meat

DEPARTMENT OF AGRICULTURAL MARKETING
UNIVERSITY. OF NEWCASTLE UPON TYNE.

why we eat meat

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WHY WE EAT MEAT

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CONTENTS

SUMMARY

Two questions were posed: Firstly, 'why do consumers eat meat and what are its competitive advantages or disadvantages?'; and secondly, 'what types of food are eaten by consumers and at what meal times?'. To answer the first question a sample of three hundred and fifty housewives completed a series of unfinished sentences which were devised from eight group interviews.

In answering the second question, types of food eaten by the housewives and their families were investigated using two two-week diary surveys in which actual meal eating behaviour was recorded.

The initial research findings support and refine the conclusions of earlier studies that housewives consider meat to be a dietary staple, and the major constituent of the main meal of the day. It was a food that was 'full of goodness', 'very nourishing and substantial' and essential in the diet of all working men. Further, it was a versatile food and easy to 'build a meal around' as it was 'the basis of any main meal'. However, housewives were conscious of the fact that meat prices seemed to be rising steeply and envisaged that they would either have to restrict their meat purchases or buy cheaper cuts of meat.

Competing protein foodstuffs had far less favourable images. Cheese and eggs were associated with snack meals, and typically, they 'needed something added' to be filling enough for a main meal. Egg dishes, however, were very popular with children as they were colourful and 'fun to eat'. Furthermore they had the necessary nourishing and sustaining qualities that growing children required. Fish was acceptable for a main meal but lack of versatility restricted its use to one, or, at the most, two main meals per week. This suggested that many housewives were limited by their culinary knowledge to frying only. Indeed, when asked why they only had fish for the main meal once a week responses were, 'my family would complain if it was served more' or 'any more would be too boring'.

The survey of actual household food consumption behaviour found that meat is eaten at fewer meals than might have been expected from the earlier findings that it was thought to have no serious competitor. Processed or prepared meat meals were eaten far more frequently than fresh meat; housewives ate less meat meals and indeed less protein food meals generally, than did their children; whilst their husbands ate protein and fresh meat meals most often.

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INTRODUCTION

In October 1971, the Meat and Livestock Commission provided funds for the Department of Agricultural Marketing, University of Newcastle upon Tyne, to research three major areas:

(1) What do housewives consider as substitutes for meat and meat products and what advantages or disadvantages has meat *vis-a-vis* these potential competitors; in simple words, why eat meat?

(2) What household food patterns can be identified with particular reference to meat and meat cuts?

(3) What are housewives' attitudes to selected meat cuts?

Finally, having identified the attitude dimensions that are important to housewives in assessing cuts of meat, and having monitored their meat eating behaviour, the relationship between these could be investigated.

The different areas and their interrelation can be illustrated by a flow-diagram.

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                    ┌──────────────────────────────┐
                    │ Why do consumers eat meat?   │
         ┌──────────│ What are its competitive ad- │──────────┐
         │          │ vantages and disadvantages?  │          │
         │          └──────────────────────────────┘          │
         ▼                                                     ▼
┌──────────────────────────┐         ┌──────────────────────────────┐
│ On what criteria do house-│        │ What types of foods are       │
│ wives assess different    │        │ eaten by these consumers      │
│ types of meat cuts?       │        │ and how do meat cuts re-      │
└──────────────────────────┘         │ late to this pattern of       │
         │                           │ consumption?  Are there       │
         ▼                           │ seasonal patterns of          │
┌──────────────────────────┐         │ consumption?                  │
│ Are these criteria inter- │        └──────────────────────────────┘
│ related and if so, can    │                       │
│ composite attitude dimen- │                       │
│ sions be identified?      │                       │
└──────────────────────────┘                       │
         │                                          │
         │    ┌──────────────────────────────┐      │
         │    │ What is the relationship      │      │
         └───▶│ between attitudes towards     │◀─────┘
              │ certain meat cuts and the     │
              │ frequency of consumption      │
              │ of these same cuts?           │
              └──────────────────────────────┘
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The completed study is presented as two separate department-mental reports: the present volume 'Why We Eat Meat', documents the results of the first two research areas; and the companion volume 'Consumer Attitudes to Meat Cuts - a further study' refines and develops work carried out earlier at Newcastle[1] into attitudes to selected meat cuts and the relationship between these attitudes and frequency of consumption of the same cuts.

The conclusions and marketing implications of the complete study for the meat trade are given in the second report, 'Consumer Attitudes to Meat Cuts - a further study'.

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(1)   P. J. Baron, W. J. G. Cowie, D. R. Hughes and D. Lesser. 'Housewives' Attitudes to Meat', Department of Agricultural Marketing, University of Newcastle upon Tyne, 1973, Report No. 16.

PART 1: HOUSEWIVES' ATTITUDES TO MEAT AND

OTHER SELECTED PROTEIN FOODS

Chapter 1

GROUP INTERVIEWS

(a) Method

Pilot work was based on eight group discussions. The
groups were chosen to represent a wide range of social back-
grounds and age classes but each group was relatively homo-
geneous. They were as follows:-

Group 1   Social Class   A B C_1 aged under 30

2   Social Class C_2 D E   aged under 30

3   Social Class   A B C_1 aged 30-50

4   Social Class C_2 D E   aged 30-50

5   Social Class   A B C_1 aged 50+

6   Social Class C_2 D E   aged 50+

7   Working women of varied social class and age

8   Old aged pensioners of varied social class and
        age.

All discussions took place in or around Newcastle upon Tyne.
Typically there were six members to a group. A group of more
than seven tends to fragment and split into sub-groups; the inte-
rest of the individual members is not sustained and group inter-
action decreases. A group of fewer than five respondents also
tends to generate less interaction and greater fragmentation as
it becomes easier for one individual to dominate the discussion.
Each discussion was carried out in the home of one of the group
members. This venue had several advantages. Most important, it
set respondents at their ease and provided a more representative
sample since some people could or would not visit a central
point at a distance from their homes.

An inducement of £2 was offered to the hostess, who pro-
vided coffee and sandwiches, and £1 to each of the guests who
made up the remainder of the group. The discussions were tape-
recorded. Typically the strategy that generated the most useful
discussion was to emphasise that the interviewer had very little
or no knowledge of the problem and wished to be educated by the
group members. This prevented the discussion from developing
along the lines that the housewife thought the University might

expect, such as the relative vitamin count of various meat cuts and foods. As a rule relevant discussion could continue for quite long periods (1 hour or more) with the minimum of probing or guidance from the interviewer. During the final period of discussion (each group averaging at least $1\frac{1}{2}$ hours), the interviewer was able to drop the 'eager to learn' approach and adopt more specific and purposeful questioning.

(b) Results

The main areas covered by the discussions were: the importance of meat in the diet of the family, especially compared with other protein foods; why it was considered important; the advantages and disadvantages of meat as a protein food; usage of meat and meat products for different meals; how or when the housewife's decision about the evening meal was made; were her meals planned or did her menu patterns repeat themselves; knowledge of cuts of meat; the butcher himself; and, finally, each individual's attitudes to cooking.

All groups maintained that meat was the major constituent of the main meal of the day and if meat was not available then meals would consist of fish, cheese or egg dishes. However, these three latter items were not thought to have the 'goodness' or 'nutriment' of meat. All thought that egg and cheese dishes needed something added to make a main meal. The higher socio-economic groups (A B C_1) were more willing to serve these dishes, perhaps indicating that they had more time to prepare meals. Certainly they were more aware of egg and cheese recipes. A number of C_2 and D housewives stressed that their husbands would be very annoyed if they were not given meat for their evening meal. Most housewives thought that men, whether manual or professional workers, needed a meat meal in the evening. However, children of school age did not necessarily need a meat meal as they had a full 'school dinner' including meat at lunchtime. A very few respondents even questioned whether the children actually eat the meat that is provided at school. Thus an egg or cheese ingredient meal is acceptable as 'tea' for children but only as a snack for father.

