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Cefas contract report C2848

Radiological Habits Survey: Amersham, 2009

2010

Environment Report RL 04/10

Environment Agency

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Environment Report RL 04/10

Final report

Radiological Habits Survey: Amersham, 2009

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Approved for publication by W.C. Camplin

2010

The work described in this report was carried out under contract to the Environment Agency, the Food Standards Agency and the Health and Safety Executive.
Cefas contract C2848
FSA Project PAU 198 / Lot 7 / ERI0006

This report should be cited as: Clyne, F.C., Garrod, C.J. and Elliott, J., 2010. Radiological Habits Survey: Amersham, 2009. RL 04/10. Cefas, Lowestoft

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SUMMARY

This report presents the results of a survey conducted in 2009 to determine the habits and consumption patterns of people living, working and pursuing recreational activities in the vicinity of the GE Healthcare nuclear licensed site at Amersham, Buckinghamshire. The site is authorised to discharge gaseous radioactive waste via stacks to the atmosphere, liquid radioactive waste via the Maple Lodge Sewage Treatment Works into the Grand Union Canal and contains sources of direct radiation. Areas likely to be most affected by the discharges and sources of radiation were defined as the aquatic survey area for liquid discharges, the terrestrial survey area for gaseous discharges and the direct radiation survey area for ionising radiation emanating directly from the site.

The following potential exposure pathways related to the site were investigated:

- The consumption of food from the aquatic survey area
- Activities and occupancy over canal and river banks
- The handling of fishing gear and sediment
- Activities and occupancy in and on water
- Occupancy in close proximity to sewage sludge
- The consumption of food from the terrestrial survey area
- The use and destination of produce originating from the survey areas
- The consumption and use of groundwater and surface water in the terrestrial survey area
- The transfer of contamination off-site by wildlife
- Occupancy within 1 km of the licensed site boundary
- Any new or unusual exposure pathways

Interviews were conducted with members of the public and data collected for 476 individuals are presented and discussed. High rates of consumption and of occupancy over canal and river banks are identified using established methods comprising (a) a 'cut off' to define the high-rate group and (b) 97.5th percentiles. The rates so identified can be used in dose assessments. Additionally, profiles of integrated habits data are presented specifically for use in total dose assessments.

The aquatic survey area covered sections of the Grand Union Canal and the River Colne including their banks. The northern limit of the survey area for the canal and for the river was the Maple Lodge Sewage Treatment Works. The southern limit of the aquatic survey area for the canal was Denham Deep Lock and for the river was the confluence of the River Colne and the River Misbourne. Internal and external exposure pathways were investigated because of the potential effects from liquid discharges. No interviewees were consuming aquatic foods from this survey area. However, there were unconfirmed reports from fisheries officers, anglers and houseboat occupants that fish from the Grand Union Canal were being taken for consumption. Therefore, to account for this, a consumption

rate for fish of 1 kg y^{-1} is suggested for assessment purposes. Activities in the aquatic survey area predominantly took place along the Grand Union Canal. The adult high-rate groups for canal and river bank occupancy were for people angling, walking and sitting on a chair on the canal bank. Gamma dose rate measurements were taken on the banks of the Grand Union Canal and the River Colne at locations where activities occurred. No interviewees were handling fishing gear or sediment in the survey area. Occupancy in close proximity to sewage sludge and sewage cake bio-solids was recorded for employees at the Maple Lodge Sewage Treatment Works, which handles liquid discharges from the Amersham site. On the canal, people were undertaking water-based activities such as kayaking, living on houseboats and boating. The consumption of fruit and vegetables that had been grown on land in the aquatic survey area and had been irrigated with water from the River Colne was identified.

The terrestrial survey covered an area up to 5 km from the site centre. In this area, internal exposure pathways were investigated because of the potential effects from gaseous discharges. Food production was identified at 24 farms, three smallholdings and 11 allotment sites. The farms produced beef cattle, cows' milk, goats' milk, lambs, pigs, chickens, chicken eggs, watercress and arable crops. The smallholdings produced beef cattle, lambs, chicken eggs and pigs. Seven beekeepers were identified who produced honey within the survey area. Foods from the terrestrial area were consumed from the following food groups: green vegetables, other vegetables, root vegetables, potato, domestic fruit, milk, cattle meat, pig meat, sheep meat, poultry, eggs, wild/free foods, rabbits/hares, honey, wild fungi, venison, freshwater fish, freshwater crustaceans and freshwater plants. The mean consumption rates for the adult high-rate group exceeded the respective generic 97.5th percentile rates for milk, pig meat and eggs. The human consumption of well water and spring water was noted and allotment holders used water from the River Chess to irrigate their fruit and vegetables. Although all farm livestock were supplied with mains water, some animals had access to the River Chess and to streams. The small-scale commercial trapping of signal crayfish occurred in a lake on the River Misbourne and angling was identified at two stocked trout lakes on the River Chess. Activities noted on the water for the River Chess were wading at a watercress farm, wading at the Frogmore Meadow Nature Reserve and paddling in the river at Chesham.

The transfer of contamination off-site by wildlife was investigated, as radionuclides could enter the food chain or contaminate the environment through this pathway. A representative of the Amersham site reported that rabbits were occasionally observed on site, but since they could not access controlled areas, the site did not have a wildlife control policy. Some individuals living in the terrestrial survey area were consuming rabbits that were caught or shot within 5 km of the site but it was not known if these animals had spent time on the site.

The direct radiation survey covered an area out to 1 km from the licensed site boundary. In this area, external pathways were investigated because of potential effects from ionising radiation emanating

directly from the site and from exposure to gases discharged from the site to the atmosphere. Occupancy rates were obtained for: residents; employees of small businesses; staff and pupils at high schools in the area; and pupils at a college. It should be noted that activities of the GE Healthcare employees or contractors while they were at work on the site were not included in the survey as different radiation protection criteria apply. The highest total, indoor and outdoor occupancy rates were for residents. Gamma dose rate measurements were taken indoors and outdoors at most properties where interviews were conducted. For comparison, background readings were taken at distances beyond 5 km of the Amersham licensed site centre.

Comparisons are made with the results from the previous Amersham habits survey undertaken in 2004.

In the aquatic area, in the 2004 and 2009 surveys, no consumption of aquatic foods was recorded. However, in both surveys there were unconfirmed reports that fish were being removed from the Grand Union Canal and this was thought to be for consumption. For activities over canal and river banks, comparisons of mean occupancy rates for the adult high-rate group have been made and there were significant changes between 2004 and 2009. The mean occupancy rate for the adult high-rate group over grass increased from 60 h y^{-1} in 2004 to 180 h y^{-1} in 2009, and over the towpath increased from 640 h y^{-1} in 2004 to 1100 h y^{-1} in 2009. No activities involving handling fishing gear or sediment were identified in either survey.

In the terrestrial area, there were significant changes in some of the mean consumption rates for the adult high-rate group in 2009 compared to the results of the previous survey in 2004. Food groups with relatively significant increases in consumption rates in 2009 were: milk, from 190 l y^{-1} to 350 l y^{-1}; pig meat from 13 kg y^{-1} to 88 kg y^{-1}; sheep meat from 9.7 kg y^{-1} to 18 kg y^{-1}; poultry from 7.1 kg y^{-1} to 12 kg y^{-1}; eggs from 19 kg y^{-1} to 34 kg y^{-1}; venison from 6.7 kg y^{-1} to 10 kg y^{-1}; and freshwater plants from 23 kg y^{-1} to 32 kg y^{-1}. The food group with a relatively significant decrease in the consumption rate in 2009 was freshwater crustaceans from 1.3 kg y^{-1} to 0.1 kg y^{-1}.

In the direct radiation area, there were no significant changes in the total occupancy rates. In the 0 – 0.25 km zone, the total occupancy rates were the same in 2009 as in 2004, at 8700 h y^{-1}. In the >0.25 – 0.5 km zone, the total occupancy rates increased from 8000 h y^{-1} in 2004 to 8600 h y^{-1} in 2009. In the >0.5 – 1.0 km zone, the total occupancy rates increased from 8000 h y^{-1} in 2004 to 8500 h y^{-1} in 2009. Comparisons of gamma dose rate measurements taken at the same seven residences in 2004 and 2009 are compared and the results were broadly similar.

Suggestions are provided for changes to environmental monitoring programmes on the basis of the information collected during the survey (see Section 8.4). These include introducing a one-off sample of pork, adding a sample of goats' milk, adding a sample of honey and adding a sample of wild fungi.

1 INTRODUCTION

The public may be exposed to radiation as a result of the operations of the Amersham nuclear licensed site either through the authorised discharges of liquid or gaseous radioactive wastes into the local environment, or from radiation emanating directly from the site. This report provides information on activities carried out locally by members of the public, which may influence their radiation exposure. The study has been funded by the Environment Agency, the Food Standards Agency and the Health and Safety Executive in order to support their respective roles in protecting the public from the effects of radiation.

UK policy on the control of radiation exposure has long been based on the recommendations of the International Commission on Radiological Protection (ICRP), which embody the principles of justification of practices, optimisation of protection and dose limitation. Radiological protection of the public is based on the concept of a 'representative person'. This notional individual is defined as being representative of the more highly exposed members of the population. It follows that, if the dose to the representative person is acceptable when compared to relevant dose limits and constraints, other members of the public will receive lower doses, and overall protection to the public is provided from the effects of radiation. The term 'representative person' is equivalent to, and replaces, the term 'average member of the critical group' as recommended by ICRP (ICRP, 2006). The recommendations of the ICRP were updated in 2007 (ICRP, 2007) and, for the public, still include the principle of protecting the individuals most highly exposed to radiation, characterised by the representative person.

1.1 Regulatory framework

The Environment Agency regulates the discharges of waste under the Radioactive Substances Act 1993 (RSA 93) (UK Parliament, 1993) as amended by the Environment Act 1995 (EA 95) (UK Parliament, 1995); by legislation implementing the European Union (EU) Basic Safety Standards (BSS) Directive 96/29/Euratom (CEC, 1996) and by the Energy Act 2004 (EA 04) (UK Parliament, 2004). The Directive takes into account the recommendations of the ICRP, particularly ICRP 60 (ICRP, 1991). From 6th April 2010, in England and Wales, the provisions of RSA 93 authorising the disposals of radioactive waste, will be subsumed within the Environmental Permitting Regulations (UK Parliament, 2010). Installation and operation of certain prescribed activities can only occur on sites if they are licensed under the Nuclear Installations Act 1965 (as amended) (NIA 65) (UK Parliament, 1965). The Nuclear Installations Inspectorate (NII) of the Health and Safety Executive implements this legislation and is also responsible for regulating, under the Ionising Radiations Regulations (IRR 99) (UK Parliament, 1999), the exposure of the public to direct radiation from the operations occurring on these sites.

Authorisations under RSA 93 (or, from April 2010, appropriate permits) are, or will be, issued by the Environment Agency after wide-ranging consultations that include the Food Standards Agency. The Food Standards Agency has responsibilities for ensuring that any radioactivity present in food does not compromise food safety and that authorised discharges of radioactivity do not result in unacceptable doses to consumers via the food chain. The Food Standards Agency also ensures that public radiation exposure via the food chain is within EU acceptable limits.

1.2 Radiological protection framework

Dose standards for the public are embodied in the national policy (UK Parliament, 2009a), in guidance from the International Atomic Energy Agency (IAEA), in the Basic Safety Standards for Radiation Protection (IAEA, 1996) and in European Community legislation in the EU BSS Directive 96/29/Euratom (CEC, 1996). The public dose standards were incorporated into UK law in IRR 99. In order to implement the Directive in England and Wales, the Environment Agency was issued with a direction by the Department of the Environment, Transport and the Regions in 2000 (DETR, 2000). This direction has been reaffirmed in the recent policy document (UK Parliament, 2009). It includes the requirements that the environment agencies ensure, wherever applicable, that:

- All public radiation exposures from radioactive waste disposals are kept As Low As Reasonably Achievable (ALARA), social and economic factors being taken into account;
- The sum of each exposure does not exceed the dose limit of 1 mSv a year;
- The dose received from any new source does not exceed 0.3 mSv a year;
- The dose received from any single site does not exceed 0.5 mSv a year.

The dose limit of 1 mSv per year to the public from all anthropogenic sources is also the recommendation made by the ICRP (ICRP, 2007).

The environment agencies are also required to ensure that the dose estimates are as realistic as possible for the population as a whole and for reference groups of the population. They are required to take all necessary steps to identify the reference groups of the population taking into account the effective pathways of transmission of radioactive substances. Guidance on the principles underlying prospective radiological assessment (i.e. assessments of potential future doses) has been provided by a group of UK Government Bodies (EA, SEPA, DoENI, NRPB and FSA, 2002). The National Dose Assessment Working Group (NDAWG) has also published principles underlying retrospective radiological assessment (i.e. assessment of doses already received from past discharges) (Allott, 2005) and possible methods of carrying out these assessments using the data from combined habits surveys (Camplin *et al.*, 2005). NDAWG agreed that the optimal method for performing retrospective dose assessments would be to use habits profiles (profiling method). This approach is being adopted in Radioactivity in Food and the Environment (RIFE) publications, (e.g. EA, NIEA, FSA and SEPA, 2009), as combined habits surveys are completed. NDAWG has also published reports on the collection and use of habits survey data in retrospective and prospective dose assessments

(NDAWG, 2005; NDAWG 2009); the principles described in these reports are consistent with those used here.

2 THE SURVEY

2.1 Site activity

The nuclear licensed site at Amersham is owned by GE Healthcare and is located at the Grove Centre, Amersham, Buckinghamshire (Figure 1).

The site houses a wide range of plants for manufacturing radiopharmaceutical products, containing such radionuclides as fluorine-18 and technetium-99m, for use in medicine and research. The site discharges gaseous radioactive waste via stacks to the atmosphere, liquid radioactive waste via the Maple Lodge Sewage Treatment Works to the Grand Union Canal and contains sources of direct radiation.

GE Healthcare Ltd is licensed to operate the site under NIA 65, which allows the installation and operation of certain activities. Under RSA 93, the company is authorised to discharge gaseous radioactive wastes via stacks to the atmosphere and liquid radioactive wastes via the Maple Lodge Sewage Treatment Works to the Grand Union Canal. Details of the amounts of gaseous and liquid radioactive waste discharged are published in the RIFE reports, for example, EA, FSA, NIEA and SEPA, 2009.

At the time of the Amersham habits survey fieldwork there were no unusual activities being carried out which might have affected dose rates..

2.2 Survey objectives

The Centre for Environment, Fisheries & Aquaculture Science (Cefas) undertook the Amersham habits survey in 2009 on behalf of the Environment Agency, the Food Standards Agency and the Health and Safety Executive. The aim of the survey was to obtain comprehensive information on the habits of the public that might lead to their exposure to radiation from the effects of liquid discharges, gaseous discharges and direct radiation from the Amersham nuclear site.

Specifically, investigations were conducted into the following:

- The consumption of food from the aquatic survey area
- Activities and occupancy over canal and river banks
- The handling of fishing gear and sediment
- Activities and occupancy in and on water
- Occupancy in close proximity to sewage sludge
- The consumption of food from the terrestrial survey area

- The use and destination of produce originating from the survey areas
- The consumption and use of groundwater and surface water in the terrestrial survey area
- The transfer of contamination off-site by wildlife
- Occupancy within 1 km of the licensed site boundary
- Any new or unusual exposure pathways

No additional site-specific investigations were requested by the Environment Agency, the Food Standards Agency or the Health and Safety Executive.

2.3 Survey areas

Three survey areas were defined to encompass the main areas potentially affected by the discharges from the site and sources of radioactivity. These were an aquatic survey area for liquid discharges, a terrestrial survey area for gaseous discharges and a direct radiation survey area for ionising radiation emanating directly from the site. Figure 1 provides an overview of all three survey areas.

The aquatic survey area, shown in Figure 2, covered sections of the Grand Union Canal and the River Colne including their banks. The northern limit of the survey area for the canal and the river was the Maple Lodge Sewage Treatment Works. The southern limit of the aquatic survey area for the canal was Denham Deep Lock and for the river was the confluence of the River Colne and the River Misbourne.

The terrestrial survey area, shown in Figure 3, covered all land within 5 km of the site centre (NGR SU 984 975). Watercourses and lakes potentially containing contamination from the washout of gaseous discharges are discussed in the terrestrial section of this report.

The direct radiation survey area, which is also shown in Figure 3, covered all land within 1 km of the Amersham licensed site boundary.

The same aquatic, terrestrial and direct radiation survey areas were used in the previous Amersham habits survey conducted by Cefas, which was in 2004 (McTaggart *et al*., 2005).

2.4 Conduct of the survey

As part of the pre-survey preparation, the Environment Agency, the Food Standards Agency and the Health and Safety Executive were contacted to identify any additional site-specific requirements. People with local knowledge of the survey area were contacted for information relevant to the various exposure pathways. These included representatives from the Environment Agency, British Waterways, parish councils and town councils. Further information regarding the activities of people in the aquatic and terrestrial survey areas was obtained from Internet searches, Ordnance Survey maps and from previous Amersham habits survey reports and field notebooks.

A proposed fieldwork programme was sent to the Environment Agency, the Food Standards Agency, and the Health and Safety Executive before the fieldwork commenced, for their comment.

The fieldwork was carried out from 17th – 29th August 2009 by a survey team of four people, according to techniques described by Leonard *et al.* (1982). During the fieldwork, a meeting was held between three members of the survey team and four representatives from the Amersham site. These discussions provided details about current site activities, local information, potential pathways and activities in the area, and the transfer of contamination off-site by wildlife.

The following information was obtained during the meeting:

- Decommissioning of an old plant was underway and it was anticipated that this work will be completed in 2013.
- The site currently manufactures radiopharmaceutical products for use in medicine and research.
- Tritium has been detected in groundwater directly under the site but this was thought to be predominantly localised. Drinking water has been monitored by the site at abstraction points in the nearby area and tritium has not been detected at these locations.
- Activities in the direct radiation area included occupancy of neighbouring residential buildings, and walking, horse riding and jogging on the paths and roads in the vicinity of the site.
- Rabbits were occasionally observed on site, but since they cannot access controlled areas, the site did not have a wildlife control policy.

Interviews were conducted with people who were identified in the pre-survey preparation and others that were identified during the fieldwork. These included, for example, anglers, houseboat occupants, farmers, allotment holders, beekeepers and people living and working close to the site. Interviews were used to obtain consumption and occupancy rates relevant to the aquatic, terrestrial and direct radiation areas. Any other information of possible use to the survey was also obtained. Gamma dose rate measurements were taken over canal and river banks in the aquatic survey area, and were also taken indoors and outdoors of most properties in the direct radiation area where interviews took place. Background gamma dose rates were taken at a distance beyond 5 km from the site centre.

Four Cefas personnel spent 36 days in total investigating the survey areas and interviewing individuals who were relevant to the survey. Observations for 476 individuals were recorded.

For practical and resource reasons, the survey did not involve the whole population in the vicinity of Amersham, but targeted subsets or groups, chosen in order to identify those individuals potentially most exposed to radiation pathways. However, even within a subset or group there may be people who were not interviewed during the survey fieldwork. Therefore, to aid interpretation, the number of people for whom data were obtained in each group as a percentage of the estimated complete coverage for that group has been calculated. The results are summarised in Table 1. The 'groups' are described and quantified, and the numbers of people for whom data were obtained are given as percentages of the totals. It should be noted that for certain groups, such as anglers, it can be virtually impossible to calculate the total number of people who undertake the activity in the survey area as many people may visit from outside the area. Based on UK Office of National Statistics residential data for electoral wards (www.statistics.gov.uk) there were approximately 42,560 people living in the terrestrial survey area, although information was obtained for a significantly smaller number than this.

It should be noted that the survey did not include the activities of the employees of the Amersham site or contractors while they were at work on the site. This is because dose criteria applicable to these people whilst at work and the dose assessment methods are different from those for members of the public. However, any consumption data, and activities and occupancy rates for these employees while outside work, are included in the results if employees were encountered during the survey.

People were initially questioned about their habits relating to the survey area that their first identified activity occurred in and, where possible, they were also asked about their habits relating to the other two survey areas. For example, people in the terrestrial survey were initially questioned because it was known that they grew significant quantities of terrestrial foodstuffs. However, they were also asked about habits that might lead to exposure to liquid discharges or direct radiation. During interviews with representatives from large establishments such as schools, it was not possible to collect data for all pathways (such as consumption of local foods) for each person. In these cases, the data obtained were limited to the primary reason for the interview, for example, only occupancy rates would have been recorded for pupils at schools in the direct radiation area.

3 METHODS FOR DATA ANALYSIS

3.1 Data recording and presentation

Data collected during the fieldwork were recorded in logbooks. On return to the laboratory, the data were examined and any notably high rates were double-checked, where possible, by way of a follow-up phone call. In cases where follow-up phone calls were not possible (e.g. interviewees who wished to remain anonymous), the data were accepted at face value. The raw data were entered into a purpose-built database where each individual for whom information was obtained was given a unique identifier (the observation number) to assist in maintaining data quality.

During the interviews, people could not always provide consumption rates in kilograms per year for food or litres per year for milk. In these circumstances, interviewees were asked to provide the information in a different format. For example, some estimated the size and number of items (e.g. eggs) consumed per year, whereas others gave the number of plants in a crop or the length and number of rows in which the crop was grown per year. The database converted these data into consumption rates (kg y^{-1} for food and l y^{-1} for milk) using a variety of conversion factors. These factors included produce weights (Hessayon, 1990 and 1997, and Good Housekeeping, 1994), edible fraction data researched by Cefas, and information supplied by the Meat and Livestock Commission.

The consumption and occupancy data in the text of this report are rounded to two significant figures, except for values less than 1.0, which are rounded to one decimal place. This method of presentation reflects the authors' judgement on the accuracy of the methods used. In the tables and annexes, the consumption rate data are usually presented to one decimal place. Occasionally, this rounding process causes the computed values (row totals, mean rates and 97.5^{th} percentiles), which are based on un-rounded data, to appear slightly erroneous. Consumption rates less than 0.05 kg y^{-1} are presented to two decimal places in order to avoid the value of 0.0 kg y^{-1}. External exposure data are quoted as integer numbers of hours per year.

To ensure the quality of the data collected during the survey fieldwork and presented in this report, the following procedures have been employed:

- Experienced scientific staff were used for the fieldwork and data analysis. They had been trained in the techniques of interviewing and obtaining data for all pathways that were relevant to the survey being conducted. Where individuals offered information during interview that was considered unusual, they were questioned further in order to double-check the validity of their claims.
- Where possible, interviewees were contacted again to confirm the results of the initial interview if, when final consumption or occupancy rates were calculated, observations were found to be high

in relation to our experience of other surveys. Local factors were taken into account in these cases.

- Data were manipulated in a purpose-built database using a consistent set of conversion factors.
- Data were stored in a database in order to minimise transcription and other errors.
- Draft reports were reviewed by the Environment Agency, the Food Standards Agency and the Health and Safety Executive, and by a senior radiological consultant.
- A final report was only issued when the Environment Agency, the Food Standards Agency and the Health and Safety Executive were entirely satisfied with the format and content of the draft report.

For the purpose of data analysis, foodstuffs were aggregated into food groups based on the classifications in Byrom *et al*., (1995) and are identified in Table 2. Specific food types relevant to this survey are presented in the subsequent tables. The data are structured into groups when it is reasonable to assume that consistent concentrations or dose rates would apply within the group. For example, when considering terrestrial food consumption, all types of root vegetables are grouped together in a food group called 'root vegetables'. For external exposure over canal and river banks, occupancies over the same substrate (e.g. grass) are grouped together. In addition, data are structured into age groups because different dose coefficients (i.e. the factors which convert intakes of radioactivity into dose) can apply to different ages. The age groups and their relevant age ranges are based on the recommendations in ICRP 72 (ICRP, 1996), and are listed below:

Age group	**Age range in group**
3-month-old	Under 1-year-old
1-year-old	1-year-old
5-year-old	2-year-old to 6 year-old
10-year-old	7-year-old to 11-year-old
15-year-old	12-year-old to 16-year-old
Adult	17-year-old and over

For direct radiation pathways, the data are grouped into distance zones from the licensed site boundary as a coarse indication of the potential dose rate distribution due to this source of exposure. The bands used are: 0 – 0.25 km, >0.25 – 0.5 km and >0.5 – 1 km. These distance bands are also useful when assessing exposure to gaseous discharges.

3.2 Data analysis

The results of the survey are the individuals' consumption, occupancy and handling rates presented in Annexes 1 and 2. These can be used in radiological assessments of the effects of the discharges from the Amersham site.

Where quantifiable data cannot be obtained from interviews but pathways are believed to exist, it is sometimes necessary to provide quantitative or estimated habits data for use in dose assessments. These data are presented in Annex 3.

The habits data have been analysed to derive representative high rates of consumption and occupancy, prior to a formal assessment being undertaken. Three approaches have been used:

Firstly, the 'cut-off' method described by Hunt *et al.* (1982) was used. With the 'cut-off' method, the appropriate high rate was calculated by taking the arithmetic mean of the values between the maximum observed rate and one third of the maximum observed rate. In this report, the term 'high-rate group' is used to represent the individuals derived by the 'cut-off' method. The mean of the high-rate group was calculated for each food group and for occupancy over canal and river banks. In certain cases, using the 'cut-off' method resulted in only one person being in the high-rate group. In these cases, expert judgement was used to decide whether the high-rate group should remain as one individual or whether others should be included. If others were included, the second highest rate was divided by three to give a new cut-off value and all observations above this were included in the high-rate group.

Secondly, the 97.5th percentile rate was calculated for each group by using the *Microsoft Excel* mathematical function for calculating percentiles. This method accords with precedents used in risk assessments of the safety of food consumption. However, it should be noted that the interviewees in this study are selected and therefore the calculated percentiles are not based on random data.

Thirdly, profiles have been produced that give a complete view of the habits of the individual that might lead to exposure to all the discharges and radiation from the site. The profiles are based on values calculated by the 'cut-off' method. The profiled data can be used to assess total dose, integrated across all pathways of exposure.

Mean and 97.5th percentile consumption rates based on national statistics have been derived by the Ministry of Agriculture, Fisheries and Food ((MAFF) (now part of the Department for Environment, Food and Rural Affairs, Defra) and the Food Standards Agency (Byrom *et al.,* 1995 and FSA, 2002), and these are referred to as generic rates in this report. The generic rates are used as a baseline for comparison with the observed rates.

For ingestion and for canal or river bank occupancy pathways, mean rates for the high-rate groups for children have been calculated from the survey data. However, because few child observations were identified, the consumption and occupancy rates should be viewed with caution. For assessments purposes, an alternative approach may be taken which involves scaling the mean rates for the adult high-rate groups by ratios. These ratios are given in Annex 4 and have been calculated using generic 97.5^{th} percentile consumption rates.

For use in assessments of foetal dose, consumption and occupancy rates are provided in Annex 5 for women of childbearing age. The age range used in this report for women of childbearing age is 15 – 44 years old, which is based on the classification used by the Office of National Statistics (www.statistics.gov.uk).

For the direct radiation pathway, high-rate group mean occupancy rates and 97.5^{th} percentile rates have not been calculated. Such an analysis is of limited value without a detailed knowledge of the spatial extent of dose rates due to direct radiation.

4 AQUATIC RADIATION PATHWAYS

4.1 Aquatic survey area

The aquatic survey area covered sections of the Grand Union Canal and the River Colne including their banks. The northern limit of the survey area for the canal and the river was the outfall of the Maple Lodge Sewage Treatment Works. The southern limit for the canal was Denham Deep Lock and for the river was the confluence of the River Colne and the River Misbourne (Figure 2). Sections of the rivers Misbourne and Chess were within the terrestrial survey area and are discussed in Section 5.

The aquatic survey area was part of a complex stretch of waterways which comprised the Grand Union Canal, the River Colne and a system of man-made lakes that were formerly gravel pits. The lakes were fed by groundwater and there was minimal flooding from the river and canal to the lakes, therefore, they were not included in the survey area. At the northernmost extent of the survey area, the discharges from the Maple Lodge Sewage Treatment Works entered the Grand Union Canal by a concrete culvert which passed over the River Colne. The culvert had low sides where it passed over the river in order to allow the discharges to overflow into the river at times of high flow. For most of the northern part of the survey area the canal and river ran almost parallel and in the central and southern part of the survey area the river diverged away from the canal to the west and flowed around the perimeter of several lakes. Four locations were identified where the canal and the river joined, three of which had weirs to regulate the flow of water from the canal into the river and one had an interchange of canal and river water.

The Grand Union Canal

The Grand Union Canal is part of the central canal system that links London with Birmingham and because of this it was a popular route for houseboats. A steady flow of houseboats was observed cruising along the canal and many houseboats were moored on the canal banks throughout the area. There were a small number of permanent moorings on the canal and visiting boats were permitted to moor for up to 14 days at one location before having to move a distance of either five locks or 5 miles, whichever was closest. There were also leisure moorings in a marina near Harefield but there were no permanent moorings at this location. The areas in the vicinity of the locks were popular mooring areas. The occupants of one permanently moored houseboat lived on board all year round and other people utilised the visitors' moorings and stayed in the area for varying lengths of time. Throughout the area, the western bank of the canal was easily accessible on foot due to the well maintained towpath running along it. Activities observed throughout the area on the west bank were angling,

walking, dog walking, cycling and jogging. Access to the east bank was variable due to densely vegetated areas and residences with private canal frontage.

In the northern section of the survey area, approximately 100 m south of the sewage treatment works discharge outfall, the west bank of the canal was a popular location with anglers. Between the sewage treatment works and Copper Mill Lock, the first lock to the south, the canal and the River Colne joined and a weir regulated a one way flow of water from the canal into the river. A row of houses was situated on the west bank on a small area of land in between the canal and the River Colne.

One of the two road bridges in the survey area was situated just south of Copper Mill Lock. Between the lock and the road bridge was a small kayak slalom course owned by a local sailing club and people were observed kayaking on the course during the survey. This was a popular angling location due to convenient access to the canal. There was an interchange of canal and river water south of the road bridge at Troy Cut, a narrow and partly overgrown arm of the canal, and further south the canal joined the river with a one-way flow of water into the river. Individuals owned a patch of land south of Troy Cut, located in between the canal and the River Colne, where they grew vegetables which were irrigated with river water. During the survey, many boats were moored on the banks of a side-arm of the canal in this area and it was reported that these boats were occupied only at weekends.

The next lock to the south was Black Jack's Lock, and immediately south of this, the River Colne joined the canal with a weir regulating the flow of water into the river. There was a road bridge at Widewater Lock, and as a result of the convenient access, the west bank of the canal in the vicinity of Widewater Lock was popular with anglers.

Between Widewater Lock and the southernmost part of the aquatic survey area, there were many manmade lakes on either side of the canal. South of Widewater Lock, the east bank of the canal had eroded and the canal joined a lake where a marina was located. The marina had approximately 250 moorings for cruisers and narrowboats. This section of the canal flowed through the Denham Country Park and a trail along the east bank of the canal provided good access.

The River Colne

The River Colne was approximately 5 to 10 metres wide, and although the river was relatively shallow at the time of the survey, it was reported that the water levels fluctuate seasonally because the river is groundwater fed. The river banks in the survey area were predominantly overgrown with dense vegetation and were mostly inaccessible. No evidence of canoeing or boating was observed on the river, which was probably due to its small size and shallow water depth.

From the northern extent of the survey area, the river flowed south parallel with the Grand Union Canal. The river flowed past the gardens of several residential properties where the occupants could access the river. There was public access to the river for a short stretch at Coppermill Lane, where one angler was interviewed. The river joined the canal at Troy Cut and this area was reported to be popular with anglers. The river flowed south, diverged to the west of the canal at Black Jack's Lock, and around the gravel-pit lakes. The river flowed through Denham Country Park where the banks of the river could be accessed by a footpath. In the country park, fishing platforms were provided for members of an angling club to fish the river. Anglers were interviewed on the banks of the river at the southernmost part of the survey area near the confluence with the River Misbourne.

4.2 Fisheries

It was illegal to remove fish and shellfish from the Grand Union Canal. In spite of this, there were reports of people setting nets across the canal and fisheries officers have recovered fishing nets from the area. It was also reported that there were signal crayfish (*Pacifastacus leniusculus*) in the canal and that people were setting traps. The survey team did not encounter anyone removing fish or shellfish from the canal during the fieldwork.

The consented trapping of signal crayfish on the River Colne was permitted, although, in 2009, no consents had been granted to trap crayfish within the aquatic survey area. Fisheries officers reported that crayfish traps that had been set without consent had been seized from the River Colne.

4.3 Angling

Two angling clubs were identified whose members fished in the aquatic survey area.

One angling club had the rights to fish the stretch of the Grand Union Canal within the survey area. The club had 90 members, although not all of the members actively fished in the survey area as the club's fishing area extended beyond its limits. There was good access to the west bank of the canal throughout the survey area and angling was permitted along this stretch with the exception of the areas immediately either side of the locks. The most popular angling locations along the canal were approximately 100 m south of the sewage discharge outfall, near Copper Mill Lock and near

Widewater Lock. Anglers reported that they caught a variety of fish species including bream (*Abramis brama*), roach (*Rutilus rutilus*), carp (*Cyprinus carpio*), tench (*Tinca tinca*), chub (*Leuciscus cephalus*), pike (*Esox lucins*), perch (*Perca fluviatilis*), grayling (*Thymallus thymallus*), gudgeon (*Gobio gobio*) and trout (*Salmo spp.*).

The other angling club had the rights to fish on the River Colne at Troy Cut and through Denham Country Park. Anglers fished from wooden platforms in the country park and from the river bank at Troy Cut. During the survey, anglers were observed on the banks of the river near Coppermill Lane and near the confluence of the rivers Colne and Misbourne. Anglers were allowed to remove fish from the River Colne and under the Thames Region Fishery Bylaws there was a bag limit of two fish per person per day. At the time of the fieldwork this bag limit was under revision as a result of a national directive.

The survey team did not encounter any anglers removing fish from the canal or from the river during the fieldwork.

4.4 Maple Lodge Sewage Treatment Works

Activities at the Maple Lodge Sewage Treatment Works were investigated because liquid waste from the Amersham site is discharged via the sewer to this sewage works where it undergoes treatment. The treated water, which may still hold radionuclides in liquid phase, is subsequently released into the Grand Union Canal.

During the sewage treatment process solid matter settles out to form sludge. The sludge is transferred to a drying plant, de-watered to a consistency similar to damp peat, and loaded onto a lorry to be despatched to farms. The dried sludge is referred to as sewage cake bio-solid. Farmers used the sewage cake bio-solids as a fertiliser and it was applied exclusively to arable land by contractors. In 2009, the Maple Lodge Sewage Treatment Works supplied sewage cake bio-solids to approximately 100 farms, which were located between 10 km and 60 km from the sewage treatment works.

Employees or contractors at the Maple Lodge Sewage Treatment Works spent time in close proximity (<10 metres) to the sewage sludge or sewage cake bio-solids during processes such as servicing the machinery, cleaning and clearing pumps and pipes, clearing debris or distributing the sewage cake bio-solids.

4.5 Other pathways

The irrigation of fruit and vegetables grown on land in the aquatic survey area using water from the River Colne was identified. Individuals owned a section of land between the canal and the River Colne where they grew vegetables for their own consumption.

4.6 Food consumption

Aquatic foods

No interviewees were consuming aquatic foods from the aquatic survey area.

It was illegal to remove fish and shellfish from the Grand Union Canal, but in spite of this, there were numerous unconfirmed reports from anglers and houseboat occupants that fish (bream, perch, pike and eels) ducks and swans have been removed from the canal by anglers believed to be of Eastern European origin. Fisheries officers received several complaints per month from anglers who had seen people taking large quantities of fish from the canal which was believed to be for consumption. There were multilingual public information signs along the canal bank stating 'No fish to be taken away'.

Anglers were allowed to remove two fish per person per day from the River Colne under the Thames Region Fishery Bylaws. However, anglers encountered during the survey reported that they had not removed fish from the river.

In order to account for the unconfirmed reports of the consumption of fish from the aquatic survey area, a consumption rate of 1 kg y^{-1} is suggested for assessment purposes. This approach is consistent with the nominal value suggested in the 2004 Amersham habits survey and is the value used for assessments in Radioactivity in Food and the Environment (e.g. EA, FSA, NIEA and SEPA, 2009).

Fruit and vegetables irrigated with water from the River Colne

Two adults were identified consuming fruit and vegetables grown on land in the aquatic survey area that had been irrigated with water from the River Colne. Table 3 presents the consumption rates of all foods consumed, which were courgette, lettuce, spinach, aubergine, pumpkin, runner bean, tomato, carrot, spring onion, potato and cape gooseberries. These foods are included in the aquatic section of this report since the source of exposure is liquid discharges and not gaseous discharges. Therefore, these consumption rates have not been included in the tables of food groups from the terrestrial survey area and the annexes in this report. This pathway has been included in Table 53, which shows the combinations of adult pathways for consideration in dose assessments.

4.7 Canal and river bank occupancy

Canal and river bank occupancy rates for adults and children are presented in Table 4 and 5 respectively. Most of the activities on the canal bank were undertaken on the gravel towpath but people also used a strip of grass in between the edge of the canal and the towpath. The water level in the canal was controlled to prevent flooding and people living along the canal reported that the incidences of the canal water flooding onto the towpath have been very low. Activities on the banks of the River Colne were identified over grass.

