



## ***A Survey of Food Awareness In South West Primary Schools***



## **Introduction**

Cornish Mutual commissioned PFA Research to undertake a survey of primary school children across Cornwall, Devon, Dorset and Somerset to determine level of awareness and knowledge of vegetables, dairy products and meat produce that are readily available in the supermarket and to determine if they are able to recognise the origins of a small number of everyday food products. The research is intended to help inform Cornish Mutual's 'Dig Down' campaign to foster a healthy diet amongst children by encouraging schools to grow some of their own vegetables.

PFA Research would like to thank all those schools who agreed to take part in this research project and thanks also to their members of staff whose help was vital to ensure the success of this project within the allotted time. Finally we should not forget to thank those pupils who completed the survey for sharing their knowledge of primary food groups and products with us.

### ***Research Process and Analysis***

In undertaking the survey careful consideration was given to ensuring that as well as providing the information necessary to help inform the 'Dig Down' campaign the whole experience offered benefits to the participating schools and the children themselves. Questions needed to be robust to gain the required information but the questionnaire and questions also needed to be straightforward and clear to remove the potential for misinterpretation, to be as short as possible to minimise disruption to the school day and offer the children a fun learning experience.

The survey took the form of a printed double sided self-completion questionnaire to be administered to pupils by staff members within each individual school. The decision to use school personnel to administer the survey was based upon the pre-existing relationship these individuals had with the children and the desire to minimise disruption within the school day at a busy time of the year. Primary schools throughout Cornwall, Devon, Dorset and Somerset were contacted to invite them to participate in the research. Those schools that agreed to participate in the survey were sent a 'survey pack' consisting of a cover letter, an instruction sheet on how to administer the survey, survey questionnaires, a return form cover-sheet and a freepost return envelope. 24 schools agreed to take part, all of which returned the questionnaires. A total of 1115 completed questionnaires were returned for data processing and analysis, of which 978 were from the target age bands. (Some schools took the opportunity to survey their other age groups and some smaller schools have mixed year classes.)

After data processing and cleansing, the data was analysed at the 'top-line' to provide the broad baseline information for the 'Dig Down' campaign promotion. Further analysis by county, age, gender and town or village location was also undertaken to identify any potential differences related to these group characteristics.

## **Use of Data**

### ***Market Research Supporting PR Activities***

All of the work carried out by PFA Research Ltd is conducted in accordance with the Market Research Society Code of Conduct.

A recent adjudication by the Market Research Society placed a duty of care on market research organisations to protect the interests of both their client and those that took part in any research. As part of this duty of care market research organisations are required to ensure that any press releases or other promotional material issued by the client is supported by the data. As such PFA Research reserves the right to view and suggest amendments to any press release or promotional material prior to its release into the public domain. This procedure is in line with the recommendation of the Market Research Society and does not undermine client ownership of the data.

### ***General Disclaimer***

PFA Research Ltd takes no responsibility for any incorrect information supplied to us. Quantitative market information is based primarily on interviews or self-completed questionnaires and therefore is subject to fluctuation.

The contents of this report represent our interpretation and analysis of information that can be considered generally available to the public and provided by responsible individuals in subject organisations<sup>1</sup>. It is not guaranteed as to accuracy or completeness. It does not contain material provided to us in confidence by our clients or research respondents.

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<sup>1</sup> In this case teaching staff or responsible designated individuals in primary schools.

## Key Points of Interest

Children's overall level of recognition of vegetables is high, ranging from 98% for carrots and sweetcorn to a low of 44% for swede/turnip.

Levels of animal recognition are even higher than those for vegetables, with all pupils correctly identifying the picture of the cow, 99% identifying pigs, 98% for chickens and 97% for sheep. The picture of the turkeys generated the lowest level of recognition, with many pupils identifying this as a picture of a peacock; possibly because it is more common to see pictures of peacocks than those of a live turkey.

Children are less familiar with the methods used to harvest vegetables; especially for broccoli where less than 1 in 3 gave the correct response. This compares to nearly 8 out of every 10 pupils who correctly identified that potatoes are dug up from the ground.

95% of children correctly identified that chickens produce eggs, while 83% identified that cheese can be made from cows', sheep' or goats milk. Children appeared to really struggle in identifying the cow as the correct source for beefburgers, with only 38% giving the correct answer. In fact 217 children did not provide any answer as to where beefburgers are sourced and a further 285 gave the answer as pig.