The one day of the week when housewives felt justified in serving lighter meals was Saturday when all the family had time for a more substantial breakfast. It was evident that Sunday lunch was still considered the meal of the week and even though meat prices were rising rapidly, a weekend without a joint of meat was rejected as incomplete. The housewife did not ascribe a precise meaning to the word 'meat'. Discussion about frequency of serving meat would commonly elicit such statements as "We have meat three times a week, and bacon or sausages twice and chicken once". In most cases, however, meat included only fresh pork,

lamb and beef.

Housewives, when asked why meat was more acceptable as a
protein food than possible substitutes, said that they believed
it had more 'energy value' or 'was more substantial' than cheese,
eggs or fish. Generally it was thought that the prime cuts, such
as rump steak, or sirloin of beef, were nutritionally the best
value although many of the cheap cuts had plenty of 'goodness' if
they were cooked for a long time. A major advantage that meat had
over its competitors was its versatility, as the housewife must
try to create some variation in main meals over the week. The
only point on which meat was faulted in competition with other
protein foods was price. Almost all housewives commented at some
time on how prices were escalating.

Housewives thought that in theory they should plan meals
over a period but, in practice, admitted to deciding spontan-
eously on a menu. Typically the evening meal would be settled
during the morning or even afternoon, often as a result of 'look-
ing to see what the butcher had out'. Meat was an attractive
purchase because it was, 'a meal in itself' or 'the basis of a
meal' and needed much less preparation than cheese or eggs.
Dishes that required even the smallest preparation were avoided
by many housewives because they either did not like cooking and
preparing food or, because they were working or had a family
could not find the necessary time. Weekly menus would appear to
be similar over time, e.g. some combination of the following was
used by many housewives each week.

   (1) Sunday joint/chicken
   (2) Leftovers from Sunday joint
   (3) Mince
   (4) Lamb/pork chops
   (5) Stewing steak
   (6) Sausages/liver

The composition of the main meal appears to vary with the
time of year. In summer more salads are eaten and there is more
opportunity to use cheese and eggs in these dishes. Less of the
heavy meat dishes, such as stews and hotpots are cooked at this
season.

Many of the housewives, especially in the lower income
groups, received housekeeping money on Thursday or Friday and put
aside a set amount until Tuesday of the next week. Thus they
avoided over-buying for the weekend and so being short of money
for the remainder of the week. In some cases lump sums were
allotted for certain purchases. Notably, rather than asking the
butcher for a joint big enough for five, she would ask for a
joint costing £1.30, and for mid-week meals she would ask for 40p
worth of mince. This would suggest that the meat purchases of

many housewives will decline over time as prices increase. They are especially more aware of the rise in meat prices as most of them buy meat from a specialist butcher so that its price is not confused by those of other purchases, as are the prices of individual items in the overall 'grocery basket'.

Any discussion about the advantages or disadvantages of meat inevitably encompasses the role of the butcher and the service he offers. The traditional butcher is held in awe by many housewives, although they will admit that 'other people's butchers' may not attain the very high standards of their own. Earlier work carried out in the Department of Agricultural Marketing, Newcastle upon Tyne University, supports this point of view[1]. Comments such as:

> 'About the only way to get good meat is to find a good butcher and stick to him'.

> 'I like to buy my meat where people know me'.

> 'Supermarket meat is not as good as the traditional butcher's'.

were commonplace. A good relationship with the butcher can only be built up over time to the point where the housewife can say, 'he knows what I want and how much I can afford'. The younger housewives of all socio-economic groups were less dependent on the traditional butcher and seemed more prepared to buy in a supermarket. They gave the impression that they were embarrassed by their lack of knowledge about cuts of meat and were unwilling to put themselves in the hands of a businessman who, after all, 'is trying to sell as much meat as he can'. Rather, a self-service store was preferred where the price and the cut is clearly labelled so that choices to fit the pocket can be made without social embarrassment. As a general rule, however, all age groups had very limited knowledge about types of meat and how they should be cooked.

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[1] P. J. Baron, W. J. G. Cowie, D. R. Hughes and D. Lesser. 'Housewives' Attitudes to Meat', Department of Agricultural Marketing, University of Newcastle upon Tyne, Report No. 16, 1973.

Chapter 2

SENTENCE COMPLETIONS

(a) Method

The information gained from the eight open interviews gave
a qualitative insight into what advantages or disadvantages meat
had over competing foodstuffs. However it was necessary to
quantify these results to get any assessment of their general
applicability. The technique used in this instance was a 'Sen-
tence Completion' test, based on information generated in the
open interviews.

A great advantage of this technique is that the housewife
can be convinced that she can make spontaneous statements with-
out bringing her own rationality into question, e.g. 'Many
housewives do not serve eggs for the main meal because ....
..........................', removes the burden from herself
to other women with whom she need not necessarily agree.

A funnel design was used when constructing the battery of
sentences. Thus, sentences 1-11 were concerned with food gene-
rally, whilst sentences 12-25 became increasingly more specific
to the central question - why do people prefer meat to other
protein foods? Sentences 24 and 25 sum up the problem and pose
the statements 'I think most people like meat because ....
..........................' and 'Meat is different from cheese,
fish and eggs because ....'.
The full set of unfinished sentences are shown in Appendix A,
Section C.

It was planned to recruit a sample of 350 housewives as
this would include cells of sufficient size in all segments of
the population to allow all the anticipated comparisons between
cells at a usable level of sensitivity. The survey was carried
out in South Shields, and 370 interviews were successfully com-
pleted. A 'Random Walk' sampling method was considered to be
most appropriate to yield a representative sample of the area.

Pre-testing of the series of unfinished sentences indi-
cated that they were both comprehensible and meaningful, there-
fore, all twenty-five were retained for the main survey. In
this each respondent was shown each unfinished sentence on a
card. As the interviewer read out the opening phrase of the
sentence the respondent could follow it from the relevant card.
The intervier then wrote down the first ending that the
respondent answered. The results are presented below with the
frequency tables. Cross-tabulation of the Sentence Completion

responses appear at Appendix B.

(b) Results

Table 1(a) shows the responses to the unfinished sentence,
'In a restaurant I would choose for my main course ....
..................'. These show that steak is by far the most
popular dish followed by 'beef'. 'Beef' most often indicated
'roast beef and Yorkshire pudding'. These two dishes account
for 50% of total responses. Chicken consumption per capita has
risen steeply over the last decade and it is now considered
cheap, having lost its luxury image to beef. Nevertheless, al-
most 9% of the respondents would still choose chicken for their
main course. Meat cuts of some description were mentioned by
80% of the sample. The most popular non-meat dishes were scampi
(5%) and fish (4%). Egg and cheese dishes hardly received
mention. Perhaps surprisingly 6% gave curry as the dish they
would be most likely to choose.

Table 1(a): 'In a restaurant I would choose for
              my main course ....'

Response	Percentage
Steak	31.0
Beef	18.4
Chicken	8.8
Curry	6.0
Mixed Grill	6.0
Scampi	5.2
Gammon/Ham	4.9
Fish	4.4
Lamb	3.6
Steak and Kidney Pie	2.5
Pork	2.2
Chinese Meal	1.6
Pork chops	1.2
Lamb chops	0.8
Eggs	0.8
Cheese	0.5
Other	1.6
No Answer	0.5
	100.0

Steak was the most popular dish for all socio-economic
groups apart from E, and was especially popular with the high
categories (Table 1(b)). Group E preferred beef. Scampi was a
popular middle class meal, while curry was a more popular meal

for the under 40 years working class housewife (Table 1(c)).