Adults' canal and river bank occupancy

The maximum occupancy rate recorded over grass was 200 h y^{-1} for two anglers. One other person who was sitting on a chair on the canal bank had an occupancy rate within a factor of three of this giving a mean rate of 180 h y^{-1}.

The maximum occupancy rate recorded over the gravel towpath was 1300 h y^{-1} for an angler. One other person who walked along the canal bank had an occupancy rate within a factor of three of this giving a mean rate of 1100 h y^{-1}.

Children's canal and river bank occupancy

15-year-old age group

The maximum occupancy rate recorded over the gravel towpath was 630 h y^{-1} for an angler. No other occupancy rates were recorded within a factor of three of this, so the occupancy rate for this group has been taken to be 630 h y^{-1}.

10-year-old age group

Two identical occupancy rates recorded over the gravel towpath were 28 h y^{-1} for two children walking along the canal bank, so the occupancy rate for this group has been taken to be 28 h y^{-1}.

5-year-old age group

The only occupancy rate recorded over the gravel towpath was 12 h y^{-1} for a child walking along the canal bank, so the occupancy rate for this group has been taken to be 12 h y^{-1}.

1-year-old age group

The only occupancy rate recorded over the gravel towpath was 12 h y^{-1} for a child being pushed in a pram along the canal bank, so the occupancy rate for this group has been taken to be 12 h y^{-1}.

Gamma dose rate measurements

Representative gamma dose rate measurements at 1 m above the substrate were taken over grass and over the gravel towpath on the banks of the Grand Union Canal, and over sand and stones on the banks of the River Colne. These measurements (shown in Table 6) ranged from: 0.049 µGy h^{-1} to 0.058 µGy h^{-1} over grass; 0.053 µGy h^{-1} to 0.058 µGy h^{-1} over the gravel towpath; and was 0.048 µGy h^{-1} over sand and stones. For comparison, an approximate value of 0.060 µGy h^{-1} would be expected for natural substrates.

4.8 Handling of fishing gear or sediment

The survey team did not interview anyone undertaking activities involving handling fishing gear or sediment in the aquatic survey area. Although it was illegal to remove fish from the Grand Union Canal, fisheries officers reported that nets have been confiscated from the canal and although no consents to trap signal crayfish on the River Colne were granted by the Environment Agency in 2009, crayfish traps have been seized from the river. Handling of angling equipment was not considered to be a significant pathway. Therefore, as in previous surveys, data for this pathway were not collected.

4.9 Exposure to sewage sludge or sewage cake bio-solids

Table 7 shows the occupancy rates in close proximity (<10 m) to sewage sludge and sewage cake bio-solids for the employees at the Maple Lodge Sewage Treatment Works.

The maximum occupancy rate in close proximity (<10 m) to sewage sludge was 1800 h y^{-1} for 10 employees who were maintaining pumps at the sewage treatment works. The maximum occupancy rate in close proximity (<10 m) sewage cake bio-solids was 610 h y^{-1} for one employee who was transporting sewage cake biosolids at the sewage treatment works.

4.10 Water based activities

Activities taking place in or on the water can lead to ingestion of water and/or inhalation of spray. These pathways are generally considered to be minor in comparison with other exposure pathways such as the ingestion of foods produced in the vicinity of a nuclear site. However, relevant data have been collected for consideration in dose assessments. Mean occupancy rates for the high-rate groups and 97.5th percentile rates have not been calculated.

Activities where there is a high likelihood of the individual's face submerging under water have been classified as activities 'in water', as they are more likely to lead to ingestion of water. All other activities have been classified as activities 'on water'.

Occupancy rates for activities taking place 'in water' and 'on water' in the aquatic survey area for adults and children are shown in Table 8 and Table 9, respectively.

Activities in the water

The only activity identified taking place in the water in the aquatic survey area was kayaking. Two occupancy rates were recorded, which were 50 h y^{-1} for an adult and 100 h y^{-1} for a child in the 15-year-old age group.

No children in the 10-year-old, 5-year-old, 1-year-old and 3-month-old age groups were identified with occupancy rates in the water.

Activities on the water

Activities taking place on the water in the aquatic survey area were houseboat occupancy and boating. Nineteen observations were recorded for adults and two observations were recorded for children. The maximum occupancy rate for adults was 7300 h y^{-1} for two adults living on a houseboat that was permanently moored in the area. The occupancy rates for children were both 400 h y^{-1} for two children in the 10-year old age group living on a houseboat.

No children in the 15-year-old, 5-year-old, 1-year-old and 3-month-old age groups were identified with occupancy rates on the water.

5 TERRESTRIAL RADIATION PATHWAYS

5.1 Terrestrial survey area

The terrestrial survey area covered all land within 5 km of the site centre (NGR SU 984 975) as shown in Figure 3.

The northwestern part of the survey area was largely urban, encompassing the town of Amersham and a small part of the town of Chesham. The village of Little Chalfont was located directly east of the site, Chorleywood to the southeast and Chalfont St Giles to the south. There were large areas of agricultural land and woodland in between the urban areas. The rivers Chess and Misbourne bisected the area from northwest to east and west to south respectively.

Twenty-four working farms were identified in the area. Of these:

- Four farms produced beef cattle
- Seven farms produced arable crops
- Two farms produced beef cattle and arable crops
- Two farms produced beef cattle and lambs
- One farm produced beef cattle, cows' milk and chickens
- One farm produced chicken eggs
- One farm produced chicken eggs and arable crops
- One farm produced geese
- One farm produced goats' milk
- One farm produced pigs and beef cattle
- One farm produced pigs and lambs
- One farm produced lambs and arable crops
- One farm produced watercress

Beef cattle were sold nationally for breeding, to an abattoir in Oxford, and at a livestock market in Thame, Oxfordshire. Beef cattle and lambs were sold to abattoirs in Yorkshire and Colchester. Pork was sold from the farm, to local shops and farmer's markets. Cows' milk was sold to a national distributor and goats' milk was sold to two local dairies situated just outside the survey area. Chicken eggs were sold from the farms and to village shops in the local area. Most of the arable crops, which included barley, wheat and oilseed rape were sold nationally. Some barley was sold for malting. Watercress was grown in water from the River Chess and spring water, and was sold at local markets as well as nationally to a wholesaler.

Farmers and their families were noted to be consuming beef, lamb, pork, watercress, cows' milk and goats' milk produced commercially on their own farms. Chickens were kept non-commercially on several farms and chicken eggs were consumed.

Three smallholdings were identified in the area: one produced beef cattle, lambs and geese; one produced pigs and chickens for eggs; and one produced lambs. Beef cattle and lambs were sold at Thame livestock market and pork, chicken eggs and lamb were sold from the door and were consumed by family and friends.

Eleven allotment sites were located within the survey area. Five were in Amersham, three were in Chesham, two were in Chorleywood and one was in Chalfont St Giles. One of the allotment sites was located 0.35 km west of the Amersham site. There were approximately 170 plots in total at the Amersham allotment sites, approximately 40 plots in total at the Chesham allotment sites, 140 plots in total at the Chorleywood allotment sites and 70 at the Chalfont St Giles allotment site. The allotment sites were well used and well maintained and many varieties of fruit and vegetables were being grown. In addition, one smallholder produced beef cattle, lambs and geese at one of the allotment sites. Many households were identified where people grew fruit and vegetables in their gardens and two households kept goats for milking.

Seven beekeepers were identified in the survey area and together they had 46 hives. One of these beekeepers produced honey commercially and had 30 hives. Hives were located at Amersham, Flaunden, Little Chalfont, Chorleywood, Chalfont and Ley Hill. The production of honey per hive ranged from 9.0 kg y^{-1} to 40 kg y^{-1} and the average production per hive was 19 kg y^{-1}. The beekeepers consumed some of the honey and the rest was given to family and friends, sold commercially and sold from their homes.

The consumption of wild foods included blackberries, chestnuts, elderberries, nettles, sloes and mushrooms. These were collected from the allotments and farmland in the survey area. Game consumed from within the survey area included ducks, geese, partridge, pheasant, pigeon, rabbits and hares. Two private game shoots were identified on farmland in the area, one of which was conducted over four farms.

The consumption and use of groundwater in the terrestrial survey area was investigated. Residents of a household near Chorleywood were identified using well water as their sole water supply. Workers at a non-residential farm, also near Chorleywood, drank spring water whilst at work. An allotment site in Chesham bordered the River Chess and many allotment holders used river water to irrigate their fruit and vegetables. Another allotment site, also in Chesham, had a well and the water was used for irrigation. Some livestock had access to the River Chess and streams. In the previous habits survey, a mineral water bottling plant was identified that sourced water from boreholes near Chesham. The plant

was not operational in 2009 as it was in the process of changing ownership and it was reported that the plant would recommence operations in 2010.

The small scale commercial rapping of signal crayfish was carried out by one fisherman at a lake on the River Misbourne. However, the fisherman was unavailable for an interview at the time of the survey. It was reported that signal crayfish were abundant in the gravel pit lakes on the River Chess in Chesham and consumption of crayfish from these lakes was recorded.

Two lakes stocked with rainbow trout were identified on the River Chess, one at Latimer and one near Chesham. One of the lakes operated a catch and release policy and there was a bag limit of two fish per week. The consumption of trout from this lake was reported to be minimal. Small private fishing syndicates were identified fishing along the length of the River Chess.

Activities where people spend time in and on water for watercourses in the terrestrial area were investigated. Activities observed on the River Chess were wading at the watercress farm, wading at Frogmore Meadow Nature Reserve and paddling in the river at Chesham.

5.2 Wholesalers and retailers

Foods produced within the terrestrial survey area were being sold at numerous village shops, from farms and from the door. Village shops were selling duck eggs and chicken eggs; farm shops were selling chicken eggs, pork, lamb, duck and pheasant; and doorstep sales included pork, chicken eggs and honey.

5.3 Transfer of contamination offsite by wildlife

The transfer of contamination offsite by wildlife was investigated as radionuclides could enter the food chain or contaminate the environment through this pathway. Amersham site representatives were asked about wildlife that could act as carriers for the transfer of radioactivity off site. A representative of the Amersham site reported that rabbits were occasionally observed on site, but since they could not access controlled areas, the site did not have a wildlife control policy. Some individuals living in the terrestrial survey area were consuming rabbits that were caught or shot within 5 km of the site but it was unlikely that these animals had spent time on the site because they were shot some distance away.

5.4 Unusual pathways

No unusual pathways were identified in the terrestrial survey area.

5.5 Food consumption data

Consumption data for locally produced foodstuffs potentially affected by gaseous discharges from the Amersham site are presented in Tables 10 to 28 for adults and Tables 29 to 41 for children. These tables include the mean consumption rates of the high-rate groups together with the observed 97.5th percentile rates calculated as described in Section 3.2. The data are summarised in Table 42 for adults and in Tables 43 to 46 for children (15-year-old, 10-year-old, 5-year-old and 1-year-old age groups, respectively). No children in the 3-month-old age group were identified consuming foods from the terrestrial survey area.

In order to provide information relevant to monitoring and assessments studies, the consumption rate data collected during the survey were analysed to indicate the percentage that each food type contributed to each food group. The data are summarised in Table 47. Those food types sampled as part of the 2008 Food Standards Agency monitoring programme (EA, FSA, NIEA and SEPA, 2009) are shown in bold italics in the table.

Adults' consumption rates

Consumption of locally produced foods was identified in the following 19 food groups: green vegetables, other vegetables, root vegetables, potato, domestic fruit, milk, cattle meat, pig meat, sheep meat, poultry, eggs, wild/free foods, rabbits/hares, honey, wild fungi, venison, freshwater fish, freshwater crustaceans and freshwater plants. No consumption of cereals or freshwater molluscs was identified.

The mean consumption rate for the adult high-rate group exceeded the generic 97.5th percentile consumption rate for milk, pig meat and eggs. A further eight mean consumption rates for the high-rate groups exceeded the generic mean consumption rates. These were for green vegetables, other vegetables, root vegetables, potato, domestic fruit, sheep meat, poultry and honey. Six observed 97.5th percentile consumption rates exceeded the generic 97.5th percentile consumption rates. These were for green vegetables, root vegetables, milk, pig meat, sheep meat and eggs.

Children's consumption rates

15-year-old age group

Seventeen children in this age group were identified consuming locally produced food. Consumption was identified in the following 12 food groups: green vegetables, other vegetables, root vegetables, potato, domestic fruit, pig meat, poultry, eggs, wild/free foods, rabbits/hares, honey and freshwater plants. No consumption was identified for milk, cattle meat, sheep meat, wild fungi, venison, cereals, freshwater fish, freshwater crustaceans or freshwater molluscs.

The mean consumption rate for the high-rate group did not exceed the generic 97.5th percentile consumption rate for any food group. Five mean consumption rates for the high-rate groups exceeded the generic mean consumption rates. These were for green vegetables, root vegetables, pig meat, poultry and eggs. The observed 97.5th percentile consumption rates did not exceed the respective generic 97.5th percentile consumption rates for any food group.

10-year-old age group

Nine children in this age group were identified consuming locally produced food. Consumption was identified in the following 12 food groups: green vegetables, other vegetables, root vegetables, potato, domestic fruit, pig meat, poultry, eggs, wild/free foods, rabbits/hares, honey and freshwater plants. No consumption was identified for milk, cattle meat, sheep meat, wild fungi, venison, cereals, freshwater fish, freshwater crustaceans or freshwater molluscs.

The mean consumption rate for the high-rate group did not exceed the generic 97.5th percentile consumption rates for any food group. Three mean consumption rates for the high-rate groups exceeded the generic mean consumption rates. These were for domestic fruit, poultry and eggs. The observed 97.5th percentile consumption rates did not exceed the respective generic 97.5th percentile consumption rates for any food group.

5-year-old age group

Twelve children in this age group were identified consuming locally produced food. Consumption was identified in the following nine food groups: green vegetables, other vegetables, root vegetables, potato, domestic fruit, cattle meat, eggs, wild/free foods and honey. No consumption was identified for milk, pig meat, sheep meat, poultry, rabbits/hares, wild fungi, venison, cereals, freshwater fish, freshwater crustaceans, freshwater molluscs or freshwater plants. No generic 97.5th percentile or generic mean consumption rates have been determined for this age group so no comparisons with the corresponding observed rates are possible.

1-year-old age group

Two children in this age group were identified consuming locally produced food. Consumption was identified in the following five food groups: green vegetables, other vegetables, root vegetables, potato and domestic fruit. No consumption was identified for milk, cattle meat, pig meat, sheep meat, poultry, eggs, wild/free foods, rabbits/hares, honey, wild fungi, venison, cereals, freshwater fish, freshwater crustaceans, freshwater molluscs or freshwater plants. No generic 97.5th percentile or generic mean consumption rates have been determined for this age group so no comparisons with the corresponding observed rates are possible.

3-month-old age group

No children in this age group were identified consuming foods from the terrestrial survey area.

5.6 Water based activities

Activities where there is a high likelihood of the individual's face submerging under water are classified as activities 'in water', as they are more likely to lead to ingestion of water. All other activities are classified as activities 'on water'.

Occupancy rates for activities taking place 'on water' in the survey area for adults and children are shown in Table 48 and Table 49, respectively. No activities were identified taking place 'in the water' in the terrestrial survey area.

Activities on the water

Activities taking place on the water in the aquatic survey area were wading, angling and paddling. Five observations were recorded for adults and two observations were recorded for children. The maximum occupancy rate for adults was 960 h y^{-1} for three people wading at a watercress farm. The occupancy rates for children were both 6.0 h y^{-1} for two children in the 10-year-old and 5-year-old age groups, who were both paddling.

No children in the 5-year-old, 1-year-old and 3-month-old age groups were identified with occupancy rates on the water.

6 DIRECT RADIATION PATHWAYS

6.1 Direct radiation survey area

The direct radiation survey area covered all land within 1 km of the Amersham licensed site boundary, as shown in Figure 3. The occupancy data collected from the direct radiation area is also applicable to the direct exposure arising from gaseous releases from the site.

Immediately to the north of the site was a residential area which comprised four-storey flats and houses. Beyond this was a small business park and a combined nursery and primary school. The remainder of the land to the north of the survey area was agricultural and one working farm was located to the northwest.

Residential properties bordered the northeastern corner of the Amersham licensed site boundary and these were among the closest properties to the site. A lane ran along the eastern edge of the site and residential properties, a church and a pub were located along the lane. Further east from the site was the widespread village of Little Chalfont. In addition to residential properties, the village comprised: a high school with a sizeable playing field in close proximity to the Amersham site; several shopping areas; large commercial organisations; and a train station. The village was densely populated to the northeast of the survey area and less densely populated to the southeast of the area.

Two unoccupied properties were located close to the southern boundary of the site, one was derelict and one was undergoing renovation. The sectors to the south and southwest of the site were predominantly agricultural land with the exception of a residential area located at the outer limit of the survey area to the southwest.

Residential properties were located along the western boundary of the site, as well as a working farm and a workshop which was the closest commercial premises to the site. There was a large disused orchard, which had not been commercially productive for many years and further to the west was an allotment site with many well tended plots where people grew a variety of fruit and vegetables. The outskirts of Amersham town lay further to the west and northwest of the survey area. This area consisted of residential properties, three high schools, a college, a nursery, two industrial estates and shops.

6.2 Residential activities

In the 0 – 0.25 km zone, residential properties bordered the Amersham site boundary on the eastern side and western side of the site. There were also four-story flats and houses to the north of the site. The highly populated residential area of Little Chalfont covered part of the >0.25 – 5 km zone to the

northeast and a far greater part of the 0.5 – 1 km zone from the northeast to southeast, the northeast area being more densely populated. The outskirts of Amersham town covered the northwest sector of the >0.5 – 1 km zone and also overlapped into the >0.25 – 0.5 km zone. There was a small residential area at the outer limit of the >0.5 – 0.1 km zone to the southwest. One of these residential properties was also a working farm and one was a smallholding.

Due to the densely populated nature of the direct radiation survey area, it was not possible to conduct interviews at all houses in the area, thus effort was divided between the three zones. Approximately 80% of effort was concentrated in the inner zone and approximately 10% of the effort in each of the middle and outer zones.

Interviews were conducted at 30 households, which included 11 families with children. Of those interviewed, 18 were in the 0 – 0.25 km zone, five were in the >0.25 – 0.5 km zone and seven were in the > 0.5 – 1 km zone.

6.3 Leisure activities

A variety of leisure activities were identified occurring within the direct radiation survey area, particularly in the densely populated areas. There were two churches located directly to the north and northeast of the site that provided regular church services and were also used for classes and group meetings. In the village of Little Chalfont there were many cafes, restaurants, local shops, a library, a tennis club and a village hall. Throughout the survey area there were numerous lanes and footpaths which were used by walkers, dog walkers and joggers. To the west of the site there was a well tended allotment site.

6.4 Commercial activities

There were numerous businesses in the survey area. Those located in the 0 – 0.25 km zone were: a workshop to the west, which was the closest commercial premises to the site; a public house and a local shop to the east; and a business park with a warehouse and 12 office units to the north. The area to the west of the site in the >0.25 – 0.5 km zone included a restaurant, a petrol station four local shops and farming activities. On the outskirts of Amersham town in the >0.5 – 1.0 km zone there were two industrial estates, one of which had 28 units and the other had 26 warehouse and business units. In the village of Little Chalfont, there were local shops, offices, restaurants and cafes.

The activities of Amersham site employees and contractors while at work were not considered in the direct radiation survey as different radiation protection criteria apply.

6.5 Educational activities

One high school and one combined nursery and primary school were located in the >0.25 – 0.5 km zone. Two high schools, one college and one nursery were located within the >0.5 – 1 km zone. Interviews were conducted at the three high schools and the college. There were approximately 1970 pupils and 260 staff in total at the high schools and the pupil's ages ranged from 12 to 19 years old. There were typically between 500 and 600 students on the college campus per day and between 100 and 150 staff. Students generally spent two or three days per week on campus, which equates to 890 h y^{-1} and 590 h y^{-1}, respectively.

6.6 Occupancy rates

Table 50 presents indoor, outdoor and total occupancy data for adults and children. Where large numbers of identical occupancy rates were obtained for staff and pupils at high schools and a college in the area, a representative number of occupancy rates have been included in the tables. An analysis of the data by distance zones and occupancy rates is shown in Table 51.

0 – 0.25 km from the licensed site boundary

Occupancy data were collected for 68 people in the 0 – 0.25 km zone. The observations were for 51 residents, 10 visitors and seven employees. Two residents had identical highest total occupancy rates of 8700 h y^{-1} and two other residents had the highest indoor and outdoor occupancy rates of 8600 h y^{-1} and 1800 h y^{-1} respectively.

>0.25 – 0.5 km from the licensed site boundary

Occupancy data were collected for 41 people in the >0.25 – 0.5 km zone. The observations were for: 13 residents; two allotment holders; and 16 pupils and 10 staff from a high school. Two residents had identical highest total and indoor occupancy rates of 8600 h y^{-1} and 8400 h y^{-1} respectively. Two other residents had identical highest outdoor occupancy rates of 960 h y^{-1}.

>0.5 – 1.0 km from the licensed site boundary

Occupancy data were collected for 82 people in the >0.5 – 1.0 km zone. The observations were for: 16 residents; two farm workers; and 20 staff and 44 pupils from a high school or college. One resident had the highest total and indoor rates of 8500 h y^{-1} and 8400 h y^{-1} respectively. Another resident who was also a farmer had the highest outdoor occupancy rate of 2600 h y^{-1}.

6.7 Gamma dose rate measurements

Table 52 presents gamma dose rate measurements for the Amersham direct radiation survey area and for backgrounds. Gamma dose rate measurements were taken both indoors and outdoors at most residences, businesses and organisations where interviews were conducted. It should be noted that these measurements have not been adjusted for natural background dose rates. Outdoor measurements were taken approximately 5 to 10 metres from the nearest building. Gamma dose rate measurements over rough grass were taken at locations at distances further than 5 km from the site centre to obtain background dose rates. All measurements were taken at a height of 1 metre above the substrate.

Thirty-five outdoor gamma dose rates over grass ranged from 0.066 µGy h^{-1} to 0.121 µGy h^{-1}, and two over stone were 0.070 µGy h^{-1}. Where interviews were conducted at properties that were in close proximity to each other, a single outdoor gamma dose rate measurement was taken and was used for these properties. Twenty-three indoor measurements taken over concrete ranged from 0.056 µGy h^{-1} to 0.107 µGy h^{-1}; three taken over stone ranged from 0.088 µGy h^{-1} to 0.095 µGy h^{-1}; and four taken over wood ranged from 0.068 µGy h^{-1} to 0.103 µGy h^{-1}. Four background measurements ranged from 0.070 µGy h^{-1} to 0.090 µGy h^{-1}. Three of the 35 outdoor direct radiation measurements were higher than the highest background measurement.

Measurements of neutron and photon dose rates have been made by the Health Protection Agency (previously the National Radiological Protection Board) in the Amersham area but have not been published (pers. comm.). Comprehensive studies of background radiation have also been carried out on a national scale by the Health Protection Agency the most recent of these being a review conducted in 2005 (Watson *et al*, 2005). The results from this review could be used for comparison with the data collected during the survey.

7 USES OF HABITS DATA FOR DOSE ASSESSMENTS

7.1 Combined pathways

In determining habits data for the purposes of assessing radiological doses to the public, it may be necessary to consider a combination of pathways. Data are provided in Annexes 1 and 2 so that the full effect of combining pathways can be assessed for individual observations, given the concentrations and dose rates for a particular assessment. In some circumstances, it will be possible to make simplifying assumptions and define the consumption and external exposure rates appropriate to a series of potential high-rate groups. Such assumptions will depend on the assessment in question but some initial observations are provided here as a starting point for those undertaking assessments.

The most extensive combinations of pathways for adult dose assessment are shown in Table 53. Each of the 21 combinations shown in Table 53 represents an actual individual (or individuals) from Annex 1 who has positive data (irrespective of the magnitude), for each pathway marked with an asterisk. It should be noted that combination numbers in Table 53 do not correlate directly with observation numbers in Annex 1. Other individuals from Annex 1 have combinations that are not listed in Table 53 because they have fewer pathways and a dose assessment for them would be adequately covered by one of the 21 listed combinations. Data shown in Annex 3 have been included in Table 53.

Combinations of pathways at high-rate group means may be achieved by considering the data in Annexes 1 and 2. Although these mean rates are not given in the annexes, the rates for individuals in the high-rate groups are in bold and are therefore apparent.

7.2 Foetal dose assessment

Dose assessment of the foetus was introduced routinely for the first time in the Radioactivity in Food and the Environment Report for 2005 (EA, EHS, FSA and SEPA, 2006), following the publication of recommendations by the Radiation Protection Division of the Health Protection Agency (National Radiological Protection Board, 2005). The adopted approach is to use ratios of the consumption and occupancy data for women of childbearing age in order to calculate the dose to the foetus. Therefore, consumption and occupancy data collected during the Amersham habits survey for females of childbearing age are presented in Annex 5. The Office of National Statistics classifies women to be of childbearing age if they are between 15 – 44 years old (www.statistics.gov.uk); this age range has been used in Annex 5. It was not possible to collect ages for all female observations during the habits survey. However, these females with unknown ages have been included in Annex 5 as they might be women of childbearing age.

7.3 Total dose assessment

The environment agencies and the Food Standards Agency have considered ways of using habits data to calculate total dose retrospectively. The adopted approach is to use the adult consumption and occupancy data collected in each habits survey to create a matrix with a series of habits profiles for each site. The relevant matrix for the Amersham adults' profiled habits data is shown in Annex 6. The National Dose Assessment Working Group (NDAWG) has considered this approach to assessing retrospective total doses (Camplin *et al*, 2005) and has agreed that using habits profiles is an appropriate approach. Retrospective total doses around Amersham are made using these profiles and reported in the Radioactivity in Food and the Environment Reports (e.g. EA, FSA, NIEA and SEPA, 2009). Additionally, profiles have been created for 15-year-old, 10-year-old, 5-year-old and 1-year-old age groups, and for women of childbearing age. These are shown in Annexes 7, 8, 9, 10 and 11 respectively. They are not currently used in the Radioactivity in Food and the Environment Reports. Data from Annex 3 are not included in Annexes 7, 8, 9, 10 and 11. No profiles are provided for 3-month-old children because there were no data for this age group.

8 CONCLUSIONS AND SUGGESTIONS

8.1 Survey findings

The survey investigated the three potential sources of public radiation exposure from the Amersham site, which were:

- Discharges of liquid radioactive waste via the Maple Lodge Sewage Treatment Works to the Grand Union Canal
- Discharges of gaseous radioactive waste to the atmosphere
- Emissions of direct radiation

Data were collected for 476 individuals including anglers, houseboat occupants, farmers, allotment holders, beekeepers and people spending time within 1 km of the site. These people were targeted because their habits and where they live may cause them to be exposed to the effects of radioactivity from the site. However, it should be noted that the most exposed people can only be defined with the outcome of a dose assessment.

All consumption rates recorded are only for foods produced, collected or caught from within the survey areas as defined in Section 2.3.

Aquatic survey area

No interviewees were consuming aquatic foods from the aquatic survey area. However, there were unconfirmed reports from fisheries officers, anglers and houseboat occupants that fish from the Grand Union Canal were being consumed. Therefore, to account for this, a consumption rate of 1 kg y^{-1} is suggested for assessment purposes.

The mean occupancy rates for the adult high-rate groups over the canal and river banks were 180 h y^{-1} for grass and 1100 h y^{-1} for the towpath.

No interviewees were handling fishing gear or sediment in the aquatic survey area.

At the Maple Lodge Sewage Treatment Works, the maximum occupancy rate in close proximity (<10 m) to sewage sludge was 1800 h y^{-1} for 10 employees and the maximum occupancy rate in close proximity (<10 m) sewage cake bio-solids was 610 h y^{-1} for one employee.

The only adult occupancy rate recorded for time spent in water was 50 h y^{-1}. Two houseboat occupants had the identical maximum occupancy rates for time spent on water which was 7300 h y^{-1}.

The consumption of fruit and vegetables grown on land in the aquatic survey area which was irrigated with water from River Colne was identified.

Terrestrial survey area

The mean consumption rates for the adult high-rate groups for the separate consumption pathways for foods potentially affected by gaseous discharges were:

- 39 kg y^{-1} for green vegetables
- 21 kg y^{-1} for other vegetables
- 34 kg y^{-1} for root vegetables
- 71 kg y^{-1} for potato
- 29 kg y^{-1} for domestic fruit
- 350 kg y^{-1} for milk
- 12 kg y^{-1} for cattle meat
- 88 kg y^{-1} for pig meat
- 18 kg y^{-1} for sheep meat
- 12 kg y^{-1} for poultry
- 34 kg y^{-1} for eggs
- 2.6 kg y^{-1} for wild/free foods
- 1.9 kg y^{-1} for rabbits/hares
- 5.5 kg y^{-1} for honey
- 1.9 kg y^{-1} for wild fungi
- 10 kg y^{-1} for venison
- 7.1 kg y^{-1} for freshwater fish
- 0.1 kg y^{-1} for freshwater crustaceans
- 32 kg y^{-1} for freshwater plants

No consumption of cereals or freshwater molluscs was identified. The consumption of foodstuffs by children (15-year-old, 10-year-old, 5-year-old and 1-year-old age groups) was also recorded.

Residents of a household near Chorleywood were using well water as their sole water supply and workers at a non-residential farm, also near Chorleywood, drank spring water whilst at work. One allotment site in Chesham bordered the River Chess and many allotment holders used river water to irrigate their fruit and vegetables. Another allotment site, also in Chesham, had a well and the water was used for irrigation. Some livestock had access to the River Chess and to streams.

Investigations into the off-site transfer of radioactive contamination by wildlife established that rabbits were observed occasionally on site but since they cannot access controlled areas the site did not have a wildlife control policy. Some individuals living in the terrestrial survey area were consuming rabbits that

were caught or shot within 5 km of the site but it was not known if these animals had spent time on the site.

Direct radiation survey area

For occupancy by members of the public within 1 km of the Amersham licensed site boundary, the highest rates were:

- For the 0 – 0.25 km zone; 8700 h y^{-1} total occupancy, 8600 h y^{-1} indoor occupancy and 1800 h y^{-1} outdoor occupancy
- For the >0.25 – 0.5 km zone; 8600 h y^{-1} total occupancy, 8400 h y^{-1} indoor occupancy and 960 h y^{-1} outdoor occupancy
- For the >0.5 – 1.0 km zone; 8500 h y^{-1} total occupancy, 8400 h y^{-1} indoor occupancy and 2600 h y^{-1} outdoor occupancy

In all three zones, the highest total, indoor and outdoor rates were for residents, one of whom was a farmer who worked in the area.

8.2 Comparisons with previous surveys

The results from this 2009 survey can be compared with results from the previous Amersham habits survey undertaken in 2004. The aquatic, terrestrial and direct radiation survey areas in the 2009 survey were the same as those in the 2004 survey. All comparisons for consumption and for occupancy over canal and river banks include data for adults only. The comparisons of occupancy rates in the direct radiation area include data for adults and children.

Aquatic survey area

The types of activities identified in 2009 were for the most part similar to those identified in 2004.

No interviewees were consuming aquatic foods from the aquatic survey area in 2004 and 2009. In both years there were unconfirmed reports of people, believed to be of Eastern European origin, removing fish from the Grand Union Canal which was thought to be for consumption. Therefore, a nominal value of 1 kg y^{-1} for the consumption of fish was suggested for assessments purposes in 2004 and 2009.

For activities on canal and river banks, occupancy over grass and over the gravel towpath was identified during the 2004 and 2009 surveys and is compared in Table A.

Table A. Comparison between 2004 and 2009 occupancy rates over canal and river banks for adults

	2004			2009		
Canal or river bank substrate	Number in high-rate group	Maximum occupancy rate (h y^{-1})	Mean occupancy rate for the high-rate group (h y^{-1})	Number in high-rate group	Maximum occupancy rate (h y^{-1})	Mean occupancy rate for the high-rate group (h y^{-1})
Grass	1	60	60	3	200	183
Gravel towpath	7	920	638	2	1260	1086

The activities undertaken over canal and river banks by the individuals in the high-rate groups in 2004 included: angling, canal maintenance, dog walking and jogging. The activities undertaken by the individuals in the high-rate groups in 2009 were: angling, walking and sitting on a chair on the canal bank.

No interviewees were undertaking activities involving the handling of fishing gear or sediment in 2004 and 2009.

The maximum occupancy rate in close proximity (<10 m) to sewage sludge was identical in 2004 and 2009 and this was 1800 h y^{-1}. The maximum occupancy rate in close proximity (<10 m) sewage cake bio-solids was 1100 h y^{-1} in 2004 and this decreased to 610 h y^{-1} in 2009. This occupancy rate decreased because there were more employees undertaking the same activities for less time.

In 2004, there were no rates recorded for occupancy in water in the aquatic survey area and in 2009 the only occupancy rate for occupancy in water was 50 h y^{-1} for a kayaker. In the 2004 and 2009 surveys, the highest occupancy rates on water were 8000 h y^{-1} and 7300 h y^{-1} respectively, both of which were for houseboat occupants.

Terrestrial survey area

The production and consumption of food from the terrestrial survey area in 2009 was very similar to that in 2004. The types of farming remained a mix of beef cattle, dairy cattle, sheep, pigs, poultry, goats for milk, chickens for eggs and watercress.

The mean consumption rates for the adult high-rate group for terrestrial food groups from the 2004 and 2009 surveys are shown in Table B.

Table B. Comparison between 2004 and 2009 mean consumption rates for the adult high-rate groups for terrestrial food groups (kg y^{-1})

Food group	2004	2009
Green vegetables	31.8	38.9
Other vegetables	35.0	21.0
Root vegetables	45.5	33.6
Potato	71.9	71.1
Domestic fruit	37.5	28.7
Milk	187.5	352.6
Cattle meat	20.8	11.8
Pig meat	12.7	88.4
Sheep meat	9.7	18.2
Poultry	7.1	12.2
Eggs	19.1	34.3
Wild/free foods	2.0	2.6
Rabbits/hares	2.7	1.9
Honey	5.7	5.5
Wild fungi	1.6	1.9
Venison	6.7	10.2
Freshwater fish	8.3	7.1
Freshwater crustaceans	1.3	0.1
Freshwater plants	22.7	31.7

Consumption rates increased in 2009 in the following 10 food groups: green vegetables, milk, pig meat, sheep meat, poultry, eggs, wild/free foods, wild fungi, venison and freshwater plants. Consumption rates decreased in 2009 in the following nine food groups: other vegetables, root vegetables, potato, domestic fruit, cattle meat, rabbits/hares, honey, freshwater fish and freshwater crustaceans. No consumption of cereals or freshwater molluscs was identified in either survey. There were relatively large increases in consumption rates for milk, pig meat, sheep meat, poultry, eggs and venison. There was a relatively large decrease in the consumption rate for freshwater crayfish. The large increase in pork consumption was due to a pig farmer who was consumed large quantities of pork and pork products from his farm. The large increase in milk consumption was due

to the identification in 2009 of new milk consumers at a dairy farm and at a household where goats were kept for milk. No specific reasons were identified for the other changes in consumption rates.

Direct radiation survey area

Activities in the direct radiation survey area in 2009 were very similar to those in 2004. There were no changes in the residential areas, and the commercial and educational activities identified during both surveys were the same.

A comparison between the 2004 and 2009 direct radiation occupancy rates, by zone, is presented in Table C below.

Table C. Comparison between 2004 and 2009 occupancy rates in the direct radiation survey area (h y^{-1})

	2004	**2009**
0 – 0.25 km zone		
Highest total	8656	8708
Highest indoor	8088	8618
Highest outdoor	2190	1825
>0.25 – 0.5 km zone		
Highest total	7964	8552
Highest indoor	6664	8448
Highest outdoor	1300	960
>0.5 – 1 km zone		
Highest total	8036	8526
Highest indoor	6762	8422
Highest outdoor	2800	2555

In the 2004 and 2009 surveys in all three zones, the highest total, indoor and outdoor rates were for residents. In 2004 and 2009 in the >0.5 – 1 km zone, the same resident who had the highest outdoor occupancy rates was also a farmer who worked in the area.

In the Amersham direct radiation area, gamma dose measurements taken in 2009 can be compared with those taken at the same premises in 2004. These are shown in Table D and the results are broadly similar.

Table D. Comparison between 2004 and 2009 gamma dose rate measurements taken at residences in the Amersham direct radiation survey area (μGy h^{-1})

	Outdoor		Indoor	
Location	**2004**	**2009**	**2004**	**2009**
House 2	0.127	0.121	0.072	0.088
House 3	0.086	0.097	0.083	0.088
House 6	0.077	0.073	0.070	0.067
House 8	0.088	0.097	0.084	NM
House 10	0.077	0.082	0.074	0.081
House 16	0.072	0.080	0.098	0.107
House 31	0.068	0.066	0.079	0.079

These measurements have not been adjusted for natural background dose rates
These house numbers relate to those in Table 52
NM = Not measured

8.3 Summary of current environmental monitoring programmes

The 2008 monitoring programmes for Amersham operated by the Environment Agency and the Food Standards Agency, and published in the RIFE report (EA, FSA, NIEA and SEPA, 2009), included the samples and measurements listed below. The location names, foods and substrate classifications are taken directly from that publication. Some of the samples and measurements taken for the monitoring programme may be from outside the survey areas used for the 2009 Amersham habits survey.

