramasinghe and K.K.D.S. Ranaweera

Department of Food Science and Technology, Faculty of Applied Sciences, University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka

The effect of food habits and attitudes on micro-sleepiness was attempted to study simultaneously with development of a food product to combat. Data were collected from Sri Lanka Police Traffic Division and from 250 respondents using a pre-tested questionnaire representing drivers (especially highway drivers), private and public sector workers (shift based) and cramming students (university and school). Questionnaires were directed to respondents to fill independently and analyzed statistically. Results exposed that 76.84, 96.39 and 80.93% out of total consumed rice for all three meals, which leads to obtain a higher glycemic meal. Having two hyper glycemic meals before 14.00 h was identified as a cause for micro-sleepiness. Peak level of road accidents were witnessed at 14.00 - 20.00 h (38.2%) and intensity of micro-sleepiness was also falling at the same period (37.36%). While from 14.00 to 16.00 h was the peak time, 16.00 to 18.00 h was the least; again it reappearing to some extent from 18.00 to 20.00 h. Even though respondents expressed that peak hours of micro-sleepiness is 14.00-16.00 h, according to police reports, peak hours fall in between 18.00-20.00 h. Out of the interviewers, 69.27% strongly required to evade micro-sleepiness and keen to spend LKR 10-20 on a commercial product. Sine age-old practices connected to suppress micro-sleepiness were time consuming, recent respondents (51.64%) like to have a quick answer via a product like rapid drink. Finally it was concluded that morning and noon food habits may reason for micro-sleepiness and dinner may affect for both, natural as well as micro sleepiness due to heavy glycemic load of food. According to the study, micro-sleepiness can be categorized in to three zones such as low-risk zone (08.00-10.00 h and 18.00-20.00 h), manageable zone (10.00-12.00 h), and high-risk zone (14.00-16.00 h).

Keywords: Food habits, Glycemic load, Micro-sleepiness, Road accidents