

## ABSTRACT

**Introduction:** Non communicable diseases (NCD) are chronic debilitating diseases rapidly increasing globally including Sri Lanka and are leading cause of deaths resulting in premature deaths. A considerable reduction of NCD could be achieved by controlling their preventable common risk factors including unhealthy diet.

Snacking is one of the unhealthy dietary practices especially among adolescents. Contents of a food label support the consumer to take informed choices about the food/drink items they would consume. Since the behaviour adopted in adolescence remain indefinitely in life, adolescents should be a primary target group for intervention strategies in promoting food label use on making healthier choices of food/drink snacking items for their consumption. In the scarcity of studies, this study was carried out so as to assess the use of food labels in making choices on packaged food/drink snacks among adolescents and its associations with socio-demographic characteristics, snacking behaviour, knowledge and attitudes on food labels.

**Methodology:** A community-based cross-sectional study was conducted among in Grade 12 students of type I AB government schools in the district of Colombo in July 2011. Mixed schools and schools with < 150 Grade 12 students were excluded. The sample was selected using a three stage, stratified, cluster sampling method to represent male and female students in four schools in the district of Colombo.

A self-administered questionnaire was used to assess socio-demographic data, snacking behaviour, use of food labels on making choices of packaged food/drink snacks (categorised into 'proper' and 'improper' label users based on a score given for label reading frequency, attention paid to contents in a food label and their usual practice in selecting a snack based on correct interpretation of food labels), knowledge on food labels and attitudes towards media strategies used on food labels. Data analysis was done by using statistical software package SPSS 17<sup>th</sup> version.

**Results:** The study sample was 542 with the majority (56.3%) aged 17 years with a male: female ratio of 1:1. Majority were Buddhists (96%), Sinhalese (98%) and of Commerce stream (30%). Almost all (98%) received pocket money from their parents/guardian, males and females in equal proportions. Of them, 61% spent it mostly on snacks. All students consumed snacks at least once a week while 49% did so at least

three times a week. Biscuits (85%), noodles (66%), chocolates (61%), cola drinks (77%) and milk (71%) were the most commonly consumed packaged food/drink snacks. They consumed packaged snacks predominantly at school (54%) and with friends and siblings (80%) but based on decisions taken all by themselves (88%). Frequent label readers were 74.5% ('always' or 'most of the time'), with a significant female predominance ( $p < 0.05$ ). Over 74% paid attention always or most of the times to the brand name, price and nutrition panel. Over 60% were able to select the better option when asked to make a choice between two packaged snacks. However, some did it for incorrect reasons such as attractive label, incorrect health claims. Mean score obtained by the sample for their use of labels was 23.9 marks. The majority (70%) were identified as 'improper' users of food labels.

Majority (84%) showed 'good' knowledge on the information given on food labels, a higher proportion seen among females and frequent label readers ( $p > 0.05$ ). But their knowledge lacked in some areas such as best before date, %RDA, natural products, permitted colours, etc. Students showed negative attitudes towards marketing strategies used on food labels such as better quality of the snack with labels indicating known brand names, quality packaging and high price.

A higher proportion of 'improper' label use was seen among those with poor knowledge on food labels, males, purchasing power, unhealthy snacking behaviour and negative attitudes towards media strategies. However, only attitudes on brand names and imported snacks were found to be significant. Although frequent snacking was associated with improper label use, it was not associated with overall label use.

**Conclusions:** Adolescents frequently snack on unhealthy packaged snacks. Despite having good knowledge on food labelling and relatively positive attitudes towards media strategies on food labels, they are not being used it in making choices of their packaged snacks.

**Recommendations:** School-based programmes need to be implemented to improve the use of food labels in making choices of packaged snacks by the adolescents and improve their knowledge and transform their attitudes towards food labels.

**Key words:** Non communicable diseases, snacking, food labels, adolescents.