Aquatic monitoring

- Flounder from Beckton
- Sediment from the outfall and from upstream of the outfall (Grand Union Canal)
- Freshwater from Maple Cross, upstream of the outfall (Grand Union Canal), the River Chess, the River Misbourne upstream and downstream
- Crude effluent, digested sludge and final effluent from the Maple Lodge Sewage Treatment Works
- Gamma dose rate measurements over grass, and over mud and grass on the bank of the Grand Union Canal

Terrestrial monitoring

- Milk
- Apples
- Beetroot
- Blackberries
- Carrots
- Chard
- Runner beans

- Spinach
- Wheat
- Grass
- Soil

8.4 Suggestions for changes to the monitoring programmes

The following are suggestions for changes to the current environmental monitoring programmes. It should be noted that the suggestions are based on the findings of this survey. They are not the outcome of any form of assessment. It is suggested that samples currently monitored, which are not listed below, remain unchanged in the monitoring programmes.

Environment Agency monitoring

The current environmental monitoring programme adequately covers the Amersham area and no changes are suggested.

Food Standards Agency monitoring

- The consumption of pork was identified at a rate significantly above the generic 97.5th percentile rate. No meats are currently being sampled. Therefore, it is suggested that a one-off sample of pork could be added to the programme for reassurance purposes.
- A sample of goats' milk could be introduced as it was consumed at high rates and is not currently monitored.
- A sample of honey could be introduced to the programme and this was consumed by a large number of people and is not currently monitored.
- An annual sample of wild fungi could be introduced since this is consumed and is not currently monitored. Fungi are known to have high concentration factors for radionuclides.

9 ACKNOWLEDGEMENTS

Gratitude is expressed to representatives of local authorities and associations and members of the public who offered helpful advice and information during the survey. This survey was undertaken on behalf of the Environment Agency, the Food Standards Agency and the Health and Safety Executive. The project officers for these organisations provided considerable help during the planning of the survey and the drafting of the report.

10 REFERENCES

Allott, R., 2005. Assessment of compliance with the public dose limit. Principles for the assessment of total retrospective public doses. NDAWG/2/2005. National Dose Assessment Working Group.

Byrom, J., Robinson, C., Simmonds, J.R., Walters, B., and Taylor, R.R., 1995. Food consumption rates for use in generalised radiological dose assessments. J. Radiol. Prot. 1995 Vol. 15 No 4 335-341.

Camplin, W.C., Grzechnik, M.P. and Smedley, C.A., 2005. Methods for assessment of total dose in the Radioactivity in Food and the Environment report. Presented to the *National Dose Assessments Working Group (NDAWG)*. Paper NDAWG/3/2005, 27th April 2005.

CEC, 1996. Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation. Off. J. Eur. Commun., 39(L159): 1-114.

DETR, 2000. Radioactive Substances (Basic Safety Standards) (England and Wales) Direction 2000. DETR, London.

EA, EHS, FSA and SEPA, 2006. Radioactivity in Food and the Environment, 2005. EA, EHS, FSA and SEPA, Warrington, Belfast, London and Stirling. RIFE (11).

EA, FSA, NIEA and SEPA, 2009. Radioactivity in Food and the Environment, 2007. EA, FSA, NIEA and SEPA, Warrington, London, Belfast and Stirling. RIFE (14).

EA, SEPA, DoENI, NRPB and FSA, 2002. Authorisation of discharges of radioactive waste to the environment. Principles for the assessment of prospective public doses. Interim Guidance. EA, SEPA, DoENI, NRPB and FSA, Lancaster.

FSA, 2002. Assessment Methodology for the Potential Impact on Food of Radioactive Discharges to the Environment. FSA, London.

Good Housekeeping, 1994. Good Housekeeping Cook Book. Ebury Press, London.

Hessayon, D. G., 1990. The Fruit Expert, pbi Publications, Waltham Cross.

Hessayon, D. G., 1997. The New Vegetable & Herb Expert, Expert Books, London.

Hunt, G.J., Hewett, C.J. and Shepherd, J.G., 1982. The identification of critical groups and its application to fish and shellfish consumers in the coastal area of the north-east Irish Sea. Health Physics, Vol. 43, No 6, 875-889.

IAEA, 1996. International basic safety standards for protection against ionizing radiation and for the safety of radiation sources. Saf. Ser. No. 115. IAEA, Vienna.

ICRP, 1991. 1990 Recommendations of the International Commission on Radiological Protection. Annal. ICRP 21 (1-3). Pergamon Press, Oxford, (ICRP Publ. 60.).

ICRP, 1996. Age-dependent doses to members of the public from intake of radionuclides. Annal. ICRP 26 (1). Elsevier Science, Oxford, (ICRP Publ. 72).

ICRP, 2006. Assessing dose of the representative person for the purpose of radiation protection of the public. Annal. ICRP 36 (3). Elsevier Science, Oxford, (ICRP Publ. 101.).

ICRP, 2007. The 2007 Recommendations of the International Commission on Radiological Protection. Annal. ICRP 37 (2-4). Elsevier Science, Oxford, (ICRP Publ. 103)

Leonard, D.R.P., Hunt, G.J. and Jones, P.G.W., 1982. Investigation of individual radiation exposures from discharges to the aquatic environment: techniques used in habits surveys. Proc. 3rd Int. Symp. Soc. Radiol. Prot., Inverness, 6 to 11 June 1982. Vol 2, 512-517. Society for Radiological Protection.

NDAWG, 2005. Position paper on the collection and use of habits data for retrospective dose assessments. National Dose Assessment Working Group. NDAWG/4/2005.

NDAWG, 2009. Acquisition and use of habits data for prospective assessments. National Dose Assessment Working Group. NDAWG/2/2009.

National Radiological Protection Board, 2005. Guidance on the application of dose coefficients for the embryo and fetus from intakes of radionuclides by the mother. Docs NRPB 16(2). NRPB, Chilton, 41pp.

McTaggart, K. A., Tipple, J. R., Clyne. F.J. and Sherlock, M., 2005. Radiological Habits Survey: Amersham, 2004. EA, FSA and HSE, Preston, London and Bootle.

Smith, K.R. and Jones, A.L., 2003. Generalised habit data for radiological assessments. NRPB-W41. NRPB, Chilton.

UK Parliament, 1965. Nuclear Installations Act, 1965 (as amended). HMSO, London.

UK Parliament, 1993. Radioactive Substances Act, 1993. HMSO, London.

UK Parliament, 1995. Environment Act, 1995. HMSO, London.

UK Parliament, 1999. The Ionising Radiation Regulations 1999. Stat. Inst. 1999/3232. HMSO, London, 67pp.

UK Parliament, 2004. Energy Act, 2004. HMSO, London.

UK Parliament, 2009. UK Strategy for Radioactive Discharges. DECC, London.

UK Parliament, 2010. Environmental Permitting (England and Wales) Regulations, 2010. Statutory Instrument 2010 No 675. HMSO, London.

Watson, S.J., Jones, A.L., Oatway, W.B. and Hughes, J.S., 2005. Ionising Radiation Exposure of the UK Population: 2005 review. HPA-RPD-001, Chilton.

www.statistics.gov.uk

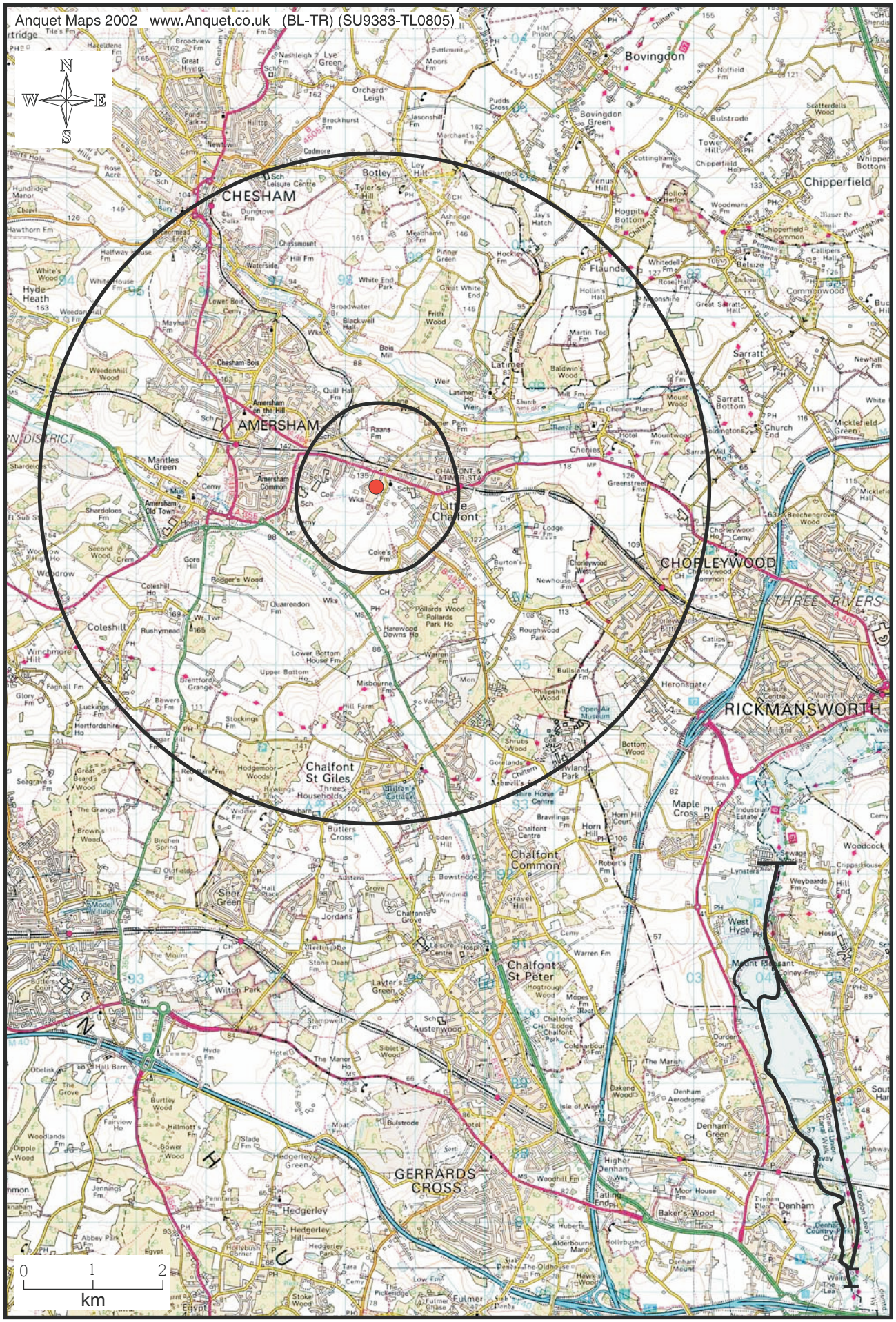

Figure 1. Overview of the Amersham aquatic, terrestrial and direct radiation survey areas

● Amersham site centre

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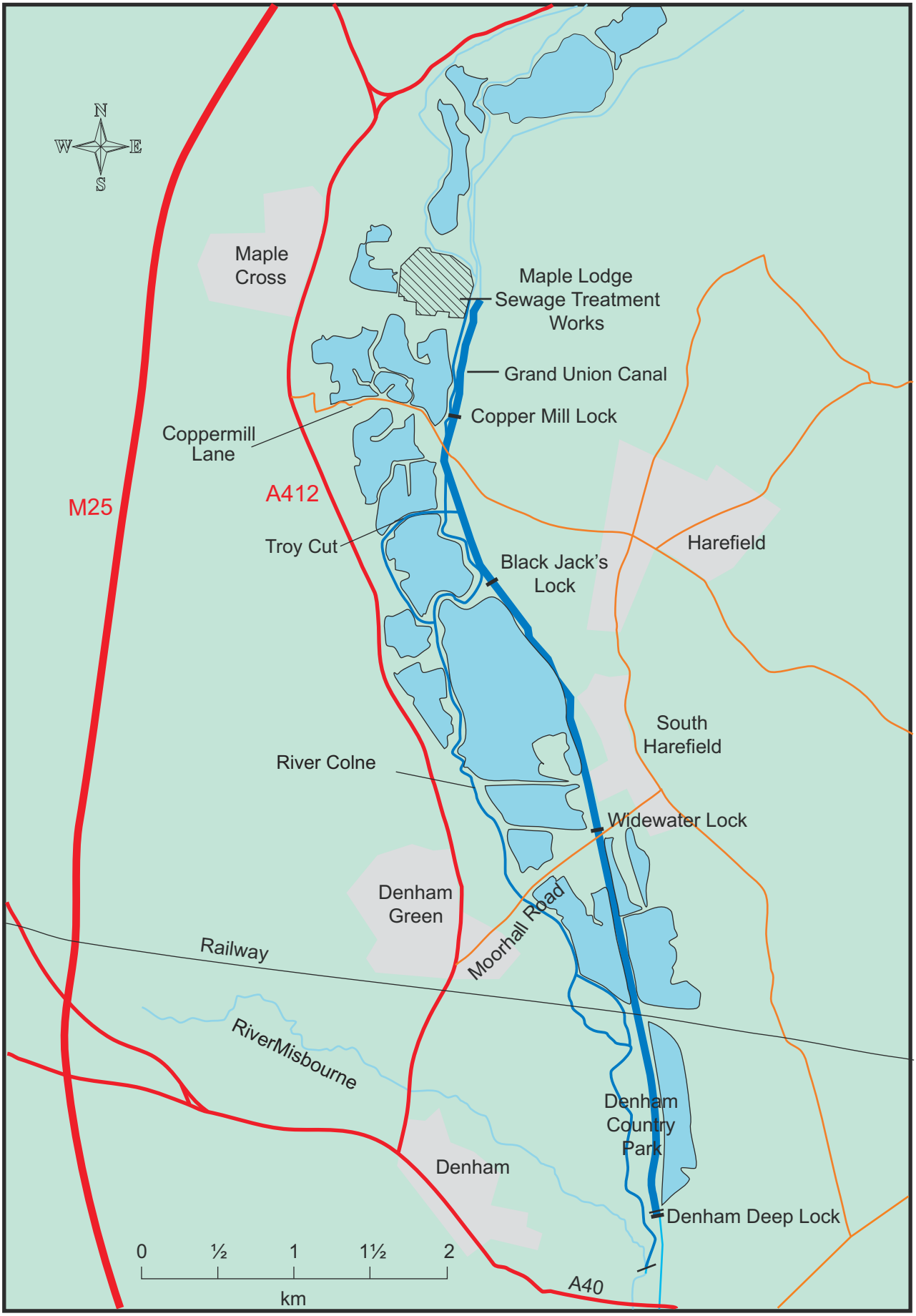

Figure 2. The Amersham aquatic survey area

Watercourses investigated in the aquatic survey

Watercourses not investigated in the aquatic survey

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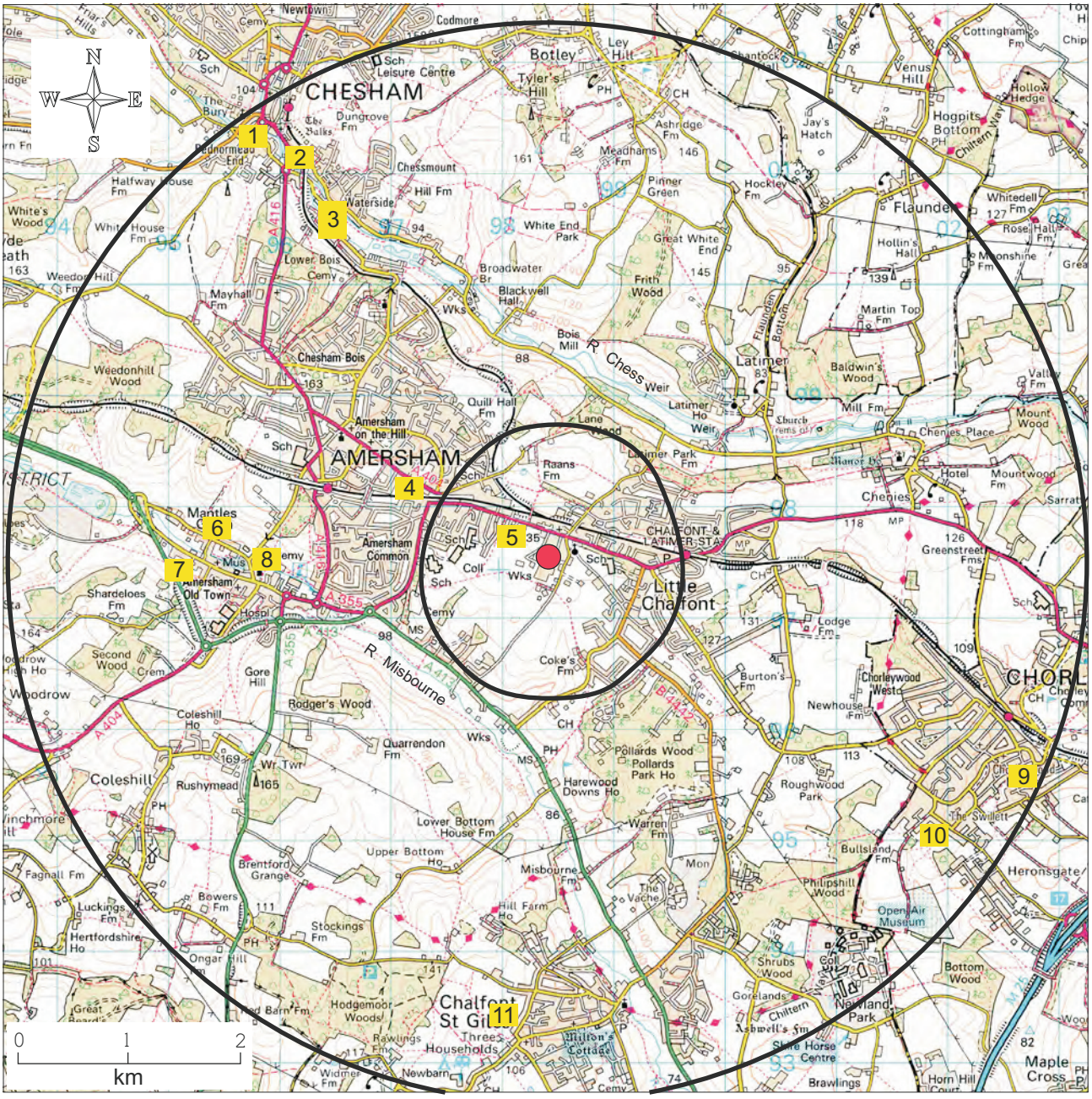

Figure 3. The Amersham terrestrial (outer ring) and direct radiation (inner ring) survey areas

1 = Germaine Street Allotments
2 = Amersham Road Allotments
3 = Duke of Bedford Trust Allotments
4 = Woodside Road Allotments
5 = White Lion Road Allotments
6 = Football Allotments
Amersham site centre
7 = Little Shardloes Allotments
8 = The Pyghtle Allotments
9 = Copmans Wick Allotments
10 = The Swillett Allotments
11 = Back Lane Allotments

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Table 1. Survey coverage

Group	Criteria	Estimate of complete coverage	Number for whom positive data were obtained	Coverage for positive observations	Notes
SUMMARY OF ALL PATHWAYS					
All potential people in Amersham aquatic, terrestrial and direct radiation survey areas	Number of people resident in terrestrial survey area (excluding those resident in the direct radiation survey area) (See (B) terrestrial pathways)	42600[a]	196[b]	0.5%	The survey targeted individuals who were potentially the most exposed (see Section 2.4), mostly producers of local food (farmers and gardeners). Including 7 people who spend time 'on water' in the terrestrial survey area.
	Number of people resident in the direct radiation survey area (See (C) direct radiation pathways)	Unknown but >3880	80	2%	Including 2 people who lived and worked in the area. Excluding employees and contractors of GE Healthcare Ltd., and people living in the direct radiation survey area.
	Number of people employed but not resident in the direct radiation survey area (See (C) direct radiation pathways)	U	39[b]	U	Including 30 staff and high schools in the area. Excluding employees and contractors of GE Healthcare Ltd., and people living in the direct radiation survey area.
	Number of people visiting the direct radiation area (See (C) direct radiation pathways)	U	72	U	Including 60 pupils at high schools and a college in the area.
	Number of people effected by liquid discharges (excluding people resident in the terrestrial survey area) (See (A) aquatic pathways)	U	89[b]	U	Including 43 employees at the Maple Lodge Sewage Treatment Works.
	Total for aquatic, terrestrial and direct radiation survey areas	U	476[b]	U	
(A) AQUATIC PATHWAYS					
Canal and river bank users (including anglers)	Number of people interviewed during the survey	U	39	U	
Houseboat occupants	Number of people interviewed during the survey	U	17	U	
Kayakers	Number of people interviewed during the survey	U	2	U	
Maple Lodge Sewage Treatment Works employees	Number of people who work in close proximity (<10m) to the sewage sludge or sewage cake bio-solids at the Maple Lodge Sewage Treatment Works	58	43	74%	Correspondence with a representative from the sewage treatment works provided generic data for 43 employees. Additionally, 15 employees were undertaking this work for a small amount of time and these people have not been included in the data analysis.

Table 1. Survey coverage

Group	Criteria	Estimate of complete coverage	Number for whom positive data were obtained	Coverage for positive observations	Notes
(B) TERRESTRIAL PATHWAYS					
Farms and smallholdings	Number of farmers and their family members consuming farm produce from the survey area	92	72	78%	Interviews were conducted with 25 farmers in the survey area.
Allotment holders	Number of people consuming allotment produce from the survey area	U	106	U	Interviews were conducted with 32 allotment holders.
Bee keepers	Number of people consuming honey from survey area	U	31	U	Interviews were conducted with 7 beekeepers.
River and lake users	Number of people interviewed during the survey	U	7	U	
(C) DIRECT RADIATION PATHWAYS					
Occupancy of area	Total number of occupancies excluding site employees and contractors	Unknown but >3880	191	U	
Residents	Number of residents in the survey area	Unknown but >3880	80	U	Interviews were conducted at 30 households. Including 2 people who lived and worked in the area.
Employees (excluding staff at schools)	Number of people employed in the survey area	U	11	U	Including 2 people who lived and worked in the area. Excluding employees and contractors of GE Healthcare Ltd., and people living in the direct radiation survey area.
School and college staff	Number of staff at schools and a college in the survey area	460	30	7%	Although times were recorded for 385 staff at 3 high schools and 1 college, a representative value of 30 observations were included in the data analysis.
School and college pupils	Number of pupils attending schools and a college in the survey area	2790	60	2%	Although times were recorded for 2523 pupils at 3 high schools and 1 college, a representative value of 60 observations were included in the data analysis.
Visitors	Number of visitors to the survey area	U	12	U	
BREAKDOWN OF AGE GROUPS					
Adults	17-year-old and over	~33530	343	~1%	
15-year-old	12-year-old to 16-year-old	~2590	54	~2%	
10-year-old	7-year-old to 11-year-old	~2790	17	~0.6%	
5-year-old	2-year-old to 6-year-old	~2640	14	~0.5%	
1-year-old	1-year-old	~520	3	~0.5%	
3-month-old	Under 1-year-old	~490	0	0	

Notes

[a] Data from www.statistics.gov.uk were used to estimate this figure for people resident in the 5 km survey area.

[b] The number of people for whom positive data were obtained, for pathways (A), (B) and (C), will not equal the relevant totals in the summary of all pathways. This is because in sections (A), (B) and (C) some individuals may be counted two or more times, for example someone who lives on a houseboat and spends time on the canal bank.

U - Unknown

Table 2. Typical food groups used in habits surveys

Food group	Examples of foods within the group
Green vegetables	Asparagus, broccoli, Brussels sprout, cabbage, calabrese, cauliflower, chard, courgettes, cucumber, gherkin, globe artichoke, herbs, kale, leaf beet, lettuce, marrow, spinach
Other vegetables	Aubergine, broad bean, chilli pepper, french bean, mangetout, pea, pepper, pumpkin, runner bean, sweetcorn, tomato
Root vegetables	Beetroot, carrot, celeriac, celery, chicory, fennel, garlic, Jerusalem artichoke, kohl rabi, leek, onion, parsnip, radish, shallot, spring onion, swede, turnip
Potato	Potato
Domestic fruit	Apple, apricot, blackberry, blackcurrant, boysenberry, cherry, damson, fig, gooseberry, grapes, greengages, huckleberry, loganberry, melon, nectarines, peach, pear, plum, raspberry, redcurrants, rhubarb, rowanberry, strawberry, tayberry, whitecurrant
Milk	Cows' milk, cream, yoghurt, goats' milk
Solid milk products	Butter, cheese
Cattle meat[a]	Beef
Pig meat[a]	Pork
Sheep meat[a]	Lamb, mutton
Poultry	Chicken, duck, goose, grouse, guinea fowl, partridge, pheasant, pigeon, snipe, turkey, woodcock
Eggs	Chicken egg, duck egg, goose egg
Wild/free foods	Blackberry, chestnut, crab apple, damson, dandelion root, elderberry, nettle, raspberry, rowanberry, sloe, strawberry,
Honey	Honey
Wild Fungi	Mushrooms, other edible fungi
Rabbits/Hares	Rabbit, hare
Venison[a]	Venison
Fish (sea)	Bass, brill, cod, common ling, dab, Dover sole, flounder, gurnard, haddock, hake, herring, lemon sole, mackerel, monkfish, mullet, plaice, pollack, witch saithe, salmon, sea trout, squid[b], cuttlefish[b], rays, turbot, whitebait, whiting
Fish (freshwater)	Brown trout, rainbow trout, perch, pike, salmon (river), eels
Crustaceans	Brown crab, spider crab, crawfish, lobster, *Nephrops* , squat lobster, prawn, shrimp
Molluscs	Cockles, limpets, mussels, oysters, queens, scallops, razor shell, whelks, winkles

Notes

[a] Including offal

[b] Although squid and cuttlefish are molluscs, radiologically they are more akin to fish

The food groups are based on Byrom *et al* ., (1995)

Table 3. Adults' consumption rates of fruit and vegetables irrigated with water from the River Colne in the Amersham aquatic survey area (kg y^{-1})

Observation number	Green vegetables			Other vegetables				Root vegetables			Domestic fruit
	Courgette	Lettuce	Spinach	Aubergine	Pumpkin	Runner bean	Tomato	Carrot	Spring onion	Potato	Cape gooseberry
78	12.9	3	1.7	7.7	1.7	12.8	9	1.1	1.5	2.3	1.5
79	12.9	3	1.7	7.7	1.7	12.8	9	1.1	1.5	2.3	1.5

Notes

These data have not been included in the tables for foods from the terrestrial survey area or in Annex 1 since the source of exposure is liquid discharge and not gaseous discharge. The pathway has been included in Table 53, which shows the combinations of adult pathways for consideration in dose assessments.

Table 4. Adults' occupancy rates over canal and river banks in the Amersham aquatic survey area (h y^{-1})

Observation number	Location	Activity	Grass	Gravel towpath
226	**River Colne**	**Angling**	**200**	**-**
227	**River Colne**	**Angling**	**200**	**-**
220	**Grand Union Canal - near South Harefield**	**Sitting on a chair**	**150**	**-**
215	Grand Union Canal - near Denham	Sitting on a chair	11	-
162	**Grand Union Canal - near the Maple Lodge Sewage Treatment Works**	**Angling**	**-**	**1260**
75	**Grand Union Canal - several locations**	**Walking**	**-**	**913**
177	Grand Union Canal - several locations	Walking	-	250
175	Grand Union Canal - several locations	Angling	-	200
170	Grand Union Canal and River Colne - near Copper Mill Lock	Angling	-	126
76	Grand Union Canal - several locations	Dog walking	-	104
218	Grand Union Canal - between Copper Mill Lock and Denham	Walking	-	104
219	Grand Union Canal - between Copper Mill Lock and Denham	Walking	-	104
74	Grand Union Canal - several locations	Jogging	-	90
174	Grand Union Canal - near Copper Mill Lock	Water sports preparation	-	75
166	Grand Union Canal - several locations	Dog walking	-	60
167	Grand Union Canal - several locations	Dog walking	-	60
176	Grand Union Canal - several locations	Walking	-	40
216	Grand Union Canal - near Denham	Cycling and walking	-	36
217	Grand Union Canal - near Denham	Cycling and walking	-	36
77	Grand Union Canal - several locations	Dog walking	-	32
161	Grand Union Canal - near the Maple Lodge Sewage Treatment Works	Angling	-	30
168	Grand Union Canal - several locations	Dog walking	-	30
169	Grand Union Canal - several locations	Dog walking	-	30
221	Grand Union Canal - near Widewater Lock	Walking	-	28
222	Grand Union Canal - near Widewater Lock	Walking	-	28
159	Grand Union Canal - several locations	Dog walking	-	26
160	Grand Union Canal - several locations	Dog walking	-	26
171	Grand Union Canal - near Copper Mill Lock	Angling	-	24
172	Grand Union Canal - near Copper Mill Lock	Angling	-	24
332	Grand Union Canal - several locations	Cycling	-	14
189	Grand Union Canal - several locations	Walking	-	12
164	Grand Union Canal - several locations	Walking	-	4
165	Grand Union Canal - several locations	Walking	-	4

Notes

Observations in bold indicate the high-rate individuals

The mean occupancy rate over grass based on 3 high-rate observations is 183 h y^{-1}

The observed 97.5th percentile rate based on 4 observations for grass is 200 h y^{-1}

The mean occupancy rate over towpath based on 2 high-rate observations is 1086 h y^{-1}

The observed 97.5th percentile rate based on 29 observations for the towpath is 1017 h y^{-1}

Table 5. Children's occupancy rates over canal and river banks in the Amersham aquatic survey area (h y^{-1})

15-year-old age group

Observation number	Age	Location	Activity	Gravel towpath
163	**15**	**Grand Union Canal - near the Maple Lodge Sewage Treatment Works**	**Angling**	**630**
173	16	Grand Union Canal - near Copper Mill Lock	Water sports preparation	25

Notes

The observation in bold indicates the high-rate individual

The occupancy rate over the gravel towpath based on the only high-rate observation is 630 h y^{-1}

The observed 97.5th percentile rate based on 2 observations for the gravel towpath is 615 h y^{-1}

10-year-old age group

Observation number	Age	Location	Activity	Gravel towpath
223	**10**	**Grand Union Canal - near Widewater Lock**	**Walking**	**28**
224	**7**	**Grand Union Canal - near Widewater Lock**	**Walking**	**28**

Notes

Observations in bold indicate the high-rate individuals

The mean occupancy rate over the gravel towpath based on 2 high-rate observations is 28 h y^{-1}

The observed 97.5th percentile rate based on 2 observations for the gravel towpath is 28 h y^{-1}

5-year-old age group

Observation number	Age	Location	Activity	Gravel towpath
191	**5**	**Grand Union Canal - several locations**	**Walking**	**12**

Notes

The observation in bold indicates the high-rate individual

The occupancy rate over the towpath based on the only observation is 12 h y^{-1}

The observed 97.5th percentile rate is not applicable for 1 observation

1-year-old age group

Observation number	Age	Location	Activity	Gravel towpath
190	**1**	**Grand Union Canal - several locations**	**Being pushed in a pram**	**12**

Notes

The observation in bold indicates the high-rate individual

The occupancy rate over the towpath based on the only observation is 12 h y^{-1}

The observed 97.5th percentile rate is not applicable for 1 observation

Table 6. Gamma dose rate measurements over canal and river banks in the Amersham aquatic survey area (µGy h^{-1})

Location	NGR	Substrate	Gamma dose rate at 1 metre[a]
Grand Union Canal - south of the Maple Lodge Sewage Treatment Works outfall	TQ 042 919	Grass	0.049
Grand Union Canal - north of Copper Mill Lock	TQ 041 913	Grass	0.051
Grand Union Canal - near Black Jack's Lock	TQ 042 904	Gravel towpath	0.058
Grand Union Canal - south of Black Jack's Lock	TQ 045 899	Gravel towpath	0.053
Grand Union Canal - north of Widewater Lock	TQ 048 894	Gravel towpath	0.056
Grand Union Canal - north of Denham Deep Lock	TQ 052 863	Grass	0.058
River Colne	TQ 052 862	Sand and stones	0.048

Notes

[a] These measurements have not been adjusted for natural background dose rates.

Table 7. Occupancy rates in close proximity to sewage sludge or sewage cake bio-solids (h y^{-1})

Observation number	Activity	Occupancy in close proximity (<10m) to sewage sludge	Occupancy in close proximity (<10m) to sewage cake bio-solids
434 - 443	Maintaining pumps	1840	-
444 - 452	Debris removal, cleaning filters, unblocking pumps and pipes, and sampling	1700	-
453 - 489	Debris removal, cleaning filters, unblocking pumps and pipes, and sampling	1140	-
460	Debris removal, cleaning filters, unblocking pumps and pipes, and sampling	850	-
461	Moving sewage cake bio-solids on site	-	607
462 - 476[a]	Loading, delivering and unloading sewage cake bio-solids	-	276

Notes

[a]In addition to these employees, there were approximatley 15 employees doing this work for a small fraction of their working year.