Table 2(a) shows frequencies of response to the sentence,
'But if it was not available I would choose ....'. Chicken
was the most frequent second choice with fish, steak and beef
following. Eggs again were not popular and cheese was not men-
tioned at all. Over 30% of first choice beef eaters would opt
for chicken as a second choice, and 19% would have fish.

Table 2(a): 'But if it was not available I would
              choose ....'

Response	Percentage
Chicken	22.0
Fish	15.6
Steak	12.0
Beef	10.9
Mixed Grill	7.0
Pork	5.8
Lamb	5.8
Gammon/Ham	4.7
Lamb chops	3.3
Scampi	2.8
Steak and Kidney Pie	1.9
Curry	1.7
Eggs	1.7
Pork chops	1.7
Other	3.1
	100.0

If there was no beef on the menu old age pensioners would
choose lamb (26%), chicken (18%) or fish (12%). This was lamb's
only creditable mention, and its appeal to the over-sixties
cannot suggest much possibility for growth of lamb sales. If
chicken was not available then most housewives would select
beef, fish or steak (Table 2(b)).

The popularity of steak, beef and chicken as shown in
Table 1(a) is emphasised in the above table as it is these same
three meats that would be chosen second if the first chosen of
the three were not available. Fish, not popular as a first
choice, appears to be a strong second choice meal.

Responses to the unfinished sentence, 'Working men eat a
lot of ....', are shown in Table 3. By far the most fre-
quent response was 'meat', or 'meat and potatoes'. There is
little doubt that this reflects the strong masculine image that
meat, and particularly beef, projects in the North East. The

Table 3: 'Working men eat a lot of ....'

Response	Percentage
Meat/meat and potatoes	53.3
Potatoes	12.9
Bread	10.2
Meat Pie/Sausages	6.9
Bulky foods	4.1
Beef	3.3
Steak	3.3
Sandwiches	1.9
Other	2.7
No Answer	1.4
	100.0

preliminary group interviews indicated this, when statements
such as 'a man needs meat when he has been working all day'
occurred quite often. Six per cent actually specified either
beef or steak, while pork or lamb were not mentioned; a sugge-
stion that it is beef which is the manual worker's food. High
carbohydrate diets were thought common among working men.
Potatoes and bread were the most important non-meat items men-
tioned.

The sentence was phrased to suggest manual-type rather
than white collar workers and significantly not one respondent
mentioned fish, cheese or eggs as a food that was much eaten by
working men. This may indicate that the three latter foods have
not the 'strength-giving' and 'filling' qualities of meat.

Table 4(a) gives responses to the unfinished sentence 'If
food prices keep going up I shall have to cut down on ....'.
Thirty-four per cent replied that purchases of meat of some sort
would suffer; 27% mentioning meat and 7% specifying expensive
meat. The high price elasticities for cakes, biscuits and
butter are reflected in the answers, and the general rise in
food prices could perhaps have a considerable impact on cigar-
ette smoking, or so the respondents believed.

The lower the socio-economic class of respondent the more
likely is she to cut down her meat purchases as prices rise.
A/B's and C_1's, however, will cut down on the more expensive
cuts and on cakes and biscuits (Table 4(b)). The lower groups
are more likely to exchange butter for margarine and they might
economise by giving up smoking. Groups D and E also think that
they would have to cut down on food generally.

Almost a quarter of respondents could not complete the

Table 4(a): 'If food prices keep going up I shall
have to cut down on ....'

Response	Percentage
Meat	26.9
Cakes/Biscuits	17.0
Butter	14.0
Expensive Meat	6.9
Food generally	5.8
Luxury food	5.2
Cigarettes	4.9
Certainly not food	3.0
Fruit and Vegetables	2.2
Non-food items	1.6
Beef	0.5
Fish	0.4
Other	2.6
D.K./No Answer	9.0
	100.0

sentence, 'And perhaps buy more of ....', mainly because
the lower socio-economic groups could not anticipate buying any
substitutes as they could not economise any further, (Table
5(a)). Housewives, especially the younger ones, who stated that
they would cut down on meat generally said that they would buy
instead more fruit and vegetables (18%), cheaper cuts of meat
(18%), fish (15%) or eggs (Tables 5(b) and (c)). Those reducing
their purchases of expensive cuts of meat predictably would buy

Table 5(a): 'And perhaps buy more of ....'

Responses	Percentage
Fruit and Vegetables	21.4
Cheaper cuts	14.0
Margarine	10.7
Eggs	6.0
Chicken	4.9
Fish	4.9
Mince	3.0
Cheese	3.0
Other	9.2
No Answer	22.9
	100.0

cheaper cuts, whilst those restricting their cakes and biscuits
or luxury foods purchases would buy more fruit and vegetables.

No housewife mentioned that she would cut down on eggs or
cheese if food prices increase which, at first sight, should
auger well for these products, but their relatively weak compet-
itive position is illustrated in Table 5(a). Very few respon-
dents suggested that they would switch to eggs or cheese (only 5%
and 3% respectively). Fruit and vegetables and cheaper cuts, how-
ever, are in a much stronger competitive position as food prices
rise.

Over 25% of housewives thought that for a meal to be appet-
ising it had to be served and presented well, and in a similar
vein 31% thought that it should look nice and be colourful (Table
6(a)). Apart from some housewives mentioning that a meal should
be 'well-cooked' comments on the quality of food itself were
restricted to 'a meal needs to have good taste and flavour (8%),
smell nice· (2%) and be served hot' (5%). Cross-tabulating by age
and socio-economic class (Tables 6(b) and (c)) show that meal
presentation and serving is more important to the younger C_2 and
D groups, whilst the A/B's and C_1's require colour in a meal and
want it to look attractive. The older housewives from the lower
socio-economic groups generally took a more practical view and
wished their meals to be well cooked and served hot.

Table 6(a): 'I think for a meal to be interesting
and appetising it must ....'

Response	Percentage
Served and presented well	25.5
Well cooked	19.0
Look nice/attractive	15.7
Colourful	15.1
Good taste/flavour	8.5
Served hot	4.9
Variety	4.7
Smell nice	1.9
Other	3.8
No Answer	0.9
	100.0

A third of all respondents thought that 'the most nourishing
food you can buy is ......' meat of some sort (meat 27%, steak 5%
and chicken 1%). This was twice the percentage of its nearest
protein food rival, eggs (Table 7(a)). Cheese gained 12% of
housewives' votes but fish was thought nourishing by relatively

few and indeed gained slightly less support than fruit and vege-
tables. Milk has a good 'nourishing' image which perhaps in part
is attributable to heavily nourishment-orientated advertising.
An encouraging point for meat producers was that the younger
housewives were more inclined to believe meat was the most nutri-
tious food (Table 7(b)).

Table 7(a): 'The most nutritious food you can
buy is ....'

Response	Percentage
Meat	27.2
Milk	17.0
Eggs	16.5
Cheese	12.4
Vegetables and/or fruit	7.1
Fish	6.9
Steak	4.9
Chicken	1.4
Other	4.1
No Answer	2.5
	100.0

The reasons why respondents thought various foods were the
most nourishing are given in Table 8(a). Fullness of proteins,
vitamins and goodness were the most frequently quoted and toge-
ther accounted for about 70% of explanations about meat, milk,
cheese and eggs. Ten per cent of respondents who had chosen the
latter as the most nourishing food thought so because of its
versatility (Table 8(b)).

