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Low fruit and vegetable intakes in older individuals in Northern Ireland

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The health benefits of a high consumption of fruit and vegetables are now well recognised⁽¹⁾ with the result that global recommendations are that adults should be consuming at least five portions of fruit and vegetables daily⁽¹⁾. Reports, however, suggest that intakes in the older population of Great Britain lie below this recommended amount⁽²⁾. The present project aimed to assess current intakes of fruit and vegetables in a large sample of the older population in Northern Ireland.

Names and telephone numbers were obtained for one thousand individuals aged >65 years living in Northern Ireland. Attempts were made to contact all individuals by telephone to assess fruit and vegetable intakes and various demographic and lifestyle characteristics that have previously been found to impact on diet. Fruit and vegetable intakes were assessed using dietary recall for both weekdays and weekend days. Demographic variables included gender, age, marital status (married or not married), living status (living with anyone else or not living with anyone else), region of residence and deprivation score of residence based on residential postcode. Lifestyle characteristics included distance travelled for food shopping, frequency with which individuals received help with food shopping, frequency with which individuals received help with food ocoking, frequency with which individuals had food delivered and frequency with which individuals consumed food out of the house.

Data were gained from 426 (43%) individuals, representative of the Northern Irish older population according to the 2001 census. These individuals reported a mean fruit and vegetable intake on weekdays of 4.02 (sp 1.3) portions, ranging from none to eight portions, where 148 (35%) individuals were consuming five or more portions daily. Mean fruit and vegetable intake on weekends was 4.10 (sp 1.3) portions, ranging from none to eight portions, where 161 (38%) individuals were consuming five or more portions daily. Analysis using regression showed that greater consumption of fruit and vegetables on weekdays was significantly associated with females (B 0.53, P<0.01), younger individuals (B -0.02, P=0.01), and those living in less deprived areas (B -0.01, P=0.04). Greater consumption at weekends was significantly associated with females (B 0.54, P<0.01) and younger individuals (B 0.03, P=0.01).

These data suggest that older individuals in Northern Ireland are consuming less fruit and vegetables than that currently recommended for optimal health. These intakes, however, are higher than those in similar populations in the rest of the UK⁽²⁾, possibly as a result of a greater proximity to farming and agriculture in Northern Ireland resulting in a greater availability and accessibility to fruit and vegetables for the Northern Irish population⁽³⁾. Patterns of consumption are similar in Northern Ireland and in the rest of the UK. Gender differences in fruit and vegetable consumption in the older population have previously been attributed to differences in traditional gender roles⁽⁴⁾, decreases as a result of age have previously been considered a part of general decreases in food consumption as a result of age-related decreases in appetite, taste acuity, gastrointestinal function and energy requirement⁽⁴⁾, and differences dependent on socio-economic status possibly represent the cost of obtaining and preparing fruits and vegetables relative to that of other foods⁽⁵⁾. These findings suggest that interventions aiming to increase fruit and vegetable intakes in older individuals in Northern Ireland should focus particularly on these groups.

- 1. World Health Organisation (1990) Diet, Nutrition, and the Prevention of Chronic Diseases. WHO Technical Report Series no. 797. Geneva: WHO.
- 2. Finch, S, Doyle W, Lowe C et al. (1998) The National Diet and Nutrition Survey: People Aged 65 Years and Over. London: H. M. Stationery Office.
- 3. Safefood (2007) Consumer focused review of the fruit and vegetable food chain. http://www.safefood.eu/global/publications/research%20reports/fruit_and_veg_CFR%20final.pdf?epslanguage=en (accessed October 2008).
- 4. Donkin AJM, Johnson AE, Lilley JM et al. (1998) Appetite 30, 39–51.
- 5. Dibsdall LA, Lambert N, Bobbin RF et al. (2003) Public Health Nutr 6, 159-168.