Levels of awareness of the main constituent ingredients of common snack foods can be considered as fair rather than good, ranging from 63% who correctly identified crisps as being made from potatoes to only 43% who said that ice-cream is made from milk or cream.

69% of children gave the correct answer of 5 portions of fruit or vegetables a day as part of a healthy diet and a further 10% gave an answer of greater than 5 portions.

Age, gender and town or village location seem to be important factors with older children, girls and pupils from village schools tending to perform the best in overall terms. The picture in relation to county within which the schools are located is more mixed and varies from response to response.

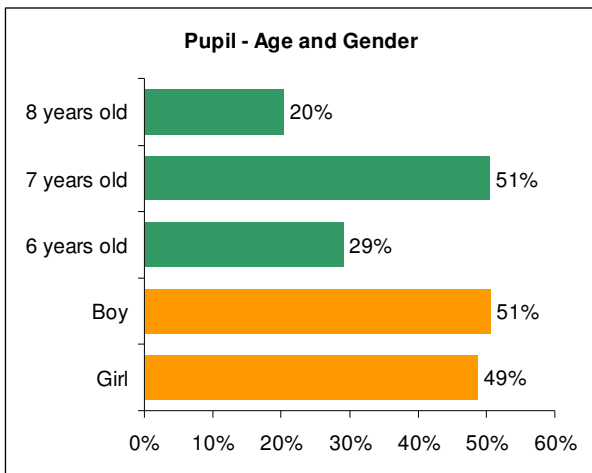
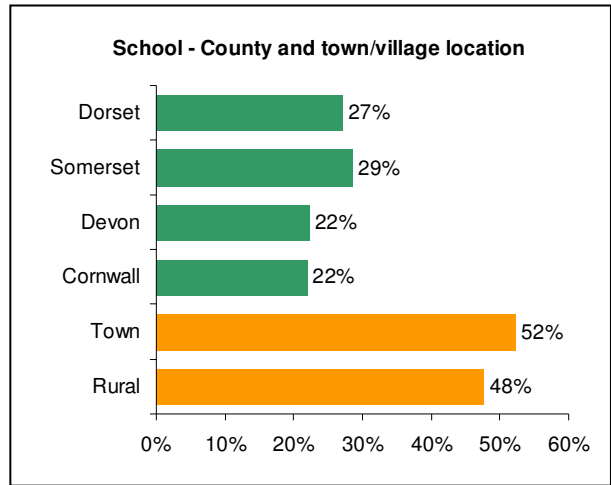
77% of pupils have visited a farm and just under two-thirds had grown their own vegetables. Pupils from village schools are more likely to have visited a farm and are also more likely to have experience of growing their own vegetables.

# Findings

## Sample Characteristics

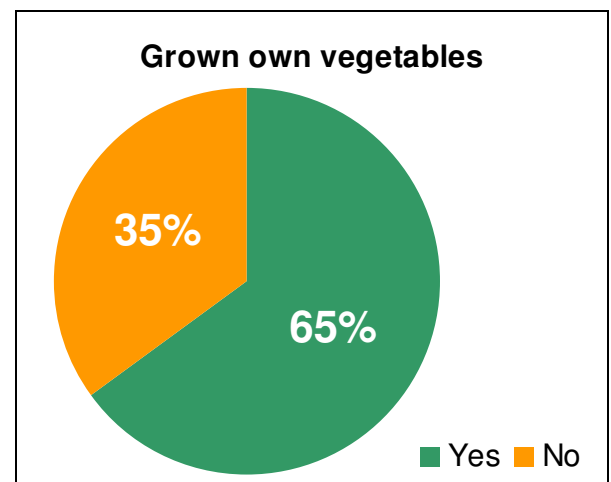
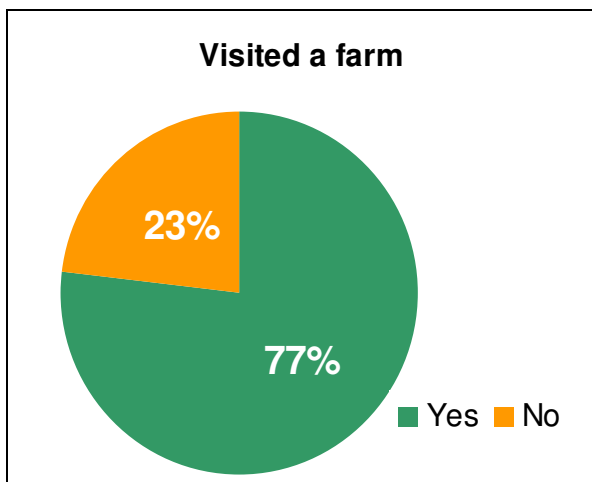
The largest number of valid completed questionnaires were returned from schools located in Somerset (29%), followed by Dorset on 27% and Devon and Cornwall both on 22%. Just over half (52%) of schools were defined as being located within a town and 48% were based in a more rural setting such as a village. Rural schools tend to have fewer pupils within the target age group than their town counterparts.

