

Basis of 5 a day

1. Joyce Hughes (2000) *The case for increasing the population consumption of fruit and vegetables and the evidence for the effectiveness of interventions.*

“Internationally an intake of at least five portions (400g) of fruit and vegetables per day has become an established “healthy eating” message.”

“The scientific basis for recommending an increase in fruit and vegetable consumption is now widely accepted, and there is a broad agreement on the target, i.e. “at least five portions a day” (or roughly, five 80g portions)”.

2. Williams C. *Healthy eating: clarifying advice about fruit and vegetables. BMJ 1995; 310:1453-1455.*

“Before the COMA cardiovascular review group published its report in November 1994 there was no national numerical goals for fruit and vegetable consumption for England, Wales and Northern Ireland. The Scottish diet report in 1993 recommended that Scotland’s population should eat an average of at least 400g of fruit and vegetables (excluding potatoes) a day. This is consistent with the lower limit population goal for fruit and vegetables consumption contained in the WHO report *Diet, Nutrition and the Prevention of Chronic Disease*”. The WHO recommendation was based upon levels of fruit and vegetable consumption in Southern Mediterranean countries with low levels of CHD.

3. Balance of Good Health

The 5 a day message also fits into the Balance of Good Health, the food guide which was developed as a result of the Nutrition Task Force. The quantitative guidelines for the BoGH are based on COMA 1994, recommending an average weekly intake of fruit and vegetables of 102.91 oz (equivalent to 425g per day). The message also contributes to efforts to stem the increase in the prevalence of obesity and overweight, and other dietary goals such as reduced fat intake, increased dietary fibre intake.

4. Study by Khaw et al

Studies from the USA suggested that studies attempting to increase fruit and vegetable intake among the general population are likely to result in a relatively small increase in intake, at least in the short term. However, small increases may have significant impacts on health. The recent study by Khaw et al demonstrates that even a small increase in intake - around 50g, just over half a portion - could still have significant benefits to health. The main focus of the study by Khaw et al was relations between plasma ascorbic acid (vitamin C) and mortality. Plasma ascorbic acid is highly correlated to fruit and vegetable consumption but the authors would not be able to categorically state the relations with portions or the “5 a day” message.

5. Joshipura et al

A recent study among US health professionals (Joshipura et al) found that each 1 portion per day increase in fruit and vegetable intake was associated with a 4% lower risk of CHD and a 6% lower risk of stroke, after controlling for other risk factors. The authors of this study highlighted that relatively few epidemiologic studies have examined the relationship between intake of vegetables and fruit and risk for CHD.