Table 9 shows what the housewives would cook if some of
their friends came round for an evening meal, and contrasts with
what they would choose for the main course in a restaurant.
Steak is only mentioned by 6% of respondents and beef by just
over 1%. Eggs would be served by 8% but again cheese is thought
of little importance. Relatively cheap and easily prepared
dishes, such as casseroles, cold tinned meat with salad, and
sandwiches were mentioned quite frequently. However, the sur-
prising popularity of curry is again in evidence, since 14%
would give it to their guests. Chicken is shown to be an adapt-
able meat; popular as a restaurant meal but at the same time
suited to the guest's palate and to the host's pocket. Meat,
generally, does well *vis-a-vis* its competitors and was mentioned
in some form by about 50% of housewives, but this was consider-
ably less frequent than the mentions in Table 1 (80%). Presum-
ably this reflects a number of factors, the most important being

Table 8(a): 'Because ....'

Response	Percentage
Full of protein	27.7
Full of goodness	20.6
Full of vitamins	16.5
Full of nutritiousness	11.5
Versatile	3.8
Substantial	3.3
Habit	1.9
Non-fattening	1.1
Other	8.0
No Answer	5.6
	100.0

Table 9: 'If some of my friends came round for an evening meal I would cook them ......'

Response	Percentage
Curry	14.3
Chicken	11.5
Meat	11.3
Meat and Salad	8.0
Sandwiches/Snack	7.7
Eggs	6.0
Steak	6.0
Fish	4.9
Mixed Grill	4.1
Chops	2.7
Gammon	2.5
Cheese	2.5
Omelette	2.2
Can't afford any	1.9
What they want	1.4
Roast Beef	1.4
Other, mainly casseroles	8.7
No Answer	2.9
	100.0

high price of meat, difficulty in preparation, and lack of culinary confidence.

Eggs were considered the most versatile food you can buy by over 40% of respondents (Table 10(a)). This could reflect success of advertising which had stressed that 'Eggs are versatile'.

Meat or a specific cut, in particular chicken or mince, was men-
tioned by 34%. All age groups thought that eggs were versatile
but this view was held most strongly by the under 40's and espe-
cially the under 21's. The older housewife, was more prone to
think that meat was the most versatile food available (Table
10(b)). Fish was mentioned by very few respondents but cheese
by over 10%.

Table 10(a):   'The most versatile food you can
buy is ....'

Response	Percentage
Eggs	42.3
Meat	15.7
Cheese	10.7
Chicken	8.5
Mince	5.8
Milk	4.4
Bacon/Ham	3.8
Fish	2.5
Other	4.4
No Answer	1.9
	100.0

The sentence, 'Some people say that fish, cheese, meat and
eggs are all good because they contain a lot of protein but ....
........', was phrased to investigate whether the housewife
thought that protein foods were the complete foods. Many found
this a difficult question. Nevertheless, the need for balance
in a meal and the importance of fruit and vegetables were illus-
trated and some housewives thought that one could have too much
of the protein foods and others that 'not everybody is very keen
on them' (Table 11). Almost 7% thought that these protein foods
were expensive although, in the main, this referred only to fish
and meat.

The group interviews had suggested that egg dishes were very
popular with children and the main reason for this is that they
think them fun and easy to eat (Table 12). Sixteen per cent of
housewives actually mentioned that children like eggs because
they can dip bread or toast fingers into them. Versatility and
speed and ease of preparation would seem to show why housewives
would like their children to eat egg dishes rather than a state-
ment on 'why children like eggs'.

Earlier, respondents had been asked to say on what they
would economise if food prices kept going up (Table 4(a)). One

Table 11: 'Some people say that fish, cheese, meat
            and eggs are all good because they
            contain a lot of protein but.........'

Response	Percentage
Need fruit and vegetables as well	17.9
Need balanced meal	16.8
Need carbohydrates and starch	10.2
Not everybody likes these	8.8
Can have too much of the protein foods	7.1
Expensive	6.9
They are all necessary in a diet	6.0
One can do without them	2.5
Other	3.6
No Answer	20.2
	100.0

Table 12: 'Some children like eggs because ......'

Response	Percentage
Fun and easy to eat	21.4
Can dip toast in them	15.9
Mine like them/mine don't	14.8
Versatile	11.8
Easy to digest	7.4
Tasty	4.1
Quick and easy to prepare	3.0
Appetising or nourishing	2.7
Other	1.9
No Answer	17.0
	100.0

third had said that meat purchases would suffer. A question
more specifically related to meat was also posed, 'If meat
prices go up a lot this year I ....'.

Over 40% believed that they would have to buy less meat
(Table 13(a)). This held throughout all socio-economic groups
but was more pronounced in groups D and E (Table 13(b)), and
in the under 21 and over 50 age ranges (Table 13(c)). One
fifth of all respondents said they would still buy the same
amount but this was a composite of (a) those who did not wish
to eat any less meat, out of preference, and (b) those who
could not buy much less as they already eat very little. The
former represented 25% of all A/B's, C_1 and C_2's and the latter

Table 13(a): 'If meat prices go up a lot this year
               I ....'

Response	Percentage
Buy less	42.0
Still buy the same amount	19.5
Buy cheaper cuts	19.2
Use more eggs or fish	6.3
Do without altogether	5.2
Buy more chicken	4.9
Eat more vegetables	1.1
Use more cheese	0.9
No Answer	0.9
	100.0

13% of D and E's. Increasing purchases of cheaper cuts was seen
as the remedy by 19%, and 5% mentioned that they would buy more
chicken. A similar percentage, mainly old age pensioners, said
they would do without meat altogether. Substituting eggs or fish
was a possibility considered by some housewives but cheese
received little mention.

Table 14 shows frequency of responses to the unfinished sen-
tence, 'I think a cheese omelette is ......'. This was an un-
successful attempt to look at reactions towards a cheese/egg
meal. Responses tended to be of the 'is very pleasant' or 'is
nasty' type. Fifteen per cent thought the dish was tasty or
nourishing, whilst 4% said that it was only a snack.

Table 14: 'I think a cheese omelette is ......'

Response	Percentage
Is good/pleasant, etc.	47.8
Is unpleasant/nasty, etc.	24.7
Tasty	9.1
Nourishing	6.3
Only a snack	3.6
Easy to cook and prepare	2.2
Satisfying	1.4
Appetising	1.4
Other	0.5
No Answer	3.0
	100.0

Twenty-two per cent of respondents said that many house-
wives only serve fish once a week because of 'their religion',
or 'tradition', or 'out of habit' (Table 15). It seems that
housewives still think that 'Friday is fish day'. The great
majority thought of fish as 'fish and chips'. Thus responses
like 'once a week is enough' or 'it is too boring if eaten more
than once a week', were common. Over 20% thought that purchase
was infrequent because of cost. This may paint a gloomy picture
for wet fish marketing. The product is thought to be an expen-
sive, staid, protein food with limited usage and, by some, not
filling or satisfying.

Table 15: 'Many housewives only serve fish once
a week because ....'

Response	Percentage
Religion, habit, tradition	22.5
Expensive	20.3
Once is enough, too boring if more than once	19.0
Do not like it	14.3
Not versatile	4.7
Not filling or satisfying	4.1
We prefer meat	3.3
Difficult to prepare	1.4
Other	4.1
No Answer	6.3
	100.0

Over 40% of housewives thought that their husbands pre-
ferred meat to cheese because it was 'more filling' (22%), 'more
substantial' (9%), 'more satisfying' (7%) and 'you can get your
teeth into it' (4%), (Table 16). Stated another way, cheese
could not be used for a full main meal. Almost 20% said that
meat was tastier or more flavoursome than cheese, and some hus-
bands were just accustomed to eating meat and did not want to
change.

