

A comparison of the food provided and consumed over the period of the Eat Well Do Well (EWDW) pilot

The EWDW project started in 2004 with most schools rolling onto the scheme throughout the year of 2005. This report compares the food provided and consumed by children in May 2005 to September 2006 when the scheme had been running for over a year.

Nutrients analysis of food served in 2005 and 2006 in comparison to the CWT recommended guidelines

Nutrients	Recommended	Food Served 2005	Food Served 2006
Energy (kcal)	> 557	581	659
Fat (g)	< 21.6	<u>25.4</u>	11.9
Saturated Fat (g)	< 6.8	<u>7.2</u>	3.8
Carbohydrate (g)	> 74.2	<u>71.5</u>	106.1
NME Sugar (g)	< 16.3	24.6	13.5
Fibre (g)	> 4.5	4.6	7.2
Protein (g)	> 8.5	20.3	38.3
Iron (mg)	> 3.5	<u>2.6</u>	3.9
Zinc (mg)	> 2.8	<u>1.7</u>	3.4
Calcium (mg)	> 220	237	403
Vitamin A (µg)	> 200	483	393
Vitamin C (mg)	> 12	25	60
Folate (µg)	> 60	61	124
Sodium (mg)	< 600	<u>849</u>	556

Results outside the guidelines are highlighted in red and underlined.

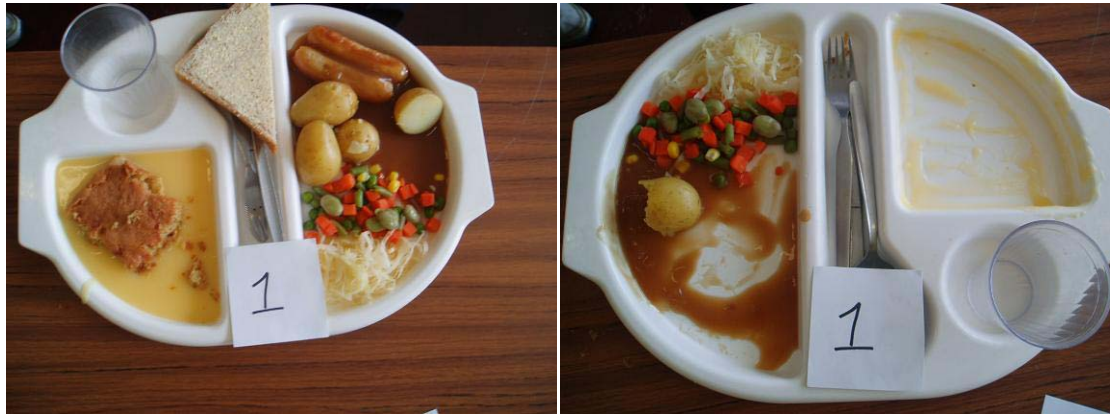
Comparisons between the food served in 2006 to the food served in 2005 highlight improvements in the nutritional value of the food provided by the schools. These improvements in the current 2006 menu have led to the provision of increased amounts of carbohydrates, meaning the food provided in the 2006 menu met the Caroline Walker Trust (CWT) recommended guidelines. The balance of carbohydrate provided during analysis in 2006 had improved, resulting in the level of non-milk extrinsic sugar, which in 2005 was provided at more than 50% of the recommended maximum amount, and in 2006 was at just over 80% of the recommended guideline.

The levels of fat and saturated fat have reduced by more than 50% leading to an improvement with them both being provided within the recommended 37 guidelines. The 2006 menu provided increased levels of the micronutrients; fibre, calcium zinc and folate, making it possible for children to consume these nutrients at levels above the recommended minimum amounts.

The level of iron now provided by the 2006 menu has improved by over 15%, and is now provided at above the recommended minimum amounts that should be served at lunch. The pictures below visibly detail the improvements in the menu. The provision of fresh vegetables and availability of homemade bread made with half white and half wholemeal flour help to provide an increase in the availability of nutrients.

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School Meals 2005



School Meals 2006



In 2005 children made comments that they did not like the vegetables, that they were watery or had a 'funny' texture. Children making these comments did not realise that the vegetables were frozen, but just made comments that they did not like them and so choose not to eat them. These pictures were picked at random and show how the menu has developed and although they also demonstrate that children will often eat the foods they like and leave the rest, they do show that the children are beginning to eat a more varied diet, including some of the vegetables provided.

A comparison of the nutritional values of the food actually consumed by children in 2005 and 2006

Nutrient	Recommended	Average intake 2005	Average intake 2006
Energy (kcal)	< 557	456	400
Fat (g)	< 21.6	20.6	8.1
Saturated Fat (g)	< 6.8	6	2.8
Carbohydrate (g)	> 74.2	<u>54.6</u>	<u>65</u>
NME Sugars (g)	< 16.3	<u>19</u>	12.7
Englyst Fibre (g)	> 4.5	2.6	3.2
Protein (g)	> 8.5	16.3	20.9
Iron (mg)	> 3.5	<u>1.79</u>	<u>1.9</u>
Zinc (mg)	> 2.8	<u>1.34</u>	<u>1.8</u>
Calcium (mg)	> 220	221	291
Vitamin A (µg)	> 200	254	350
Vitamin C (mg)	> 12	<u>10</u>	37.6
Folate (µg)	> 60	<u>35.3</u>	61.5
Sodium (mg)	< 600	<u>624</u>	375

These results highlight that for many areas children are actually consuming an improved diet at lunchtime. The intake of calories has reduced slightly, however there has been an increase of food with higher nutritional values leading to improved intakes of micronutrients. Interestingly, analysis highlights statistically significant increases in the nutrients; zinc, calcium, vitamin A, vitamin C and folate and a significant reduction in fat, saturated fat, sugars and sodium.

However the intake of some of these micronutrients remain below the CWT guidelines and analysis reveals that 49% of the 37 children taking part in the 2006 lunch study actually had intakes of the essential micronutrients; calcium, iron zinc, folate that were below the guidelines.

In summary the quality of the food provided in 2006 had improved upon the 2005 menu, providing fresh vegetables rather than frozen, homemade bread, increased availability of fresh fruit with fruit juice or milk as accompanying drinks rather than squash. The nutritional content of the food served in 2006 had improved for every nutrient assessed and meets the recommended guidelines for all but one nutrient. The only nutrient which was lower than the guidelines was iron, which had improved by 15% on the previous years analysis and was just 11% short of the recommended amount.

The actual food consumed by the children improved to provide more essential micronutrients, however for many nutrients remain below the recommended minimum of what children should be obtaining from their school lunch.