## The Caroline Walker Trust Student Essay Prize 2010

## Winner: Anvesha Mahendra

M.Sc student – Department of Human Nutrition
University of Glasgow

## **Essay Title:**

Write a memorandum to the new minister responsible for public health in the Department of health outlining, "What you think the top 5 priorities should be for the new government to promote better nutritional health for the population?"

The annual burden of diet-related diseases like obesity, some cancers, type 2 diabetes, cardiovascular disease and osteoporosis to the NHS UK, is greater than £20 billion (Rayner & Scarborough, 2005). A healthy nutritious diet, like a longterm insurance policy could largely prevent this rising burden, but till date no government has given public nutrition policy, a priority on its political agenda. For example, less than 1 per cent of £1.6 billion budget for heart disease is spent on nutritional management (Yuen et al, 2004). With this background, drawing from the past experiences and innumerable expert opinions, this memorandum will propose the top five strategies for the new government, to improve the nutritional health of the population.

The most important priority for the government should be to increase the fruit and vegetable consumption of the population. Higher fruit and vegetable intake is associated with reduced risk of obesity, heart disease, stroke and cancer (WHO, 2000) and NDNS 2004 pointed that, 80% of the population's daily average intake of fruit and vegetable was less than two portions. Based on this evidence, the previous government had introduced the 5 A day campaign across the UK, to encourage the daily intake of five portions of fruit and vegetables. This campaign has been the most noticeable and well invested public health nutrition initiative till date in the UK as seen in a FSA report, which indicated that the awareness regarding the message is as high as 78% (Dowler, 2008). The new government should continue to support this initiative, giving special attention to low income groups who have lower intakes and greater health problems (LIDNS, 2004). It is known that, the low income groups although have awareness, have issues to afford and access fruit and vegetables and the government should support food cooperatives and community gardens to increase the access (Sustain, 2009).

The second area of focus for the government should be in the prevention and management of obesity and related diseases, through reducing the salt, fat and sugar content of processed foods. High salt and fat intake are modifiable risk factors for cardiovascular disease (Clarke & lewington, 2006) and NDNS 2004 points that, a large majority of the UK population consume salt (75% from processed foods); fat and sugar (mainly from alcoholic and carbonated beverages), in excess than recommended levels. A daily intake of 6g of salt (a 3.5g decrease from current levels of 9.5 g) can reduce the CVD risk by 15% (SACN 2003) and a 2% daily reduction of saturated fat can cut-down the risk of heart attacks by 23%

(Mozaffrein et al, 2006). Therefore, the government through legislation, should urge the food industries to be more proactive in their product development, by reducing the portion size and modifying nutritional composition by decreasing energy, sugar, salt and fat content without compromising on the taste, thus balancing the needs of all the stakeholders: the industry, government and the consumers.

The third area of emphasis for the government should be maternal and infant nutrition. There is evidence that, food choices and the nutritional status of a mother during pregnancy is like a forecast to the child's growth, development and health status in the later adult life (NICE, 2008). Based on this evidence, focus should be on aiming for a healthy pre-pregnancy weight and weight gain during pregnancy, which are the important predictors of infant birth weight and health in later life (FSA, 2007). The UK has the one of the highest teenage pregnancies in Europe and about 27% obese pregnant women (British dietetic Association, 2009), which can increase the risk for low birth weight infants and further increase the risk for all chronic diseases. And obese pregnant mothers, compared to their normal peers, have a 1.5 times higher risk of delivering babies with congenital abnormalities (King, 2006). Therefore the government should ensure that, all pregnant women should receive clear and practical nutritional advice from dieticians or registered public health nutritionists, at an early stage of their conception about maintaining a healthy weight and importance of supplementing folate to prevent neural tube defects (CEMACH, 2007). The government should also endorse the FSA and SACN recommendation of folate fortification of cereal products (Gardiner et al, 2009), based on higher benefit than risk (Billie et al, 2007).