Table 8. Adults' occupancy rates in and on water in the Amersham aquatic survey area (h y $^{-1}$)

Observation number	Location	Activity	In water	On water
174	Grand Union Canal - near Copper Mill Lock	Kayaking	50	-
78	Grand Union Canal - near Black Jack's Lock	Living on a houseboat	-	7300
79	Grand Union Canal - near Black Jack's Lock	Living on a houseboat	-	7300
75	Grand Union Canal - near Widewater Lock	Living on a houseboat	-	7008
225	Grand Union Canal - near Widewater Lock	Living on a houseboat	-	4536
177	Grand Union Canal - several locations	Living on a houseboat	-	4000
220	Grand Union Canal - near Harefield	Living on a houseboat	-	1814
175	Grand Union Canal - several locations	Living on a houseboat	-	1760
176	Grand Union Canal - several locations	Living on a houseboat	-	1760
221	Grand Union Canal - near Widewater Lock	Living on a houseboat	-	403
222	Grand Union Canal - near Widewater Lock	Living on a houseboat	-	403
164	Grand Union Canal - several locations	Living on a houseboat	-	126
165	Grand Union Canal - several locations	Living on a houseboat	-	126
215	Grand Union Canal - near Denham Deep Lock	Living on a houseboat	-	126
72	Grand Union Canal - several locations	Living on a houseboat	-	108
73	Grand Union Canal - several locations	Living on a houseboat	-	108
218	Grand Union Canal - between Copper Mill Lock and Denham	Boating	-	84
219	Grand Union Canal - between Copper Mill Lock and Denham	Boating	-	84
70	Grand Union Canal - near Widewater Lock	Living on a houseboat	-	24
71	Grand Union Canal - near Widewater Lock	Living on a houseboat	-	24

Table 9. Children's occupancy rates in and on water in the Amersham aquatic survey area (h y $^{-1}$)

Observation number	Age	Location	Activity	In water	On water
15-year-old age group					
173	16	Grand Union Canal - near Coppermill Lock	Kayaking	100	-
10-year-old age group					
223	10	Grand Union Canal - near Widewater Lock	Living on a houseboat	-	403
224	7	Grand Union Canal - near Widewater Lock	Living on a houseboat	-	403

Table 10. Adults' consumption rates of green vegetables from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Asparagus	Broccoli	Brussel sprout	Cabbage	Calabrese	Cauliflower	Chard	Courgette	Cucumber	Globe artichoke	Herbs	Kale	Lettuce	Marrow	Rocket	Spinach	Total
334	**1.9**	**13.5**	**-**	**-**	**-**	**6.7**	**-**	**36.4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**9.2**	**67.7**
335	**1.9**	**13.5**	**-**	**-**	**-**	**6.7**	**-**	**36.4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**9.2**	**67.7**
184	**-**	**-**	**-**	**19.5**	**15.0**	**3.0**	**0.6**	**4.4**	**4.1**	**-**	**-**	**5.1**	**1.2**	**-**	**-**	**1.4**	**54.3**
185	**-**	**-**	**-**	**19.5**	**15.0**	**3.0**	**0.6**	**4.4**	**4.1**	**-**	**-**	**5.1**	**1.2**	**-**	**-**	**1.4**	**54.3**
82	**-**	**16.8**	**3.4**	**13.7**	**-**	**2.8**	**-**	**15.2**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**51.9**
83	**-**	**16.8**	**3.4**	**13.7**	**-**	**2.8**	**-**	**15.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**51.9**
209	**-**	**11.2**	**10.9**	**11.4**	**-**	**-**	**0.6**	**5.9**	**-**	**-**	**-**	**-**	**3.6**	**-**	**-**	**1.4**	**45.0**
210	**-**	**11.2**	**10.9**	**11.4**	**-**	**-**	**0.6**	**5.9**	**-**	**-**	**-**	**-**	**3.6**	**-**	**-**	**1.4**	**45.0**
336	**-**	**-**	**-**	**14.6**	**-**	**9.0**	**-**	**-**	**-**	**-**	**-**	**-**	**5.4**	**11.9**	**-**	**-**	**40.9**
337	**-**	**-**	**-**	**14.6**	**-**	**9.0**	**-**	**-**	**-**	**-**	**-**	**-**	**5.4**	**11.9**	**-**	**-**	**40.9**
91	**-**	**15.0**	**-**	**-**	**-**	**7.5**	**-**	**18.2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**40.7**
136	**-**	**-**	**6.8**	**3.0**	**-**	**3.7**	**-**	**20.0**	**-**	**-**	**-**	**-**	**1.5**	**-**	**-**	**-**	**35.0**
137	**-**	**-**	**6.8**	**3.0**	**-**	**3.7**	**-**	**20.0**	**-**	**-**	**-**	**-**	**1.5**	**-**	**-**	**-**	**35.0**
80	**-**	**-**	**-**	**9.8**	**-**	**6.5**	**-**	**10.6**	**-**	**4.3**	**-**	**-**	**-**	**-**	**-**	**-**	**31.3**
244	**-**	**-**	**12.3**	**8.2**	**-**	**-**	**-**	**6.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**27.1**
243	**-**	**-**	**12.3**	**8.2**	**-**	**-**	**-**	**6.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**27.1**
238	**0.2**	**-**	**2.7**	**-**	**9.0**	**1.1**	**-**	**7.4**	**-**	**-**	**1.0**	**-**	**1.8**	**-**	**-**	**1.0**	**24.2**
239	**0.2**	**-**	**2.7**	**-**	**9.0**	**1.1**	**-**	**7.4**	**-**	**-**	**1.0**	**-**	**1.8**	**-**	**-**	**1.0**	**24.2**
211	**-**	**3.6**	**2.2**	**13.2**	**-**	**2.7**	**-**	**-**	**-**	**-**	**-**	**-**	**1.4**	**-**	**-**	**-**	**23.1**
212	**-**	**3.6**	**2.2**	**13.2**	**-**	**2.7**	**-**	**-**	**-**	**-**	**-**	**-**	**1.4**	**-**	**-**	**-**	**23.1**
213	**-**	**3.6**	**2.2**	**13.2**	**-**	**2.7**	**-**	**-**	**-**	**-**	**-**	**-**	**1.4**	**-**	**-**	**-**	**23.1**
214	**-**	**3.6**	**2.2**	**13.2**	**-**	**2.7**	**-**	**-**	**-**	**-**	**-**	**-**	**1.4**	**-**	**-**	**-**	**23.1**
66	0.6	1.6	3.0	9.4	-	-	-	3.3	-	-	-	3.8	-	-	-	-	21.8
67	0.6	1.6	3.0	9.4	-	-	-	3.3	-	-	-	3.8	-	-	-	-	21.8
178	-	-	-	4.1	-	-	2.1	13.6	-	-	-	-	2.0	-	-	-	21.8
179	-	-	-	4.1	-	-	2.1	13.6	-	-	-	-	2.0	-	-	-	21.8
228	-	6.7	4.1	3.7	-	-	-	5.5	-	-	-	-	1.8	-	-	-	21.8
229	-	6.7	4.1	3.7	-	-	-	5.5	-	-	-	-	1.8	-	-	-	21.8
86	-	3.0	1.8	2.4	-	-	-	8.1	-	-	-	-	2.4	-	-	-	17.7

Table 10. Adults' consumption rates of green vegetables from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Asparagus	Broccoli	Brussel sprout	Cabbage	Calabrese	Cauliflower	Chard	Courgette	Cucumber	Globe artichoke	Herbs	Kale	Lettuce	Marrow	Rocket	Spinach	Total
84	-	3.0	1.8	2.4	-	-	-	8.1	-	-	-	-	2.4	-	-	-	17.7
85	-	3.0	1.8	2.4	-	-	-	8.1	-	-	-	-	2.4	-	-	-	17.7
81	-	-	-	3.3	-	4.4	-	7.1	-	2.9	-	-	-	-	-	-	17.6
181	-	3.5	-	2.9	-	-	-	9.6	-	-	-	-	1.4	-	-	-	17.4
182	-	3.5	-	2.9	-	-	-	9.6	-	-	-	-	1.4	-	-	-	17.4
322	6.3	2.0	-	2.1	-	-	1.3	3.7	-	-	-	-	-	-	-	-	15.4
323	6.3	2.0	-	2.1	-	-	1.3	3.7	-	-	-	-	-	-	-	-	15.4
259	-	2.6	1.2	3.3	-	-	0.5	2.4	1.6	-	-	1.3	0.6	1.2	-	-	14.6
260	-	2.6	1.2	3.3	-	-	0.5	2.4	1.6	-	-	1.3	0.6	1.2	-	-	14.6
258	-	2.6	1.2	3.3	-	-	0.5	2.4	1.6	-	-	1.3	0.6	1.2	-	-	14.6
261	-	2.6	1.2	3.3	-	-	0.5	2.4	1.6	-	-	1.3	0.6	1.2	-	-	14.6
262	-	2.6	1.2	3.3	-	-	0.5	2.4	1.6	-	-	1.3	0.6	1.2	-	-	14.6
68	0.4	1.1	2.0	6.3	-	-	-	2.2		-	-	2.6	-	-	-	-	14.5
69	0.4	1.1	2.0	6.3	-	-	-	2.2	-	-	-	2.6	-	-	-	-	14.5
13	-	0.7	-	6.4	-	1.7	-	-	-	-	0.1	-	2.8	-	-	2.6	14.2
14	-	0.7	-	6.4	-	1.7	-	-	-	-	0.1	-	2.8	-	-	2.6	14.2
87	-	-	-	2.7	-	-	-	10.1	-	1.2	-	-	-	-	-	-	14.1
88	-	-	-	2.7	-	-	-	10.1	-	1.2	-	-	-	-	-	-	14.1
89	-	-	-	2.7	-	-	-	10.1	-	1.2	-	-	-	-	-	-	14.1
17	-	-	6.1	-	-	-	-	6.1	-	-	-	-	1.6	-	-	-	13.8
18	-	-	6.1	-	-	-	-	6.1	-	-	-	-	1.6	-	-	-	13.8
19	-	-	6.1	-	-	-	-	6.1	-	-	-	-	1.6	-	-	-	13.8
293	-	-	-	-	-	-	-	4.6	-	-	-	-	-	-	-	8.5	13.1
294	-	-	-	-	-	-	-	4.6	-	-	-	-	-	-	-	8.5	13.1
183	-	2.4	-	1.9	-	-	-	6.4	-	-	-	-	0.9	-	-	-	11.6
316	-	-	-	-	-	-	-	5.2	-	-	-	-	2.3	-	-	2.3	9.7
317	-	-	-	-	-	-	-	5.2	-	-	-	-	2.3	-	-	2.3	9.7
255	-	-	-	-	-	-	1.1	8.3	-	-	-	-	-	-	-	-	9.4
256	-	-	-	-	-	-	1.1	8.3	-	-	-	-	-	-	-	-	9.4

Table 10. Adults' consumption rates of green vegetables from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Asparagus	Broccoli	Brussel sprout	Cabbage	Calabrese	Cauliflower	Chard	Courgette	Cucumber	Globe artichoke	Herbs	Kale	Lettuce	Marrow	Rocket	Spinach	Total
152	-	2.3	-	-	-	-	-	-	1.8	-	-	2.8	-	-	-	-	6.9
153	-	2.3	-	-	-	-	-	-	1.8	-	-	2.8	-	-	-	-	6.9
240	-	0.7	0.6	1.5	-	-	-	2.8	-	-	0.5	-	-	-	-	0.9	6.9
241	-	0.7	0.6	1.5	-	-	-	2.8	-	-	0.5	-	-	-	-	0.9	6.9
234	-	1.0	-	-	-	-	-	1.9	-	-	-	-	3.8	-	-	-	6.7
235	-	1.0	-	-	-	-	-	1.9	-	-	-	-	3.8	-	-	-	6.7
236	-	1.0	-	-	-	-	-	1.9	-	-	-	-	3.8	-	-	-	6.7
138	-	-	-	2.3	-	1.4	-	-	1.4	-	-	-	1.1	-	-	-	6.2
139	-	-	-	2.3	-	1.4	-	-	1.4	-	-	-	1.1	-	-	-	6.2
263	-	-	-	6.1	-	-	-	-		-	-	-	-	-	-	-	6.1
264	-	-	-	6.1	-	-	-	-	-	-	-	-	-	-	-	-	6.1
338	-	-	-	3.9	-	-	-	-	-	1.9	-	-	-	-	-	-	5.8
121	-	-	-	-	-	-	-	5.1	-	-	-	-	-	-	-	-	5.1
122	-	-	-	-	-	-	-	5.1	-	-	-	-	-	-	-	-	5.1
123	-	-	-	-	-	-	-	5.1	-	-	-	-	-	-	-	-	5.1
124	-	-	-	-	-	-	-	5.1	-	-	-	-	-	-	-	-	5.1
156	-	-	-	-	-	-	-	-	-	-	-	-	4.5	-	-	-	4.5
157	-	-	-	-	-	-	-	-	-	-	-	-	4.5	-	-	-	4.5
295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	4.1
296	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	4.1
230	-	-	-	-	-	-	-	1.7	-	-	0.2	-	-	-	-	1.5	3.4
231	-	-	-	-	-	-	-	1.7	-	-	0.2	-	-	-	-	1.5	3.4
201	-	-	1.4	-	-	-	-	1.1	-	-	-	-	0.4	-	-	-	2.9
202	-	-	1.4	-	-	-	-	1.1	-	-	-	-	0.4	-	-	-	2.9
203	-	-	1.4	-	-	-	-	1.1	-	-	-	-	0.4	-	-	-	2.9
206	-	-	1.4	-	-	-	-	1.1	-	-	-	-	0.4	-	-	-	2.9
200	-	-	1.4	-	-	-	-	1.1	-	-	-	-	0.4	-	-	-	2.9
204	-	-	1.4	-	-	-	-	1.1	-	-	-	-	0.4	-	-	-	2.9
205	-	-	1.4	-	-	-	-	1.1	-	-	-	-	0.4	-	-	-	2.9

Table 10. Adults' consumption rates of green vegetables from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Asparagus	Broccoli	Brussel sprout	Cabbage	Calabrese	Cauliflower	Chard	Courgette	Cucumber	Globe artichoke	Herbs	Kale	Lettuce	Marrow	Rocket	Spinach	Total
339	-	-	-	1.9	-	-	-	-	-	1.0	-	-	-	-	-	-	2.9
126	-	-	-	-	-	-	-	1.5	1.4	-	-	-	-	-	-	-	2.8
127	-	-	-	-	-	-	-	1.5	1.4	-	-	-	-	-	-	-	2.8
128	-	-	-	-	-	-	-	1.5	1.4	-	-	-	-	-	-	-	2.8
129	-	-	-	-	-	-	-	1.5	1.4	-	-	-	-	-	-	-	2.8
130	-	-	-	-	-	-	-	1.5	1.4	-	-	-	-	-	-	-	2.8
131	-	-	-	-	-	-	-	1.5	1.4	-	-	-	-	-	-	-	2.8
132	-	-	-	-	-	-	-	1.5	1.4	-	-	-	-	-	-	-	2.8
242	-	0.3	0.2	0.6	-	-	-	1.1	-	-	0.2	-	-	-	-	0.3	2.8
330	-	-	-	-	-	-	-	1.8	-	-	0.03	-	-	-	0.8	-	2.6
331	-	-	-	-	-	-	-	1.8	-	-	0.03	-	-	-	0.8	-	2.6
38	-	-	-	-	-	-	-	-	-	-	-	-	2.0	-	-	-	2.0
39	-	-	-	-	-	-	-	-	-	-	-	-	2.0	-	-	-	2.0
245	-	-	0.3	-	-	-	-	0.9	-	-	-	-	-	-	-	0.3	1.5
246	-	-	0.3	-	-	-	-	0.9	-	-	-	-	-	-	-	0.3	1.5
247	-	-	0.3	-	-	-	-	0.9	-	-	-	-	-	-	-	0.3	1.5
248	-	-	0.3	-	-	-	-	0.9	-	-	-	-	-	-	-	0.3	1.5
249	-	-	0.3	-	-	-	-	0.9	-	-	-	-	-	-	-	0.3	1.5
250	-	-	0.3	-	-	-	-	0.9	-	-	-	-	-	-	-	0.3	1.5
251	-	-	0.3	-	-	-	-	0.9	-	-	-	-	-	-	-	0.3	1.5
252	-	-	0.3	-	-	-	-	0.9	-	-	-	-	-	-	-	0.3	1.5
253	-	-	0.3	-	-	-	-	0.9	-	-	-	-	-	-	-	0.3	1.5
254	-	-	0.3	-	-	-	-	0.9	-	-	-	-	-	-	-	0.3	1.5
47	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	-	-	1.4
48	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	-	-	1.4
34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9	0.9
49	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	0.3	0.7
50	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	0.3	0.7
51	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	0.3	0.7

Table 10. Adults' consumption rates of green vegetables from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Asparagus	Broccoli	Brussel sprout	Cabbage	Calabrese	Cauliflower	Chard	Courgette	Cucumber	Globe artichoke	Herbs	Kale	Lettuce	Marrow	Rocket	Spinach	Total
52	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	0.3	0.7
29	-	-	-	0.7	-	-	-	-	-	-	-	-	-	-	-	-	0.7
30	-	-	-	0.7	-	-	-	-	-	-	-	-	-	-	-	-	0.7
20	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	0.3	0.5
21	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	0.3	0.5
22	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	0.3	0.5
186	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	0.2
187	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	0.2
276	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	0.1

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of green vegetables based on the 22 high-rate adult consumers is 38.9 kg y^{-1}

The observed 97.5th percentile rate based on 125 observations is 54.0 kg y^{-1}

Table 11. Adults' consumption rates of other vegetables from the Amersham terrestrial survey area (kg y $^{-1}$)

Observation number	Broad bean	Chilli pepper	French bean	Mangetout	Pea	Pepper	Pumpkin	Runner bean	Squash	Sweetcorn	Tomato	Total
178	5.1	-	3.0	-	-	-	-	15.2	13.6	-	8.5	45.4
179	5.1	-	3.0	-	-	-	-	15.2	13.6	-	8.5	45.4
239	4.1	-	-	-	16.2	3.5	-	3.4	0.6	0.8	-	28.6
238	4.1	-	-	-	16.2	3.5	-	3.4	0.6	0.8	-	28.6
322	-	-	1.4	1.8	1.8	-	-	2.0	8.1	1.2	10.8	27.1
323	-	-	1.4	1.8	1.8	-	-	2.0	8.1	1.2	10.8	27.1
243	14.3	-	1.6	-	-	-	-	9.2	-	-	-	25.1
244	14.3	-	1.6	-	-	-	-	9.2	-	-	-	25.1
263	-	-	-	-	-	-	-	10.2	-	-	14.4	24.6
264	-	-	-	-	-	-	-	10.2	-	-	14.4	24.6
209	-	-	2.6	-	4.5	-	-	9.8	-	7.4	-	24.2
210	-	-	2.6	-	4.5	-	-	9.8	-	7.4	-	24.2
151	-	-	-	-	-	0.8	-	12.2	-	-	10.1	23.1
136	9.0	-	5.3	-	-	-	-	5.1	-	2.3	-	21.7
137	9.0	-	5.3	-	-	-	-	5.1	-	2.3	-	21.7
82	10.9	-	-	-	-	-	-	10.2	-	-	-	21.1
83	10.9	-	-	-	-	-	-	10.2	-	-	-	21.1
184	7.3	-	2.2	-	-	-	-	10.9	0.7	-	-	21.1
185	7.3	-	2.2	-	-	-	-	10.9	0.7	-	-	21.1
14	16.4	-	0.5	-	-	-	-	0.5	-	1.2	-	18.4
13	16.4	-	0.5	-	-	-	-	0.5	-	1.2	-	18.4
338	2.9	-	0.6	-	-	-	12.5	-	-	2.2	-	18.2
186	-	-	-	-	-	-	-	-	-	-	18.0	18.0
187	-	-	-	-	-	-	-	-	-	-	18.0	18.0
138	3.4	-	-	-	-	-	-	10.2	-	-	4.1	17.7
139	3.4	-	-	-	-	-	-	10.2	-	-	4.1	17.7
17	4.9	-	-	-	-	-	-	10.9	0.5	1.2	-	17.4
18	4.9	-	-	-	-	-	-	10.9	0.5	1.2	-	17.4
19	4.9	-	-	-	-	-	-	10.9	0.5	1.2	-	17.4
336	5.5	-	-	-	-	-	11.9	-	-	-	-	17.3
337	5.5	-	-	-	-	-	11.9	-	-	-	-	17.3
258	0.5	-	4.0	5.4	2.7	-	-	3.3	0.1	0.9	-	17.1

Table 11. Adults' consumption rates of other vegetables from the Amersham terrestrial survey area (kg y $^{-1}$)

Observation number	Broad bean	Chilli pepper	French bean	Mangetout	Pea	Pepper	Pumpkin	Runner bean	Squash	Sweetcorn	Tomato	Total
259	**0.5**	**-**	**4.0**	**5.4**	**2.7**	**-**	**-**	**3.3**	**0.1**	**0.9**	**-**	**17.1**
261	**0.5**	**-**	**4.0**	**5.4**	**2.7**	**-**	**-**	**3.3**	**0.1**	**0.9**	**-**	**17.1**
262	**0.5**	**-**	**4.0**	**5.4**	**2.7**	**-**	**-**	**3.3**	**0.1**	**0.9**	**-**	**17.1**
260	**0.5**	**-**	**4.0**	**5.4**	**2.7**	**-**	**-**	**3.3**	**0.1**	**0.9**	**-**	**17.1**
334	**4.1**	**-**	**-**	**-**	**-**	**-**	**-**	**12.2**	**-**	**-**	**-**	**16.3**
335	**4.1**	**-**	**-**	**-**	**-**	**-**	**-**	**12.2**	**-**	**-**	**-**	**16.3**
121	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**13.6**	**-**	**-**	**2.7**	**16.3**
122	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**13.6**	**-**	**-**	**2.7**	**16.3**
123	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**13.6**	**-**	**-**	**2.7**	**16.3**
124	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**13.6**	**-**	**-**	**2.7**	**16.3**
306	**-**	**-**	**1.7**	**-**	**-**	**-**	**-**	**10.0**	**-**	**4.6**	**-**	**16.3**
330	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4.6**	**-**	**-**	**10.8**	**15.4**
331	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4.6**	**-**	**-**	**10.8**	**15.4**
34	-	-	-	-	-	-	-	-	-	-	14.4	14.4
211	-	-	-	-	3.2	-	-	6.5	-	4.4	-	14.2
213	-	-	-	-	3.2	-	-	6.5	-	4.4	-	14.2
214	-	-	-	-	3.2	-	-	6.5	-	4.4	-	14.2
212	-	-	-	-	3.2	-	-	6.5	-	4.4	-	14.2
91	-	-	-	-	-	-	1.5	-	-	-	12.7	14.2
182	2.1	-	1.3	-	-	-	1.0	6.4	-	-	3.0	13.8
181	2.1	-	1.3	-	-	-	1.0	6.4	-	-	3.0	13.8
255	-	-	2.4	-	-	-	-	9.2	-	1.6	-	13.2
256	-	-	2.4	-	-	-	-	9.2	-	1.6	-	13.2
152	-	-	-	-	-	-	-	7.9	-	-	4.5	12.5
153	-	-	-	-	-	-	-	7.9	-	-	4.5	12.5
228	-	-	2.2	-	-	-	-	8.2	0.6	1.4	-	12.3
229	-	-	2.2	-	-	-	-	8.2	0.6	1.4	-	12.3
293	1.1	-	-	-	-	-	1.2	-	0.3	-	9.0	11.6
294	1.1	-	-	-	-	-	1.2	-	0.3	-	9.0	11.6
3	-	-	-	-	-	-	2.3	9.1	-	-	-	11.3
4	-	-	-	-	-	-	2.3	9.1	-	-	-	11.3
295	-	-	-	-	-	-	-	5.7	-	-	5.7	11.3

Table 11. Adults' consumption rates of other vegetables from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Broad bean	Chilli pepper	French bean	Mangetout	Pea	Pepper	Pumpkin	Runner bean	Squash	Sweetcorn	Tomato	Total
296	-	-	-	-	-	-	-	5.7	-	-	5.7	11.3
66	3.0	-	-	-	-	-	0.6	7.3	-	-	-	11.0
67	3.0	-	-	-	-	-	0.6	7.3	-	-	-	11.0
183	1.4	-	0.9	-	-	-	0.7	4.3	-	-	2.0	9.2
339	1.4	-	0.3	-	-	-	6.3	-	-	1.1	-	9.1
234	2.3	-	-	-	-	-	-	6.8	-	-	-	9.1
235	2.3	-	-	-	-	-	-	6.8	-	-	-	9.1
236	2.3	-	-	-	-	-	-	6.8	-	-	-	9.1
318	-	-	-	-	-	-	-	9.1	-	-	-	9.1
319	-	-	-	-	-	-	-	9.1	-	-	-	9.1
320	-	-	-	-	-	-	-	9.1	-	-	-	9.1
257	1.0	-	0.8	-	0.1	-	-	6.1	-	-	-	8.0
316	-	-	2.2	-	-	-	-	5.4	-	-	-	7.6
317	-	-	2.2	-	-	-	-	5.4	-	-	-	7.6
80	-	-	-	-	-	-	-	7.3	-	-	-	7.3
68	2.0	-	-	-	-	-	0.4	4.9	-	-	-	7.3
69	2.0	-	-	-	-	-	0.4	4.9	-	-	-	7.3
84	7.3	-	-	-	-	-	-	-	-	-	-	7.3
85	7.3	-	-	-	-	-	-	-	-	-	-	7.3
86	7.3	-	-	-	-	-	-	-	-	-	-	7.3
309	1.0	0.5	0.8	-	0.5	-	-	2.9	-	-	-	5.7
310	1.0	0.5	0.8	-	0.5	-	-	2.9	-	-	-	5.7
311	1.0	0.5	0.8	-	0.5	-	-	2.9	-	-	-	5.7
312	1.0	0.5	0.8	-	0.5	-	-	2.9	-	-	-	5.7
313	1.0	0.5	0.8	-	0.5	-	-	2.9	-	-	-	5.7
38	-	-	-	-	-	1.0	-	1.3	-	-	3.3	5.7
39	-	-	-	-	-	1.0	-	1.3	-	-	3.3	5.7
240	0.4	-	1.4	-	2.3	-	-	-	-	1.2	-	5.2
241	0.4	-	1.4	-	2.3	-	-	-	-	1.2	-	5.2
81	-	-	-	-	-	-	-	4.9	-	-	-	4.9
47	-	-	-	-	1.4	-	-	2.3	-	-	-	3.6
48	-	-	-	-	1.4	-	-	2.3	-	-	-	3.6

Table 11. Adults' consumption rates of other vegetables from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Broad bean	Chilli pepper	French bean	Mangetout	Pea	Pepper	Pumpkin	Runner bean	Squash	Sweetcorn	Tomato	Total
276	-	-	-	-	-	-	-	-	-	-	3.6	3.6
49	-	-	0.3	-	-	-	-	1.6	-	-	1.4	3.3
50	-	-	0.3	-	-	-	-	1.6	-	-	1.4	3.3
51	-	-	0.3	-	-	-	-	1.6	-	-	1.4	3.3
52	-	-	0.3	-	-	-	-	1.6	-	-	1.4	3.3
126	-	-	-	-	0.5	-	-	2.7	-	-	-	3.2
127	-	-	-	-	0.5	-	-	2.7	-	-	-	3.2
128	-	-	-	-	0.5	-	-	2.7	-	-	-	3.2
129	-	-	-	-	0.5	-	-	2.7	-	-	-	3.2
130	-	-	-	-	0.5	-	-	2.7	-	-	-	3.2
131	-	-	-	-	0.5	-	-	2.7	-	-	-	3.2
132	-	-	-	-	0.5	-	-	2.7	-	-	-	3.2
242	0.2	-	0.5	-	0.9	-	-	-	-	0.5	-	2.1
29	-	-	-	-	0.9	-	-	0.2	-	-	-	1.1
30	-	-	-	-	0.9	-	-	0.2	-	-	-	1.1
245	-	-	0.1	-	-	-	-	0.9	-	-	-	1.0
246	-	-	0.1	-	-	-	-	0.9	-	-	-	1.0
247	-	-	0.1	-	-	-	-	0.9	-	-	-	1.0
248	-	-	0.1	-	-	-	-	0.9	-	-	-	1.0
249	-	-	0.1	-	-	-	-	0.9	-	-	-	1.0
250	-	-	0.1	-	-	-	-	0.9	-	-	-	1.0
251	-	-	0.1	-	-	-	-	0.9	-	-	-	1.0
252	-	-	0.1	-	-	-	-	0.9	-	-	-	1.0
253	-	-	0.1	-	-	-	-	0.9	-	-	-	1.0
254	-	-	0.1	-	-	-	-	0.9	-	-	-	1.0
200	-	-	0.2	-	-	-	-	-	0.03	0.3	-	0.6
201	-	-	0.2	-	-	-	-	-	0.03	0.3	-	0.6
202	-	-	0.2	-	-	-	-	-	0.03	0.3	-	0.6
203	-	-	0.2	-	-	-	-	-	0.03	0.3	-	0.6
204	-	-	0.2	-	-	-	-	-	0.03	0.3	-	0.6
205	-	-	0.2	-	-	-	-	-	0.03	0.3	-	0.6
206	-	-	0.2	-	-	-	-	-	0.03	0.3	-	0.6

Table 11. Adults' consumption rates of other vegetables from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Broad bean	Chilli pepper	French bean	Mangetout	Pea	Pepper	Pumpkin	Runner bean	Squash	Sweetcorn	Tomato	Total
230	-	-	-	-	-	-	-	-	-	0.5	-	0.5
231	-	-	-	-	-	-	-	-	-	0.5	-	0.5
20	-	-	-	-	-	-	-	-	0.04	-	-	0.0
21	-	-	-	-	-	-	-	-	0.04	-	-	0.0
22	-	-	-	-	-	-	-	-	0.04	-	-	0.0

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of other vegetables based on the 45 high-rate adult consumers is 21.0 kg y^{-1}

The observed 97.5th percentile rate based on 133 observations is 28.2 kg y^{-1}

Table 12. Adults' consumption rates of root vegetables from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Beetroot	Carrot	Celeriac	Celery	Fennel	Garlic	Jerusalem artichoke	Leek	Onion	Parsnip	Radish	Radish	Shallot	Spring onion	Swede	Turnip	Total
243	7.4	4.1	-	-	-	-	-	6.1	19.4	9.7	-	-	-	-	12.2	-	58.9
244	7.4	4.1	-	-	-	-	-	6.1	19.4	9.7	-	-	-	-	12.2	-	58.9
238	9.8	1.4	1.9	3.2	0.3	1.1	-	2.7	21.6	4.3	-	-	-	-	8.2	-	54.6
239	9.8	1.4	1.9	3.2	0.3	1.1	-	2.7	21.6	4.3	-	-	-	-	8.2	-	54.6
184	3.3	7.2	-	-	-	0.5	-	3.6	5.8	1.4	-	1.8	1.3	-	21.8	4.3	51.0
185	3.3	7.2	-	-	-	0.5	-	3.6	5.8	1.4	-	1.8	1.3	-	21.8	4.3	51.0
334	7.4	8.1	-	-	-	-	-	-	6.5	6.5	-	-	-	-	12.2	-	40.7
335	7.4	8.1	-	-	-	-	-	-	6.5	6.5	-	-	-	-	12.2	-	40.7
322	8.2	10.8	-	-	-	1.0	-	7.2	-	-	-	-	6.4	2.0	-	-	35.6
323	8.2	10.8	-	-	-	1.0	-	7.2	-	-	-	-	6.4	2.0	-	-	35.6
257	-	6.3	-	-	-	-	-	-	12.3	3.0	-	-	-	-	13.6	-	35.2
17	13.1	3.6	-	-	-	-	-	15.0	-	1.9	1.0	-	-	-	-	-	34.6
18	13.1	3.6	-	-	-	-	-	15.0	-	1.9	1.0	-	-	-	-	-	34.6
19	13.1	3.6	-	-	-	-	-	15.0	-	1.9	1.0	-	-	-	-	-	34.6
136	-	-	-	-	-	-	-	8.9	10.7	-	0.9	-	9.5	-	-	-	30.0
137	-	-	-	-	-	-	-	8.9	10.7	-	0.9	-	9.5	-	-	-	30.0
80	-	21.6	-	-	-	-	-	-	6.9	-	-	-	-	-	-	-	28.5
209	9.8	-	-	-	-	-	-	9.6	8.6	-	-	-	-	-	-	-	28.1
210	9.8	-	-	-	-	-	-	9.6	8.6	-	-	-	-	-	-	-	28.1
82	-	-	-	-	-	-	-	13.5	8.1	5.4	-	-	-	-	-	-	27.0
83	-	-	-	-	-	-	-	13.5	8.1	5.4	-	-	-	-	-	-	27.0
152	2.8	-	-	-	-	-	-	4.5	7.9	7.9	-	-	-	-	-	-	23.2
153	2.8	-	-	-	-	-	-	4.5	7.9	7.9	-	-	-	-	-	-	23.2
212	5.9	4.3	-	-	-	-	-	4.1	5.2	-	-	-	-	1.0	-	-	20.4
211	5.9	4.3	-	-	-	-	-	4.1	5.2	-	-	-	-	1.0	-	-	20.4
213	5.9	4.3	-	-	-	-	-	4.1	5.2	-	-	-	-	1.0	-	-	20.4
214	5.9	4.3	-	-	-	-	-	4.1	5.2	-	-	-	-	1.0	-	-	20.4
20	6.6	-	-	-	-	-	-	2.3	10.8	0.7	-	-	-	-	-	-	20.3
21	6.6	-	-	-	-	-	-	2.3	10.8	0.7	-	-	-	-	-	-	20.3
22	6.6	-	-	-	-	-	-	2.3	10.8	0.7	-	-	-	-	-	-	20.3
81	-	14.4	-	-	-	-	-	-	5.2	-	-	-	-	-	-	-	19.6
67	-	2.7	1.9	-	2.4	0.8	-	5.4	2.2	-	1.3	-	1.9	0.8	-	-	19.4

Table 12. Adults' consumption rates of root vegetables from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Beetroot	Carrot	Celeriac	Celery	Fennel	Garlic	Jerusalem artichoke	Leek	Onion	Parsnip	Radish	Radish	Shallot	Spring onion	Swede	Turnip	Total
66	-	2.7	1.9	-	2.4	0.8	-	5.4	2.2	-	1.3	-	1.9	0.8	-	-	19.4
293	3.7	-	-	-	-	-	-	14.2	-	-	-	-	-	-	-	-	17.9
294	3.7	-	-	-	-	-	-	14.2	-	-	-	-	-	-	-	-	17.9
87	8.2	4.5	-	-	0.1	-	-	-	3.6	-	-	-	-	-	-	-	16.4
88	8.2	4.5	-	-	0.1	-	-	-	3.6	-	-	-	-	-	-	-	16.4
89	8.2	4.5	-	-	0.1	-	-	-	3.6	-	-	-	-	-	-	-	16.4
156	12.3	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.6
157	12.3	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.6
179	5.5	-	-	-	-	1.5	-	3.0	4.0	-	-	-	-	-	-	-	14.0
178	5.5	-	-	-	-	1.5	-	3.0	4.0	-	-	-	-	-	-	-	14.0
336	-	-	-	-	-	-	-	13.5	-	-	-	-	-	-	-	-	13.5
337	-	-	-	-	-	-	-	13.5	-	-	-	-	-	-	-	-	13.5
68	-	1.8	1.3	-	1.6	0.5	-	3.6	1.4	-	0.9	-	1.3	0.5	-	-	13.0
69	-	1.8	1.3	-	1.6	0.5	-	3.6	1.4	-	0.9	-	1.3	0.5	-	-	13.0
228	4.9	4.1	-	-	-	-	-	-	3.2	-	-	-	-	-	-	-	12.2
229	4.9	4.1	-	-	-	-	-	-	3.2	-	-	-	-	-	-	-	12.2
86	6.6	-	-	-	0.6	-	-	1.8	1.4	1.4	-	-	-	-	-	-	11.9
84	6.6	-	-	-	0.6	-	-	1.8	1.4	1.4	-	-	-	-	-	-	11.9
85	6.6	-	-	-	0.6	-	-	1.8	1.4	1.4	-	-	-	-	-	-	11.9
318	-	-	-	-	-	-	-	5.7	6.0	-	-	-	-	-	-	-	11.7
319	-	-	-	-	-	-	-	5.7	6.0	-	-	-	-	-	-	-	11.7
320	-	-	-	-	-	-	-	5.7	6.0	-	-	-	-	-	-	-	11.7
13	1.6	-	0.2	0.6	1.0	-	-	6.0	1.3	-	-	-	-	0.3	-	-	11.1
14	1.6	-	0.2	0.6	1.0	-	-	6.0	1.3	-	-	-	-	0.3	-	-	11.1
295	-	-	-	-	-	-	-	10.0	-	-	-	-	-	-	-	-	10.0
296	-	-	-	-	-	-	-	10.0	-	-	-	-	-	-	-	-	10.0
200	-	-	-	-	-	0.4	-	4.0	3.2	1.1	-	-	-	-	-	-	8.8
202	-	-	-	-	-	0.4	-	4.0	3.2	1.1	-	-	-	-	-	-	8.8
203	-	-	-	-	-	0.4	-	4.0	3.2	1.1	-	-	-	-	-	-	8.8
204	-	-	-	-	-	0.4	-	4.0	3.2	1.1	-	-	-	-	-	-	8.8
205	-	-	-	-	-	0.4	-	4.0	3.2	1.1	-	-	-	-	-	-	8.8
206	-	-	-	-	-	0.4	-	4.0	3.2	1.1	-	-	-	-	-	-	8.8

Table 12. Adults' consumption rates of root vegetables from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Beetroot	Carrot	Celeriac	Celery	Fennel	Garlic	Jerusalem artichoke	Leek	Onion	Parsnip	Radish	Radish	Shallot	Spring onion	Swede	Turnip	Total
201	-	-	-	-	-	0.4	-	4.0	3.2	1.1	-	-	-	-	-	-	8.8
91	-	-	-	-	-	1.3	-	-	7.2	-	-	-	-	-	-	-	8.5
138	3.1	-	-	-	-	-	-	-	2.7	1.4	0.3	-	-	-	-	-	7.5
139	3.1	-	-	-	-	-	-	-	2.7	1.4	0.3	-	-	-	-	-	7.5
310	0.7	0.4	0.6	1.0	-	1.2	-	-	3.4	-	-	-	-	-	-	-	7.3
309	0.7	0.4	0.6	1.0	-	1.2	-	-	3.4	-	-	-	-	-	-	-	7.3
311	0.7	0.4	0.6	1.0	-	1.2	-	-	3.4	-	-	-	-	-	-	-	7.3
312	0.7	0.4	0.6	1.0	-	1.2	-	-	3.4	-	-	-	-	-	-	-	7.3
313	0.7	0.4	0.6	1.0	-	1.2	-	-	3.4	-	-	-	-	-	-	-	7.3
255	-	-	-	-	-	-	-	-	2.4	4.9	-	-	-	-	-	-	7.3
256	-	-	-	-	-	-	-	-	2.4	4.9	-	-	-	-	-	-	7.3
234	2.1	-	-	-	-	-	-	-	4.4	-	-	-	-	-	-	-	6.5
235	2.1	-	-	-	-	-	-	-	4.4	-	-	-	-	-	-	-	6.5
236	2.1	-	-	-	-	-	-	-	4.4	-	-	-	-	-	-	-	6.5
259	-	0.6	-	1.0	-	-	1.4	2.6	-	0.3	0.1	-	-	0.1	-	-	6.2
260	-	0.6	-	1.0	-	-	1.4	2.6	-	0.3	0.1	-	-	0.1	-	-	6.2
262	-	0.6	-	1.0	-	-	1.4	2.6	-	0.3	0.1	-	-	0.1	-	-	6.2
258	-	0.6	-	1.0	-	-	1.4	2.6	-	0.3	0.1	-	-	0.1	-	-	6.2
261	-	0.6	-	1.0	-	-	1.4	2.6	-	0.3	0.1	-	-	0.1	-	-	6.2
240	-	-	-	-	-	-	-	1.5	4.5	-	-	-	-	-	-	-	6.0
241	-	-	-	-	-	-	-	1.5	4.5	-	-	-	-	-	-	-	6.0
181	1.9	-	-	-	-	-	-	2.1	1.7	-	-	-	-	-	-	-	5.8
182	1.9	-	-	-	-	-	-	2.1	1.7	-	-	-	-	-	-	-	5.8
338	-	-	-	-	-	-	-	5.7	-	-	-	-	-	-	-	-	5.7
316	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.5
317	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.5
183	1.3	-	-	-	-	-	-	1.4	1.1	-	-	-	-	-	-	-	3.8
263	-	-	-	-	-	-	-	-	3.6	-	-	-	-	-	-	-	3.6
264	-	-	-	-	-	-	-	-	3.6	-	-	-	-	-	-	-	3.6
230	1.8	-	-	-	-	-	-	1.5	-	-	-	-	-	-	-	-	3.4
231	1.8	-	-	-	-	-	-	1.5	-	-	-	-	-	-	-	-	3.4
247	0.7	-	-	-	-	-	-	0.5	1.6	0.3	-	-	-	-	-	-	3.2

