

## **2. Body Mass index and Health Related Behaviours in a national cohort of 87,134 Thai Open University Students**

Banwell C, Lim L, Seubsman S, Bain C, Dixon J, Sleigh A. (2009)“Body Mass Index and health related behaviours in a national cohort of 87,134 Thai open university students.”

### **ABSTRACT**

**Background:** Thailand is undergoing a health-risk transition with overweight and obesity emerging as an important population health problem. This paper reports on a study of the transition, focusing on ‘lifestyle’ factors such as diet (fried foods, soft drinks, Western-style fast foods) and physical activity (mild, moderate, strenuous exercise, housework/gardening and screen time).

**Methods:** A baseline survey was administered to 87 134 adult students from all regions of Thailand attending an open university.

**Results:** 54% of the cohort was female. Participants’ median age was 29 years. By self-reported Asian standards, 16% of the sample was obese (body mass index (BMI)>25) and 15% overweight at risk (BMI>23–24.9). Men were twice as likely as women to be overweight (21% vs 9%) or obese (23% vs 10%). Obesity was associated with urban residence and doing little housework or gardening and with spending more than 4 hours a day watching television or using computers. The latter occurred among 30% of the cohort, with a population attributable fraction (PAF) suggesting that it accounts for 11% of the current problem. Daily consumption of fried food was associated with obesity, and eating fried foods every second day or daily had a PAF of nearly 20%.

**Conclusions:** These health-related behaviours underpinning the Thai health transition are associated with increasing obesity. They are modifiable through policies addressing structural issues and with targeted health promotion activities to prevent future obesity gains. Insights into future trends in the Thai health transition can be gained as this student cohort ages.

