

Food, income and education: who eats more of what?

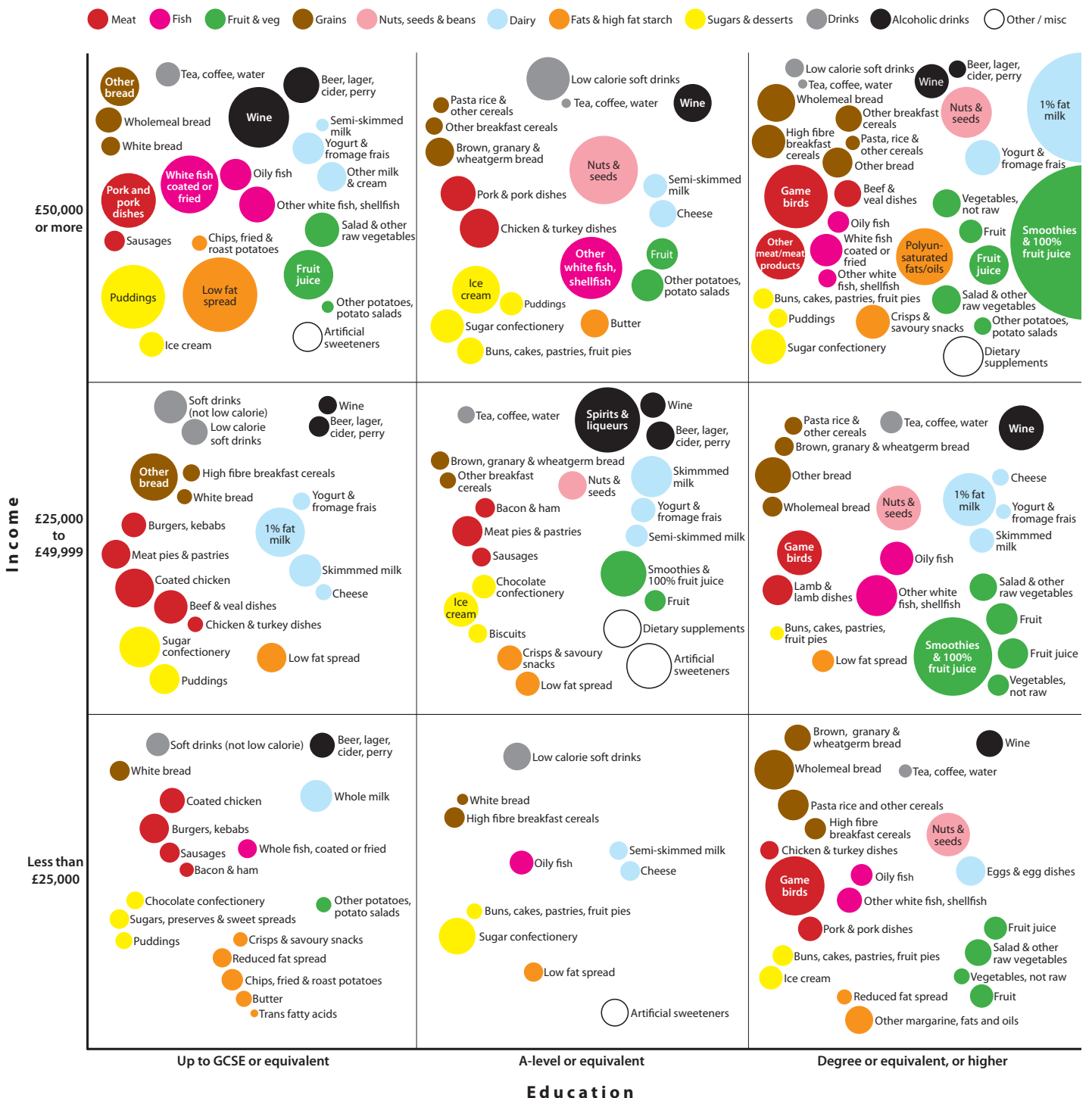
NDNS data on food consumption

Evidence Brief 6, February 2014

Interactive version at www.cedar.iph.cam.ac.uk/resources/evidence

Among the many things that influence the foods we eat, two important factors are what we earn and our level of education. Using data from the National Diet and Nutrition Survey, we look at the picture for UK food consumption.

The graphic below presents how UK food choices vary against the national average by income and education groups. A description of these data can be found over the page, and you can explore the graphic further by visiting www.cedar.iph.cam.ac.uk/resources/evidence



Key facts

- Foods appear in the graphic only if they are consumed in quantities significantly greater than that of the UK population as a whole.
- Therefore the foods shown here are those food which stand out on a statistical basis, *not* the totality of the diet within each demographic group.
- The relative size of each circle indicates how much greater than average each of the foods is eaten. For example, based on this graphic you can say that people with high incomes and degrees have unusually high consumption of game birds compared to the population, but not that they necessarily eat more game birds than they eat beef and veal dishes.

Detailed methods

The data for this graphic come from years 1-3 of the rolling programme of the National Diet and Nutrition Survey (NDNS). Which contains detailed data about food eaten by 1,491 adults. Because of the way NDNS is conducted, these data are a statistically representative sample of what is eaten by people in the UK.

For each income-education category, consumption (in grams) was estimated for 68 food, beverage, and nutrient categories, as defined in NDNS.

The estimation of intake was adjusted for the age and gender make-up of each group and the total quantity of food consumed.

The group was plotted as a circle within the graphic if its consumption exceeded the 95% upper confidence interval of the population mean.

The size of the circle is proportional to the difference between the level of consumption within a specific income-education category and that of the population overall.

Within each square in the grid, similar foodstuffs are clustered together, but otherwise the relative placement of each circle does not have any meaning.

The income categories use equivalised household income, to account for differently sized households.

Acknowledgements and feedback

Data analysis by Nick Jones and Dr Pablo Monsivais.
Graphic by Oliver Francis.

The NDNS survey is commissioned by the Food Standards Agency and Department of Health, The data it produces are used for many different purposes and are an important asset for public health research in the UK, since they provides us with a detailed account of what is eaten in a representative sample of people in the UK. The NDNS survey is carried out by MRC Human Nutrition Research and NatCen.

We took inspiration from a matrix plot published by Bloomberg Businessweek in November 2013, which explored food purchasing in the USA.

We would like to develop the online version of this graphic by adding more interactive features. If you have any comments or questions, or suggestions for other interactive features, please email Oliver on ocf26@cam.ac.uk



About CEDAR

The Centre for Diet and Activity Research studies the factors that influence dietary and activity related behaviours, develops and evaluates interventions, and is helping to shape public health practice and policy. We are a partnership between the University of Cambridge, the University of East Anglia and MRC Units in Cambridge. We draw on the expertise of a wide range of scientific disciplines including behavioural science, biostatistics, epidemiology, health geography, health economics and human nutrition.

References and resources

- An interactive version of this Evidence Brief can be found at www.cedar.iph.cam.ac.uk/resources/evidence
- National Diet and Nutrition Survey - Information at MRC Human Nutrition Unit: www.mrc-hnr.cam.ac.uk/research/current-projects/national-diet-and-nutrition-survey



EB6 v.1.0 17/02/2014