The claim that meat was more filling was reiterated when
the unfinished sentence, 'Eggs contain as much protein as meat
but .....', was posed (Table 17). Meat was thought 'more fill-
ing, substantial, satisfying and it made a better main meal'.
Again it had advantages of taste and flavour. Surprisingly,
meat was thought more versatile by 7% of the housewives and no-
one compared eggs favourably with meat. Meat is the interest-
ing food, whereas the impression given is that if the housewife
served eggs for a main meal the reaction from her family would
be a disappointed 'Oh, it's eggs!'.

Table 16:   'Most husbands prefer meat to cheese
                because ....'

	Response	Percentage
More filling		21.7
Tastier		15.4
Cheese is not a full main meal		12.1
More substantial		9.1
We like or we are used to meat		7.7
More satisfying		6.6
More nourishing		4.7
Better flavour		3.8
Can get your teeth into meat		3.6
More appetising		3.3
More interesting		1.6
Meat makes lovely gravy		1.6
Other		4.7
No Answer		4.1
		100.0

Table 17:   'Eggs contain as much protein as
                meat but ....'

Response   Percentage

Meat is:

	Percentage
More filling	22.5
Makes a better main meal	19.2
More substantial	7.1
Tastier	7.1
More interesting	7.1
More versatile	6.9
Our family prefers meat	6.6
More satisfying	4.9
Better flavour	2.7
More nourishing	2.3
More appetising	2.3
Other	5.5
No Answer	5.8
	100.0

    Table 18 illustrates that eggs are thought of as providing
other meal dishes such as snacks, breakfasts and children's
teas rather than as a main meal dish, again because they do not
'fill'. Again, 11% of housewives thought that 'men need a

solid meal', and eggs do not supply this.

Table 18: 'Many housewives do not serve eggs for
the main meal because ....'

Response	Percentage
We have eggs for other meals	25.5
Not as substantial	20.1
Not as filling	13.2
Men need a solid meal	11.5
Eggs are less versatile	6.3
Not as satisfying	4.9
We prefer to serve meat	4.4
Not as tasty	2.5
One can get bored with eggs	2.2
Other	2.5
No Answer	6.9
	100.0

The majority opinion was that children liked fish (Table 19), especially if it was fried and served with chips. A number specified that to be acceptable it had to be bought from a 'fish and chip shop'. On the negative side 15% said children thought that fish meals were 'unpleasant', 7% 'unappetising and taste-less', and 5% 'not filling and too bony'. These comments referred in the main to unprocessed fish, although 8% said that children loved fish fingers.

Table 19: 'Children think fish meals are .....'

Response	Percentage
Popular, very pleasant, etc.	50.5
Not nice, unpleasant, etc.	14.8
Super if fried and with chips	8.0
Unappetising and tasteless	7.1
Lovely if in fish finger form	6.6
Too bony	3.8
Tasty	1.1
Not filling	1.1
No Answer	7.0
	100.0

The housewives were asked under what circumstances they would give fish more often to their family (Table 20) and the

most common answer was 'if they liked it more!'. The suggestion
was of preference for further processing, either simple deboning,
or more complicated complete fish main meal packaging, and of
desire for better information on how to vary fish meals. Once
again the expensiveness of fish was mentioned by over 20% of
respondents. Some housewives obviously had difficulty in buying
fresh fish as the shop was either too far away or open at incon-
venient hours. Five per cent of staunch meat eaters would only
buy more fish if meat was not available.

Table 20: 'I would give fish more often to my
family if ....'

Response	Percentage
If the family liked it more	45.6
If it was cheaper	26.6
We have it often now	6.9
If the fish shop was more conveniently placed	5.5
If meat was not available	4.7
If there was more variety to it	2.2
No I would never give them more	1.6
Other	2.7
No Answer	4.2
	100.0

The number of different dishes mentioned, when asked 'My
favourite meal with eggs in is ......' showed how versatile eggs
are (Table 21(a)). The dishes ranged from savoury flans and
Scotch eggs to pancakes and souffles. Omelettes were the most
popular egg meal, especially for socio-economic groups A/B and
C_1 (Table 21(b)). The North East addiction to Yorkshire pudding
was apparent in that 9% of respondents, typically the younger
working class housewives, gave this as their favourite egg dish
(Table 21(c)).

Twenty per cent of respondents thought cheese and eggs were
good for snacks or suppers and some said they could be used for
sauces and savouries, emphasising the casual meal usage of those
dishes (Table 22). However, many certainly believed that they
contained all the essential main food elements. Housewives said
they were good for body-building (20%), for proteins and vita-
mins (11%), growing children (11%), bones, teeth and skin (10%),
and for health generally (5%), and could be eaten by everybody
(7%). But referring back to Table 7(a), even though cheese and
eggs are thought nourishing, they do not compare with meat.

Table 21(a): 'My favourite meal with eggs in
                 is ....'

Response	Percentage
Omelette	26.1
Scrambled egg	12.1
Yorkshire pudding	9.3
Bacon and Egg	8.5
Egg salad	7.4
Egg Custard	5.5
Savoury Flan	5.2
Fried Egg	4.7
Souffle	3.6
Poached Egg	3.0
Boiled Egg	2.7
Egg and Chips	2.7
Pancakes	1.9
Mixed Grill	1.9
Scotch Egg	1.4
Other	2.8
No Answer	1.2
	100.0

Table 22: 'Cheese and eggs are good for ....'

Response	Percentage
Snacks or supper	19.8
Body building	19.5
Proteins and Vitamins	11.0
Growing Children	10.7
Bones, teeth or skin	10.2
Everybody	7.1
Health	4.9
Sauces, savouries, etc.	4.7
Dieting, slimming	3.6
For all meals	3.0
Everything	2.2
Other	1.4
No Answer	1.9
	100.0

An attempt was made to get housewives' opinions on the
relative importance of different foods as needed by growing
children. Because it had been found that they had difficulty
in stating one food as needed more than another, they were given

the opportunity to list 3 foods, e.g. they could have said 'milk, fish and cheese are the most important'. Table 23 is based on the average number of mentions a food received expressed as a percentage figure. Milk was thought the most important followed by eggs and meat. Cheese and fish did not score favourably and indeed housewives thought fruit and vegetables were more important for children's needs. Some housewives said that the composite 'protein foods' were the most important.

Table 23: 'The sort of food a growing child needs is ....'

Response	Percentage
Milk	25.7
Eggs	19.8
Meat	16.5
Fruit and Vegetables	11.2
Cheese	10.4
Fish	7.0
Protein foods	6.0
Bread, bulky foods	3.4
	100.0

The two final sentences posed the deliberately leading questions 'Why do people like meat?' and 'Why is it different from its competing protein foodstuffs?'.

It would appear that meat is thought a very tasty, good flavoured food (Table 24(a)). Taste is more often mentioned by the lower socio-economic groups and 'flavour' by A/B and C_1's (Table 24(b)), perhaps with the same meaning. Nine per cent of the housewives said that people liked meat because they could make a great variety of dishes with it, others thought it has the previously mentioned necessary filling qualities. Thus, it is 'the basis of the main meal, satisfying, substantial, full of nourishment and appetising'. However 14% thought that tradition and habit were responsible for most people liking meat.

Seventeen per cent of housewives thought that the main difference between meat and cheese, fish and eggs was that one could make a main meal out of meat (Table 25(a)); this was especially important for respondents from groups C_2 to E (Table 25(b)). Groups C_1 to D were more likely to mention that a meat meal could be varied so much.

