

income, immigration status) were recorded and associated with HFI level: Food secure (S), low- (L), mild- (M) or severely insecure (SI).

**RESULTS & FINDINGS:** 86% of all households were food secure (S) while 7, 6 and 1% were HFI-L to HFI-SI, respectively. Low prevalence of overweight/obese but more stunted children were observed in M and SI groups as compared to group S. HFI was significantly and inversely associated with socioeconomic status and diet quality in a multivariate analysis. Recent immigrants were twice more likely to suffer from M-to-SI HFI than that observed in no-immigrants.

**CONCLUSION:** HFI- (M-SI) accounts for less than 10% in this population but its impact in children's nutritional status is strongly associated to food access, mainly in domestic immigrant families.

#### P157-03

**MEASURING FOOD INSECURITY IN WOLLONGONG**  
Wan, Azdie; Yeatman, Heather; Condon-Paoloni, Deanne  
University of Wollongong, Wollongong, New South Wales, AUS

This study aimed to establish a standard assessment measure of the extent of food insecurity in Australian communities. The extent of food insecurity in developed nations such as Australia is unclear. The United States Food Security Survey Module (FSSM) was modified to suit local application in Australia. Information on food security, socio-demographic and food shopping patterns was collected through telephone surveys in two Wollongong postcode areas (2502, 2505), NSW. One thousand household telephone numbers were randomly sampled from the telephone directory. Altogether, 296 respondents completed the survey. The adult food insecurity items had reasonable internal consistency reliability (Cronbach's alpha .79). For children's items, analysis could not be computed because there were too few cases. The results indicate that 8.4% households were food insecure. This occurred prior to the current world financial crisis and thus the rate may now be greater. This study suggests that the instrument was easy to administer, suitable and reliable to measure food insecurity at the population level. Future studies of a larger scale are now required to confirm the validity and reliability of this instrument. A well validated measurement and effective monitoring system, is necessary to inform the development of policies to address food insecurity.

#### P157-04

**FOOD AND NUTRITION SECURITY OF HIV AFFECTED HOUSEHOLDS IN NAKURU, KENYA**

Mbugua, Samwel<sup>1</sup>; Andersen, Natasha A.<sup>2</sup>; Cole, Donald C.<sup>2</sup>; Webb, Aimee L.<sup>2</sup>; Sellen, Daniel W.<sup>2</sup>; Njenga, Mary<sup>3</sup>; Karanja, Nancy<sup>3</sup>; Tuitoek, Prisca J.<sup>1</sup>; Yeudall, Fiona<sup>4</sup>  
<sup>1</sup>Egerton University, Egerton, KEN; <sup>2</sup>University of Toronto, Toronto, ON, CAN; <sup>3</sup>Urban Harvest, Nairobi, KEN; <sup>4</sup>Ryerson University, Toronto, ON, CAN

**RATIONALE & OBJECTIVES:** Identify associations among socio-demographic factors and food and nutrition security status of HIV affected households in Nakuru at baseline prior to an urban agriculture intervention.

**MATERIALS & METHODS:** The baseline survey of 154 households with children participating in HIV affected self-help groups included socio-demographic, Household Food Insecurity Access Scale (HFIAS), and Household Dietary Diversity Scale (HDDS) questionnaires. Dietary (24 hour recall) and anthropometric (height, weight, mid-upper-arm circumference and skinfold) measures were collected on an index child aged 2-5 years.

**RESULTS & FINDINGS:** 73% were severely, 24% moderately and 2% mildly food insecure. 34% reported access to land for urban farming. Prevalence of stunting (33%) and underweight (26%) approached national averages

and mean body composition z-scores were negative. HFIAS was statistically significantly correlated inversely with most nutrients. Nutrient intakes and dietary quality (diversity and animal source foods) were statistically significantly positively correlated with body composition (ZMUAC and ZTSF) but not growth (HAZ, WAZ, ZBMI) indices. Backward multivariable regression observed reduced HFIAS with smaller households, and increased education and income ( $r^2=0.18$ ). Higher animal source food intake was associated with reduced HFIAS and higher HDDS ( $r^2=0.07$ ).

**CONCLUSION:** Food and nutrition security was compromised in these HIV affected households.

#### P157-05

**PRIORITIES FOR ATTRIBUTES VERSUS FOOD SECURITY**

Duvenage, Sara S.

Vaal University of Technology, Vanderbijlpark, ZAF

**RATIONALE AND OBJECTIVES:** Food security is of global importance. The purpose of this investigation was to identify the food product attributes of importance during purchasing choice of staples foods. Both the South African food industry and low-income consumers were involved.

**METHODS:** Experts in food product development were identified from the food environment ( $n=32$ ). Structured interviews were conducted.

In a pilot study ( $n=60$ ) low-income consumers were sourced to establish the level of importance perceived for different food product attributes, using a six point hedonic rating scale. Ranking and correlation were applied. These results were tested in three informal and one formal urbanized settlements ( $n=501$ ).

**RESULTS:** The food industry indicated satiety value (65%), meeting of nutrient requirements (65%), affordability (59%) and taste (59%) as the food product attributes most needed by the target consumers. However, affordability (82%), nutrient content (65%) and taste (59%) were indicated as important to industry during food product development.

The pilot study identified 14 attributes, indicating satiety value, packing size, value for money, followed by taste, as most important. During target market testing, consumers with the lowest income indicate satiety value, affordability, taste, product acceptability and convenience as priorities in order of importance, with nutrient content as the attribute of least importance (ranked 14th). Consumers of slightly higher income reported taste, satiety value, appearance, packaging size, convenience and nutrient content in sequence, as priorities, allocating a much higher important to nutrient content (ranked 6th).

**CONCLUSION:** Within a setting of constant hunger, satiety value and affordability were identified as the most important drivers during purchasing choice. Hedonic and related attributes are perceived as "nice to have", applicable only after survival needs are met. It seems that the critical level has been reached for household income beyond which the necessity for nutrient intake fades away under the pressure to survive.

#### P157-06

**FROM UNKNOWN TO THE RECOMMENDED LEVELS OF SODIUM IN THE HOSPITAL MEALS**

Adler, Dorit; Stein, Pnina

Hadassah Medical Center, Jerusalem, ISR

**RATIONALE & OBJECTIVES:** To lead a change in the cooking quality standard of the hospital kitchen staff;

To test the sodium levels of the different meals, pre intervention; and to achieve the recommended levels of sodium in the hospital meals, as the standard in practice.

**MATERIALS & METHODS:** All meal were collected during whole days, blended and sent to food laboratories to test for sodium levels. The results in the regular diet were higher than