Method for estimating trends in volume of vegetable sales using Kantar Worldpanel data.

Kantar Worldpanel Data

Kantar Worldpanel monitors the household grocery purchasing habits of 30,000 demographically representative households in Great Britain. Any data quoted in this announcement is based on the volume and value of items being bought by these consumers.

Eatwell approach

The method is intended, as far as practicable, to follow the same approach used for the Eatwell Guide. The Eatwell Guide shows that 39% of the weight of the diet should be fruit and vegetables. This totals 526g in the Eatwell Guide of which 284g is vegetables (i.e. 20.6% of the Eatwell Guide is vegetables)[1]. Specifically,

the numerator:

1. Includes vegetables from processed foods and composite dishes
2. Does not include potatoes, yams or plantains, but does include sweet potatoes
3. Does not include pulses (even though a portion contributes to 5 a day)
4. Does include herbs and olives
5. Removes the water from soup[2]

the denominator:

1. Does not include water, tea, coffee or low calorie soft drinks
2. Halves the volume of milk and fruit juices and smoothies[2]
3. Removes the water from sugary drinks[2]

Alcoholic drinks are excluded entirely from the Eatwell estimations.

Our approach

To avoid a lot of costly data manipulation, we propose a slightly simpler method as follows:

Proposed replication of Eatwell method:

1) In the denominator: do not include water, tea, coffee, low cal soft drinks
2) In the denominator: halve the weight of milk, fruit juice and smoothies
3) In the numerator: do include fresh, chilled prepared, tinned, dried and frozen veg (including sweet potatoes, herbs and olives) and exclude potatoes, yams, plantains and pulses

Proposed differences with Kantar Worldpanel method:

1) In the denominator, do not include any soft drinks even those with sugar
2) In the numerator, do not include veg from composite dishes, but these will be included in the denominator
3) Soup will be excluded entirely

Here we estimate the likely impacts of these proposed deviations from the method

Removing soft drinks from the denominator: PHE's evidence shows we get the following amounts of sugar from sugary drinks (excluding fruit juice)

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[1] http://bmjopen.bmj.com/content/6/12/e013182
[2] Page 31:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/579388/eatwell_model_guide_report.pdf

	4-10 y			11-18 y			Adults		
	Boys	Girls	Estimated average	Boys	Girls	Estimated Average	Men	Women	Estimated Average
Amount free sugar consumed per day (g)	63	59	61	84	64	74	68	49	57
% free sugar from sugar sweetened drinks			16			29			16
Amount of free sugar from sugar sweetened drinks (g)			9.76			21.46			9.12

Including processed veg in the denominator

We have estimated the amount of veg which comes from composite dishes in the UK. We analysed the dishes which contributed to >75% of the amount of veg consumed by different age groups from the NDNS. The results are as follows:

	Primary school children	Secondary school children	Adults
Total amount of veg consumed per day (g)	102	107	181
% veg consumed which comes from processed food	7.3	9.4	4.5
Estimated amount of processed veg consumed per day (g)	7.4	10.0	8.1

These amounts of free sugar and processed veg are broadly similar and will therefore cancel one another out in the denominator.

This still means that the numerator will be slightly smaller than in the Eatwell Guide because of the exclusion of processed veg, and will mean that overall the proportion of veg shown in the Kantar Worldpanel estimates will slightly underestimate the real proportion compared to if the Eatwell method was strictly followed. The potential effects of this are marginal as shown by the following:

- Currently an adult eats approx 8.1g processed veg, out of about 181g total veg, out of a total diet weighing 1348g (Eatwell fig).

- If processed veg is included in the numerator the total veg consumed will be 181/1348 = 13.4%

- If it is removed from the numerator the total veg consumer will be (181-8.1)/1348 = 12.8%

This will be slightly off-set by tinned vegetables which include water and other liquids and are included in the weights provided by Kantar Worldpanel, but are not consumed.