Table 12. Adults' consumption rates of root vegetables from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Beetroot	Carrot	Celeriac	Celery	Fennel	Garlic	Jerusalem artichoke	Leek	Onion	Parsnip	Radish	Radish	Shallot	Spring onion	Swede	Turnip	Total
248	0.7	-	-	-	-	-	-	0.5	1.6	0.3	-	-	-	-	-	-	3.2
249	0.7	-	-	-	-	-	-	0.5	1.6	0.3	-	-	-	-	-	-	3.2
245	0.7	-	-	-	-	-	-	0.5	1.6	0.3	-	-	-	-	-	-	3.2
246	0.7	-	-	-	-	-	-	0.5	1.6	0.3	-	-	-	-	-	-	3.2
250	0.7	-	-	-	-	-	-	0.5	1.6	0.3	-	-	-	-	-	-	3.2
251	0.7	-	-	-	-	-	-	0.5	1.6	0.3	-	-	-	-	-	-	3.2
252	0.7	-	-	-	-	-	-	0.5	1.6	0.3	-	-	-	-	-	-	3.2
253	0.7	-	-	-	-	-	-	0.5	1.6	0.3	-	-	-	-	-	-	3.2
254	0.7	-	-	-	-	-	-	0.5	1.6	0.3	-	-	-	-	-	-	3.2
339	-	-	-	-	-	-	-	2.9	-	-	-	-	-	-	-	-	2.9
242	-	-	-	-	-	-	-	0.6	1.8	-	-	-	-	-	-	-	2.4
121	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-	-	-	1.8
122	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-	-	-	1.8
123	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-	-	-	1.8
124	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-	-	-	1.8
49	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.6
50	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.6
51	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.6
52	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.6
3	-	-	-	-	-	0.2	-	-	1.4	-	-	-	-	-	-	-	1.6
4	-	-	-	-	-	0.2	-	-	1.4	-	-	-	-	-	-	-	1.6
29	-	0.3	-	-	-	-	-	0.8	-	0.2	-	-	-	0.1	-	-	1.3
30	-	0.3	-	-	-	-	-	0.8	-	0.2	-	-	-	0.1	-	-	1.3
186	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	1.0
187	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	1.0
38	-	0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9
39	-	0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9
126	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	0.4
127	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	0.4
128	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	0.4
129	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	0.4
130	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	0.4

Table 12. Adults' consumption rates of root vegetables from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Beetroot	Carrot	Celeriac	Celery	Fennel	Garlic	Jerusalem artichoke	Leek	Onion	Parsnip	Radish	Radish	Shallot	Spring onion	Swede	Turnip	Total
131	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	0.4
132	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	0.4
34	-	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of root vegetables based on the 30 high-rate adult consumers is 33.6 kg y^{-1}

The observed 97.5th percentile rate based on 131 observations is 53.7 kg y^{-1}

Table 13. Adults' consumption rates of potato from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Potato
336	**136.2**
337	**136.2**
82	**102.4**
83	**102.4**
80	**65.5**
209	**54.6**
210	**54.6**
211	**45.5**
212	**45.5**
213	**45.5**
214	**45.5**
293	**45.5**
294	**45.5**
81	43.7
184	43.7
185	43.7
66	38.2
67	38.2
91	36.4
228	32.8
229	32.8
334	32.8
335	32.8
322	31.9
323	31.9
318	30.2
319	30.2
320	30.2
89	27.3
17	26.9
18	26.9
19	26.9
68	25.5
69	25.5
238	24.6
239	24.6
87	18.2
88	18.2
84	14.6
85	14.6
86	14.6
136	14.4
137	14.4
13	13.7
14	13.7
138	13.7
139	13.7
156	13.7
157	13.7
306	13.7
316	13.7
317	13.7
338	11.5
234	10.6
235	10.6

Table 13. Adults' consumption rates of potato from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Potato
236	10.6
178	10.2
179	10.2
29	10.2
30	10.2
263	9.1
264	9.1
258	8.9
259	8.9
260	8.9
261	8.9
262	8.9
245	8.6
246	8.6
247	8.6
248	8.6
249	8.6
250	8.6
251	8.6
252	8.6
253	8.6
254	8.6
126	8.2
127	8.2
128	8.2
129	8.2
130	8.2
131	8.2
132	8.2
200	8.2
201	8.2
202	8.2
203	8.2
204	8.2
205	8.2
206	8.2
121	6.8
122	6.8
123	6.8
124	6.8
181	6.4
182	6.4
3	6.1
4	6.1
339	5.8
20	5.5
21	5.5
22	5.5
183	4.3
38	3.3
39	3.3
47	2.3
48	2.3
34	1.0

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of potato based on the 13 high-rate adult consumers is 71.1 kg y^{-1}

The observed 97.5th percentile rate based on 109 observations is 102.4 kg y^{-1}

Table 14. Adults' consumption rates of domestic fruit from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Apple	Blackberry	Blackcurrant	Blueberry	Cherry	Damson	Fig	Gooseberry	Greengage	Loganberry	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Tayberry	Walnuts	Whitecurrant	Worcesterberry	Total
82	3.6	2.7	1.8	-	8.2	1.1	-	-	-	-	0.6	2.3	0.3	3.4	8.6	14.3	-	-	1.8	-	48.7
83	3.6	2.7	1.8	-	8.2	1.1	-	-	-	-	0.6	2.3	0.3	3.4	8.6	14.3	-	-	1.8	-	48.7
238	-	7.2	6.8	4.1	-	-	-	2.5	-	-	-	-	8.1	5.4	2.8	5.7	-	-	-	3.0	45.6
239	-	7.2	6.8	4.1	-	-	-	2.5	-	-	-	-	8.1	5.4	2.8	5.7	-	-	-	3.0	45.6
316	-	-	-	-	-	-	-	-	-	16.7	4.5	7.9	6.8	-	-	-	-	-	-	-	36.0
317	-	-	-	-	-	-	-	-	-	16.7	4.5	7.9	6.8	-	-	-	-	-	-	-	36.0
34	2.9	-	0.2	-	-	-	-	6.1	-	-	10.0	3.4	4.1	2.3	-	6.8	-	-	-	-	35.8
257	-	-	7.9	-	-	-	-	6.4	-	-	-	-	9.5	6.4	-	-	-	-	-	-	30.2
322	-	-	5.1	-	-	-	-	1.2	-	-	-	-	18.3	4.1	1.4	-	-	-	-	-	30.1
323	-	-	5.1	-	-	-	-	1.2	-	-	-	-	18.3	4.1	1.4	-	-	-	-	-	30.1
263	12.0	-	-	-	2.0	-	-	-	-	-	-	9.7	-	-	-	-	-	-	-	-	23.8
264	12.0	-	-	-	2.0	-	-	-	-	-	-	9.7	-	-	-	-	-	-	-	-	23.8
178	-	8.2	-	-	-	-	-	4.2	-	-	-	-	1.2	4.7	1.8	-	-	-	-	-	20.1
179	-	8.2	-	-	-	-	-	4.2	-	-	-	-	1.2	4.7	1.8	-	-	-	-	-	20.1
324	-	-	0.8	-	-	-	-	-	-	-	-	-	5.0	0.3	0.6	10.7	1.3	-	0.3	-	18.8
325	-	-	0.8	-	-	-	-	-	-	-	-	-	5.0	0.3	0.6	10.7	1.3	-	0.3	-	18.8
212	11.3	3.2	1.1	-	-	-	-	0.8	-	-	-	-	0.8	-	-	1.1	-	-	-	-	18.4
213	11.3	3.2	1.1	-	-	-	-	0.8	-	-	-	-	0.8	-	-	1.1	-	-	-	-	18.4
214	11.3	3.2	1.1	-	-	-	-	0.8	-	-	-	-	0.8	-	-	1.1	-	-	-	-	18.4
211	11.3	3.2	1.1	-	-	-	-	0.8	-	-	-	-	0.8	-	-	1.1	-	-	-	-	18.4
338	7.2	-	-	-	-	-	-	-	-	-	2.4	-	1.6	-	3.6	2.3	-	-	-	-	17.1
306	10.0	-	-	-	-	-	-	-	-	-	-	5.0	-	-	-	-	-	-	-	-	15.0
148	9.8	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.8
149	9.8	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.8
150	9.8	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.8
66	-	-	1.2	-	-	-	-	-	-	-	-	-	1.2	-	-	8.6	-	-	-	-	11.0

Table 14. Adults' consumption rates of domestic fruit from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Apple	Blackberry	Blackcurrant	Blueberry	Cherry	Damson	Fig	Gooseberry	Greengage	Loganberry	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Tayberry	Walnuts	Whitecurrant	Worcesterberry	Total
67	-	-	1.2	-	-	-	-	-	-	-	-	-	1.2	-	-	8.6	-	-	-	-	11.0
140	7.3	-	-	-	-	-	-	-	-	-	3.6	-	-	-	-	-	-	-	-	-	10.9
141	7.3	-	-	-	-	-	-	-	-	-	3.6	-	-	-	-	-	-	-	-	-	10.9
295	5.7	-	1.0	-	-	-	-	-	1.0	-	-	-	1.0	1.0	-	1.0	-	-	-	-	10.8
296	5.7	-	1.0	-	-	-	-	-	1.0	-	-	-	1.0	1.0	-	1.0	-	-	-	-	10.8
136	-	-	2.3	-	-	-	-	-	-	-	-	-	2.3	-	5.7	-	-	-	-	-	10.2
137	-	2.3	-	-	-	-	-	-	-	-	-	-	2.3	-	5.7	-	-	-	-	-	10.2
240	-	-	4.3	-	-	-	-	3.1	-	-	-	-	-	-	2.9	-	-	-	-	-	10.2
241	-	-	4.3	-	-	-	-	3.1	-	-	-	-	-	-	2.9	-	-	-	-	-	10.2
243	-	-	-	-	-	-	-	-	-	-	-	-	9.2	-	-	-	-	-	-	-	9.2
244	-	-	-	-	-	-	-	-	-	-	-	-	9.2	-	-	-	-	-	-	-	9.2
91	9.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.1
339	3.6	-	-	-	-	-	-	-	-	-	1.2	-	0.8	-	1.8	1.1	-	-	-	-	8.6
88	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	6.7	-	-	-	-	7.3
68	-	-	0.8	-	-	-	-	-	-	-	-	-	0.8	-	-	5.7	-	-	-	-	7.3
69	-	-	0.8	-	-	-	-	-	-	-	-	-	0.8	-	-	5.7	-	-	-	-	7.3
38	3.0	-	-	-	-	-	-	-	-	-	-	1.9	1.2	-	-	0.3	-	-	-	-	6.4
39	3.0	-	-	-	-	-	-	-	-	-	-	1.9	1.2	-	-	0.3	-	-	-	-	6.4
181	-	-	-	-	-	-	-	2.8	-	-	-	-	0.5	3.1	-	-	-	-	-	-	6.3
182	-	-	-	-	-	-	-	2.8	-	-	-	-	0.5	3.1	-	-	-	-	-	-	6.3
331	2.0	-	-	-	-	1.0	0.6	-	-	-	1.0	1.0	-	-	-	-	-	-	-	-	5.7
142	3.6	-	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-	-	-	-	-	5.4
86	-	-	-	-	-	-	-	1.6	-	-	-	-	0.8	-	2.8	-	-	-	-	-	5.2
84	-	-	-	-	-	-	-	1.6	-	-	-	-	0.8	-	2.8	-	-	-	-	-	5.2
85	-	-	-	-	-	-	-	1.6	-	-	-	-	0.8	-	2.8	-	-	-	-	-	5.2
330	2.0	-	-	-	-	1.0	0.6	-	-	-	-	1.0	-	-	-	-	-	-	-	-	4.7

Table 14. Adults' consumption rates of domestic fruit from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Apple	Blackberry	Blackcurrant	Blueberry	Cherry	Damson	Fig	Gooseberry	Greengage	Loganberry	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Tayberry	Walnuts	Whitecurrant	Worcesterberry	Total
255	-	-	-	-	-	-	-	-	-	-	-	-	4.6	-	-	-	-	-	-	-	4.6
256	-	-	-	-	-	-	-	-	-	-	-	-	4.6	-	-	-	-	-	-	-	4.6
266	1.5	-	-	-	-	1.5	-	-	-	-	1.5	-	-	-	-	-	-	-	-	-	4.5
267	1.5	-	-	-	-	1.5	-	-	-	-	1.5	-	-	-	-	-	-	-	-	-	4.5
200	-	-	-	-	-	-	-	-	-	-	-	-	2.0	-	2.3	-	-	-	-	-	4.3
201	-	-	-	-	-	-	-	-	-	-	-	-	2.0	-	2.3	-	-	-	-	-	4.3
202	-	-	-	-	-	-	-	-	-	-	-	-	2.0	-	2.3	-	-	-	-	-	4.3
203	-	-	-	-	-	-	-	-	-	-	-	-	2.0	-	2.3	-	-	-	-	-	4.3
204	-	-	-	-	-	-	-	-	-	-	-	-	2.0	-	2.3	-	-	-	-	-	4.3
205	-	-	-	-	-	-	-	-	-	-	-	-	2.0	-	2.3	-	-	-	-	-	4.3
206	-	-	-	-	-	-	-	-	-	-	-	-	2.0	-	2.3	-	-	-	-	-	4.3
13	-	-	3.2	-	-	-	-	-	-	-	-	-	-	0.2	0.9	-	-	-	-	-	4.3
14	-	-	3.2	-	-	-	-	-	-	-	-	-	-	0.2	0.9	-	-	-	-	-	4.3
183	-	-	-	-	-	-	-	1.8	-	-	-	-	0.3	2.0	-	-	-	-	-	-	4.2
228	-	-	-	-	-	-	-	2.5	-	-	0.3	-	1.2	-	-	-	-	-	-	-	4.0
229	-	-	-	-	-	-	-	2.5	-	-	0.3	-	1.2	-	-	-	-	-	-	-	4.0
15	2.0	-	-	-	-	-	-	-	-	-	2.0	-	-	-	-	-	-	-	-	-	4.0
152	-	-	1.1	-	-	-	-	-	-	-	-	-	2.8	-	-	-	-	-	-	-	4.0
153	-	-	1.1	-	-	-	-	-	-	-	-	-	2.8	-	-	-	-	-	-	-	4.0
242	-	-	1.7	-	-	-	-	1.0	-	-	-	-	-	-	1.2	-	-	-	-	-	3.9
156	2.7	-	-	-	-	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.9
157	2.7	-	-	-	-	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.9
318	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.8	-	-	-	-	-	3.8
319	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.8	-	-	-	-	-	3.8
320	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.8	-	-	-	-	-	3.8
276	3.0	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.5

Table 14. Adults' consumption rates of domestic fruit from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Apple	Blackberry	Blackcurrant	Blueberry	Cherry	Damson	Fig	Gooseberry	Greengage	Loganberry	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Tayberry	Walnuts	Whitecurrant	Worcesterberry	Total
138	-	-	1.1	-	-	-	-	-	-	-	-	-	-	-	2.3	-	-	-	-	-	3.4
139	-	-	1.1	-	-	-	-	-	-	-	-	-	-	-	2.3	-	-	-	-	-	3.4
230	-	-	-	-	-	-	-	-	-	-	-	-	3.1	-	-	-	-	-	-	-	3.1
231	-	-	-	-	-	-	-	-	-	-	-	-	3.1	-	-	-	-	-	-	-	3.1
47	-	-	1.4	-	-	-	-	0.5	-	-	-	-	0.5	0.5	-	-	-	-	-	-	2.7
48	-	-	1.4	-	-	-	-	0.5	-	-	-	-	0.5	0.5	-	-	-	-	-	-	2.7
17	-	0.7	-	-	-	0.7	-	-	-	-	-	0.7	-	-	-	-	-	0.7	-	-	2.7
18	-	0.7	-	-	-	0.7	-	-	-	-	-	0.7	-	-	-	-	-	0.7	-	-	2.7
19	-	0.7	-	-	-	0.7	-	-	-	-	-	0.7	-	-	-	-	-	0.7	-	-	2.7
258	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2	-	-	-	-	-	2.2
259	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2	-	-	-	-	-	2.2
260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2	-	-	-	-	-	2.2
261	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2	-	-	-	-	-	2.2
262	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2	-	-	-	-	-	2.2
209	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-	1.8
210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-	1.8
87	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	1.0	-	-	-	-	1.6
89	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	1.0	-	-	-	-	1.6
126	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	0.9	-	-	-	-	1.6
127	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	0.9	-	-	-	-	1.6
128	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	0.9	-	-	-	-	1.6
129	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	0.9	-	-	-	-	1.6
130	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	0.9	-	-	-	-	1.6
131	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	0.9	-	-	-	-	1.6
132	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	0.9	-	-	-	-	1.6
245	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	0.1	-	-	-	-	-	1.5

Table 14. Adults' consumption rates of domestic fruit from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Apple	Blackberry	Blackcurrant	Blueberry	Cherry	Damson	Fig	Gooseberry	Greengage	Loganberry	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Tayberry	Walnuts	Whitecurrant	Worcesterberry	Total
246	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	0.1	-	-	-	-	-	1.5
247	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	0.1	-	-	-	-	-	1.5
248	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	0.1	-	-	-	-	-	1.5
249	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	0.1	-	-	-	-	-	1.5
250	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	0.1	-	-	-	-	-	1.5
251	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	0.1	-	-	-	-	-	1.5
252	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	0.1	-	-	-	-	-	1.5
253	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	0.1	-	-	-	-	-	1.5
254	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	0.1	-	-	-	-	-	1.5
234	-	-	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4
235	-	-	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4
236	-	-	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4
309	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	1.0
310	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	1.0
311	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	1.0
312	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	1.0
313	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	1.0
53	-	-	0.2	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	0.9
54	-	-	0.2	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	0.9
55	-	-	0.2	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	0.9
56	-	-	0.2	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	0.9
57	-	-	0.2	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	0.9
58	-	-	0.2	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	0.9
59	-	-	0.2	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	0.9
60	-	-	0.2	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	0.9
61	-	-	0.2	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	0.9

Table 14. Adults' consumption rates of domestic fruit from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Apple	Blackberry	Blackcurrant	Blueberry	Cherry	Damson	Fig	Gooseberry	Greengage	Loganberry	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Tayberry	Walnuts	Whitecurrant	Worcesterberry	Total
49	0.5	-	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	0.9
50	0.5	-	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	0.9
51	0.5	-	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	0.9
52	0.5	-	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	0.9
184	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	0.5	-	-	-	0.9
185	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	0.5	-	-	-	0.9
20	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.2	-	-	-	-	-	-	0.5
21	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.2	-	-	-	-	-	-	0.5
22	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.2	-	-	-	-	-	-	0.5
146	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5
147	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5
154	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2
155	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2
29	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	0.2
30	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	0.2

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of domestic fruit based on the 21 high-rate adult consumers is 28.7 kg y^{-1}

The observed 97.5th percentile rate based on 145 observations is 39.8 kg y^{-1}

Table 15. Adults' consumption rates of milk from the Amersham terrestrial survey area (l y^{-1})

Observation number	Cows' milk	Goats' milk	Total
111	**414.9**	**-**	**414.9**
112	**414.9**	**-**	**414.9**
113	**414.9**	**-**	**414.9**
322	**-**	**259.3**	**259.3**
323	**-**	**259.3**	**259.3**
306	-	98.3	98.3
307	-	39.2	39.2
308	-	39.2	39.2
107	-	29.6	29.6
108	-	29.6	29.6
109	-	29.6	29.6
110	-	29.6	29.6

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of milk based on the 5 high-rate adult consumers is 352.6 l y^{-1}

The observed 97.5th percentile rate based on 12 observations is 414.9 l y^{-1}

Table 16. Adults' consumption rates of cattle meat from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Beef
96	**11.8**
97	**11.8**
98	**11.8**
99	**11.8**
100	**11.8**
101	**11.8**
102	**11.8**
103	**11.8**

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of cattle meat based on the 8 high-rate adult consumers is 11.8 kg y^{-1}

The observed 97.5th percentile rate based on 8 observations is 11.8 kg y^{-1}

Table 17. Adults' consumption rates of pig meat from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Pork
207	**132.6**
208	**44.2**
53	16.9
54	16.9
55	16.9
56	16.9
57	16.9
58	16.9
59	16.9
60	16.9
61	16.9
148	8.4
149	8.4
150	8.4
211	3.3
212	3.3
213	3.3
214	3.3

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of pig meat based on the 2 high-rate adult consumers is 88.4 kg y^{-1}

The observed 97.5th percentile rate based on 18 observations is 95.0 kg y^{-1}

Table 18. Adults' consumption rates of sheep meat from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Lamb
156	**28.3**
157	**28.3**
207	**11.7**
198	**11.3**
199	**11.3**
208	3.9

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of sheep meat based on the 5 high-rate adult consumers is 18.2 kg y^{-1}

The observed 97.5th percentile rate based on 6 observations is 28.3 kg y^{-1}

Table 19. Adults' consumption rates of poultry from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Chicken	Duck	Goose	Mallard	Partridge	Pheasant	Pigeon	Total
330	**-**	**4.1**	**-**	**-**	**-**	**8.1**	**5.8**	**17.9**
331	**-**	**4.1**	**-**	**-**	**-**	**8.1**	**5.8**	**17.9**
53	**13.5**	**-**	**-**	**-**	**-**	**-**	**-**	**13.5**
54	**13.5**	**-**	**-**	**-**	**-**	**-**	**-**	**13.5**
55	**13.5**	**-**	**-**	**-**	**-**	**-**	**-**	**13.5**
56	**13.5**	**-**	**-**	**-**	**-**	**-**	**-**	**13.5**
57	**13.5**	**-**	**-**	**-**	**-**	**-**	**-**	**13.5**
58	**13.5**	**-**	**-**	**-**	**-**	**-**	**-**	**13.5**
59	**13.5**	**-**	**-**	**-**	**-**	**-**	**-**	**13.5**
60	**13.5**	**-**	**-**	**-**	**-**	**-**	**-**	**13.5**
61	**13.5**	**-**	**-**	**-**	**-**	**-**	**-**	**13.5**
322	**-**	**-**	**-**	**4.5**	**-**	**2.7**	**2.8**	**10.0**
323	**-**	**-**	**-**	**4.5**	**-**	**2.7**	**2.8**	**10.0**
92	**-**	**-**	**-**	**-**	**3.0**	**4.5**	**-**	**7.5**
93	**-**	**-**	**-**	**-**	**3.0**	**4.5**	**-**	**7.5**
94	**-**	**-**	**-**	**-**	**3.0**	**4.5**	**-**	**7.5**
95	**-**	**-**	**-**	**-**	**3.0**	**4.5**	**-**	**7.5**
148	2.0	-	-	-	-	0.9	-	2.9
149	2.0	-	-	-	-	0.9	-	2.9
150	2.0	-	-	-	-	0.9	-	2.9
340	-	-	2.8	-	-	-	-	2.8
341	-	-	2.8	-	-	-	-	2.8
96	-	0.1	0.3	-	0.2	1.4	-	1.9
97	-	0.1	0.3	-	0.2	1.4	-	1.9
98	-	0.1	0.3	-	0.2	1.4	-	1.9
99	-	0.1	0.3	-	0.2	1.4	-	1.9
100	-	0.1	0.3	-	0.2	1.4	-	1.9
101	-	0.1	0.3	-	0.2	1.4	-	1.9
102	-	0.1	0.3	-	0.2	1.4	-	1.9
103	-	0.1	0.3	-	0.2	1.4	-	1.9
336	-	-	1.1	-	-	-	-	1.1
337	-	-	1.1	-	-	-	-	1.1
263	-	-	-	-	-	0.5	0.2	0.7
264	-	-	-	-	-	0.5	0.2	0.7
334	0.7	-	-	-	-	-	-	0.7
335	0.7	-	-	-	-	-	-	0.7
198	-	-	-	-	-	0.5	-	0.5
199	-	-	-	-	-	0.5	-	0.5
288	-	-	-	-	-	0.5	-	0.5
289	-	-	-	-	-	0.5	-	0.5

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of poultry based on the 17 high-rate adult consumers is 12.2 kg y^{-1}

The observed 97.5th percentile rate based on 40 observations is 17.9 kg y^{-1}

Table 20. Adults' consumption rates of eggs from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Chicken egg	Duck egg	Goose egg	Total
293	**-**	**54.2**	**-**	**54.2**
294	**-**	**54.2**	**-**	**54.2**
148	**29.6**	**-**	**-**	**29.6**
149	**29.6**	**-**	**-**	**29.6**
150	**29.6**	**-**	**-**	**29.6**
288	**21.3**	**-**	**-**	**21.3**
289	**21.3**	**-**	**-**	**21.3**
196	17.8	-	-	17.8
211	17.8	-	-	17.8
212	17.8	-	-	17.8
213	17.8	-	-	17.8
214	17.8	-	-	17.8
336	-	-	15.5	15.5
337	-	-	15.5	15.5
192	11.9	-	-	11.9
193	11.9	-	-	11.9
194	11.9	-	-	11.9
197	11.9	-	-	11.9
146	8.9	-	-	8.9
147	8.9	-	-	8.9
340	8.9	-	-	8.9
341	8.9	-	-	8.9
334	8.0	-	-	8.0
335	8.0	-	-	8.0
322	6.8	-	-	6.8
323	6.8	-	-	6.8
195	5.9	-	-	5.9
53	5.5	-	-	5.5
54	5.5	-	-	5.5
55	5.5	-	-	5.5
56	5.5	-	-	5.5
57	5.5	-	-	5.5
58	5.5	-	-	5.5
59	5.5	-	-	5.5
60	5.5	-	-	5.5
61	5.5	-	-	5.5
258	3.6	-	-	3.6
259	3.6	-	-	3.6
260	3.6	-	-	3.6
261	3.6	-	-	3.6
262	3.6	-	-	3.6
207	3.0	-	-	3.0
208	3.0	-	-	3.0
306	3.0	-	-	3.0
330	3.0	-	-	3.0
331	3.0	-	-	3.0
140	2.3	-	-	2.3
141	2.3	-	-	2.3
142	1.1	-	-	1.1
34	1.0	-	-	1.0
238	1.0	-	-	1.0
239	1.0	-	-	1.0
332	1.0	-	-	1.0
333	0.3	-	-	0.3

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of eggs based on the 7 high-rate adult consumers is 34.3 kg y^{-1}

The observed 97.5th percentile rate based on 54 observations is 46.2 kg y^{-1}

Table 21. Adults' consumption rates of wild/free foods from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Blackberry	Chestnut	Elderberry	Nettle	Sloe	Total
148	**3.9**	**-**	**0.8**	**-**	**-**	**4.7**
149	**3.9**	**-**	**0.8**	**-**	**-**	**4.7**
150	**3.9**	**-**	**0.8**	**-**	**-**	**4.7**
322	**1.5**	**-**	**-**	**-**	**1.5**	**3.0**
323	**1.5**	**-**	**-**	**-**	**1.5**	**3.0**
324	**2.5**	**-**	**-**	**-**	**-**	**2.5**
325	**2.5**	**-**	**-**	**-**	**-**	**2.5**
34	**2.3**	**-**	**-**	**-**	**-**	**2.3**
266	**2.3**	**-**	**-**	**-**	**-**	**2.3**
267	**2.3**	**-**	**-**	**-**	**-**	**2.3**
21	**2.0**	**-**	**-**	**-**	**-**	**2.0**
258	**2.0**	**-**	**-**	**-**	**-**	**2.0**
259	**2.0**	**-**	**-**	**-**	**-**	**2.0**
260	**2.0**	**-**	**-**	**-**	**-**	**2.0**
261	**2.0**	**-**	**-**	**-**	**-**	**2.0**
262	**2.0**	**-**	**-**	**-**	**-**	**2.0**
295	**1.8**	**-**	**-**	**-**	**-**	**1.8**
296	**1.8**	**-**	**-**	**-**	**-**	**1.8**
243	1.5	-	-	-	-	1.5
244	1.5	-	-	-	-	1.5
293	1.5	-	-	-	-	1.5
294	1.5	-	-	-	-	1.5
330	0.5	-	-	-	1.0	1.5
331	0.5	-	-	-	1.0	1.5
234	1.3	-	-	-	-	1.3
235	1.3	-	-	-	-	1.3
236	1.3	-	-	-	-	1.3
316	1.2	-	-	-	-	1.2
317	1.2	-	-	-	-	1.2
38	1.0	-	-	-	-	1.0
39	1.0	-	-	-	-	1.0
192	1.0	-	-	-	-	1.0
193	1.0	-	-	-	-	1.0
194	1.0	-	-	-	-	1.0
318	1.0	-	-	-	-	1.0
319	1.0	-	-	-	-	1.0
320	1.0	-	-	-	-	1.0
228	0.9	-	-	-	-	0.9
229	0.9	-	-	-	-	0.9
255	0.8	-	-	-	-	0.8
256	0.8	-	-	-	-	0.8
263	-	0.7	-	-	-	0.7
264	-	0.7	-	-	-	0.7
3	-	-	-	-	0.5	0.5
4	-	-	-	-	0.5	0.5
16	0.5	-	-	-	-	0.5
126	0.4	-	-	-	-	0.4
127	0.4	-	-	-	-	0.4
128	0.4	-	-	-	-	0.4
129	0.4	-	-	-	-	0.4
130	0.4	-	-	-	-	0.4
131	0.4	-	-	-	-	0.4

Table 21. Adults' consumption rates of wild/free foods from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Blackberry	Chestnut	Elderberry	Nettle	Sloe	Total
132	0.4	-	-	-	-	0.4
288	0.3	-	-	-	-	0.3
289	0.3	-	-	-	-	0.3
29	0.2	-	-	-	-	0.2
30	0.2	-	-	-	-	0.2
49	0.2	-	-	-	-	0.2
50	0.2	-	-	-	-	0.2
51	0.2	-	-	-	-	0.2
52	0.2	-	-	-	-	0.2
184	-	-	-	0.1	-	0.1
185	-	-	-	0.1	-	0.1

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of wild/free foods based on the 18 high-rate adult consumers is 2.6 kg y^{-1}

The observed 97.5th percentile rate based on 63 observations is 4.7 kg y^{-1}

Table 22. Adults' consumption rates of rabbits/hares from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Rabbit	Hare	Total
92	**2.3**	**-**	**2.3**
93	**2.3**	**-**	**2.3**
94	**2.3**	**-**	**2.3**
95	**2.3**	**-**	**2.3**
330	**-**	**1.6**	**1.6**
331	**-**	**1.6**	**1.6**
148	**1.5**	**-**	**1.5**
149	**1.5**	**-**	**1.5**
150	**1.5**	**-**	**1.5**
288	0.5	-	0.5
289	0.5	-	0.5

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of rabbits/hares based on the 9 high-rate adult consumers is 1.9 kg y^{-1}

The observed 97.5th percentile rate based on 11 observations is 2.3 kg y^{-1}

Table 23. Adults' consumption rates of honey from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Honey
318	**7.9**
319	**7.9**
320	**7.9**
294	**6.8**
316	**6.8**
328	**5.4**
329	**5.4**
295	**4.1**
314	**4.1**
315	**4.1**
322	**2.7**
323	**2.7**
293	2.3
317	2.3
301	1.8
302	1.8
296	1.4
297	1.4
298	1.4
96	0.9
101	0.9
121	0.6
122	0.6
123	0.6
124	0.6

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of honey based on the 12 high-rate adult consumers is 5.5 kg y^{-1}

The observed 97.5th percentile rate based on 25 observations is 7.9 kg y^{-1}

Table 24. Adults' consumption rates of wild fungi from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Mushrooms
322	**2.7**
323	**2.7**
295	**1.1**
296	**1.1**

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of wild fungi based on the 4 high-rate adult consumers is 1.9 kg y^{-1}

The observed 97.5th percentile rate based on 4 observations is 2.7 kg y^{-1}

Table 25. Adults' consumption rates of venison from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Venison
322	**10.2**
323	**10.2**

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of venison based on the 2 high-rate adult consumers is 10.2 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 10.2 kg y^{-1}

Table 26. Adults' consumption rates of freshwater fish from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Rainbow trout
158	**7.1**
91	1.2

Notes

The observation in bold indicates the high-rate individual

The consumption rate of freshwater fish based on the only high-rate adult consumer is 7.1 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 6.9 kg y^{-1}

Table 27. Adults' consumption rates of freshwater crustaceans from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Crayfish
263	**0.1**
264	**0.1**
198	**0.1**
199	**0.1**

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of freshwater crustaceans based on the 4 high-rate adult consumers is 0.1 kg y^{-1}

The observed 97.5th percentile rate based on 4 observations is 0.1 kg y^{-1}

Table 28. Adults' consumption rates of freshwater plants from the Amersham terrestrial survey area (kg y^{-1})

Observation number	Watercress
114	**45.0**
115	**30.0**
116	**20.0**
322	0.7
323	0.7

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of freshwater plants based on the 3 high-rate adult consumers is 31.7 kg y^{-1}

The observed 97.5th percentile rate based on 5 observations is 43.5 kg y^{-1}

Table 29. Children's consumption rates of green vegetables from the Amersham terrestrial survey area (kg y^{-1})

15-year-old age group

Observation number	Age	Broccoli	Cabbage	Chard	Courgette	Cucumber	Herbs	Jerusalem artichoke	Lettuce	Spinach	Total
90	**15**	**-**	**2.7**	**-**	**10.1**	**-**	**-**	**1.2**	**-**	**-**	**14.1**
237	**16**	**1.0**	**-**	**-**	**1.9**	**-**	**-**	**-**	**3.8**	**-**	**6.7**
133	16	-	-	-	1.5	1.4	-	-	-	-	2.8
134	16	-	-	-	1.5	1.4	-	-	-	-	2.8
135	12	-	-	-	1.5	1.4	-	-	-	-	2.8
31	16	-	0.7	-	-	-	-	-	-	-	0.7
32	15	-	0.7	-	-	-	-	-	-	-	0.7
33	12	-	0.7	-	-	-	-	-	-	-	0.7

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of green vegetables based on the 2 high-rate 15-year-old age group consumers is 10.4 kg y^{-1}

The observed 97.5th percentile rate based on 8 observations is 12.8 kg y^{-1}

10-year-old age group

Observation number	Age	Broccoli	Cabbage	Chard	Courgette	Cucumber	Herbs	Jerusalem artichoke	Lettuce	Spinach	Total
232	**10**	**-**	**-**	**-**	**1.7**	**-**	**0.2**	**-**	**-**	**1.5**	**3.4**
233	**8**	**-**	**-**	**-**	**1.7**	**-**	**0.2**	**-**	**-**	**1.5**	**3.4**
40	7	-	-	-	-	-	-	-	0.5	-	0.5

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of green vegetables based on the 2 high-rate 10-year-old age group consumers is 3.4 kg y^{-1}

The observed 97.5th percentile rate based on 3 observations is 3.4 kg y^{-1}

Table 29. Children's consumption rates of green vegetables from the Amersham terrestrial survey area (kg y^{-1})

5-year-old age group

Observation number	Age	Broccoli	Cabbage	Chard	Courgette	Cucumber	Herbs	Jerusalem artichoke	Lettuce	Spinach	Total
180	**3**	**-**	**1.0**	**0.5**	**3.2**	**-**	**-**	**-**	**0.5**	**-**	**5.1**
41	5	-	-	-	-	-	-	-	0.5	-	0.5
42	3	-	-	-	-	-	-	-	0.5	-	0.5
35	6	-	-	-	-	-	-	-	-	0.4	0.4
36	3	-	-	-	-	-	-	-	-	0.4	0.4

Notes

The observation in bold indicates the high-rate individual

The consumption rate of green vegetables based on the only high-rate 5-year-old age group consumer is 5.1 kg y^{-1}

The observed 97.5th percentile rate based on 5 observations is 4.6 kg y^{-1}

1-year-old age group

Observation number	Age	Broccoli	Cabbage	Chard	Courgettes	Cucumber	Herbs	Jerusalem artichoke	Lettuce	Spinach	Total
43	**1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.5**	**-**	**0.5**

Notes

The observation in bold indicates the high-rate individual

The mean consumption rate of green vegetables based on the only 1-year-old age group consumer is 0.5 kg y^{-1}

The observed 97.5th percentile rate is not applicable for 1 observation

Table 30. Children's consumption rates of other vegetables from the Amersham terrestrial survey area (kg y^{-1})

15-year-old age group

Observation number	Age	Broad bean	French bean	Pea	Pepper	Pumpkin	Runner bean	Squash	Sweetcorn	Tomato	Total
237	**16**	**2.3**	**-**	**-**	**-**	**-**	**6.8**	**-**	**-**	**-**	**9.1**
133	**16**	**-**	**-**	**0.5**	**-**	**-**	**2.7**	**-**	**-**	**-**	**3.2**
134	**16**	**-**	**-**	**0.5**	**-**	**-**	**2.7**	**-**	**-**	**-**	**3.2**
135	**12**	**-**	**-**	**0.5**	**-**	**-**	**2.7**	**-**	**-**	**-**	**3.2**
31	16	-	-	0.9	-	-	0.2	-	-	-	1.1
32	15	-	-	0.9	-	-	0.2	-	-	-	1.1
33	12	-	-	0.9	-	-	0.2	-	-	-	1.1

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of other vegetables based on the 4 high-rate 15-year-old age group consumers is 4.6 kg y^{-1}