The 'filling' properties of meat mentioned in the preceding

Table 24(a):   'I think most people like meat
                because ....'

Response	Percentage
Taste	23.6
Tradition or habit	13.7
Basis of the main meal	10.7
Variety of dishes	9.3
Full of nourishment	9.1
Satisfying/substantial	7.7
Flavour	6.3
Filling	4.7
Appetising	4.4
Good Gravy	1.9
Non-fattening	1.4
Natural	1.4
Other	1.9
No Answer	3.9
	100.0

Table 25(a):   'Meat is different from cheese, fish
                and eggs because ....'

Response	Percentage
Can make a dinner of it	17.3
Can vary it	10.7
More substantial	10.4
Tastier	8.2
Better/different flavour	7.4
Makes good gravy	7.4
More filling	6.3
Better nourishment	6.0
Different texture	5.5
Satisfying	4.9
Need to chew it	3.3
More savoury	3.0
More appetising	1.4
More expensive	1.1
Other	2.3
No Answer	4.8
	100.0

tables were re-emphasised, this was especially important to the
higher socio-economic groups. Taste and flavour were thought to
be better than in fish, cheese or eggs, and it made a substantial

meal, as illustrated by the percentages for 'more substantial', 'more filling', 'better nourishment', satisfying' and perhaps 'different texture'. Finally, more important for the older house-wife, meat makes good gravy which was not possible with the other foods (Table 25(c)). Almost all differences given were in favour of meat although 1% did mention that the major difference between meat and cheese, fish and eggs was that meat was more expensive.

To summarise, it appears that most housewives think that meat is the most attractive of all protein foods, as it satis-fies three basic criteria. Firstly, it has a unique taste and indeed, in relative terms, it is more tasty or flavoursome than other protein foods. Secondly, it is thought to be a more sub-stantial and nourishing food than its competitors, and has, better qualities for inducing 'food satisfaction'. Thirdly, and perhaps most importantly, it can be used in varied forms as the basis of a main meal. Cheese and eggs, however, are not filling enough although they do not lack the necessary dietary require-ments such as protein and vitamins. The former is more a food for a supper or snack, something to be eaten with a biscuit. The latter is more the children's meal, fun to eat, versatile and easy to digest. Fish is traditionally used for a main meal on Thursday or Friday but generally it has a very poor image. It is not as nourishing as meat, yet still expensive and there are very few dishes that can be based on it.

The majority of menus extend only as far as 'fried fish and chips' and many do not think it the sort of food a growing child needs. Children are thought to prefer processed fish products, such as fish fingers or fish cakes. Meat, especially beef, has traditionally been considered the most important part of the diet and has certain masculine connotations. Working men need meat to supply nourishment and substantiality to keep them fit, and to this end meat has all the necessary proteins, vitamins and good-ness. However children are thought to need nourishment rather than filling, and this can be adequately achieved with eggs.

This favourable impression which housewives have of meat and meat products is tempered by the fact that they think they are not tied to buying the product irrespective of price. If food prices increase then some housewives would buy less meat whilst others thought they would choose cheaper cuts.

PART 2: HOUSEHOLD FOOD CONSUMPTION PATTERNS

Chapter 3

THE MEALS STUDY

(a) Method

This part of the research deals with actual consumption of
meat and other foods in South Shields. The information was ob-
tained by direct consumer contact and provided details of what
the family eat and at what meals. In addition it established
how frequently different cuts of meat were eaten, to provide a
basis for examination of the relationship between frequency of
consumption and attitude towards specific meat cuts.

The method chosen was a diary, in which the respondent had
to record the meals that had been consumed by her family during
the period under review. The alternative of a direct interview
survey was rejected because the period of time over which recall
was necessary and the detail required meant that the relevant
information could not possibly have been reliably recorded.
However, research also has its problems. Firstly, the house-
wife may deliberately falsify the entry, notably she might re-
cord that her family eat expensive cuts of meat as opposed to
mince and scrag-end so that it would project a better image of
her 'social eating' position. Secondly, there is the 'condi-
tioning' problem; the danger that the respondent's interest in
filling up the diary will cause her to modify her normal behav-
iour. Because the housewife has a continual check on the foods
she serves she might, therefore, serve more varied food than
usual. Thirdly, the housewife might simply forget to record
the necessary information and then inaccurately attempt to fill
in the diary at the end of the week, or even entirely forget to
record a meal. Finally, given the research resources, the limi-
ted period over which the diary could be maintained might not
be representative of eating behaviour over the whole year.

The first problem, that of deliberate falsification, is
implicit in all surveys, though its importance can easily be
exaggerated, but use of a daily diary over two separate periods
can go a long way to solving the three remaining possible
sources of error. As she would receive a diary every day the
housewife would be continually reminded of her recording duty
and would be less likely either to forget or to make errors.
As the completed diary would be returned the next day, she
would not be in a position to check the meals served over the
week from the diary and so alter her behaviour. The choice of
two time periods would enable seasonality of food· consumption

to be investigated and thus a more representative picture of year-round food consumption could be obtained. It was, therefore, considered that a two period daily diary used with proper safeguards could derive estimates of the respondent and her family's eating behaviour more reliably than any other available method.

The design of the diary had to minimise the work for the respondent without losing either accuracy or detail. A high initial rate of response is essential in this form of two time period survey. Typically postal responses are very poor for a single survey, so if sample members were to be retained over two survey periods the effort would have to be made to appear as simple, yet as interesting as possible. The task itself could be minimised by designing a form that could be quickly and easily filled with questions and instructions that were easily understood and rigidly unambiguous, and by providing a worthwhile incentive.

Inherent difficulties with food consumption diary research are that meal eating patterns differ between the week-end and week days, and different people call meals by different names. A questionnaire was designed and administered to 100 housewives to establish the range of behaviour in the survey area (Appendix C). It was evident that all members of the family do not necessarily eat the same meals. Typically, if there were differences then these were between parents and children under 10 years of age and between the husband and the rest of the family. For example, the housewife and her children might well eat 'tea' at 4.30-5.00 p.m. whereas the husband would have 'dinner' at 6.00-6.30 p.m. The problem of nomenclature arose mainly from whether the midday meal was called 'lunch' or 'dinner' and the evening meal 'tea' or 'dinner' (Table 26). Further there was some confusion as to what constituted a meal and what did not. Thus, a glass of milk before bedtime might or might not be called 'supper'.

To avoid possible confusion arising from nomenclature of meals all food consumed was to be recorded, from the first bite in the morning to the chocolate biscuit before going to bed. This helped the housewife to check through the food consumed in any day in a very systematic fashion and so to increase recording efficiency and accuracy.

Originally the title 'Food Diary' had been used but this was changed to 'Meal Sheet' which caused less confusion and apprehension among respondents. Naming of meals was avoided by using the simple titles, 1ST MEAL IF ANY, etc., and the problem of different meals for different members of the family was over-

Table 26: Names used for Daily Meals

	Name Used	Weekend	Weekday	Time eaten
		% using name	% using name	
1st meal	Breakfast	100	100	7.00-10.00 a.m.
2nd meal	Dinner	48	32	11.30- 2.00 p.m.
	Lunch	50	62	
	Main meal	1	-	
	Tea	1	-	
	Sandwiches	-	1	
	Midday snack	-	4	
	Nil	-	1	
3rd meal	Tea	77	43	4.30- 7.00 p.m.
	High tea	7	7	
	Dinner	9	38	
	Supper	6	5	
	Evening meal	1	7	
4th meal	Supper	62	59	7.00 p.m.+
	Dinner	3	4	
	Evening meal	1	1	
	Nil	34	36	

come by sub-dividing the meals as shown below. The respondent
was given the opportunity to record information on up to five
meals per day. This proved in many cases to be more than ade-
quate. The need for as much detail as possible was stressed as
it was thought better to have excess information which could
eventually be discarded than to be presented with vague generic
terms, such as beef and chips, or meat and vegetables, rather
than rump steak and chips or leg of lamb and cauliflower.

