

Dr Verner Wheelock is Managing Director of Verner Wheelock Associates, ([www.vwa.co.uk](http://www.vwa.co.uk)) and also provides a website that promotes healthy eating in schools ([www.healthyeatingschools.co.uk](http://www.healthyeatingschools.co.uk)). For communication please email: [verner@healthyeatingschools.co.uk](mailto:verner@healthyeatingschools.co.uk)

# Verner Wheelock

## Reflections on school meals legislation

Current interest in school meals has been stimulated by claims that today's children will have a life-span which is about 10 years shorter than that of their parents. Furthermore, this is primarily because of the poor nutritional quality of the food consumed by children.

During the past few years, I have been doing an evaluation of the scientific rationale behind various government healthy eating initiatives. In this article, I will present information on the current standards of health of young people. I will also provide a critique of the legislation on school meals.

Table 1 (page 78) shows that, according to the Health Survey for England, the proportion of children aged 1-15 where health is classified by self or carer as "good/very good" has improved since 1995. By 2007, the last year for which values are available, this applied to 95% of boys and 94% of girls. Since 1950, the mortality of children aged 1-14 in the United Kingdom has fallen from 1.4/1000 in 1950 to 0.2/1000 in 2000 (Figure 1, page 78). With respect to food for children aged 5-15, the proportion of children consuming 5+ portions of vegetables has virtually doubled for both boys and girls since 2001 (Table 2, page 78). For all children, the average number of portions consumed has increased from 2.5 to 3.3.

This provides evidence that the general health of children has actually been improving, as confirmed by the increased consumption of fruit and vegetables in children's diet.

### School meals

The implementation of recent nutritional

standards for school lunches has proved to be a huge burden for the caterers. Essentially, it means that detailed records have to be kept of precisely what is used during a menu cycle. Using information on the nutrient content of all the foods and ingredients used, calculations have to be done to determine the amounts of 14 different nutrients present in each meal.

When the Nutrient-based Standards were devised, I conducted a detailed critique which is available on our website. In particular, I pointed out that the Dietary Reference Values (DRVs), which are used as the basis for the Standards, are essentially best estimates. The group that devised the DRVs pointed out that:

"For most nutrients, the Panel found insufficient data to establish the DRVs with any great confidence."

The development of legislation based on the DRVs is a good example of what a World Health Organisation report described as the "nutrient-based approach" which it concluded "is commonly misapplied", and "has led to considerable confusion amongst policy makers in both food and health sectors, as well as among nutrition educators and consumers".

There is wide variation in the nutritional composition of all foods. This depends on age, breed/variety, conditions of production and conditions of storage, to name but a few. The only way to obtain accurate, reliable data is to do a chemical analysis of a sample of the various foods which are used. In practice, this is just not feasible, and so data from sources such as McCance & Widdowson<sup>1</sup> have to be used. Hence, the values used in the calculation can differ significantly from the 'true value' of

the food used in the school meal. For example, the content of fat in minced lamb can vary between 8.1% and 22.8%. Food manufacturers are allowed a tolerance of  $\pm 20\%$  when labelling products which have a fat content above 5%. If we assume the specification of lamb mince is 15%, then in practice the value could legitimately lie between 12% and 18%. Other limitations of the nutritional standards' approach are that it relates to the food which is served, not what is actually consumed.

Recent government Healthy Eating initiatives with regard to school meals required most school caterers to spend valuable resources producing information that, in my opinion, was a waste of time and effort. Most school caterers do a good job and they should be given every encouragement to provide wholesome, nutritious meals that the pupils will find tasty and attractive to eat.

There is no doubt that there are some children whose health is not ideal and who would benefit from an improvement in the nutritional quality of their diet. To address this issue involves identifying those children at risk and to establish the causes of the poor diet. Any strategies designed to overcome the problem would have to consider all aspects of home and background. The school lunch only represents a small proportion of the total food consumed by any young person.

Individual schools should accept the responsibility to encourage health and well-being among pupils and teachers. There are plenty of examples available including my book, "Healthy Eating in Schools".

1. McCance and Widdowson's "The Composition of Foods" book series contains nutrient composition data based on information from the Food Standards Agency's UK Nutrient Databank.

TABLE 1  
**General Health Good/Very Good**  
Aged 1 – 15

	Boys	Girls	%
1995	90	92	
1996	91	90	
1997	91	92	
1998	92	93	
1999	93	94	
2000	92	92	
2001	93	93	
2002	92	92	
2003	93	95	
2004	95	94	
2005	94	96	
2006	94	94	
2007	95	94	

Source: Health Survey for England

FIGURE 1  
**Changes in Mortality of Children Aged 1 – 14 (UK)**

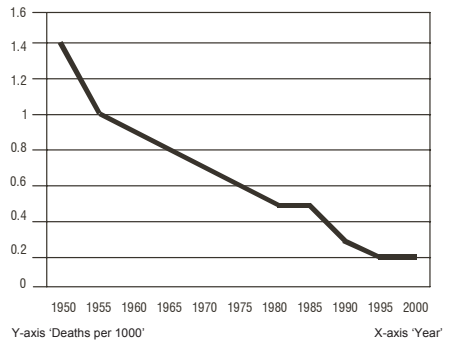


TABLE 2  
**Consumption of Fruit and Vegetables (5+ Portions)**  
Aged 5–15

	Boys	Girls	%
2001	11	11	
2002	12	12	
2003	10	12	
2004	13	12	
2005	18	17	
2006	19	22	
2007	21	21	

Source: Health Survey for England