The observed 97.5th percentile rate based on 7 observations is 8.2 kg y^{-1}

10-year-old age group

Observation number	Age	Broad bean	French bean	Pea	Pepper	Pumpkin	Runner bean	Squash	Sweetcorn	Tomato	Total
40	**7**	**-**	**-**	**-**	**0.3**	**-**	**0.3**	**-**	**-**	**0.8**	**1.4**
232	**10**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.5**	**-**	**0.5**
233	**8**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.5**	**-**	**0.5**

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of other vegetables based on the 3 high-rate 10-year-old age group consumers is 0.8 kg y^{-1}

The observed 97.5th percentile rate based on 3 observations is 1.4 kg y^{-1}

Table 30. Children's consumption rates of other vegetables from the Amersham terrestrial survey area (kg y^{-1})

5-year-old age group

Observation number	Age	Broad bean	French bean	Pea	Pepper	Pumpkin	Runner bean	Squash	Sweetcorn	Tomato	Total
180	**3**	**1.2**	**0.7**	**-**	**-**	**-**	**3.5**	**5.3**	**-**	**2.0**	**12.7**
35	**6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**7.2**	**7.2**
36	**3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**7.2**	**7.2**
5	**4**	**-**	**-**	**-**	**-**	**1.1**	**4.5**	**-**	**-**	**-**	**5.7**
41	5	-	-	-	0.3	-	0.3	-	-	0.8	1.4
42	3	-	-	-	0.3	-	0.3	-	-	0.8	1.4

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of other vegetables based on the 4 high-rate 5-year-old age group consumers is 8.2 kg y^{-1}

The observed 97.5th percentile rate based on 6 observations is 12.0 kg y^{-1}

1-year-old age group

Observation number	Age	Broad bean	French bean	Pea	Pepper	Pumpkin	Runner bean	Squash	Sweetcorn	Tomato	Total
6	**1**	**-**	**-**	**-**	**-**	**0.5**	**1.8**	**-**	**-**	**-**	**2.3**
43	**1**	**-**	**-**	**-**	**0.3**	**-**	**0.3**	**-**	**-**	**0.8**	**1.4**

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of other vegetables based on the 2 high-rate 1-year-old age group consumers is 1.8 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 2.2 kg y^{-1}

Table 31. Children's consumption rates of root vegetables from the Amersham terrestrial survey area (kg y^{-1})

15-year-old age group

Observation number	Age	Beetroot	Carrot	Fennel	Garlic	Leek	Onion	Parsnip	Spring onion	Total
90	**15**	**8.2**	**4.5**	**0.1**	**-**	**-**	**3.6**	**-**	**-**	**16.4**
237	**16**	**2.1**	**-**	**-**	**-**	**-**	**4.4**	**-**	**-**	**6.5**
33	12	-	0.3	-	-	0.8	-	0.2	0.1	1.3
31	16	-	0.3	-	-	0.8	-	0.2	0.1	1.3
32	15	-	0.3	-	-	0.8	-	0.2	0.1	1.3
133	16	-	-	-	-	-	0.4	-	-	0.4
134	16	-	-	-	-	-	0.4	-	-	0.4
135	12	-	-	-	-	-	0.4	-	-	0.4

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of root vegetables based on the 2 high-rate 15-year-old age group consumers is 11.4 kg y^{-1}

The observed 97.5th percentile rate based on 8 observations is 14.6 kg y^{-1}

10-year-old age group

Observation number	Age	Beetroot	Carrot	Fennel	Garlic	Leek	Onion	Parsnip	Spring onion	Total
232	**10**	**1.8**	**-**	**-**	**-**	**1.5**	**-**	**-**	**-**	**3.4**
233	**8**	**1.8**	**-**	**-**	**-**	**1.5**	**-**	**-**	**-**	**3.4**
40	7	-	0.2	-	-	-	-	-	-	0.2

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of root vegetables based on the 2 high-rate 10-year-old age group consumers is 3.4 kg y^{-1}

The observed 97.5th percentile rate based on 3 observations is 3.4 kg y^{-1}

Table 31. Children's consumption rates of root vegetables from the Amersham terrestrial survey area (kg y^{-1})

5-year-old age group

Observation number	Age	Beetroot	Carrot	Fennel	Garlic	Leek	Onion	Parsnip	Spring onion	Total
180	**3**	**1.4**	**-**	**-**	**0.3**	**0.7**	**0.9**	**-**	**-**	**3.4**
5	4	-	-	-	0.1	-	0.7	-	-	0.8
41	5	-	0.2	-	-	-	-	-	-	0.2
42	3	-	0.2	-	-	-	-	-	-	0.2
35	6	-	0.1	-	-	-	-	-	-	0.1
36	3	-	0.1	-	-	-	-	-	-	0.1

Notes

The observation in bold indicates the high-rate individual

The consumption rate of root vegetables based on the only high-rate 5-year-old age group consumer is 3.4 kg y^{-1}

The observed 97.5th percentile rate based on 6 observations is 3.1 kg y^{-1}

1-year-old age group

Observation number	Age	Beetroot	Carrot	Fennel	Garlic	Leek	Onion	Parsnip	Spring onion	Total
6	**1**	**-**	**-**	**-**	**-**	**-**	**0.3**	**-**	**-**	**0.3**
43	**1**	**-**	**0.2**	**-**	**-**	**-**	**-**	**-**	**-**	**0.2**

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of root vegetables based on the 2 high-rate 1-year-old age group consumers is 0.3 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 0.3 kg y^{-1}

Table 32. Children's consumption rates of potato from the Amersham terrestrial survey area (kg y^{-1})

15-year-old age group

Observation number	Age	Potato
90	**15**	**27.3**
237	**16**	**10.6**
31	**16**	**10.2**
32	**15**	**10.2**
33	**12**	**10.2**
133	16	8.2
134	16	8.2
135	12	8.2

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of potato based on the 5 high-rate 15-year-old age group consumers is 13.7 kg y^{-1}

The observed 97.5th percentile rate based on 8 observations is 24.4 kg y^{-1}

10-year-old age group

Observation number	Age	Potato
40	**7**	**0.8**

Notes

The observation in bold indicates the high-rate individual

The mean consumption rate of potato based on the only 10-year-old age group consumer is 0.8 kg y^{-1}

The observed 97.5th percentile rate is not applicable for 1 observation

Table 32. Children's consumption rates of potato from the Amersham terrestrial survey area (kg y^{-1})

5-year-old age group

Observation number	Age	Potato
5	**4**	**3.0**
180	**3**	**2.4**
41	5	0.8
42	3	0.8
35	6	0.5
36	3	0.5

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of potato based on the 2 high-rate 5-year-old age group consumers is 2.7 kg y^{-1}

The observed 97.5th percentile rate based on 6 observations is 2.9 kg y^{-1}

1-year-old age group

Observation number	Age	Potato
6	**1**	**1.2**
43	**1**	**0.8**

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of potato based on the 2 high-rate 1-year-old age group consumers is 1.0 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 1.2 kg y^{-1}

Table 33. Children's consumption rates of domestic fruit from the Amersham terrestrial survey area (kg y^{-1})

15-year-old age group

Observation number	Age	Apple	Blackberry	Blackcurrant	Gooseberry	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Tayberry	Whitecurrant	Total
90	**15**	**-**	**-**	**-**	**-**	**-**	**-**	**0.7**	**-**	**-**	**1.0**	**-**	**-**	**1.6**
133	**16**	**-**	**-**	**-**	**-**	**-**	**-**	**0.7**	**-**	**-**	**0.9**	**-**	**-**	**1.6**
134	**16**	**-**	**-**	**-**	**-**	**-**	**-**	**0.7**	**-**	**-**	**0.9**	**-**	**-**	**1.6**
135	**12**	**-**	**-**	**-**	**-**	**-**	**-**	**0.7**	**-**	**-**	**0.9**	**-**	**-**	**1.6**
237	**16**	**-**	**-**	**1.4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1.4**
62	**15**	**-**	**-**	**0.2**	**-**	**-**	**-**	**0.8**	**-**	**-**	**-**	**-**	**-**	**0.9**
63	**15**	**-**	**-**	**0.2**	**-**	**-**	**-**	**0.8**	**-**	**-**	**-**	**-**	**-**	**0.9**
64	**14**	**-**	**-**	**0.2**	**-**	**-**	**-**	**0.8**	**-**	**-**	**-**	**-**	**-**	**0.9**
31	16	-	-	-	-	-	-	0.2	-	-	-	-	-	0.2
32	15	-	-	-	-	-	-	0.2	-	-	-	-	-	0.2
33	12	-	-	-	-	-	-	0.2	-	-	-	-	-	0.2

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of domestic fruit based on the 8 high-rate 15-year-old age group consumers is 1.3 kg y^{-1}

The observed 97.5th percentile rate based on 11 observations is 1.6 kg y^{-1}

10-year-old age group

Observation number	Age	Apple	Blackberry	Blackcurrant	Gooseberry	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Tayberry	Whitecurrant	Total
326	**7**	**-**	**-**	**0.8**	**-**	**-**	**-**	**5.0**	**0.3**	**0.6**	**10.7**	**1.3**	**0.3**	**18.8**
232	10	-	-	-	-	-	-	3.1	-	-	-	-	-	3.1
233	8	-	-	-	-	-	-	3.1	-	-	-	-	-	3.1
40	7	0.8	-	-	-	-	0.5	0.3	-	-	0.1	-	-	1.6
65	10	-	-	0.1	-	-	-	0.4	-	-	-	-	-	0.5

Notes

The observation in bold indicates the high-rate individual

The consumption rate of domestic fruit based on the only high-rate 10-year-old age group consumer is 18.8 kg y^{-1}

The observed 97.5th percentile rate based on 5 observations is 17.2 kg y^{-1}

Table 33. Children's consumption rates of domestic fruit from the Amersham terrestrial survey area (kg y^{-1})

5-year-old age group

Observation number	Age	Apple	Blackberry	Blackcurrant	Gooseberry	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Tayberry	Whitecurrant	Total
327	**5**	**-**	**-**	**0.8**	**-**	**-**	**-**	**5.0**	**0.3**	**0.6**	**10.7**	**1.3**	**0.3**	**18.8**
35	**6**	**1.4**	**-**	**0.1**	**3.1**	**5.0**	**1.7**	**2.0**	**1.1**	**-**	**3.4**	**-**	**-**	**17.9**
36	**3**	**1.4**	**-**	**0.1**	**3.1**	**5.0**	**1.7**	**2.0**	**1.1**	**-**	**3.4**	**-**	**-**	**17.9**
180	3	-	1.9	-	1.0	-	-	0.3	1.8	0.4	-	-	-	5.4
41	5	0.8	0.3	-	-	-	0.5	0.3	-	-	0.1	-	-	1.9
42	3	0.8	0.3	-	-	-	0.5	0.3	-	-	0.1	-	-	1.9

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of domestic fruit based on the 3 high-rate 5-year-old age group consumers is 18.2 kg y^{-1}

The observed 97.5th percentile rate based on 6 observations is 18.7 kg y^{-1}

1-year-old age group

Observation number	Age	Apple	Blackberry	Blackcurrant	Gooseberry	Pear	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Tayberry	Whitecurrant	Total
43	**1**	**0.8**	**0.3**	**-**	**-**	**-**	**0.5**	**0.3**	**-**	**-**	**0.1**	**-**	**-**	**1.9**

Notes

The observation in bold indicates the high-rate individual

The mean consumption rate of domestic fruit based on the only 1-year-old age group consumer is 1.9 kg y^{-1}

The observed 97.5th percentile rate is not applicable for 1 observation

Table 34. Children's consumption rates of cattle meat from the Amersham terrestrial survey area (kg y^{-1})

5-year-old age group

Observation number	Age	Beef
106	**5**	**0.2**
105	**4**	**0.2**
104	**3**	**0.2**

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of cattle meat based on the 3 high-rate 5-year-old age group consumers is 0.2 kg y^{-1}

The observed 97.5th percentile rate based on 3 observations is 0.2 kg y^{-1}

Table 35. Children's consumption rates of pig meat from the Amersham terrestrial survey area (kg y^{-1})

15-year-old age group

Observation number	Age	Pork
62	**15**	**16.9**
63	**15**	**16.9**
64	**14**	**16.9**

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of pig meat based on the 3 high-rate 15-year-old age group consumers is 16.9 kg y^{-1}

The observed 97.5th percentile rate based on 3 observations is 16.9 kg y^{-1}

10-year-old age group

Observation number	Age	Pork
65	**10**	**8.4**

Notes

The observation in bold indicates the high-rate individual

The mean consumption rate of pig meat based on the only 10-year-old age group consumer is 8.4 kg y^{-1}

The observed 97.5th percentile rate is not applicable for 1 observation

Table 36. Children's consumption rates of poultry from the Amersham terrestrial survey area (kg y^{-1})

15-year-old age group

Observation number	Age	Chicken	Pheasant	Total
62	**15**	**13.5**	**-**	**13.5**
63	**15**	**13.5**	**-**	**13.5**
64	**14**	**13.5**	**-**	**13.5**
290	15	-	0.5	0.5
291	14	-	0.5	0.5

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of poultry based on the 3 high-rate 15-year-old age group consumers is 13.5 kg y^{-1}

The observed 97.5th percentile rate based on 5 observations is 13.5 kg y^{-1}

10-year-old age group

Observation number	Age	Chicken	Pheasant	Total
65	**10**	**6.8**	**-**	**6.8**
292	11	-	0.5	0.5

Notes

The observation in bold indicates the high-rate individual

The consumption rate of poultry based on the only high-rate 10-year-old age group consumer is 6.8 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 6.6 kg y^{-1}

Table 37. Children's consumption rates of eggs from the Amersham terrestrial survey area (kg y^{-1})

15-year-old age group

Observation number	Age	Chicken egg
290	**15**	**21.3**
291	**14**	**21.3**
62	15	5.5
63	15	5.5
64	14	5.5

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of eggs based on the 2 high-rate 15-year-old age group consumers is 21.3 kg y^{-1}

The observed 97.5th percentile rate based on 5 observations is 21.3 kg y^{-1}

10-year-old age group

Observation number	Age	Chicken egg
292	**11**	**14.5**
65	10	2.7

Notes

The observation in bold indicates the high-rate individual

The mean consumption rate of eggs based on the only high-rate 10-year-old age group consumer is 14.5 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 14.2 kg y^{-1}

5-year-old age group

Observation number	Age	Chicken egg
35	**6**	**0.5**
36	**3**	**0.5**

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of eggs based on the 2 high-rate 5-year-old age group consumers is 0.5 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 0.5 kg y^{-1}

Table 38. Children's consumption rates of wild/free foods from the Amersham terrestrial survey area (kg y^{-1})

15-year-old age group

Observation number	Age	Blackberry
237	**16**	**1.3**
133	16	0.4
134	16	0.4
135	12	0.4
290	15	0.3
291	14	0.3
31	16	0.2
32	15	0.2
33	12	0.2

Notes

The observation in bold indicates the high-rate individual

The mean consumption rate of wild/free foods based on the only high-rate 15-year-old age group consumer is 1.3 kg y^{-1}

The observed 97.5th percentile rate based on 9 observations is 1.1 kg y^{-1}

10-year-old age group

Observation number	Age	Blackberry
326	**7**	**2.5**
292	11	0.3
40	7	0.3

Notes

The observation in bold indicates the high-rate individual

The consumption rate of wild/free foods based on the only high-rate 10-year-old age group consumer is 2.5 kg y^{-1}

The observed 97.5th percentile rate based on 3 observations is 2.4 kg y^{-1}

Table 38. Children's consumption rates of wild/free foods from the Amersham terrestrial survey area (kg y^{-1})

5-year-old age group

Observation number	Age	Blackberry
327	**5**	**2.5**
35	**6**	**1.1**
36	**3**	**1.1**

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of wild/free foods based on the 3 high-rate 5-year-old age group consumers is 1.6 kg y^{-1}

The observed 97.5th percentile rate based on 3 observations is 2.4 kg y^{-1}

Table 39. Children's consumption rates of rabbits/hares from the Amersham terrestrial survey area (kg y^{-1})

15-year-old age group

Observation number	Age	Rabbit
290	**15**	**0.5**
291	**14**	**0.5**

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of rabbits/hares based on the 2 high-rate 15-year-old age group consumers is 0.5 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 0.5 kg y^{-1}

10-year-old age group

Observation number	Age	Rabbit
292	**11**	**0.5**

Notes

The observation in bold indicates the high-rate individual

The mean consumption rate of rabbits/hares based on the only 10-year-old age group consumer is 0.5 kg y^{-1}

The observed 97.5th percentile rate is not applicable for 1 observation

Table 40. Children's consumption rates of honey from the Amersham terrestrial survey area (kg y^{-1})

15-year-old age group

Observation number	Age	Honey
299	**12**	**1.4**
303	15	0.4

Notes

The observation in bold indicates the high-rate individual

The consumption rate of honey based on the only high-rate 15-year-old age group consumer is 1.4 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 1.3 kg y^{-1}

10-year-old age group

Observation number	Age	Honey
300	**7**	**1.4**
304	9	0.4

Notes

The observation in bold indicates the high-rate individual

The consumption rate of honey based on the only high-rate 10-year-old age group consumer is 1.4 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 1.3 kg y^{-1}

5-year-old age group

Observation number	Age	Honey
321	**2**	**0.4**
305	**2**	**0.2**

Notes

Observations in bold indicate the high-rate individuals

The mean consumption rate of honey based on the 2 high-rate 5-year-old age group consumers is 0.3 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 0.4 kg y^{-1}

Table 41. Children's consumption rates of freshwater plants from the Amersham terrestrial survey area (kg y^{-1})

15-year-old age group

Observation number	Age	Watercress
117	**16**	**20.0**
118	12	5.0

Notes

The observation in bold indicates the high-rate individual

The consumption rate of freshwater plants based on the only high-rate 15-year-old age group consumer is 20.0 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 19.6 kg y^{-1}

10-year-old age group

Observation number	Age	Watercress
119	**10**	**5.0**

Notes

The observation in bold indicates the high-rate individual

The mean consumption rate of freshwater plants based on the only 10-year-old age group consumer is 5.0 kg y^{-1}

The observed 97.5th percentile rate is not applicable for 1 observation

Table 42. Summary of consumption rates for adults in the Amersham area (kg y^{-1} or l y^{-1})

Food group	Number of observations	Number of high-rate consumers	Observed maximum consumption rate for the high-rate group	Observed minimum consumption rate for the high-rate group	Observed mean consumption rate for the high-rate group	Observed 97.5th percentile consumption rate	Generic mean consumption rate	Generic 97.5th percentile consumption rate
Foods from the aquatic survey area								
Fish	NC	NC	NC	NC	NC	NC	15.0	40.0
Crustaceans	NC	NC	NC	NC	NC	NC	3.5	10.0
Molluscs	NC	NC	NC	NC	NC	NC	3.5	10.0
Foods from the terrestrial survey area								
Green vegetables	125	22	67.7	23.1	38.9	54.0	15.0	45.0
Other vegetables	133	45	45.4	15.4	21.0	28.2	20.0	50.0
Root vegetables	131	30	58.9	20.3	33.6	53.7	10.0	40.0
Potato	109	13	136.2	45.5	71.1	102.4	50.0	120.0
Domestic fruit	145	21	48.7	17.1	28.7	39.8	20.0	75.0
Milk	12	5	414.9	259.3	352.6	414.9	95.0	240.0
Cattle meat	8	8	11.8	11.8	11.8	11.8	15.0	45.0
Pig meat	18	2	132.6	44.2	88.4	95.0	15.0	40.0
Sheep meat	6	5	28.3	11.3	18.2	28.3	8.0	25.0
Poultry	40	17	17.9	7.5	12.2	17.9	10.0	30.0
Eggs	54	7	54.2	21.3	34.3	46.2	8.5	25.0
Wild/free foods	63	18	4.7	1.8	2.6	4.7	7.0	25.0
Rabbits/hares	11	9	2.3	1.5	1.9	2.3	6.0	15.0
Honey	25	12	7.9	2.7	5.5	7.9	2.5	9.5
Wild fungi	4	4	2.7	1.1	1.9	2.7	3.0	10.0
Venison	2	2	10.2	10.2	10.2	10.2	ND	ND
Cereals	NC	NC	NC	NC	NC	NC	50.0	100.0
Freshwater fish	2	1	7.1	7.1	7.1	6.9	ND	ND
Freshwater crustaceans	4	4	0.1	0.1	0.1	0.1	ND	ND
Freshwater molluscs	NC	NC	NC	NC	NC	NC	ND	ND
Freshwater plants	5	3	45.0	20.0	31.7	43.5	ND	ND

Notes

ND = not determined

NC = not consumed

Table 43. Summary of consumption rates for the 15-year-old age group in the Amersham area (kg y^{-1})

Food group	Number of observations	Number of high-rate consumers	Observed maximum consumption rate for the high-rate group	Observed minimum consumption rate for the high-rate group	Observed mean consumption rate for the high-rate group	Observed 97.5th percentile consumption rate	Generic mean consumption rate	Generic 97.5th percentile consumption rate
Foods from the aquatic survey area								
Fish	NC	NC	NC	NC	NC	NC	6.5	20.0
Crustaceans	NC	NC	NC	NC	NC	NC	2.5	6.0
Molluscs	NC	NC	NC	NC	NC	NC	2.5	6.0
Foods from the terrestrial survey area								
Green vegetables	8	2	14.1	6.7	10.4	12.8	9.0	25.0
Other vegetables	7	4	9.1	3.2	4.6	8.2	10.0	30.0
Root vegetables	8	2	16.4	6.5	11.4	14.6	7.5	20.0
Potato	8	5	27.3	10.2	13.7	24.4	60.0	130.0
Domestic fruit	11	8	1.6	0.9	1.3	1.6	15.0	50.0
Milk	NC	NC	NC	NC	NC	NC	110.0	260.0
Cattle meat	NC	NC	NC	NC	NC	NC	15.0	35.0
Pig meat	3	3	16.9	16.9	16.9	16.9	10.0	30.0
Sheep meat	NC	NC	NC	NC	NC	NC	5.5	15.0
Poultry	5	3	13.5	13.5	13.5	13.5	6.5	20.0
Eggs	5	2	21.3	21.3	21.3	21.3	7.0	25.0
Wild/free foods	9	1	1.3	1.3	1.3	1.1	3.0	13.0
Rabbits/hares	2	2	0.5	0.5	0.5	0.5	ND	ND
Honey	2	1	1.4	1.4	1.4	1.3	2.0	5.0
Wild fungi	NC	NC	NC	NC	NC	NC	2.0	5.5
Venison	NC	NC	NC	NC	NC	NC	ND	ND
Cereals	NC	NC	NC	NC	NC	NC	50.0	95.0
Freshwater fish	NC	NC	NC	NC	NC	NC	ND	ND
Freshwater crustaceans	NC	NC	NC	NC	NC	NC	ND	ND
Freshwater molluscs	NC	NC	NC	NC	NC	NC	ND	ND
Freshwater plants	2	1	20.0	20.0	20.0	19.6	ND	ND

Notes

ND = not determined

NC = not consumed

Table 44. Summary of consumption rates for the 10-year-old age group in the Amersham area (kg y^{-1})

Food group	Number of observations	Number of high-rate consumers	Observed maximum consumption rate for the high-rate group	Observed minimum consumption rate for the high-rate group	Observed mean consumption rate for the high-rate group	Observed 97.5th percentile consumption rate	Generic mean consumption rate	Generic 97.5th percentile consumption rate
Foods from the aquatic survey area								
Fish	NC	NC	NC	NC	NC	NC	6.0	20.0
Crustaceans	NC	NC	NC	NC	NC	NC	2.5	7.0
Molluscs	NC	NC	NC	NC	NC	NC	2.5	7.0
Foods from the terrestrial survey area								
Green vegetables	3	2	3.4	3.4	3.4	3.4	6.0	20.0
Other vegetables	3	3	1.4	0.5	0.8	1.4	8.0	25.0
Root vegetables	3	2	3.4	3.4	3.4	3.4	6.0	20.0
Potato	1	1	0.8	0.8	0.8	NA	45.0	85.0
Domestic fruit	5	1	18.8	18.8	18.8	17.2	15.0	50.0
Milk	NC	NC	NC	NC	NC	NC	110.0	240.0
Cattle meat	NC	NC	NC	NC	NC	NC	15.0	30.0
Pig meat	1	1	8.4	8.4	8.4	NA	8.5	25.0
Sheep meat	NC	NC	NC	NC	NC	NC	4.0	10.0
Poultry	2	1	6.8	6.8	6.8	6.6	5.5	15.0
Eggs	2	1	14.5	14.5	14.5	14.2	6.5	20.0
Wild/free foods	3	1	2.5	2.5	2.5	2.4	3.0	11.0
Rabbits/hares	1	1	0.5	0.5	0.5	NA	ND	ND
Honey	2	1	1.4	1.4	1.4	1.3	2.0	7.5
Wild fungi	NC	NC	NC	NC	NC	NC	1.5	4.5
Venison	NC	NC	NC	NC	NC	NC	ND	ND
Cereals	NC	NC	NC	NC	NC	NC	45.0	75.0
Freshwater fish	NC	NC	NC	NC	NC	NC	ND	ND
Freshwater crustaceans	NC	NC	NC	NC	NC	NC	ND	ND
Freshwater molluscs	NC	NC	NC	NC	NC	NC	ND	ND
Freshwater plants	1	1	5.0	5.0	5.0	NA	ND	ND

Notes

ND = not determined

NC = not consumed

NA = not applicable

Table 45. Summary of consumption rates for the 5-year-old age group in the Amersham area (kg y^{-1})

Food group	Number of observations	Number of high-rate consumers	Observed maximum consumption rate for the high-rate group	Observed minimum consumption rate for the high-rate group	Observed mean consumption rate for the high-rate group	Observed 97.5th percentile consumption rate	Generic mean consumption rate	Generic 97.5th percentile consumption rate
Foods from the aquatic survey area								
Fish	NC	NC	NC	NC	NC	NC	ND	ND
Crustaceans	NC	NC	NC	NC	NC	NC	ND	ND
Molluscs	NC	NC	NC	NC	NC	NC	ND	ND
Foods from the terrestrial survey area								
Green vegetables	5	1	5.1	5.1	5.1	4.6	ND	ND
Other vegetables	6	4	12.7	5.7	8.2	12.0	ND	ND
Root vegetables	6	1	3.4	0.8	3.4	3.1	ND	ND
Potato	6	2	3.0	2.4	2.7	2.9	ND	ND
Domestic fruit	6	3	18.8	17.9	18.2	18.7	ND	ND
Milk	NC	NC	NC	NC	NC	NC	ND	ND
Cattle meat	3	3	0.2	0.2	0.2	0.2	ND	ND
Pig meat	NC	NC	NC	NC	NC	NC	ND	ND
Sheep meat	NC	NC	NC	NC	NC	NC	ND	ND
Poultry	NC	NC	NC	NC	NC	NC	ND	ND
Eggs	2	2	0.5	0.5	0.5	0.5	ND	ND
Wild/free foods	3	3	2.5	1.1	1.6	2.4	ND	ND
Rabbits/hares	NC	NC	NC	NC	NC	NC	ND	ND
Honey	2	2	0.4	0.2	0.3	0.4	ND	ND
Wild fungi	NC	NC	NC	NC	NC	NC	ND	ND
Venison	NC	NC	NC	NC	NC	NC	ND	ND
Cereals	NC	NC	NC	NC	NC	NC	ND	ND
Freshwater fish	NC	NC	NC	NC	NC	NC	ND	ND
Freshwater crustaceans	NC	NC	NC	NC	NC	NC	ND	ND
Freshwater molluscs	NC	NC	NC	NC	NC	NC	ND	ND
Freshwater plants	NC	NC	NC	NC	NC	NC	ND	ND

Notes

ND = not determined

NC = not consumed

NA = not applicable

Table 46. Summary of consumption rates for the 1-year-old age group in the Amersham area (kg y^{-1})

Food group	Number of observations	Number of high-rate consumers	Observed maximum consumption rate for the high-rate group	Observed minimum consumption rate for the high-rate group	Observed mean consumption rate for the high-rate group	Observed 97.5th percentile consumption rate	Generic mean consumption rate	Generic 97.5th percentile consumption rate
Foods from the aquatic survey area								
Fish	NC	NC	NC	NC	NC	NC	ND	ND
Crustaceans	NC	NC	NC	NC	NC	NC	ND	ND
Molluscs	NC	NC	NC	NC	NC	NC	ND	ND
Foods from the terrestrial survey area								
Green vegetables	1	1	0.5	0.5	0.5	NA	ND	ND
Other vegetables	2	2	2.3	1.4	1.8	2.2	ND	ND
Root vegetables	2	2	0.3	0.2	0.3	0.3	ND	ND
Potato	2	2	1.2	0.8	1.0	1.2	ND	ND
Domestic fruit	1	1	1.9	1.9	1.9	NA	ND	ND
Milk	NC	NC	NC	NC	NC	NC	ND	ND
Cattle meat	NC	NC	NC	NC	NC	NC	ND	ND
Pig meat	NC	NC	NC	NC	NC	NC	ND	ND
Sheep meat	NC	NC	NC	NC	NC	NC	ND	ND
Poultry	NC	NC	NC	NC	NC	NC	ND	ND
Eggs	NC	NC	NC	NC	NC	NC	ND	ND
Wild/free foods	NC	NC	NC	NC	NC	NC	ND	ND
Rabbits/hares	NC	NC	NC	NC	NC	NC	ND	ND
Honey	NC	NC	NC	NC	NC	NC	ND	ND
Wild fungi	NC	NC	NC	NC	NC	NC	ND	ND
Venison	NC	NC	NC	NC	NC	NC	ND	ND
Cereals	NC	NC	NC	NC	NC	NC	ND	ND
Freshwater fish	NC	NC	NC	NC	NC	NC	ND	ND
Freshwater crustaceans	NC	NC	NC	NC	NC	NC	ND	ND
Freshwater molluscs	NC	NC	NC	NC	NC	NC	ND	ND
Freshwater plants	NC	NC	NC	NC	NC	NC	ND	ND

Notes

ND = not determined

NC = not consumed

NA = not applicable

Table 47. Percentage contribution each food type makes to its terrestrial food group for adults

Green vegetables	
Courgette	30.9 %
Cabbage	20.9 %
Broccoli	11.0 %
Brussel sprout	8.8 %
Lettuce	6.3 %
Cauliflower	5.4 %
Spinach	4.5 %
Calabrese	3.0 %
Kale	2.2 %
Cucumber	2.0 %
Marrow	1.8 %
Asparagus	1.2 %
Chard	0.9 %
Artichoke	0.9 %
Herbs	0.2 %
Rocket	0.1 %
Other vegetables	
Runner bean	41.4 %
Tomato	16.4 %
Broad bean	15.8 %
Pea	5.9 %
French bean	5.7 %
Sweetcorn	4.8 %
Pumpkin	3.7 %
Squash	3.4 %
Mangetout	2.1 %
Pepper	0.7 %
Chilli pepper	0.2 %
Root vegetables	
Onion	25.4 %
Leek	22.4 %
Beetroot	19.4 %
Carrot	10.3 %
Swede	7.2 %
Parsnip	6.5 %
Shallot	2.4 %
Garlic	1.3 %
Celery	1.0 %
Radish	0.8 %
Spring onion	0.8 %
Celeriac	0.8 %
Fennel	0.8 %
Turnip	0.5 %
Artichoke	0.4 %

Potato	
Potato	100.00 %
Domestic fruit	
Apple	18.0 %
Raspberry	17.3 %
Strawberry	11.6 %
Rhubarb	10.4 %
Blackcurrant	7.9 %
Gooseberry	6.5 %
Redcurrant	5.3 %
Blackberry	5.2 %
Plum	5.2 %
Pear	3.7 %
Loganberry	3.1 %
Cherry	1.9 %
Damson	1.1 %
Blueberry	0.8 %
Worcesterberry	0.6 %
Whitecurrant	0.4 %
Greengage	0.4 %
Tayberry	0.3 %
Walnuts	0.2 %
Fig	0.2 %
Milk	
Cows' milk	60.5 %
Goats' milk	39.5 %
Cattle meat	
Beef	100.0 %
Sheep meat	
Lamb	100.0 %
Pig meat	
Pork	100.0 %

Poultry	
Chicken	52.9 %
Pheasant	23.1 %
Pigeon	7.2 %
Partridge	5.4 %
Goose	4.1 %
Duck	3.7 %
Mallard	3.7 %
Eggs	
Chicken egg	75.6 %
Duck egg	19.0 %
Goose egg	5.4 %
Wild/free foods	
Blackberry	88.0 %
Sloe	7.3 %
Elderberry	2.8 %
Chestnut	1.7 %
Nettle	0.2 %
Rabbits/hares	
Rabbit	81.8 %
Hare	18.2 %
Honey	
Honey	100.0 %
Wild fungi	
Mushrooms	100.0 %
Venison	
Venison	100.0 %
Freshwater fish	
Rainbow trout	100.0 %
Freshwater crustaceans	
Crayfish	100.0 %
Freshwater plants	
Watercress	100.0 %

Notes

Food types in emboldened italics were monitored by FSA in 2008 (EA, FSA, NIEA and SEPA, 2009).
Wheat was also monitored.
Percentages are based on the consumption of all adults in the survey consuming that particular food group.