Cornwall had the highest and Dorset the lowest proportion of respondents from town schools; 65% and 39% respectively.



Just over half (51%) of pupils were male. In terms of age 51% of pupils were 7 years old, 29% were aged 6 and 20% were 8 years of age. 73% of girls are aged 7 or 8 years old compared to 70% of boys.

The Somerset sample had the oldest age profile and also had the highest proportion of girls. The Dorset sample had the youngest overall age profile, while Devon had the largest proportion of boys that responded.

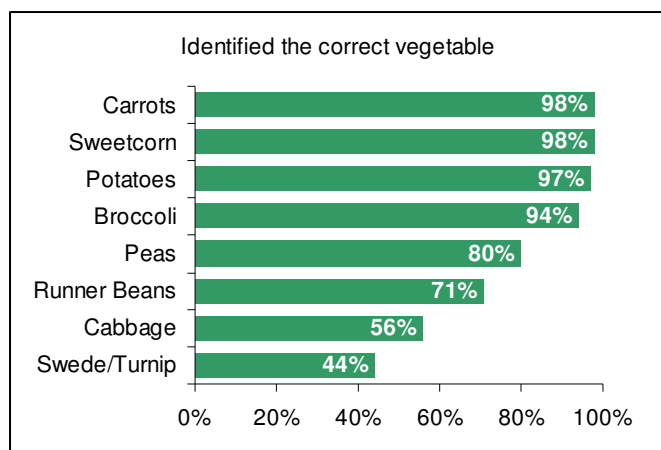


Just over three-quarters of pupils had visited a farm; while just under two-thirds of all pupils had experience of growing their own vegetables. 71% of 6 year olds had visited a farm, as had 80% of 7 year olds and 78% of 8 year olds. 72% of 8 year olds have grown their own vegetables compared to 65% of 7 year olds and 62% of 6 year olds. This greater experience of growing vegetables is likely to have contributed to 8 year olds greater levels of overall awareness of the vegetables in the vegetable recognition and harvesting method tasks. A slightly larger proportion of girls than boys had visited a farm and/or grown their own vegetables; this possibly accounts for girls' slightly better overall performance on the questionnaire.

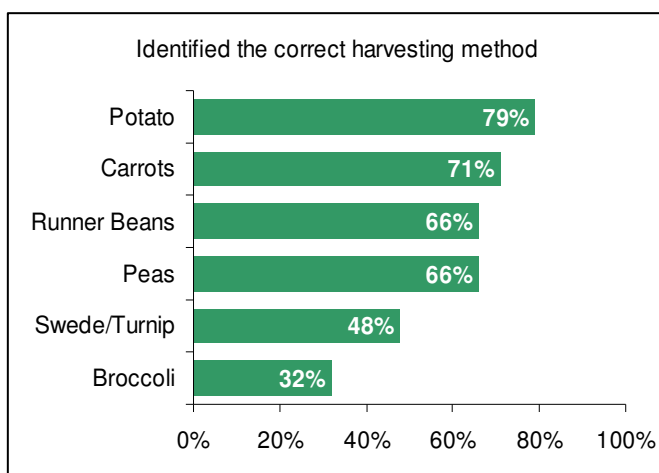
83% of Dorset pupils have visited a farm compared to only 72% of those from Cornwall, the lowest of all the four counties. 73% of Devon pupils had grown their own vegetables, the highest proportion for the four counties. Somerset at 61% has the lowest proportion of pupils that have grown vegetables.

