

Objective: To determine the prevalence of LCT genotypes associated with LI and to determine whether those genotypes are associated with dairy intake, circulating 25(OH)-vitamin D concentrations and biomarkers of type 2 diabetes.

Methods: Fasting blood samples were drawn from a total of 649 Caucasians aged 20-29 years from the Toronto Nutrigenomics and Health Study, for genotyping, plasma 25-OH vitamin D, fasting glucose and insulin. Dairy intake was assessed using a one-month, 196-item food frequency questionnaire. Analysis of covariance was used to determine the association between genotype and dairy intake, 25-OH vitamin D, as well as biomarkers of type 2 diabetes.

Results: Approximately 33% had the CC genotype at position -13910, which has previously been associated with LI. The CC genotype was significantly associated with lower circulating 25-OH vitamin D ($p=0.0001$). This association was due, at least in part, to low total dairy intake ($p=0.003$), particularly skim milk in this population ($p=0.0008$). No significant association was observed between the -13910C>T gene variant and biomarkers of type 2 diabetes. Total dairy intake was inversely associated with fasting glucose ($p=0.04$); however, the association was attenuated after adjusting for age, sex, and BMI ($p=0.08$).

Conclusion: The LCT genotype that has been implicated to LI is associated with lower plasma levels of vitamin D, which could impact the risk of certain chronic diseases.

14. Observing the differences of obesity pattern and food choices between super market and public market consumers in Kandy District, Sri Lanka. (Chamil Senavirathne)

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Introduction: Food systems, both traditional and modern, are fundamentally connected to the health and welfare of society. Furthermore, there are concerns that income growth, urbanization, and supermarket penetration in developing countries may contribute to an “obesogenic” diet transition, particularly increased consumption of energy-dense processed food at the expense of fresh fruits and vegetables and grains.

Objective of the study is to determine the difference of healthy food choices between people who use supermarket and public market in Kandy District, Sri Lanka.

Method: Data was collected from individuals who visit supermarket ($n=214$) and individuals who use public market ($n=124$) during three hours of time. Good pack of those who provided the consent, was assessed by using a check list. Weight and height measurement was taken using standard methods. SPSS 16 version was used to assess the data.

Results: Mean age of supermarket and public market visitors were (45.8 SD (13.9) CI=95%) and (49.5 SD 13.8 CI = 95%). 165 females (73.7%) were in supermarket group while 84 females (67.7 %) were in public market group. 77.2% supermarket visitors and 67.7% public market visitors are regular customers. Vegetable and fruit contain of the supermarket users, are 35.7% and 29% respectively, while 81.5% and 50.8% of public market users have vegetable and fruits in their good pack.

Availability of carbohydrate enriched food in supermarket and public market are 61.6% and 62.1% respectively. In terms of availability of processed meat products, supermarket and public market users are 40.6% and 17.7%. Mean BMI of the supermarket and public market group is 25.4 Kg m^{-2} (SD 4.07) and 24.1 Kg m^{-2} (SD 4.6) respectively. 52.3 % of the supermarket users are overweight while 37.9% of public market users are overweight and obese.

Conclusion: compared to the public market users, supermarket customers likely to contain more unhealthy foods and less amount of vegetable and fruits in their good pack.

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