Table 48. Adults' occupancy rates on water in the Amersham terrestrial survey area (h y $^{-1}$)

Observation number	Location	Activity	On water
114	Watercress farm	Wading	960
115	Watercress farm	Wading	960
120	Watercress farm	Wading	960
158	Latimer Park Lakes	Angling	48
125	Frogmore Meadow Nature Reserve	Wading	12

Table 49. Children's occupancy rates on water in the Amersham terrestrial survey area (h y $^{-1}$)

Observation number	Age	Location	Activity	On water
10-year-old age group				
432	8	River Chess	Paddling	6
5-year-old age group				
433	4	River Chess	Paddling	6

Table 50. Occupancy rates for adults and children in the Amersham direct radiation survey area (h y^{-1})

Observation Number	Age (years)	Indoor occupancy	Outdoor occupancy	Total occupancy
0 - 0.25 km zone				
45	10	7248	1460	8708
46	12	7248	1460	8708
263	84	8444	238	8682
264	65	6857	1825	8682
1	U	8618	12	8630
273	67	7900	730	8630
44	45	8239	365	8604
30	38	8344	260	8604
31	16	8552	52	8604
32	15	8552	52	8604
33	12	8552	52	8604
48	72	7416	980	8396
268	39	7616	658	8274
276	70	7598	462	8060
331	65	7416	574	7990
29	50	7408	572	7980
287	87	7844	116	7960
148	66	7521	343	7864
330	65	7480	210	7690
143	84	7199	350	7549
145	67	7446	58	7504
146	58	7268	100	7368
36	3	7167	192	7359
2	14	7223	52	7275
35	6	7072	192	7264
149	64	6439	823	7262
150	34	6439	823	7262
38	39	5768	1460	7228
40	7	5768	1460	7228
41	5	5768	1460	7228
42	3	5768	1460	7228
43	1	5768	1460	7228
144	72	6236	963	7199
275	16	6692	365	7057
140	52	6576	168	6744
274	36	6488	156	6644
269	26	5966	658	6624
271	15	6511	104	6615
272	14	6511	104	6615
266	74	6196	348	6544
267	72	6196	348	6544
47	77	6348	156	6504
34	40	5454	192	5646
270	18	5324	52	5376
147	60	5248	25	5273
39	37	4673	365	5038
332	36	4441	493	4934
141	54	4808	112	4920
333	79	3901	433	4334
37	37	3280	52	3332

Table 50. Occupancy rates for adults and children in the Amersham direct radiation survey area (h y^{-1})

Observation Number	Age (years)	Indoor occupancy	Outdoor occupancy	Total occupancy
142	21	2308	26	2334
25	U	2080	-	2080
26	U	2080	-	2080
265	64	1275	255	1530
23	U	1248	52	1300
27	U	1040	-	1040
28	U	1040	-	1040
24	U	442	26	468
277	U	78	-	78
278	U	78	-	78
279	U	78	-	78
280	U	78	-	78
281	U	78	-	78
282	U	78	-	78
283	U	78	-	78
284	U	78	-	78
285	U	78	-	78
286	U	78	-	78
>0.25 - 0.5 km zone				
11	70	8448	104	8552
12	70	8448	104	8552
9	3	7614	730	8344
10	7	7614	730	8344
151	78	7941	91	8032
3	30	6976	104	7080
7	40	6992	52	7044
152	74	5688	960	6648
153	67	5688	960	6648
5	4	6354	76	6430
6	1	6354	76	6430
4	30	6196	208	6404
8	40	6108	52	6160
342	U	1656	46	1702
343	U	1656	46	1702
344	U	1656	46	1702
345	U	1656	46	1702
346	U	1656	46	1702
347	U	1656	46	1702
348	U	1656	46	1702
349	U	1656	46	1702
350	U	1656	46	1702
351	U	1656	46	1702
352	12	1170	195	1365
353	12	1170	195	1365
354	13	1170	195	1365
355	13	1170	195	1365
356	14	1170	195	1365
357	14	1170	195	1365
358	15	1170	195	1365
359	15	1170	195	1365
360	16	1170	195	1365

Table 50. Occupancy rates for adults and children in the Amersham direct radiation survey area (h y^{-1})

Observation Number	Age (years)	Indoor occupancy	Outdoor occupancy	Total occupancy
361	16	1170	195	1365
362	17	1170	195	1365
363	17	1170	195	1365
364	18	1170	195	1365
365	18	1170	195	1365
366	19	1170	195	1365
367	19	1170	195	1365
258	48	-	208	208
257	55	-	104	104
>0.5 - 1 km zone				
15	80	8422	104	8526
288	40	5815	2555	8370
187	46	7515	26	7541
154	81	7350	44	7394
186	40	6871	122	6993
189	37	6228	728	6956
190	1	6228	728	6956
191	5	6228	728	6956
155	79	6690	66	6756
156	70	5404	1260	6664
290	15	6138	441	6579
291	14	6138	441	6579
292	11	6138	441	6579
16	48	6372	104	6476
157	67	5704	80	5784
188	34	5136	260	5396
422	U	1365	195	1560
423	U	1365	195	1560
424	U	1365	195	1560
425	U	1365	195	1560
426	U	1365	195	1560
427	U	1365	195	1560
428	U	1365	195	1560
429	U	1365	195	1560
430	U	1365	195	1560
431	U	1365	195	1560
396	U	1330	38	1368
397	U	1330	38	1368
398	U	1330	38	1368
399	U	1330	38	1368
400	U	1330	38	1368
401	U	1330	38	1368
402	U	1330	38	1368
403	U	1330	38	1368
404	U	1330	38	1368
405	U	1330	38	1368
406	11	1170	195	1365
407	11	1170	195	1365
408	12	1170	195	1365
409	12	1170	195	1365
410	13	1170	195	1365

Table 50. Occupancy rates for adults and children in the Amersham direct radiation survey area (h y $^{-1}$)

Observation Number	Age (years)	Indoor occupancy	Outdoor occupancy	Total occupancy
411	13	1170	195	1365
412	14	1170	195	1365
413	14	1170	195	1365
414	15	1170	195	1365
415	15	1170	195	1365
416	16	1170	195	1365
417	16	1170	195	1365
418	17	1170	195	1365
419	17	1170	195	1365
420	18	1170	195	1365
421	18	1170	195	1365
390	17	1045	190	1235
391	17	1045	190	1235
392	18	1045	190	1235
393	18	1045	190	1235
394	19	1045	190	1235
395	19	1045	190	1235
378	11	950	285	1235
379	11	950	285	1235
380	12	950	285	1235
381	12	950	285	1235
382	13	950	285	1235
383	13	950	285	1235
384	14	950	285	1235
385	14	950	285	1235
386	15	950	285	1235
387	15	950	285	1235
388	16	950	285	1235
389	16	950	285	1235
368	U	814	74	888
369	U	814	74	888
370	U	814	74	888
371	U	814	74	888
372	U	814	74	888
373	U	814	74	888
374	U	814	74	888
375	U	814	74	888
376	U	814	74	888
377	U	814	74	888
92	36	-	365	365
94	U	-	365	365

Notes

U = Unknown

Table 51. Analysis of occupancy rates for adults and children in the Amersham direct radiation survey area

Number of hours	Number of observations
0 - 0.25 km zone	
8000 to 8760	14
7000 to 8000	20
6000 to 7000	8
5000 to 6000	4
4000 to 5000	3
3000 to 4000	1
2000 to 3000	3
1000 to 2000	4
0 to 1000	11
0 to 8760	**68**
>0.25 - 0.5 km zone	
8000 to 8760	5
7000 to 8000	2
6000 to 7000	6
5000 to 6000	0
4000 to 5000	0
3000 to 4000	0
2000 to 3000	0
1000 to 2000	26
0 to 1000	2
0 to 8760	**41**
>0.5 - 1 km zone	
8000 to 8760	2
7000 to 8000	2
6000 to 7000	10
5000 to 6000	2
4000 to 5000	0
3000 to 4000	0
2000 to 3000	0
1000 to 2000	54
0 to 1000	12
0 to 8760	**82**

Table 52. Gamma dose rate measurements for the Amersham direct radiation survey (µGy h^{-1})

Residences, businesses and schools				
Location	Outdoor substrate	Gamma dose rate at 1 metre[a]	Indoor substrate	Gamma dose rate at 1 metre[a]
House 1	Grass	0.073	Wood	0.068
House 2	Grass	0.121	Stone	0.088
House 3	Grass	0.097	Stone	0.088
House 4	Grass	0.090	Concrete	0.100
House 5	Grass	0.072	Concrete	0.077
House 6	Grass	0.073	Concrete	0.067
House 7	Grass	0.072	Concrete	0.082
House 8	Grass	0.097	NM	NM
House 9	Grass	0.088	Stone	0.095
House 10	Grass	0.082	Concrete	0.081
House 11	Grass	0.072	Concrete	0.081
House 12	Grass	0.076	NM	NM
House 13	Grass	0.076	Concrete	0.071
House 14	Grass	0.073	Concrete	0.086
House 15	Grass	0.069	Concrete	0.057
House 16	Grass	0.080	Concrete	0.107
House 17	Grass	0.070	Concrete	0.056
House 18	Grass	0.079	Concrete	0.103
House 19	Grass	0.076	Concrete	0.085
House 20	Grass	0.069	Concrete	0.090
House 21	Grass	0.082	NM	NM
House 22	Grass	0.087	Concrete	0.105
House 23	Grass	0.083	NM	NM
House 24	Grass	0.083	NM	NM
House 25	Grass	0.070	Concrete	0.091
House 26	Grass	0.080	Wood	0.099
House 27	Grass	0.072	Concrete	0.078
House 28	Grass	0.070	NM	NM
House 29	Grass	0.079	Wood	0.103
House 30	Grass	0.074	Wood	0.072
House 31	Grass	0.066	Concrete	0.079
Business 1	Stone	0.070	Concrete	0.079
Business 2	Stone	0.070	Wood	0.086
School 1	Grass	0.074	Concrete	0.060
School 2	Grass	0.072	Concrete	0.103
School 3	Grass	0.075	Concrete	0.085
School 4	Grass	0.066	Concrete	0.089

Backgrounds				
	Location	NGR	Substrate	Gamma dose rate at 1 metre
Background 1	Chorleywood	TQ 031 957	Rough grass	0.090
Background 2	Near Chalfont St Peter	SU 990 911	Rough grass	0.075
Background 3	West of area	SU 923 993	Rough grass	0.070
Background 4	North of area	SP 987 037	Rough grass	0.077

Notes

[a] These measurements have not been adjusted for natural background dose rates.

NM = Not measured

A common set of outdoor measurements have been used at properties that are in close proximity to each other.

Table 53. Combinations of adult pathways for consideration in dose assessments in the Amersham area

Combination number	Fish (aquatic area)[a]	Fruit and vegetables irrigated with water from the River Colne	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater fish (terrestrial area)	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal and river bank occupancy over grass	Canal bank occupancy over gravel towpath	Occupancy in close proximity (<10m) to sewage sludge	Occupancy in close proximity (<10m) to sewage cake bio-solids	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area	Occupancy on water in the terrestrial survey area	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
1			X	X	X	X	X						X	X															X	X
2							X			X		X	X	X	X														X	X
3																							X				X			
4			X	X	X	X	X												X											
5									X			X				X														
6			X	X	X	X	X	X				X	X	X		X	X	X			X										
7		X																			X									
8																					X							X		
9			X		X	X	X				X																		X	X
10																			X								X			
11																							X			X				
12													X										X						X	X
13											X	X								X										
14										X	X		X																	
15			X	X	X	X	X			X			X																	
16																						X					X			
17			X	X	X	X	X					X		X						X									X	X
18			X	X			X					X	X	X	X														X	X
19																								X						
20																									X					
21	X																													

Notes

The food groups and external exposure pathways marked with an asterisk are combined for the corresponding combination number. For example, combination number 1 represents an individual (or individuals) from Annex 1 who had positive data in the following pathways; green vegetables, other vegetables, root vegetables, potato, domestic fruit, eggs, wild/free foods and occupancy within 1 km of the licensed site boundary

[a]Based on hearsay evidence (see Annex 3)

Annex 1. Adults' consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater fish (terrestrial area)	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal and river bank occupancy over grass	Canal bank occupancy over gravel towpath	Occupancy in close proximity (<10m) to sewage sludge	Occupancy in close proximity (<10m) to sewage cake bio-solids	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area
1	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	F	30	-	11.3	1.6	6.1	-	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
4	M	30	-	11.3	1.6	6.1	-	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
7	F	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	M	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	M	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	F	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	M	63	14.2	**18.4**	11.1	13.7	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	F	63	14.2	**18.4**	11.1	13.7	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	M	80	-	-	-	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	M	48	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
17	M	30	13.8	**17.4**	**34.6**	26.9	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	F	65	13.8	**17.4**	**34.6**	26.9	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	M	65	13.8	**17.4**	**34.6**	26.9	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	M	64	0.5	0.0	**20.3**	5.5	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	F	63	0.5	0.0	**20.3**	5.5	0.5	-	-	-	-	-	-	**2.0**	-	-	-	-	-	-	-	-	-	-	-	-	-
22	F	38	0.5	0.0	**20.3**	5.5	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	M	50	0.7	1.1	1.3	10.2	0.2	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-
30	F	38	0.7	1.1	1.3	10.2	0.2	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-
34	F	40	0.9	14.4	0.3	1.0	**35.8**	-	-	-	-	-	1.0	**2.3**	-	-	-	-	-	-	-	-	-	-	-	-	-
37	M	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	F	39	2.0	5.7	0.9	3.3	6.4	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-

Annex 1. Adults' consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater fish (terrestrial area)	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal and river bank occupancy over grass	Canal bank occupancy over gravel towpath	Occupancy in close proximity (<10m) to sewage sludge	Occupancy in close proximity (<10m) to sewage cake bio-solids	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area
39	M	37	2.0	5.7	0.9	3.3	6.4	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-
44	F	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	M	77	1.4	3.6	-	2.3	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	F	72	1.4	3.6	-	2.3	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	M	45	0.7	3.3	1.6	-	0.9	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-
50	F	48	0.7	3.3	1.6	-	0.9	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-
51	M	17	0.7	3.3	1.6	-	0.9	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-
52	M	21	0.7	3.3	1.6	-	0.9	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-
53	M	88	-	-	-	-	0.9	-	-	16.9	-	**13.5**	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
54	M	U	-	-	-	-	0.9	-	-	16.9	-	**13.5**	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55	F	U	-	-	-	-	0.9	-	-	16.9	-	**13.5**	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
56	M	U	-	-	-	-	0.9	-	-	16.9	-	**13.5**	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
57	F	U	-	-	-	-	0.9	-	-	16.9	-	**13.5**	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
58	M	U	-	-	-	-	0.9	-	-	16.9	-	**13.5**	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
59	F	U	-	-	-	-	0.9	-	-	16.9	-	**13.5**	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60	M	22	-	-	-	-	0.9	-	-	16.9	-	**13.5**	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
61	M	17	-	-	-	-	0.9	-	-	16.9	-	**13.5**	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
66	M	68	21.8	11.0	19.4	38.2	11.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
67	F	68	21.8	11.0	19.4	38.2	11.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
68	M	95	14.5	7.3	13.0	25.5	7.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
69	F	95	14.5	7.3	13.0	25.5	7.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70	M	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24
71	F	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24
72	M	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	108
73	F	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	108
74	F	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90	-	-	-	-
75	M	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**913**	-	-	-	7008
76	M	68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104	-	-	-	-

Annex 1. Adults' consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater fish (terrestrial area)	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal and river bank occupancy over grass	Canal bank occupancy over gravel towpath	Occupancy in close proximity (<10m) to sewage sludge	Occupancy in close proximity (<10m) to sewage cake bio-solids	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area
77	F	77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-
78	M	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7300
79	F	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7300
80	M	62	**31.3**	7.3	**28.5**	**65.5**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
81	F	60	17.6	4.9	19.6	43.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
82	M	68	**51.9**	**21.1**	**27.0**	**102.4**	**48.7**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83	F	65	**51.9**	**21.1**	**27.0**	**102.4**	**48.7**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
84	M	51	17.7	7.3	11.9	14.6	5.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
85	F	53	17.7	7.3	11.9	14.6	5.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
86	F	23	17.7	7.3	11.9	14.6	5.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
87	M	45	14.1	-	16.4	18.2	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
88	F	40	14.1	-	16.4	18.2	7.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
89	M	17	14.1	-	16.4	27.3	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
91	M	70	**40.7**	14.2	8.5	36.4	9.1	-	-	-	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	-	-	-
92	M	36	-	-	-	-	-	-	-	-	-	**7.5**	-	-	**2.3**	-	-	-	-	-	-	-	-	-	-	-	-
93	F	30	-	-	-	-	-	-	-	-	-	**7.5**	-	-	**2.3**	-	-	-	-	-	-	-	-	-	-	-	-
94	M	U	-	-	-	-	-	-	-	-	-	**7.5**	-	-	**2.3**	-	-	-	-	-	-	-	-	-	-	-	-
95	F	U	-	-	-	-	-	-	-	-	-	**7.5**	-	-	**2.3**	-	-	-	-	-	-	-	-	-	-	-	-
96	M	U	-	-	-	-	-	-	**11.8**	-	-	1.9	-	-	-	0.9	-	-	-	-	-	-	-	-	-	-	-
97	M	U	-	-	-	-	-	-	**11.8**	-	-	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98	M	U	-	-	-	-	-	-	**11.8**	-	-	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
99	M	U	-	-	-	-	-	-	**11.8**	-	-	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100	M	U	-	-	-	-	-	-	**11.8**	-	-	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
101	F	U	-	-	-	-	-	-	**11.8**	-	-	1.9	-	-	-	0.9	-	-	-	-	-	-	-	-	-	-	-
102	F	U	-	-	-	-	-	-	**11.8**	-	-	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
103	F	U	-	-	-	-	-	-	**11.8**	-	-	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
107	M	49	-	-	-	-	-	29.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
108	F	42	-	-	-	-	-	29.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Annex 1. Adults' consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater fish (terrestrial area)	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal and river bank occupancy over grass	Canal bank occupancy over gravel towpath	Occupancy in close proximity (<10m) to sewage sludge	Occupancy in close proximity (<10m) to sewage cake bio-solids	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area
109	F	20	-	-	-	-	-	29.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
110	F	17	-	-	-	-	-	29.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	M	U	-	-	-	-	-	**414.9**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	M	U	-	-	-	-	-	**414.9**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	F	U	-	-	-	-	-	**414.9**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
114	M	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**45.0**	-	-	-	-	-	-
115	F	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**30.0**	-	-	-	-	-	-
116	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**20.0**	-	-	-	-	-	-
120	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
121	F	51	5.1	**16.3**	1.8	6.8	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-
122	M	58	5.1	**16.3**	1.8	6.8	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-
123	M	20	5.1	**16.3**	1.8	6.8	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-
124	M	18	5.1	**16.3**	1.8	6.8	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-
125	M	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
126	M	U	2.8	3.2	0.4	8.2	1.6	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-
127	M	U	2.8	3.2	0.4	8.2	1.6	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-
128	M	U	2.8	3.2	0.4	8.2	1.6	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-
129	F	U	2.8	3.2	0.4	8.2	1.6	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-
130	F	U	2.8	3.2	0.4	8.2	1.6	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-
131	F	U	2.8	3.2	0.4	8.2	1.6	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-
132	F	U	2.8	3.2	0.4	8.2	1.6	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-
136	M	69	**35.0**	**21.7**	**30.0**	14.4	10.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
137	F	72	**35.0**	**21.7**	**30.0**	14.4	10.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
138	M	55	6.2	**17.7**	7.5	13.7	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
139	F	55	6.2	**17.7**	7.5	13.7	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
140	F	52	-	-	-	-	10.9	-	-	-	-	-	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
141	M	54	-	-	-	-	10.9	-	-	-	-	-	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
142	F	21	-	-	-	-	5.4	-	-	-	-	-	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Annex 1. Adults' consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater fish (terrestrial area)	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal and river bank occupancy over grass	Canal bank occupancy over gravel towpath	Occupancy in close proximity (<10m) to sewage sludge	Occupancy in close proximity (<10m) to sewage cake bio-solids	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area
143	M	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
144	F	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
145	F	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
146	F	58	-	-	-	-	0.5	-	-	-	-	-	8.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
147	M	60	-	-	-	-	0.5	-	-	-	-	-	8.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
148	M	66	-	-	-	-	11.8	-	-	8.4	-	2.9	**29.6**	**4.7**	**1.5**	-	-	-	-	-	-	-	-	-	-	-	-
149	F	64	-	-	-	-	11.8	-	-	8.4	-	2.9	**29.6**	**4.7**	**1.5**	-	-	-	-	-	-	-	-	-	-	-	-
150	F	34	-	-	-	-	11.8	-	-	8.4	-	2.9	**29.6**	**4.7**	**1.5**	-	-	-	-	-	-	-	-	-	-	-	-
151	F	78	-	**23.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
152	M	74	6.9	12.5	**23.2**	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
153	F	67	6.9	12.5	**23.2**	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
154	M	81	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
155	F	79	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
156	M	70	4.5	-	14.6	13.7	3.9	-	-	-	**28.3**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
157	F	67	4.5	-	14.6	13.7	3.9	-	-	-	**28.3**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
158	M	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**7.1**	-	-	-	-	-	-	-	-
159	M	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	-	-	-	-
160	F	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	-	-	-	-
161	M	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-	-	-
162	M	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**1260**	-	-	-	-
164	M	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	126
165	F	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	126
166	M	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	-	-	-	-
167	F	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	-	-	-	-
168	M	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-	-	-
169	F	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-	-	-
170	M	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	126	-	-	-	-
171	M	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	-	-

Annex 1. Adults' consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater fish (terrestrial area)	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal and river bank occupancy over grass	Canal bank occupancy over gravel towpath	Occupancy in close proximity (<10m) to sewage sludge	Occupancy in close proximity (<10m) to sewage cake bio-solids	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area
172	M	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	-	-
174	M	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	-	-	50	-
175	M	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-	1760
176	F	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40	-	-	-	1760
177	M	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	250	-	-	-	4000
178	F	40	21.8	**45.4**	14.0	10.2	**20.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
179	M	43	21.8	**45.4**	14.0	10.2	**20.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
181	M	55	17.4	13.8	5.8	6.4	6.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
182	F	55	17.4	13.8	5.8	6.4	6.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
183	M	88	11.6	9.2	3.8	4.3	4.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
184	M	78	**54.3**	**21.1**	**51.0**	43.7	0.9	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
185	F	78	**54.3**	**21.1**	**51.0**	43.7	0.9	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
186	F	40	0.2	**18.0**	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
187	M	46	0.2	**18.0**	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
188	M	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
189	F	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
192	M	U	-	-	-	-	-	-	-	-	-	-	11.9	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-
193	F	U	-	-	-	-	-	-	-	-	-	-	11.9	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-
194	F	U	-	-	-	-	-	-	-	-	-	-	11.9	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-
195	F	62	-	-	-	-	-	-	-	-	-	-	5.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
196	M	U	-	-	-	-	-	-	-	-	-	-	17.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
197	M	67	-	-	-	-	-	-	-	-	-	-	11.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
198	M	U	-	-	-	-	-	-	-	-	**11.3**	0.5	-	-	-	-	-	-	-	**0.1**	-	-	-	-	-	-	-
199	F	U	-	-	-	-	-	-	-	-	**11.3**	0.5	-	-	-	-	-	-	-	**0.1**	-	-	-	-	-	-	-
200	M	65	2.9	0.6	8.8	8.2	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
201	F	60	2.9	0.6	8.8	8.2	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
202	M	37	2.9	0.6	8.8	8.2	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
203	F	32	2.9	0.6	8.8	8.2	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Annex 1. Adults' consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater fish (terrestrial area)	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal and river bank occupancy over grass	Canal bank occupancy over gravel towpath	Occupancy in close proximity (<10m) to sewage sludge	Occupancy in close proximity (<10m) to sewage cake bio-solids	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area
204	F	31	2.9	0.6	8.8	8.2	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
205	M	21	2.9	0.6	8.8	8.2	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
206	M	19	2.9	0.6	8.8	8.2	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
207	M	60	-	-	-	-	-	-	-	**132.6**	**11.7**	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
208	F	57	-	-	-	-	-	-	-	**44.2**	3.9	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
209	M	68	**45.0**	**24.2**	**28.1**	**54.6**	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
210	F	66	**45.0**	**24.2**	**28.1**	**54.6**	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
211	M	75	**23.1**	14.2	**20.4**	**45.5**	**18.4**	-	-	3.3	-	-	17.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
212	F	53	**23.1**	14.2	**20.4**	**45.5**	**18.4**	-	-	3.3	-	-	17.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
213	F	21	**23.1**	14.2	**20.4**	**45.5**	**18.4**	-	-	3.3	-	-	17.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
214	M	20	**23.1**	14.2	**20.4**	**45.5**	**18.4**	-	-	3.3	-	-	17.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
215	M	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	-	126
216	M	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-	-	-
217	F	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-	-	-
218	M	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104	-	-	-	84
219	F	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104	-	-	-	84
220	M	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**150**	-	-	-	-	1814
221	M	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	-	403
222	F	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	-	-	403
225	M	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4536
226	M	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**200**	-	-	-	-	-
227	M	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**200**	-	-	-	-	-
228	M	71	21.8	12.3	12.2	32.8	4.0	-	-	-	-	-	-	0.9	-	-	-	-	-	-	-	-	-	-	-	-	-
229	F	67	21.8	12.3	12.2	32.8	4.0	-	-	-	-	-	-	0.9	-	-	-	-	-	-	-	-	-	-	-	-	-
230	F	40	3.4	0.5	3.4	-	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
231	M	41	3.4	0.5	3.4	-	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
234	M	54	6.7	9.1	6.5	10.6	1.4	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-
235	F	48	6.7	9.1	6.5	10.6	1.4	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-

Annex 1. Adults' consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater fish (terrestrial area)	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal and river bank occupancy over grass	Canal bank occupancy over gravel towpath	Occupancy in close proximity (<10m) to sewage sludge	Occupancy in close proximity (<10m) to sewage cake bio-solids	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area
236	M	17	6.7	9.1	6.5	10.6	1.4	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-
238	M	74	**24.2**	**28.6**	**54.6**	24.6	**45.6**	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
239	F	70	**24.2**	**28.6**	**54.6**	24.6	**45.6**	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
240	M	50	6.9	5.2	6.0	-	10.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
241	F	48	6.9	5.2	6.0	-	10.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
242	F	21	2.8	2.1	2.4	-	3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
243	M	73	**27.1**	**25.1**	**58.9**	-	9.2	-	-	-	-	-	-	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-
244	F	70	**27.1**	**25.1**	**58.9**	-	9.2	-	-	-	-	-	-	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-
245	M	45	1.5	1.0	3.2	8.6	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
246	F	48	1.5	1.0	3.2	8.6	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
247	M	U	1.5	1.0	3.2	8.6	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
248	F	U	1.5	1.0	3.2	8.6	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
249	M	U	1.5	1.0	3.2	8.6	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
250	F	U	1.5	1.0	3.2	8.6	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
251	M	U	1.5	1.0	3.2	8.6	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
252	F	U	1.5	1.0	3.2	8.6	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
253	M	U	1.5	1.0	3.2	8.6	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
254	F	U	1.5	1.0	3.2	8.6	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
255	M	56	9.4	13.2	7.3	-	4.6	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
256	F	56	9.4	13.2	7.3	-	4.6	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
257	M	55	-	8.0	**35.2**	-	**30.2**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
258	M	48	14.6	**17.1**	6.2	8.9	2.2	-	-	-	-	-	3.6	**2.0**	-	-	-	-	-	-	-	-	-	-	-	-	-
259	F	U	14.6	**17.1**	6.2	8.9	2.2	-	-	-	-	-	3.6	**2.0**	-	-	-	-	-	-	-	-	-	-	-	-	-
260	M	U	14.6	**17.1**	6.2	8.9	2.2	-	-	-	-	-	3.6	**2.0**	-	-	-	-	-	-	-	-	-	-	-	-	-
261	M	U	14.6	**17.1**	6.2	8.9	2.2	-	-	-	-	-	3.6	**2.0**	-	-	-	-	-	-	-	-	-	-	-	-	-
262	F	U	14.6	**17.1**	6.2	8.9	2.2	-	-	-	-	-	3.6	**2.0**	-	-	-	-	-	-	-	-	-	-	-	-	-
263	M	84	6.1	**24.6**	3.6	9.1	**23.8**	-	-	-	-	0.7	-	0.7	-	-	-	-	-	**0.1**	-	-	-	-	-	-	-
264	F	65	6.1	**24.6**	3.6	9.1	**23.8**	-	-	-	-	0.7	-	0.7	-	-	-	-	-	**0.1**	-	-	-	-	-	-	-

Annex 1. Adults' consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater fish (terrestrial area)	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal and river bank occupancy over grass	Canal bank occupancy over gravel towpath	Occupancy in close proximity (<10m) to sewage sludge	Occupancy in close proximity (<10m) to sewage cake bio-solids	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area
265	M	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
266	M	74	-	-	-	-	4.5	-	-	-	-	-	-	**2.3**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
267	F	72	-	-	-	-	4.5	-	-	-	-	-	-	**2.3**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
268	F	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
269	M	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
270	M	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
273	M	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
274	F	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
276	F	70	0.1	3.6	-	-	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
277	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
278	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
279	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
280	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
281	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
282	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
283	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
284	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
285	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
286	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
287	F	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
288	M	40	-	-	-	-	-	-	-	-	-	0.5	**21.3**	0.3	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
289	F	40	-	-	-	-	-	-	-	-	-	0.5	**21.3**	0.3	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
293	M	60	13.1	11.6	17.9	**45.5**	-	-	-	-	-	-	**54.2**	1.5	-	2.3	-	-	-	-	-	-	-	-	-	-	-	-
294	F	62	13.1	11.6	17.9	**45.5**	-	-	-	-	-	-	**54.2**	1.5	-	**6.8**	-	-	-	-	-	-	-	-	-	-	-	-
295	M	U	4.1	11.3	10.0	-	10.8	-	-	-	-	-	-	**1.8**	-	**4.1**	**1.1**	-	-	-	-	-	-	-	-	-	-	-
296	F	U	4.1	11.3	10.0	-	10.8	-	-	-	-	-	-	**1.8**	-	1.4	**1.1**	-	-	-	-	-	-	-	-	-	-	-
297	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	-	-	-	-	-	-
298	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	-	-	-	-	-	-

Annex 1. Adults' consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater fish (terrestrial area)	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal and river bank occupancy over grass	Canal bank occupancy over gravel towpath	Occupancy in close proximity (<10m) to sewage sludge	Occupancy in close proximity (<10m) to sewage cake bio-solids	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area
301	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-	-	-	-	-	-	-
302	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-	-	-	-	-	-	-
306	F	69	-	**16.3**	-	13.7	15.0	98.3	-	-	-	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
307	F	U	-	-	-	-	-	39.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
308	F	U	-	-	-	-	-	39.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
309	M	70	-	5.7	7.3	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
310	F	70	-	5.7	7.3	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
311	F	44	-	5.7	7.3	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
312	F	40	-	5.7	7.3	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
313	F	42	-	5.7	7.3	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
314	M	70	-	-	-	-	-	-	-	-	-	-	-	-	-	**4.1**	-	-	-	-	-	-	-	-	-	-	-
315	F	67	-	-	-	-	-	-	-	-	-	-	-	-	-	**4.1**	-	-	-	-	-	-	-	-	-	-	-
316	M	73	9.7	7.6	5.5	13.7	**36.0**	-	-	-	-	-	-	1.2	-	**6.8**	-	-	-	-	-	-	-	-	-	-	-
317	F	74	9.7	7.6	5.5	13.7	**36.0**	-	-	-	-	-	-	1.2	-	2.3	-	-	-	-	-	-	-	-	-	-	-
318	M	71	-	9.1	11.7	30.2	3.8	-	-	-	-	-	-	1.0	-	**7.9**	-	-	-	-	-	-	-	-	-	-	-
319	F	65	-	9.1	11.7	30.2	3.8	-	-	-	-	-	-	1.0	-	**7.9**	-	-	-	-	-	-	-	-	-	-	-
320	F	U	-	9.1	11.7	30.2	3.8	-	-	-	-	-	-	1.0	-	**7.9**	-	-	-	-	-	-	-	-	-	-	-
322	M	U	15.4	**27.1**	**35.6**	31.9	**30.1**	**259.3**	-	-	-	**10.0**	6.8	**3.0**	-	**2.7**	**2.7**	**10.2**	-	-	0.7	-	-	-	-	-	-
323	F	U	15.4	**27.1**	**35.6**	31.9	**30.1**	**259.3**	-	-	-	**10.0**	6.8	**3.0**	-	**2.7**	**2.7**	**10.2**	-	-	0.7	-	-	-	-	-	-
324	F	46	-	-	-	-	**18.8**	-	-	-	-	-	-	**2.5**	-	-	-	-	-	-	-	-	-	-	-	-	-
325	M	48	-	-	-	-	**18.8**	-	-	-	-	-	-	**2.5**	-	-	-	-	-	-	-	-	-	-	-	-	-
328	M	56	-	-	-	-	-	-	-	-	-	-	-	-	-	**5.4**	-	-	-	-	-	-	-	-	-	-	-
329	F	51	-	-	-	-	-	-	-	-	-	-	-	-	-	**5.4**	-	-	-	-	-	-	-	-	-	-	-
330	M	65	2.6	**15.4**	-	-	4.7	-	-	-	-	**17.9**	3.0	1.5	**1.6**	-	-	-	-	-	-	-	-	-	-	-	-
331	F	65	2.6	**15.4**	-	-	5.7	-	-	-	-	**17.9**	3.0	1.5	**1.6**	-	-	-	-	-	-	-	-	-	-	-	-
332	M	36	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	14	-	-	-	-
333	M	79	-	-	-	-	-	-	-	-	-	-	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
334	M	55	**67.7**	**16.3**	**40.7**	32.8	-	-	-	-	-	0.7	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Annex 1. Adults' consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater fish (terrestrial area)	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal and river bank occupancy over grass	Canal bank occupancy over gravel towpath	Occupancy in close proximity (<10m) to sewage sludge	Occupancy in close proximity (<10m) to sewage cake bio-solids	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area
335	F	50	**67.7**	**16.3**	**40.7**	32.8	-	-	-	-	-	0.7	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
336	M	60	**40.9**	**17.3**	13.5	**136.2**	-	-	-	-	-	1.1	15.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
337	F	60	**40.9**	**17.3**	13.5	**136.2**	-	-	-	-	-	1.1	15.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
338	F	68	5.8	**18.2**	5.7	11.5	**17.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
339	F	37	2.9	9.1	2.9	5.8	8.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
340	M	55	-	-	-	-	-	-	-	-	-	2.8	8.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
341	F	55	-	-	-	-	-	-	-	-	-	2.8	8.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
342	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
343	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
344	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
345	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
346	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
347	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
348	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
349	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
350	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
351	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
362	F	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
363	F	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
364	F	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
365	F	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
366	F	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
367	F	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
368	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
369	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
370	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
371	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
372	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Annex 1. Adults' consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater fish (terrestrial area)	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal and river bank occupancy over grass	Canal bank occupancy over gravel towpath	Occupancy in close proximity (<10m) to sewage sludge	Occupancy in close proximity (<10m) to sewage cake bio-solids	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area
373	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
374	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
375	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
376	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
377	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
390	M	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
391	F	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
392	M	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
393	F	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
394	M	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
395	F	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
396	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
397	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
398	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
399	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
400	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
401	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
402	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
403	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
404	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
405	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
418	M	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
419	M	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
420	M	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
421	M	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
422	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
423	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
424	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Annex 1. Adults' consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater fish (terrestrial area)	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal and river bank occupancy over grass	Canal bank occupancy over gravel towpath	Occupancy in close proximity (<10m) to sewage sludge	Occupancy in close proximity (<10m) to sewage cake bio-solids	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area
425	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
426	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
427	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
428	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
429	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
430	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
431	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
434	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1840	-	-	-
435	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1840	-	-	-
436	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1840	-	-	-
437	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1840	-	-	-
438	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1840	-	-	-
439	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1840	-	-	-
440	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1840	-	-	-
441	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1840	-	-	-
442	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1840	-	-	-
443	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1840	-	-	-
444	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1700	-	-	-
445	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1700	-	-	-
446	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1700	-	-	-
447	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1700	-	-	-
448	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1700	-	-	-
449	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1700	-	-	-
450	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1700	-	-	-
451	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1700	-	-	-
452	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1700	-	-	-
453	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1140	-	-	-
454	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1140	-	-	-

Annex 1. Adults' consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater fish (terrestrial area)	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal and river bank occupancy over grass	Canal bank occupancy over gravel towpath	Occupancy in close proximity (<10m) to sewage sludge	Occupancy in close proximity (<10m) to sewage cake bio-solids	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area
455	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1140	-	-	-
456	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1140	-	-	-
457	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1140	-	-	-
458	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1140	-	-	-
459	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1140	-	-	-
460	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	850	-	-	-
461	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	607	-	-
462	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	-	-
463	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	-	-
464	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	-	-
465	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	-	-
466	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	-	-
467	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	-	-
468	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	-	-
469	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	-	-
470	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	-	-
471	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	-	-
472	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	-	-
473	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	-	-
474	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	-	-
475	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	-	-
476	M	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	-	-

Notes

Observations in bold indicate the high-rate individuals

U = Unknown

Annex 2. Children's consumption rates (kg y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Cattle meat	Pig meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Freshwater plants (terrestrial area)	Canal bank occupancy over gravel towpath	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area	Occupancy on water in the terrestrial survey area	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
15-year-old age group																					
2	M	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7223	52
31	M	16	0.7	1.1	1.3	**10.2**	0.2	-	-	-	-	0.2	-	-	-	-	-	-	-	8552	52
32	M	15	0.7	1.1	1.3	**10.2**	0.2	-	-	-	-	0.2	-	-	-	-	-	-	-	8552	52
33	F	12	0.7	1.1	1.3	**10.2**	0.2	-	-	-	-	0.2	-	-	-	-	-	-	-	8552	52
46	F	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7248	1460
62	M	15	-	-	-	-	**0.9**	-	**16.9**	**13.5**	5.5	-	-	-	-	-	-	-	-	-	-
63	M	15	-	-	-	-	**0.9**	-	**16.9**	**13.5**	5.5	-	-	-	-	-	-	-	-	-	-
64	F	14	-	-	-	-	**0.9**	-	**16.9**	**13.5**	5.5	-	-	-	-	-	-	-	-	-	-
90	M	15	**14.1**	-	**16.4**	**27.3**	**1.6**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
117	M	16	-	-	-	-	-	-	-	-	-	-	-	-	**20.0**	-	-	-	-	-	-
118	F	12	-	-	-	-	-	-	-	-	-	-	-	-	5.0	-	-	-	-	-	-
133	M	16	2.8	**3.2**	0.4	8.2	**1.6**	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-
134	F	16	2.8	**3.2**	0.4	8.2	**1.6**	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-
135	F	12	2.8	**3.2**	0.4	8.2	**1.6**	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-
163	M	15	-	-	-	-	-	-	-	-	-	-	-	-	-	**630**	-	-	-	-	-
173	F	16	-	-	-	-	-	-	-	-	-	-	-	-	-	25	100	-	-	-	-
237	F	16	**6.7**	**9.1**	**6.5**	**10.6**	**1.4**	-	-	-	-	**1.3**	-	-	-	-	-	-	-	-	-
271	M	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6511	104
272	M	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6511	104
275	F	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6692	365
290	M	15	-	-	-	-	-	-	-	0.5	**21.3**	0.3	**0.5**	-	-	-	-	-	-	6138	441

Annex 2. Children's consumption rates (kg y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Cattle meat	Pig meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Freshwater plants (terrestrial area)	Canal bank occupancy over gravel towpath	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area	Occupancy on water in the terrestrial survey area	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
291	M	14	-	-	-	-	-	-	-	0.5	**21.3**	0.3	**0.5**	-	-	-	-	-	-	6138	441
299	M	12	-	-	-	-	-	-	-	-	-	-	-	**1.4**	-	-	-	-	-	-	-
303	M	15	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-
352	F	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
353	F	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
354	F	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
355	F	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
356	F	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
357	F	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
358	F	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
359	F	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
360	F	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
361	F	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
380	M	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	950	285
381	F	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	950	285
382	M	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	950	285
383	F	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	950	285
384	M	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	950	285
385	F	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	950	285
386	M	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	950	285
387	F	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	950	285
388	M	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	950	285

Annex 2. Children's consumption rates (kg y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Cattle meat	Pig meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Freshwater plants (terrestrial area)	Canal bank occupancy over gravel towpath	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area	Occupancy on water in the terrestrial survey area	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
389	F	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	950	285
408	M	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
409	M	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
410	M	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
411	M	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
412	M	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
413	M	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
414	M	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
415	M	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
416	M	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
417	M	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
10-year-old age group																					
10	F	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7614	730
40	M	7	0.5	**1.4**	0.2	**0.8**	1.6	-	-	-	-	0.3	-	-	-	-	-	-	-	5768	1460
45	M	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7248	1460
65	M	10	-	-	-	-	0.5	-	**8.4**	**6.8**	2.7	-	-	-	-	-	-	-	-	-	-
119	M	10	-	-	-	-	-	-	-	-	-	-	-	-	**5.0**	-	-	-	-	-	-
223	M	10	-	-	-	-	-	-	-	-	-	-	-	-	-	**28**	-	403	-	-	-
224	F	7	-	-	-	-	-	-	-	-	-	-	-	-	-	**28**	-	403	-	-	-
232	M	10	**3.4**	**0.5**	**3.4**	-	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
233	F	8	**3.4**	**0.5**	**3.4**	-	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
292	M	11	-	-	-	-	-	-	-	0.5	**14.5**	0.3	**0.5**	-	-	-	-	-	-	6138	441

Annex 2. Children's consumption rates (kg y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Cattle meat	Pig meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Freshwater plants (terrestrial area)	Canal bank occupancy over gravel towpath	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area	Occupancy on water in the terrestrial survey area	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
300	M	7	-	-	-	-	-	-	-	-	-	-	-	**1.4**	-	-	-	-	-	-	-
304	M	9	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-
326	F	7	-	-	-	-	**18.8**	-	-	-	-	**2.5**	-	-	-	-	-	-	-	-	-
378	M	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	950	285
379	F	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	950	285
406	M	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
407	M	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
432	M	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-
5-year-old age group																					
5	M	4	-	**5.7**	0.8	**3.0**	-	-	-	-	-	-	-	-	-	-	-	-	-	6354	76
9	F	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7614	730
35	M	6	0.4	**7.2**	0.1	0.5	**17.9**	-	-	-	**0.5**	**1.1**	-	-	-	-	-	-	-	7072	192
36	M	3	0.4	**7.2**	0.1	0.5	**17.9**	-	-	-	**0.5**	**1.1**	-	-	-	-	-	-	-	7167	192
41	F	5	0.5	1.4	0.2	0.8	1.9	-	-	-	-	-	-	-	-	-	-	-	-	5768	1460
42	M	3	0.5	1.4	0.2	0.8	1.9	-	-	-	-	-	-	-	-	-	-	-	-	5768	1460
104	M	3	-	-	-	-	-	**0.2**	-	-	-	-	-	-	-	-	-	-	-	-	-
105	M	4	-	-	-	-	-	**0.2**	-	-	-	-	-	-	-	-	-	-	-	-	-
106	M	5	-	-	-	-	-	**0.2**	-	-	-	-	-	-	-	-	-	-	-	-	-
180	M	3	**5.1**	**12.7**	**3.4**	**2.4**	5.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
191	F	5	-	-	-	-	-	-	-	-	-	-	-	-	-	**12**	-	-	-	6228	728
305	F	2	-	-	-	-	-	-	-	-	-	-	-	**0.2**	-	-	-	-	-	-	-
321	M	2	-	-	-	-	-	-	-	-	-	-	-	**0.4**	-	-	-	-	-	-	-

Annex 2. Children's consumption rates (kg y^{-1}) and occupancy rates (h y^{-1}) in the Amersham area

Observation number	Sex	Age (years)	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Cattle meat	Pig meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Freshwater plants (terrestrial area)	Canal bank occupancy over gravel towpath	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area	Occupancy on water in the terrestrial survey area	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
327	F	5	-	-	-	-	**18.8**	-	-	-	-	**2.5**	-	-	-	-	-	-	-	-	-
433	M	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-
1-year-old age group																					
6	F	1	-	**2.3**	**0.3**	**1.2**	-	-	-	-	-	-	-	-	-	-	-	-	-	6354	76
43	M	1	**0.5**	**1.4**	**0.2**	**0.8**	**1.9**	-	-	-	-	-	-	-	-	-	-	-	-	5768	1460
190	M	1	-	-	-	-	-	-	-	-	-	-	-	-	-	**12**	-	-	-	6228	728

Notes

Observations in bold indicate the high-rate individuals

Annex 3. Qualitative and estimated data for use in dose assessments

Details of activity	Exposure pathways involved	Estimated rate
Hearsay evidence was obtained from fisheries officers, anglers and houseboat occupants that people, believed to be of Eastern European origin, were taking fish from the Grand Union Canal for consumption. No quantitative data for fish consumption was obtained during the survey (see Section 4.6).	Fish consumption from water affected by liquid discharges.	1 kg y^{-1} per person.