1ST MEAL IF ANY	TIME EATEN	WHAT DID YOU AND YOUR FAMILY EAT FOR THE FIRST MEAL TODAY? PLEASE GIVE AS FULL DETAILS AS POSSIBLE. IF ANY MEMBERS OF THE FAMILY WERE NOT PRESENT STATE 'NOT PRESENT'
YOURSELF		
CHILDREN UNDER 10 YRS OLD		
OVER 10 YRS OLD		
HUSBAND		
OTHER		

The Meal Sheet was tested on a sample of 20 housewives, representing a wide range of ages, socio-economic background and family size, taken from the sample of 100 housewives who had completed the questionnaire on names of meals and times these were eaten (Appendix C). The meal sheets were filled in over a three week period. Each day the housewife received a sheet for that day and a stamped addressed envelope. She was asked to complete it and post it back as soon as possible on the next day. On Saturday she received sheets for Saturday and Sunday and was asked to post them both back in the same stamped addressed envelope on the Monday. On the first day she received a letter with her meal sheet thanking her for being willing to participate in the survey and exhorting her to fill in the sheets each day. A letter was also sent with the final sheet thanking respondents for taking part.

The meal sheet recording period was almost 100% successful. However, four points became clear (a) on re-interviewing the participants, half said that they had found the last week an effort and were tempted to write down that they were 'not present' for a number of the meals, (b) posting of two sheets on Saturday caused confusion for some participants. It was obvious that they had filled in Saturday's sheet instead of Sunday's and *vice versa*, (c) the need for detail in naming of the actual meat cuts consumed would have to be stressed further to avoid recordings such as 'chop and chips' rather than 'lamb' or 'pork chop and chips', (d) it would be necessary to use first class postage if the diary was to arrive the next day.

As three weeks was too long to expect most respondents to fill in meal sheets, the period was cut to two weeks for the main survey. Thus two two-week periods were to be used. The problem was, therefore, how could respondent interest be maintained over the two periods and apart from minimising the task of the respondent, what other factors could be identified that could influence the response rate?

Firstly, when recruiting the survey participants, the nature of the enquiry was emphasised. It seemed possible to take advantage of the fact that food is an important topic with all age groups. Thus, the survey would seem interesting and useful to the respondents. It was also evident that in many cases respondents felt a social obligation to co-operate.

The food people eat can, however, be a sensitive subject, so it was necessary to stress the confidentiality of the personal food sheets. Thus, respondents' names and addresses were gained at point of recruitment and at no point did they actually appear on the meal sheets. Each participant was allotted a serial number and this alone identified her particular series of meal

sheets. The confidentiality and anonymity thus ensured ought to have reduced the possibility of the housewife falsifying inform-ation.

The standard of presentation and general mailing approach are important in diary work if consumer interest is to be main-tained. The test meal sheet had been duplicated onto white sheets of paper and was uninteresting to look at. Offset litho printing was used for the main survey as it gave a more pro-fessional finish (Appendix D). Each day of the week was assoc-iated with a meal sheet of a different colour. This was useful in three ways. Firstly, it made it appear that the respondent was receiving something different every day, rather than a long series of boring meal sheets. Secondly, it was easier to diffe-rentiate Saturday's meal sheet from Sunday's and it would be easier, therefore, to fill in the correct sheet. Thirdly, from an administrative point of view the survey was much easier to carry out, e.g. the possibility of putting Wednesday's meal sheet into Thursday's envelope was lessened.

The actual meal sheet used in the main survey was very similar to that used successfully during the first period. It differed in only three respects. First, it was printed. Secondly, the question 'What did you and your family eat for the first-fifth meal today?' was changed to 'What did you and your family eat for the first-fifth meal at home today?'. School dinner and husband's canteen meals, for example, were not re-quired. It was unlikely that the housewives could accurately gain this type of information and it could, therefore, lead to confusion. Finally, the need for detail was emphasised, by capi-talising the sentence, 'Please give AS FULL DETAILS AS POSSIBLE'.

Throughout the survey it was thought necessary to involve the respondent and convince her that the exercise was both impor-tant and very useful. Participants received three communications in each of the survey periods. The first letter arrived with the first meal sheet and reminded her of the procedure to be followed and thanked her for her interest. The second arrived with Satur-day and Sunday's meal sheets and reminded her to fill in the appropriate sheet, and said how well the survey was going. The third thanked her for taking part so successfully in the survey, and in the case of the first survey, reminded her that the Uni-versity would be contacting her at a later date for the second survey. Finally, the personalised approach was enhanced by use of postage stamps rather than franking. Again the attempt was to move away from the 'circular' image. The importance of the survey was stressed in the press and radio. Articles describing the survey appeared in the local paper, "The South Shields Gazette", "The Newcastle Journal", and the "Daily Mirror", and there was an interview on Radio Newcastle that described the aims

and objectives of the survey.

To reward respondents for their completed participation
they were offered a chance in a 'prize draw'. In the first
survey, if the respondent posted back the 14 correctly completed
meal sheets she became eligible for the draw. The serial num-
bers of these respondents were placed in a box and eight of the
numbers were drawn. Each of these eight received £10. This
proved an incentive that was both popular with respondents and
with the press. Photographs of smiling housewives receiving
prizes could only increase interest in the survey. A very simi-
lar procedure was carried out for the second survey, but in this
case there were more and larger prizes. On completion of the
first survey the housewife was told of the increased prizes that
could be won if she agreed to carry out the second survey. The
first number drawn in the second survey received £50, the next
four received £8 and the next eight £5 each. The winning numbers
in each competition were published in the "South Shields Gazette"
on a day indicated to respondents in the letter thanking them for
their participation. The total cash paid out in both draws was
£202. This represents a cost of about 33p/person/survey success-
fully completed. Other experience confirms the use of a prize
draw as the most cost-effective incentive method for panel work[1].

The choice of starting dates for the two surveys was crit-
ical as there is considerable variation in purchases of food
over the year. Table 27 illustrates seasonal variation in demand

Table 27: Mean Seasonal Variation in Purchases for
Four Meats (average for whole period = 100)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Pork Purchases	109	108	105	103	100	84	87	89	104	107	100	106
Beef & Veal Purchases	109	108	104	103	91	88	85	93	97	107	108	111
Mutton & Lamb Purchases	101	96	96	97	102	103	103	104	109	100	96	95
Broiler Chicken Purchases	88	100	106	101	102	99	106	105	100	99	103	94

Source: Domestic Food Consumption and Expenditure.
Annual Report of the National Food Survey
Committee.

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[1] D. J. Yielding and I. R. Haldane. 'An Incentive Test',
Journal of Market Research Society, Vol. 15, No. 2, April
1973, pp. 101-111.

for individual meats. For example, purchases of beef and veal
are high in the winter months (October-March) but slacken in the
summer (May-September). The problem was to choose two periods
that maximised differences in consumption of food and particu-
larly meat, whilst avoiding such occurrences as national and
school holidays. Holiday eating might not be typical and at
such times the respondent would have less opportunity to fill
in the meal sheet.

The two periods chosen were the 13th to 26th March and the
3rd to 16th July. Between these periods the National Food Con-
sumption Index showed differences of 21, 17 and 9 index points
in purchases of pork, beef and veal, mutton and lamb, respect-
ively. Further they were thought to represent reasonably
typical summer and winter periods.