### **Vegetable and Animal Recognition**

Pupils overall recognition of the different vegetables was high; especially for carrots, sweetcorn, potatoes and possibly as something of a surprise broccoli. Pupils were less able to correctly identify the picture of the cabbage, which 26% mistook as a lettuce. 36% struggled to identify the swede/turnip with the 3 most common incorrect responses being, in order, onion, parsnip and beetroot.

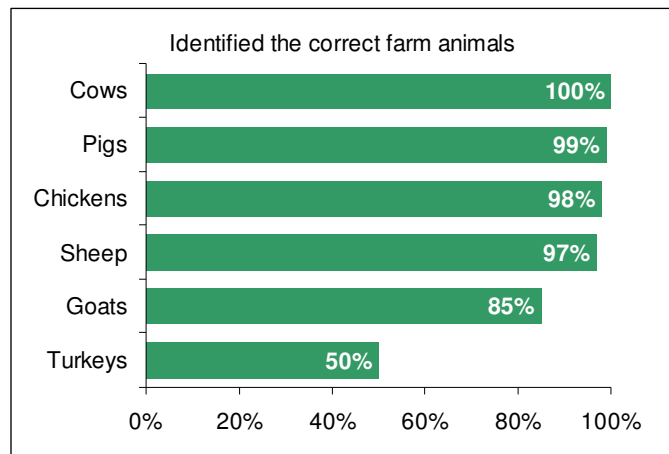


As might be expected the older pupils are more likely to correctly identify the vegetables from the pictures but even so only 50% of those aged 8 correctly identified the swede/turnip picture. Girls tend to be more likely to give the correct answer than boys when asked to identify the different vegetables although the differences in most cases were small. Rural school pupils tend to be slightly more likely to correctly identify the vegetables.

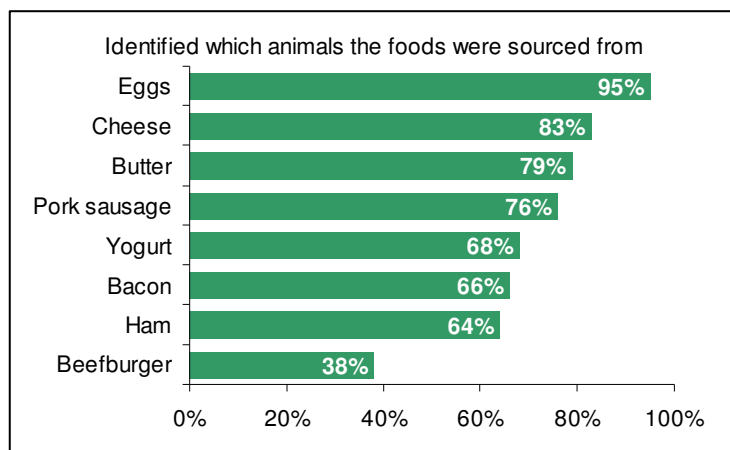


The majority of children have a good idea of methods used to harvest vegetables, with two-thirds or over correctly identifying the harvesting method for runner beans, carrots, peas and potatoes. Age seems to be a factor, with older children more likely to correctly identify the harvesting method; with the notable exception of broccoli where the youngest age group had the highest proportion of children giving the correct response. Pupils from rural schools appear slightly more likely to correctly identify the correct harvesting method.

The level of animal recognition was high for all the pictured animals. The only exception was the picture of the turkey, which only 50% of pupils correctly identified. The most common wrong answer for the turkey was the 11% that thought it was a picture of peacocks. Other less common but more exotic responses for the turkey were vulture, eagles and flamingo. Recognition levels for the different animals increase with the age of the children. As was found in relation to the identification of vegetables and the methods used to harvest them, pupils from schools based within rural communities are slightly more likely to correctly identify the pictured animals than those from schools located within towns.