Annex 4. Ratios for determining consumption and occupancy rates for children

Group	Ratio child/adult[a]	
	1-year-old	10-year-old
Fish[b]	0.050	0.200
Crustaceans[b]	0.050	0.250
Molluscs[b]	0.050	0.250
Green vegetables	0.222	0.444
Other vegetables	0.200	0.500
Root vegetables	0.375	0.500
Potatoes	0.292	0.708
Domestic fruit	0.467	0.667
Milk	1.333	1.000
Cattle meat	0.222	0.667
Pig meat	0.138	0.625
Sheep meat	0.120	0.400
Poultry	0.183	0.500
Eggs	0.600	0.800
Wild/free foods[c]	0.110	0.490
Game[d]	0.140	0.500
Honey	0.789	0.789
Wild fungi	0.150	0.450
Freshwater fish[b]	0.050	0.250
Direct radiation	1.000	1.000
External exposure	0.030	0.500
Plume	1.000	1.000

Notes

[a]The age groups suggested for assessment in this table are those relating to dose coefficients representing 1 to 2 year olds (labelled 1-year-old) and 7 to 12 year olds (labelled 10-year-old). Excepting notes b and c, consumption ratios were derived from Byrom *et al* ., (1995) for 1-year-old (6 to 12 months) and 10-year-old children (10 to 11 years)

[b]Ratios were derived from Smith and Jones, (2003) which presented data for infants and children.

[c]Ratios were derived from FSA data for wild fruit and nuts for infants and 10-year-old children.

[d]Game includes rabbits/hares and venison.

Annex 5. Consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) for women of childbearing age in the Amersham area, for use in foetal dose assessments

Observation number	Sex	Age (years)[a]	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal bank occupancy over gravel towpath	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
1	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8618	12
3	F	30	-	11.3	1.6	6.1	-	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	6976	104
7	F	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6992	52
22	F	38	0.5	0.0	20.3	5.5	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1248	52
28	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1040	-
30	F	38	0.7	1.1	1.3	10.2	0.2	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	8344	260
34	F	40	0.9	14.4	0.3	1.0	35.8	-	-	-	-	-	1.0	2.3	-	-	-	-	-	-	-	-	-	5454	192
38	F	39	2.0	5.7	0.9	3.3	6.4	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	5768	1460
55	F	U	-	-	-	-	0.9	-	-	16.9	-	13.5	5.5	-	-	-	-	-	-	-	-	-	-	-	-
57	F	U	-	-	-	-	0.9	-	-	16.9	-	13.5	5.5	-	-	-	-	-	-	-	-	-	-	-	-
59	F	U	-	-	-	-	0.9	-	-	16.9	-	13.5	5.5	-	-	-	-	-	-	-	-	-	-	-	-
74	F	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90	-	-	-	-
86	F	23	17.7	7.3	11.9	14.6	5.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
88	F	40	14.1	-	16.4	18.2	7.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
93	F	30	-	-	-	-	-	-	-	-	-	7.5	-	-	2.3	-	-	-	-	-	-	-	-	-	-
95	F	U	-	-	-	-	-	-	-	-	-	7.5	-	-	2.3	-	-	-	-	-	-	-	-	-	-
101	F	U	-	-	-	-	-	-	11.8	-	-	1.9	-	-	-	0.9	-	-	-	-	-	-	-	-	-
102	F	U	-	-	-	-	-	-	11.8	-	-	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-
103	F	U	-	-	-	-	-	-	11.8	-	-	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-
108	F	42	-	-	-	-	-	29.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Annex 5. Consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) for women of childbearing age in the Amersham area, for use in foetal dose assessments

Observation number	Sex	Age (years)[a]	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal bank occupancy over gravel towpath	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
109	F	20	-	-	-	-	-	29.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
110	F	17	-	-	-	-	-	29.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	F	U	-	-	-	-	-	414.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
116	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.0	-	-	-	-	-
129	F	U	2.8	3.2	0.4	8.2	1.6	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-
130	F	U	2.8	3.2	0.4	8.2	1.6	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-
131	F	U	2.8	3.2	0.4	8.2	1.6	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-
132	F	U	2.8	3.2	0.4	8.2	1.6	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-
134	F	16	2.8	3.2	0.4	8.2	1.6	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-
142	F	21	-	-	-	-	5.4	-	-	-	-	-	1.1	-	-	-	-	-	-	-	-	-	-	2308	26
150	F	34	-	-	-	-	11.8	-	-	8.4	-	2.9	29.6	4.7	1.5	-	-	-	-	-	-	-	-	6439	823
169	F	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-	-	-
173	F	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	100	-	-	-
178	F	40	21.8	45.4	14.0	10.2	20.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
186	F	40	0.2	18.0	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6871	122
189	F	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	6228	728
193	F	U	-	-	-	-	-	-	-	-	-	-	11.9	1.0	-	-	-	-	-	-	-	-	-	-	-
194	F	U	-	-	-	-	-	-	-	-	-	-	11.9	1.0	-	-	-	-	-	-	-	-	-	-	-
199	F	U	-	-	-	-	-	-	-	-	11.3	0.5	-	-	-	-	-	-	0.1	-	-	-	-	-	-
203	F	32	2.9	0.6	8.8	8.2	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
204	F	31	2.9	0.6	8.8	8.2	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Annex 5. Consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) for women of childbearing age in the Amersham area, for use in foetal dose assessments

Observation number	Sex	Age (years)[a]	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal bank occupancy over gravel towpath	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
213	F	21	23.1	14.2	20.4	45.5	18.4	-	-	3.3	-	-	17.8	-	-	-	-	-	-	-	-	-	-	-	-
222	F	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	-	403	-	-
230	F	40	3.4	0.5	3.4	-	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
237	F	16	6.7	9.1	6.5	10.6	1.4	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	-	-	-	-
242	F	21	2.8	2.1	2.4	-	3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
248	F	U	1.5	1.0	3.2	8.6	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
250	F	U	1.5	1.0	3.2	8.6	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
252	F	U	1.5	1.0	3.2	8.6	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
254	F	U	1.5	1.0	3.2	8.6	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
259	F	U	14.6	17.1	6.2	8.9	2.2	-	-	-	-	-	3.6	2.0	-	-	-	-	-	-	-	-	-	-	-
262	F	U	14.6	17.1	6.2	8.9	2.2	-	-	-	-	-	3.6	2.0	-	-	-	-	-	-	-	-	-	-	-
268	F	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7616	658
274	F	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6488	156
275	F	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6692	365
278	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	78	-
279	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	78	-
280	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	78	-
281	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	78	-
282	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	78	-
283	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	78	-
284	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	78	-

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285	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	78	-
286	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	78	-
289	F	40	-	-	-	-	-	-	-	-	-	0.5	21.3	0.3	0.5	-	-	-	-	-	-	-	-	-	-
296	F	U	4.1	11.3	10.0	-	10.8	-	-	-	-	-	-	1.8	-	1.4	1.1	-	-	-	-	-	-	-	-
297	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	-	-	-
301	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-	-	-	-	-
307	F	U	-	-	-	-	-	39.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
308	F	U	-	-	-	-	-	39.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
311	F	44	-	5.7	7.3	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
312	F	40	-	5.7	7.3	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
313	F	42	-	5.7	7.3	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
320	F	U	-	9.1	11.7	30.2	3.8	-	-	-	-	-	-	1.0	-	7.9	-	-	-	-	-	-	-	-	-
323	F	U	15.4	27.1	35.6	31.9	30.1	259.3	-	-	-	10.0	6.8	3.0	-	2.7	2.7	10.2	-	0.7	-	-	-	-	-
339	F	37	2.9	9.1	2.9	5.8	8.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
342	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1656	46
343	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1656	46
344	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1656	46
345	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1656	46
346	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1656	46
347	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1656	46
348	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1656	46

Annex 5. Consumption rates (kg y^{-1} or l y^{-1}) and occupancy rates (h y^{-1}) for women of childbearing age in the Amersham area, for use in foetal dose assessments

Observation number	Sex	Age (years)[a]	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal bank occupancy over gravel towpath	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
349	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1656	46
350	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1656	46
351	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1656	46
358	F	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
359	F	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
360	F	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
361	F	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
362	F	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
363	F	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
364	F	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
365	F	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
366	F	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
367	F	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1170	195
373	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	814	74
374	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	814	74
375	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	814	74
376	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	814	74
377	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	814	74
387	F	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	950	285
389	F	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	950	285
391	F	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1045	190

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Observation number	Sex	Age (years)[a]	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Freshwater crustaceans (terrestrial area)	Freshwater plants (terrestrial area)	Canal bank occupancy over gravel towpath	Occupancy in water in the aquatic survey area	Occupancy on water in the aquatic survey area	Indoor occupancy within 1 km of the licensed site boundary	Outdoor occupancy within 1 km of the licensed site boundary
393	F	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1045	190
395	F	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1045	190
401	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1330	38
402	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1330	38
403	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1330	38
404	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1330	38
405	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1330	38
427	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1365	195
428	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1365	195
429	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1365	195
430	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1365	195
431	F	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1365	195

Notes

U=Unknown

[a] Based on National Statistics guidelines women were deemed to be of childbearing age if they were between 15 and 44 years old. Women of unknown age were included as they were potentially women of childbearing age.

Annex 6. Summary of profiles for adults in the Amersham area

Profile Name	Number of individuals	Pathway Name																												
		Freshwater crustaceans (terrestrial area)	Direct radiation[a]	Eggs	Fish (aquatic area)[b]	Fish - Freshwater (terrestrial area)	Freshwater plants	Fruit - Domestic	Fruit and nuts - Wild	Gamma ext - Grass/towpath	Honey	Meat - Cow	Meat - Game[c]	Meat - Pig	Meat - Poultry	Meat - Sheep	Milk	Mushrooms	Occupancy in proximity to sewage sludge	Occupancy in proximity to sewage cake biosolids	Occupancy in water (aquatic area)	Occupancy on water (aquatic area)	Occupancy on water (terrestrial area)	Plume (IN; 0 - 0.25km)[d]	Plume (MID; 0.25 - 0.5km)[d]	Plume (OUT; 0.5 - 1km)[d]	Vegetables - Green	Vegetables - Other Domestic	Vegetables - Potatoes	Vegetables - Root
		kg	-	kg	kg	kg	kg	kg	kg	h	kg	kg	kg	kg	kg	kg	l	kg	h	h	h	h	h	h	h	h	kg	kg	kg	kg
Freshwater crustacean consumers (terrestrial area)	**4**	0.1	0.5	-	-	-	-	11.9	0.3	-	-	-	-	-	0.6	5.7	-	-	-	-	-	-	-	4340	-	-	3	12.3	4.6	1.8
Occupants for direct radiation	**133**	-	1	1.1	-	-	-	1.8	0.2	-	-	-	0.1	0.2	0.5	0.4	-	-	-	-	-	-	-	1940	680	970	0.5	1.9	0.7	1
Egg consumers	**7**	-	0.6	34.3	-	-	-	5.1	2.5	-	1.3	-	0.8	3.6	1.4	-	-	-	-	-	-	-	-	3200	-	1200	3.7	3.3	13	5.1
Fish consumers (aquatic area)	**2**	-	-	-	1	-	-	-	-	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freshwater fish consumers (terrestrial area)	**1**	-	-	-	-	7.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	-	-	-	-	-	-	-
Freshwater plant consumers	**3**	-	-	-	-	-	31.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	640	-	-	-	-	-	-	-
Domestic fruit consumers	**21**	-	0.2	4.2	-	-	0.1	28.7	0.8	-	0.7	-	1	0.6	1	-	24.7	0.3	-	-	-	-	-	1100	-	-	17	19.4	27.5	19.2
Wild fruit and nut consumers	**18**	-	0.4	6.7	-	-	0.1	11.7	2.6	-	0.6	-	1.4	1.4	1.6	-	28.8	0.4	-	-	-	-	-	2280	10	-	6.3	9.8	6.4	7.9
Occupants for exposure - grass/towpath	**2**	-	-	-	-	-	-	-	-	1090	-	-	-	-	-	-	-	-	-	-	-	3500	-	-	-	-	-	-	-	-
Honey consumers	**12**	-	-	5.7	-	-	0.1	9.9	1.1	-	5.5	-	1.7	-	1.7	-	43.2	0.5	-	-	-	-	-	-	-	-	4.8	9.3	17.8	11.6
Cattle meat consumers	**8**	-	-	-	-	-	-	-	-	-	0.2	11.8	-	-	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Game consumers	**2**	-	-	6.8	-	-	0.7	30.1	3	-	2.7	-	10.2	-	10	-	259.3	2.7	-	-	-	-	-	-	-	-	15.4	27.1	31.9	35.6
Pig meat consumers	**2**	-	-	3	-	-	-	-	-	-	-	-	-	88.4	-	7.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Poultry consumers	**17**	-	0.2	4.1	-	-	0.1	4.7	0.5	-	0.3	-	1.9	8.9	12.2	-	30.5	0.3	-	-	-	-	-	920	-	40	2.1	5	3.7	4.2
Sheep meat consumers	**5**	-	0.4	0.6	-	-	-	1.5	-	-	-	-	-	26.5	0.2	18.2	-	-	-	-	-	-	-	-	-	2490	1.8	-	5.5	5.8
Milk consumers	**5**	-	-	2.7	-	-	0.3	12	1.2	-	1.1	-	4.1	-	4	-	352.6	1.1	-	-	-	-	-	-	-	-	6.2	10.9	12.7	14.2
Mushroom consumers	**4**	-	-	3.4	-	-	0.3	20.4	2.4	-	2.7	-	5.1	-	5	-	129.6	1.9	-	-	-	-	-	-	-	-	9.8	19.2	15.9	22.8
Occupancy in proximity to sewage sludge	**27**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1580	-	-	-	-	-	-	-	-	-	-	-
Occupancy in proximity to sewage cake biosolids	**16**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300	-	-	-	-	-	-	-	-	-	-
Occupants in water (aquatic area)	**1**	-	-	-	-	-	-	-	-	80	-	-	-	-	-	-	-	-	-	-	50	-	-	-	-	-	-	-	-	-
Occupants on water (aquatic area)	**5**	-	-	-	-	-	-	-	-	230	-	-	-	-	-	-	-	-	-	-	-	6030	-	-	-	-	-	-	-	-
Occupants on water (terrestrial area)	**3**	-	-	-	-	-	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	960	-	-	-	-	-	-	-
Occupants for plume pathways (inner area)	**35**	-	1	3.4	-	-	-	5.2	0.8	-	-	-	0.2	0.7	1.3	-	-	-	-	-	-	-	-	7030	-	-	0.8	3.4	1.4	0.3
Occupants for plume pathways (middle area)	**9**	-	1	-	-	-	-	0.9	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7240	-	1.5	7.9	1.3	5.5
Occupants for plume pathways (outer area)	**11**	-	1	1.9	-	-	-	1.1	0.1	-	-	-	-	-	-	5.1	-	-	-	-	-	-	-	-	-	6990	0.9	3.3	2.5	2.8
Green vegetable consumers	**22**	-	-	5.5	-	0.1	-	14.3	0.1	-	-	-	-	0.6	0.2	-	-	-	-	-	-	-	-	-	-	-	38.9	19.5	50	33
Other vegetable consumers	**45**	-	0.2	2	-	-	-	10.2	0.5	-	0.2	-	0.5	-	1.3	-	13.7	0.1	-	-	-	-	-	730	180	320	21.5	21	25.6	20
Potato consumers	**13**	-	-	16.2	-	-	-	13.4	0.2	-	0.7	-	-	1	0.2	-	-	-	-	-	-	-	-	-	-	-	32.7	16.4	71.1	21.8
Root vegetable consumers	**30**	-	0.1	3.4	-	-	-	13.8	0.4	-	0.2	-	0.7	0.4	0.7	-	17.3	0.2	-	-	-	-	-	-	450	-	27.4	17.3	31.8	33.6

Notes

[a]Expressed as the proportion of the profile members who are exposed to direct radiation.

[b]Based on hearsay evidence (see Annex 3)

[c]Game meat includes rabbits/hares and venison

[d]Plume times are the sums of individuals' indoor and outdoor times

The means of the high-rate groups are determined by the 'cut-off' method and are highlighted on the diagonal

Annex 7. Summary of profiles for children in the 15-year-old age group in the Amersham area

		Pathway Name																	
Profile Name	**Number of individuals**	**Direct radiation[a]**	**Eggs**	**Freshwater plants**	**Fruit - Domestic**	**Fruit and nuts - Wild**	**Gamma ext - Towpath**	**Honey**	**Meat - Game[b]**	**Meat - Pig**	**Meat - Poultry**	**Occupancy in water (aquatic area)**	**Plume (IN; 0 - 0.25km)[c]**	**Plume (MID; 0.25 - 0.5km)[c]**	**Plume (OUT; 0.5 - 1km)[c]**	**Vegetables - Green**	**Vegetables - Other Domestic**	**Vegetables - Potatoes**	**Vegetables - Root**
		-	**kg**	**kg**	**kg**	**kg**	**h**	**kg**	**kg**	**kg**	**kg**	**h**	**h**	**h**	**h**	**kg**	**kg**	**kg**	**kg**
Occupants for direct radiation	**39**	1	1.1	-	-	-	-	-	-	-	-	-	1590	320	1000	0.1	0.1	0.8	0.1
Egg consumers	**2**	1	21	-	-	0.3	-	-	0.5	-	0.5	-	-	-	6580	-	-	-	-
Freshwater plant consumers	**1**	-	-	20.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Domestic fruit consumers	**8**	-	2.1	-	1.3	0.3	-	-	-	6.3	5.1	-	-	-	-	3.7	2.3	7.8	3
Wild fruit and nut consumers	**1**	-	-	-	1.4	1.3	-	-	-	-	-	-	-	-	-	6.7	9.1	11	6.5
Occupants for exposure - towpath	**1**	-	-	-	-	-	1260	-	-	-	-	-	-	-	-	-	-	-	-
Honey consumers	**1**	-	-	-	-	-	-	1.4	-	-	-	-	-	-	-	-	-	-	-
Game consumers	**2**	1	21	-	-	0.3	-	-	0.5	-	0.5	-	-	-	6580	-	-	-	-
Pig meat consumers	**3**	-	5.5	-	0.9	-	-	-	-	17	14	-	-	-	-	-	-	-	-
Poultry consumers	**3**	-	5.5	-	0.9	-	-	-	-	17	14	-	-	-	-	-	-	-	-
Occupants in water in aquatic survey area	**1**	-	-	-	-	-	30	-	-	-	-	100	-	-	-	-	-	-	-
Occupants for plume pathways (inner area)	**8**	1	-	-	0.1	0.1	-	-	-	-	-	-	7760	-	-	0.3	0.4	3.8	0.5
Occupants for plume pathways (middle area)	**9**	1	-	-	-	-	-	-	-	-	-	-	-	1370	-	-	-	-	-
Occupants for plume pathways (outer area)	**2**	1	21	-	-	0.3	-	-	0.5	-	0.5	-	-	-	6580	-	-	-	-
Green vegetable consumers	**2**	-	-	-	1.5	0.6	-	-	-	-	-	-	-	-	-	10	4.5	19	11
Other vegetable consumers	**4**	-	-	-	1.5	0.6	-	-	-	-	-	-	-	-	-	3.8	4.6	8.8	1.9
Potato consumers	**5**	0.6	-	-	0.7	0.4	-	-	-	-	-	-	5160	-	-	4.6	2.5	14	5.4
Root vegetable consumers	**2**	-	-	-	1.5	0.6	-	-	-	-	-	-	-	-	-	10	4.5	19	11

Notes

[a]Expressed as the proportion of the profile members who are exposed to direct radiation.

[b]Game meat represents rabbit

[c]Plume times are the sums of individuals' indoor and outdoor times

The means of the high-rate groups are determined by the 'cut-off' method and are highlighted on the diagonal

Annex 8. Summary of profiles for children in the 10-year-old age group in the Amersham area

		Pathway Name																		
Profile Name	**Number of individuals**	**Direct radiation[a]**	**Eggs**	**Freshwater plants**	**Fruit - Domestic**	**Fruit and nuts - Wild**	**Gamma ext - Towpath**	**Honey**	**Meat - Game[b]**	**Meat - Pig**	**Meat - Poultry**	**Occupancy on water (aquatic area)**	**Occupancy on water (terrestrial area)**	**Plume (IN; 0 - 0.25km)[c]**	**Plume (MID; 0.25 - 0.5km)[c]**	**Plume (OUT; 0.5 - 1km)[c]**	**Vegetables - Green**	**Vegetables - Other Domestic**	**Vegetables - Potatoes**	**Vegetables - Root**
		-	**kg**	**kg**	**kg**	**kg**	**h**	**kg**	**kg**	**kg**	**kg**	**h**	**h**	**h**	**h**	**h**	**kg**	**kg**	**kg**	**kg**
Occupants for direct radiation	**8**	1	1.8	-	0.2	0.1	-	-	0.1	-	0.1	-	-	1990	1040	1470	0.1	0.2	0.1	-
Egg consumers	**1**	1	15	-	-	0.3	-	-	0.5	-	0.5	-	-	-	-	6580	-	-	-	-
Freshwater plant consumers	**1**	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Domestic fruit consumers	**1**	-	-	-	19	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wild fruit and nut consumers	**1**	-	-	-	19	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Occupants for exposure - towpath	**2**	-	-	-	-	-	30	-	-	-	-	400	-	-	-	-	-	-	-	-
Honey consumers	**1**	-	-	-	-	-	-	1.4	-	-	-	-	-	-	-	-	-	-	-	-
Game consumers	**1**	1	15	-	-	0.3	-	-	0.5	-	0.5	-	-	-	-	6580	-	-	-	-
Pig meat consumers	**1**	-	2.7	-	0.5	-	-	-	-	8.4	6.8	-	-	-	-	-	-	-	-	-
Poultry consumers	**1**	-	2.7	-	0.5	-	-	-	-	8.4	6.8	-	-	-	-	-	-	-	-	-
Occupants on water (aquatic area)	**2**	-	-	-	-	-	30	-	-	-	-	400	-	-	-	-	-	-	-	-
Occupants on water (terrestrial area)	**1**	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-
Occupants for plume pathways (inner area)	**2**	1	-	-	0.8	0.1	-	-	-	-	-	-	-	7970	-	-	0.3	0.7	0.4	0.1
Occupants for plume pathways (middle area)	**1**	1	-	-	-	-	-	-	-	-	-	-	-	-	8340	-	-	-	-	-
Occupants for plume pathways (outer area)	**5**	1	2.9	-	-	0.1	-	-	0.1	-	0.1	-	-	-	-	2360	-	-	-	-
Green vegetable consumers	**2**	-	-	-	3.1	-	-	-	-	-	-	-	-	-	-	-	3.4	0.5	-	3.4
Other vegetable consumers	**3**	0.3	-	-	2.6	0.1	-	-	-	-	-	-	-	2410	-	-	2.4	0.8	0.3	2.3
Potato consumers	**1**	1	-	-	1.6	0.3	-	-	-	-	-	-	-	7230	-	-	0.5	1.4	0.8	0.2
Root vegetable consumers	**2**	-	-	-	3.1	-	-	-	-	-	-	-	-	-	-	-	3.4	0.5	-	3.4

Notes

[a]Expressed as the proportion of the profile members who are exposed to direct radiation.

[b]Game meat represents rabbit

[c]Plume times are the sums of individuals' indoor and outdoor times

The means of the high-rate groups are determined by the 'cut-off' method and are highlighted on the diagonal

Annex 9. Summary of profiles for children in the 5-year-old age group in the Amersham area

		Pathway Name														
Profile Name	**Number of individuals**	**Direct radiation[a]**	**Eggs**	**Fruit - Domestic**	**Fruit and nuts - Wild**	**Gamma ext - Towpath**	**Honey**	**Meat - Cow**	**Occupancy on water (terrestrial area)**	**Plume (IN; 0 - 0.25km)[b]**	**Plume (MID; 0.25 - 0.5km)[b]**	**Plume (OUT; 0.5 - 1km)[b]**	**Vegetables - Green**	**Vegetables - Other Domestic**	**Vegetables - Potatoes**	**Vegetables - Root**
		-	**kg**	**kg**	**kg**	**h**	**kg**	**kg**	**h**	**h**	**h**	**h**	**kg**	**kg**	**kg**	**kg**
Occupants for direct radiation	**7**	1	0.1	5.6	0.3	-	-	-	-	4150	2110	990	0.3	3.3	0.8	0.2
Egg consumers	**2**	1	0.5	17.9	1.1	-	-	-	-	7310	-	-	0.4	7.2	0.5	0.1
Domestic fruit consumers	**3**	0.7	0.3	18.2	1.6	-	-	-	-	4870	-	-	0.3	4.8	0.3	0.1
Wild fruit and nut consumers	**3**	0.7	0.3	18.2	1.6	-	-	-	-	4870	-	-	0.3	4.8	0.3	0.1
Occupants for exposure - towpath	**1**	1	-	-	-	10	-	-	-	-	-	6960	-	-	-	-
Honey consumers	**2**	-	-	-	-	-	0.3	-	-	-	-	-	-	-	-	-
Cattle meat consumers	**3**	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-
Occupants on water (terrestrial area)	**1**	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-
Occupants for plume pathways (inner area)	**4**	1	0.3	9.9	0.6	-	-	-	-	7270	-	-	0.5	4.3	0.7	0.2
Occupants for plume pathways (middle area)	**2**	1	-	-	-	-	-	-	-	-	7390	-	-	2.8	1.5	0.4
Occupants for plume pathways (outer area)	**1**	1	-	-	-	10	-	-	-	-	-	6960	-	-	-	-
Green vegetable consumers	**1**	-	-	5.4	-	-	-	-	-	-	-	-	5.1	12.7	2.4	3.4
Other vegetable consumers	**4**	0.8	0.3	10.3	0.6	-	-	-	-	3660	1610	-	1.5	8.2	1.6	1.1
Potato consumers	**2**	0.5	-	2.7	-	-	-	-	-	-	3220	-	2.5	9.2	2.7	2.1
Root vegetable consumers	**1**	-	-	5.4	-	-	-	-	-	-	-	-	5.1	12.7	2.4	3.4

Notes

[a]Expressed as the proportion of the profile members who are exposed to direct radiation.

[b]Plume times are the sums of individuals' indoor and outdoor times

The means of the high-rate groups are determined by the 'cut-off' method and are highlighted on the diagonal

Annex 10. Summary of profiles for children in the 1-year-old age group in the Amersham area

		Pathway Name									
Profile Name	**Number of individuals**	**Direct radiation[a]**	**Fruit - Domestic**	**Gamma ext - Towpath**	**Plume (IN; 0 - 0.25km)[b]**	**Plume (MID; 0.25 - 0.5km)[b]**	**Plume (OUT; 0.5 - 1km)[b]**	**Vegetables - Green**	**Vegetables - Other Domestic**	**Vegetables - Potatoes**	**Vegetables - Root**
		-	**kg**	**h**	**h**	**h**	**h**	**kg**	**kg**	**kg**	**kg**
Occupants for direct radiation	**3**	1	0.6	-	2410	2140	2320	0.2	1.2	0.7	0.2
Domestic fruit consumers	**1**	1	1.9	-	7230	-	-	0.5	1.4	0.8	0.2
Occupants for exposure - towpath	**1**	1	-	10	-	-	6960	-	-	-	-
Occupants for plume pathways (inner area)	**1**	1	1.9	-	7230	-	-	0.5	1.4	0.8	0.2
Occupants for plume pathways (middle area)	**1**	1	-	-	-	6430	-	-	2.3	1.2	0.3
Occupants for plume pathways (outer area)	**1**	1	-	10	-	-	6960	-	-	-	-
Green vegetable consumers	**1**	1	1.9	-	7230	-	-	0.5	1.4	0.8	0.2
Other vegetable consumers	**2**	1	0.9	-	3610	3220	-	0.3	1.8	1.0	0.3
Potato consumers	**2**	1	0.9	-	3610	3220	-	0.3	1.8	1.0	0.3
Root vegetable consumers	**2**	1	0.9	-	3610	3220	-	0.3	1.8	1.0	0.3

Notes

[a]Expressed as the proportion of the profile members who are exposed to direct radiation.

[b]Plume times are the sums of individuals' indoor and outdoor times

The means of the high-rate groups are determined by the 'cut-off' method and are highlighted on the diagonal

Annex 11. Summary of profiles for women of childbearing age in the Amersham area, for use in foetal dose assessments

Profile Name	Number of individuals	Pathway Name: Freshwater crustaceans (terrestrial area)	Direct radiation[a]	Eggs	Freshwater plants	Fruit - Domestic	Fruit and nuts - Wild	Gamma ext - Towpath	Honey	Meat - Cow	Meat - Game[b]	Meat - Pig	Meat - Poultry	Meat - Sheep	Milk	Mushrooms	Occupancy in water (aquatic area)	Occupancy on water (aquatic area)	Plume (IN; 0 - 0.25km)[c]	Plume (MID; 0.25 - 0.5km)[c]	Plume (OUT; 0.5 - 1km)[c]	Vegetables - Green	Vegetables - Other Domestic	Vegetables - Potatoes	Vegetables - Root
		kg	-	kg	kg	kg	kg	h	kg	kg	kg	kg	kg	kg	l	kg	h	h	h	h	h	kg	kg	kg	kg
Freshwater crustacean consumers (terrestrial area)	**1**	0.1	-	-	-	-	-	-	-	-	-	-	0.5	11	-	-	-	-	-	-	-	-	-	-	-
Occupants for direct radiation	**14**	-	1	3.8	-	4.3	0.6	-	-	-	0.1	0.6	0.2	-	-	-	-	-	4410	1010	1000	0.3	3.6	1.5	0.4
Egg consumers	**5**	-	0.4	19	-	6	1.4	-	-	-	0.4	2.3	0.7	-	-	-	-	-	1450	-	-	4.6	2.8	9.1	4.1
Freshwater plant consumers	**1**	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Domestic fruit consumers	**4**	-	0.3	6.4	0.2	26	1.3	-	0.7	-	2.6	0.8	2.5	-	64.8	0.7	-	-	1410	-	-	15	25	22	18
Wild fruit and nut consumers	**6**	-	0.3	7.4	0.1	16	2.6	-	0.7	-	2	1.4	2.1	-	43.2	0.6	-	-	2150	-	-	8.3	15	8.4	9.7
Occupants for exposure - towpath	**2**	-	-	-	-	-	-	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Honey consumers	**2**	-	-	3.4	0.3	17	2	-	5.3	-	5.1	-	5	-	130	1.4	-	-	-	-	-	7.7	18	31	24
Cattle meat consumers	**3**	-	-	-	-	-	-	-	0.3	12	-	-	1.9	-	-	-	-	-	-	-	-	-	-	-	-
Game consumers	**1**	-	-	6.8	0.7	30	3	-	2.7	-	10	-	10	-	259	2.7	-	-	-	-	-	15	27	32	36
Pig meat consumers	**4**	-	0.3	12	-	3.7	1.2	-	-	-	0.4	15	11	-	-	-	-	-	1820	-	-	-	-	-	-
Poultry consumers	**6**	-	-	3.9	0.1	5.5	0.5	-	0.5	-	2.5	8.4	11	-	43.2	0.5	-	-	-	-	-	2.6	4.5	5.3	5.9
Sheep meat consumers	**1**	0.1	-	-	-	-	-	-	-	-	-	-	0.5	11	-	-	-	-	-	-	-	-	-	-	-
Milk consumers	**2**	-	-	3.4	0.3	15	1.5	-	1.4	-	5.1	-	5	-	337	1.4	-	-	-	-	-	7.7	14	16	18
Mushroom consumers	**2**	-	-	3.4	0.3	20	2.4	-	2	-	5.1	-	5	-	130	1.9	-	-	-	-	-	9.8	19	16	23
Occupants in water (aquatic area)	**1**	-	-	-	-	-	-	30	-	-	-	-	-	-	-	-	100	-	-	-	-	-	-	-	-
Occupants on water (aquatic area)	**1**	-	-	-	-	-	-	30	-	-	-	-	-	-	-	-	-	400	-	-	-	-	-	-	-
Occupants for plume pathways (inner area)	**8**	-	1	3.8	-	6.8	1	-	-	-	0.2	1.1	0.4	-	-	-	-	-	7420	-	-	0.4	2.6	1.8	0.3
Occupants for plume pathways (middle area)	**2**	-	1	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	7060	-	-	5.7	3	0.8
Occupants for plume pathways (outer area)	**2**	-	1	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	6970	0.1	9	-	0.5
Green vegetable consumers	**7**	-	-	4.5	0.1	12	1	-	0.4	-	1.5	0.5	1.4	-	37	0.4	-	-	-	-	-	17	18	20	16
Other vegetable consumers	**5**	-	0.2	2.8	0.1	11	1.4	-	0.5	-	2	-	2	-	51.9	0.5	-	-	-	-	1400	13	25	12	13
Potato consumers	**4**	-	-	6.2	0.2	15	1	-	2.6	-	2.6	0.8	2.5	-	64.8	0.7	-	-	-	-	-	13	13	31	21
Root vegetable consumers	**5**	-	-	4.9	0.1	15	0.6	-	0.5	-	2	0.7	2	-	51.9	0.5	-	-	-	-	-	15	17	22	21

Notes

[a]Expressed as the proportion of the profile members who are exposed to direct radiation.

[b]Game meat represents venison

[c]Plume times are the sums of individuals' indoor and outdoor times

The means of the high-rate groups are determined by the 'cut-off' method and are highlighted on the diagonal

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