Next, the government should focus on breastfeeding promotion. There is explicit evidence that, breastfeeding prevents gastrointestinal and respiratory infections in the infant and breast cancer in the mother, in addition to weight loss (NICE, 2007). Current recommendations inform that "all infants should be exclusively breastfed for the first 6 months of age" (UNICEF, 2000). Due to the past government funded breastfeeding promotion in England and Scotland; breastfeeding rates have increased by 7% in about 5 years (Infant Feeding Survey, 2005). Scotland has changed a law, making it illegal to prevent a child from being milk fed in a public place (Butte et al, 2008). This is a major leap to motivate women to breastfeed without inhibitions in a public place. The government should also continue to support the UNICEF introduced baby friendly hospital initiative, which encourages new mothers to breastfeed (SACN, 2008). The previous government had allocated a fund of £2 million to endorse this initiative, which should be increased and continued by the new

government. But despite such efforts, breastfeeding rates for the first 6 months remain below 35% in the UK (one of the lowest in the world!). The new government should invest more in this area on a national level, because for every £1 per baby, spent by the government to promote breastfeeding, the industry spends £20 per baby, to advertise infant formulas (Bolling et al, 2007). Also the government should monitor the compostion of infant formulas, which are used for older infants by regular self analysis and the keep checks on the formula industry's unwarranted health claims and restrict their advertising (SACN, 2008).

Fourth priority for the government should be to improve the population's low vitamin D status, which is highly prevalent in the UK population, affecting about 34% of young adults and greater than 40% of elderly (NDNS, 2004). Apart from preventing Rickets in children and adults, latest research indicates that it may prevent chronic diseases like heart disease, cancer and multiple sclerosis (Hypponen & Powers, 2007). Vitamin D is important throughout the lifecycle but supplementation emphasis should be on vulnerable groups like women of reproductive age and infants, who have an increased physiological need and groups getting limited sun exposure like the institutionalised elderly and women of Asian and African ethnicities (SACN, 2007). Based on this evidence, the new government should, firstly, invest in a national awareness program educating the public about vitamin D's health importance (Hughes et al, 2008). Secondly, it should rectify the policy gaps of the previous government by extending Healthy start vitamins to all vulnerable groups and not just to women under 18 or on income support (Souberbielle et al, 2008) and national guidelines should recommend vitamin mixtures containing the more potent vitamin D3 and not D2 (Armas et al, 2004). Thirdly, a government appointed expert group should immediately review the evidence related to vitamin D dosage and its relation to chronic diseases (Calvo et al, 2006).

The fifth priority for the government should be to reduce the population's alcohol consumption, which is currently very high, as UK stands 9<sup>th</sup> in the world in alcohol intake (WHO, 2008). Excess alcohol can cause health problems like liver diseases, cancer, obesity and social problems like depression, injuries and loss of work productivity (Babor et al, 2003). The Royal college of Physicians working party has predicted that, just by reducing the alcohol percentage in wine (which is more possible for wine than other beverages) and raising every litre's alcoholic beverages price by 50 pence, it may be possible to cut down 100,000 hospital admissions and significant number of hospital related morbidity and mortality (Ludbrook et al 2010). To reduce alcohol intake, the government should adopt and

implement stringent measures like increased taxation (NICE, 2007), restricting availability by limiting times, conditions (Bertholet et al, 2005) and advertisements of alcohol sales (Huang et al, 2005). Strategies like these can reduce alcohol consumption greatly especially targeting the youth. Also special attention may be required in Northern Ireland and Scotland, where the consumption is much more (IAS, 2007).

Apart from the proposed priorities, the government should also: formulate novel policies to provide incentives like tax-deduction for those, who follow a healthy diet and lifestyle on a regular basis, which could be assessed by non-utilisation of the medical facilities, who are not a burden to the government; invest generously in nutritional research to develop clear and unbiased guidelines especially regulating industry funded research, which could be driven towards supporting false and unethical health claims and most importantly develop a uniform national strategy for the entire UK (Fairweather et al, 2008).

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