### **Food Sources and Ingredient Recognition**

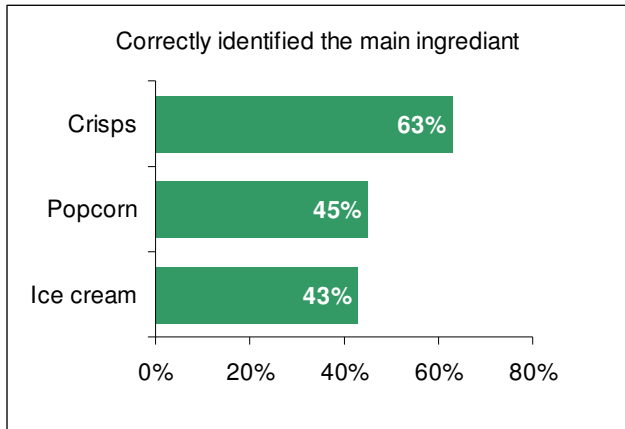


Children generally correctly identified the correct animal source for the everyday listed products. Surprisingly however less than 1 in 4 knew that beefburgers are sourced from cows, with 29% saying that beefburgers come from pigs. In the case of cheese 9% (correctly) identified goats as a source and 2% (19) correctly identified sheep's milk; this may suggest that these individuals may consume these types of cheeses at home.

Some of the more bizarre responses for where everyday foods come from include:

- Butter made from buttercups, comes out of the fridge or from a mouse;
- Eggs come from yogurt, sheep or the 'butt';
- Yogurt comes from turkeys, ducks or the cat;
- Pork sausages are made from horse, dog or worryingly from the farmer;
- Beefburgers are made from fox or deer but can also come from McDonalds or Burger King;
- Bacon comes from horse, goat or peacock;
- Cheese comes from butterflies, rats or mice;
- Ham comes from the farm, the Co-op or eagles but there is also some signs of danger for girls called Helen as one pupil thought that this was what ham was made from.

Pupils appear less sure when asked to identify the principal ingredient of common snack foods; with only 63% identifying that potatoes were used to make crisps. However some responses seem to indicate that children have an awareness of some of the potentially less healthy ingredients contained in snack food with 6% mentioning salt and 2% (21) mentioning fat as the main ingredients in crisps; 6% mentioned sugar as the principal ingredient of popcorn and 2% (24) mentioned that ice cream contained sugar. Perhaps unsurprisingly 23% said that the main ingredient of ice cream was ice or frozen water; while others said ice cream was made of strawberries, fruit, flavourings, chocolate, etc.

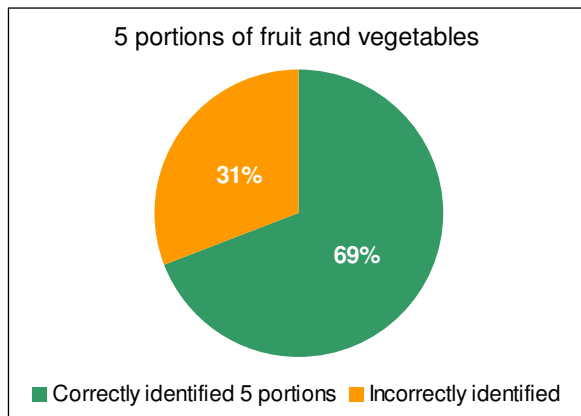


As with many of the other questions older children and girls are more likely to correctly identify the correct source and the main ingredient for each of the listed food products. Similarly those pupils from rural schools were more likely to answer correctly.

There were some quite bizarre responses mentioned by pupils as to the principal ingredients for common snack foods, including:

- Plastic, rabbits or sheep as the main ingredient of potato crisps;
- Cabbages, oranges or swede as the main ingredient of popcorn;
- Some pupils thought the main ingredient of ice cream was cheese, air, fish or potatoes.

### Healthy Eating



Approximately 7 out of every 10 pupils correctly stated that we should eat 5 portions of fruit and/or vegetables a day as part of a healthy diet. This suggests that the majority of children are aware of aspects of the healthy eating message, although we cannot be sure that they are encouraged to or actually consume 5 portions per day.

31% either did not give a value or gave an answer inconsistent with the standard message; of which 10% answered with a number greater than 5.

79% of children aged 8 years old correctly stated that we should have our 5 portions a day, falling to 72% of 7 year olds and 57% of pupils aged 6 years of age. 70% of girls and 68% of boys correctly mentioned 5 portions per day. Boys who gave an incorrect number of portions are more likely than girls to give a number in excess of 5; 46% and 36% respectively. Pupils from town schools appear to have lower levels of awareness on the correct number of portions of fruit and vegetables to be consumed per day as part of a healthy diet; with only 64% giving the correct answer compared to 75% for their more rural counterparts.