Designed by the food industry for wealth, not health: the ‘Eatwell Guide’

Zoe Harcombe

INTRODUCTION
The Balance of Good Health, a picture of a segmented plate, was launched by the UK Department of Health in 1994. In September 2007, this was relaunched by the Food Standards Agency as the Eatwell Plate. The changes were cosmetic. In March 2016, the Eatwell Plate was relaunched as the Eatwell Guide. Many of the changes were, again, cosmetic (figure 1).

The Eatwell Guide was formulated by a group appointed by Public Health England, consisting primarily of members of the food and drink industry rather than independent experts.

WHAT CHANGED?
The Eatwell Plate became the Eatwell Guide; the knife and fork disappeared; the segment names were tweaked and the images on the plate became drawings, not photographs—looking even less like real food. None of this would have any impact on epidemics of obesity or type 2 diabetes.

The segment proportions changed: starchy foods increased from 33% to 38%; fruit and vegetables from 33% to 40%; ‘milk and dairy’ became ‘dairy and alternatives’ (soya) and almost halved from 15% to 8%; non-dairy protein stayed at 12%, but was renamed as ‘beans, pulses, fish, eggs, meat and other proteins’ (the incomplete vegetarian protein listed first and an ignorance of the difference between a food group and a macronutrient demonstrated).

The purple segment (previously foods high in fat and/or sugar) became (unsaturated) oils and spreads. Unilever’s response was to place adverts in national newspapers to celebrate their ‘dedicated section’.

The indefensible can of cola was removed. The biscuits, sweets, cakes, crisps and chocolate remain, however; moved from the purple segment to be given prominence on the bottom left of the diagram, along with ketchup and ice cream.

EVIDENCE
The primary issue with the Eatwell Guide, as with its predecessors, is that it is not evidence based. There has been no randomised controlled trial (RCT) of a diet based on the Eatwell Plate or Guide, let alone one large enough, long enough and with whole population generalisability.

Dietary advice to base meals on carbohydrates is the consequence of dietary advice to restrict fat. Protein is in all foods—except sucrose (arguably not a food) and oils/lard—and thus tends to comprise ~15% of energy intake. The introduction of a total fat recommendation of 30% of calories was concomitantly a population directive to consume 55% of energy in the form of carbohydrate.1 The fat guidelines were without evidence base2 and the carbohydrate advice was not tested. Not even the hydration message holds water.

The 2015 US Dietary Guidelines4 are conspicuously silent on the subject of total fat. The recommendation appears to have been quietly dropped rather than confessionally reversed. The UK is behind the times.

WEIGHT AND CALORIES
In 2009, in personal correspondence, the Food Standards Agency confirmed that the Eatwell Plate percentages were based on weight. Food weight matters little to the human body. Calories, macronutrient and micronutrient count. Given the vastly different calorie content of 100 g of fruit and vegetables vs 100 g of oils, the plate proportions change substantially when calories are counted (table 1).

Without junk food, 68% of energy intake derives from starchy foods. The fruit and vegetable segment, intended to be the largest, forms just 8–9% of energy intake. The super foods—meat, fish and eggs—form a maximum of 11–12% of the diet, far less if beans and pulses (predominantly carbohydrate) are chosen. Highly nutritious dairy foods comprise just 6–7% of the new plate, while junk food forms 9%.

THE RCT?
Arguably, the high-carb-low-fat diet has been tested on whole populations. In the UK, in 1972, 2.7% of men and 2.7% of women were obese, and 23.0% of men and 13.9% of women were overweight. By 1999, obesity rates had risen to 22.6% of men and 25.8% of women, while 49.2% of men and 36.3% of women were overweight.

There were 800 000 people with diabetes in the UK in 1980, from a population of 56 million—an incident rate of 1.42%.5 The diabetes rate in the UK in 2015 was 6.1%.6

The association between the introduction of the dietary guidelines, and concomitant increases in obesity and diabetes, deserves examination. A number of
recent reviews have suggested a causal connection.8–10

The greatest flaw of the latest public health dietary advice might be the missed opportunity to deliver a simple and powerful message to return people to the diets we enjoyed before carbohydrate conditions convened. But when the who’s who of the food industry were represented on the group, Eat Real Food was never a likely outcome.

Twitter Follow Zoe Harcombe at @zoeharcombe

Competing interests ZH receives income from writing and from two small self-employment businesses: The Harcombe Diet Co and Columbus Publishing.

REFERENCES


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10 Hansen A. Swedish health advisory body says too much carbohydrate, not fat, leads to obesity. BMJ 2013;347:f6873.

Table 1 Calculated from a selection of foods in each category from the US Department of Agriculture all foods database

<table>
<thead>
<tr>
<th>New Eatwell Guide</th>
<th>With junk food included</th>
<th>Without junk food</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per cent in diagram</td>
<td>Per cent calorie intake</td>
</tr>
<tr>
<td>Starchy foods</td>
<td>37</td>
<td>62</td>
</tr>
<tr>
<td>Fruit and veg</td>
<td>39</td>
<td>8</td>
</tr>
<tr>
<td>Dairy and alternatives</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Beans, pulses, fish, eggs, meat, etc</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Oils and spreads</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Junk food</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>

(Starchy foods were 334 cal/100 g; fruit and vegetables 43 cal/100 g; dairy and alternatives 157 cal/100 g; beans, etc, 180 cal/100 g; oils and spreads 819 cal/100 g.) The estimates can be debated, the general principles remain.

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