South Shields was chosen as the area to be surveyed. Many
towns in the Tyne Tees Independent Television area, which is
popular for test marketing may have been over-researched, but
South Shields tends to be avoided by the market research firms.
It is popularly thought that being a seaport the town would
have a very mobile population and also a high proportion of
immigrants. This did not, however, in practice appear to be
the case.

Three hundred and seventy respondents were successfully
recruited using the questionnaire shown in Appendix A, Section
A. The actual addresses visited were found by the random walk
technique, and respondents were all recruited in the week
before the meal sheet survey was due to begin. Introductory
questions established whether the housewife normally cooked the
food for the family. If the answer was 'no' then the interview
was discontinued. Each interviewer had a specimen meal sheet
and used it to explain to the respondent what would be involved
if she agreed to take part in the survey. If she agreed to
participate the interviewer used the specimen meal sheet again
and wrote down with the respondent the meals that she and her
family had at home the day before as an example. The need for
as full details as possible was emphasised and the postal pro-
cedure was more fully explained. Section B of the questionnaire
gained names and addresses and the necessary classificatory data.
Finally, the respondents were asked to complete a series of un-
finished sentences for the attitude research which was reported
in Part I. Interest in the proposed survey was very high and
little difficulty was encountered in recruiting a sample of the
required size.

Each respondent received her first meal sheet on the 13th
March. Three hundred and thirty-four respondents successfully
completed at least 12 of the 14 meal sheets. This represents a
response rate of 90%.

In the week preceding the 3rd July, interviewers re-visited the 334 respondents who had successfully completed the first survey. Of these, three hundred were willing to take part in the second survey. The procedure was then repeated, with the exception of the attitude research, and resulted in two hundred and thirty-two successfully completed sets of 'meal sheets', a response rate of 63% over the two periods.

(b)   Results

   (i)   Breakfast

   Breakfast is the most well attended of all meals eaten at home (Table 28). However it is not the traditional English breakfast. On weekdays only 43% of husbands, 32% of children and 25% of housewives had a cooked breakfast (figures averaged over the two survey periods). These figures rise to 63%, 50% and 45% respectively at the week-end. An interesting pattern emerges for those cooked breakfasts which were eaten over the week (Fig. 1). On Monday mornings few people seem to have time for a cooked breakfast, but the numbers increase and peak for

Table 28:   Percentage of Sample not present at each Meal over the two Survey Periods

% Absent from each meal	Housewives	Children	Husband
Breakfast			
Survey 1	5.87	1.3	14.71
Survey 2	4.76	0.5	16.57
Average	5.32	0.9	15.64
Midday meal			
Survey 1	7.08	10.51	49.47
Survey 2	8.62	9.71	56.13
Average	7.85	9.84	52.8
Evening meal			
Survey 1	9.6	3.91	18.29
Survey 2	11.04	3.28	22.31
Average	10.32	3.6	20.3
Supper			
Survey 1	15.86	14.51	21.12
Survey 2	17.45	12.76	24.84
Average	16.66	13.64	22.98

Fig 1: PERCENTAGE OF BREAKFASTS THAT WERE COOKED BREAKFASTS FOR EACH DAY OF THE 2 SURVEY PERIODS.

Percentage

Survey 1	Average percentage of sample having a cooked breakfast	(a) Weekday	(b) Weekend
Husband		45.69%	62.80%
Children		35.13%	53.00%
Housewives		25.46%	46.89%

Survey 2	Average percentage of sample having a cooked breakfast	(a) Weekday	(b) Weekend
Husband		40.33%	62.68%
Children		27.96%	47.15%
Housewives		24.91%	43.08%

First Survey March

Second Survey July

38
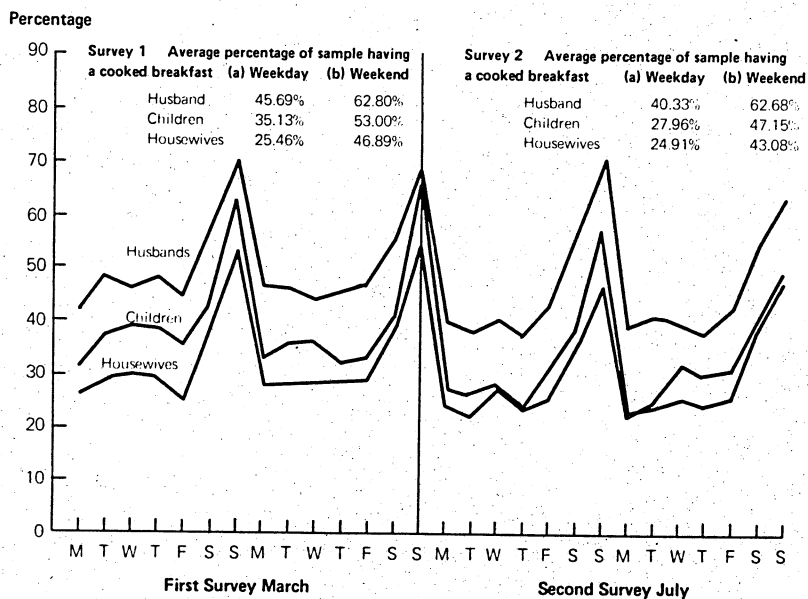
week-days on Wednesday, and then decline to Friday. There is then the dramatic increase over the week-end.

Cooked breakfasts, as might be expected, were more frequent during the first winter survey than over the second, summer period. However this was only for husbands and children. Only a quarter of all housewives had a cooked breakfast in the winter but this did not decline during the summer. Presumably housewives think that their husbands and children 'need' a cooked hot meal in winter before going out to work or school, whereas a snack is quite sufficient for themselves, at any time of the year.

The majority of uncooked breakfasts consumed by housewives and husbands were simply tea or coffee and toast or bread. Fruit was quite popular with housewives. If children had an uncooked breakfast it was most likely to be cereals and a cup of milk or tea. The types of cooked breakfast consumed over the two periods are shown in Figs. 2, 3 and 4. Of all meals cooked breakfasts were the most difficult to code as it was common for respondents to have had more than 1 major item, e.g. sausage and bacon, egg and sausage or egg and bacon. Therefore, the egg dishes, although in the main solely egg, do contain an element of meat, particularly sausage and bacon.

Eggs were most frequently eaten by children. Over the four week period breakfasts with eggs as the basis accounted for between 65-80% of all cooked breakfasts eaten by children. The range for housewives was 60-70% and for husbands 65-75%. Sausage and bacon, on the other hand, were more frequently consumed by housewives and their husbands. These two food groups accounted for the vast majority of all cooked food consumed at breakfast time. The small category 'all other' included kippers, fish fingers, cold meats and even a few bizarre entries, such as lamb chops and chicken.

(ii) Midday meal

The midday meal at home is especially a mother-and-small-children occasion, as husbands are at work and older children have school 'dinners'. However, although this was a meal that husbands least attended, almost 50% of them were present.

Meat eating habits must be examined in two parts, Monday to Saturday, and Sunday alone. On Sunday at least 95% of all housewives, children and husbands ate a meat meal (Figs. 5, 6 and 7). This illustrates the importance of the Sunday joint which persists even with escalating meat prices. Earlier group interviews had shown the strong association between the Sunday roast, 'all the family together', and 'plenty of time to prepare, cook and eat the meal in a relaxed atmosphere'. Sunday lunch was a

Fig 2: TYPES OF COOKED BREAKFASTS EATEN BY HOUSEWIVES EACH DAY OF THE TWO SURVEY PERIODS

First Survey March

Second Survey July

All other

Bacon or Sausage

Egg
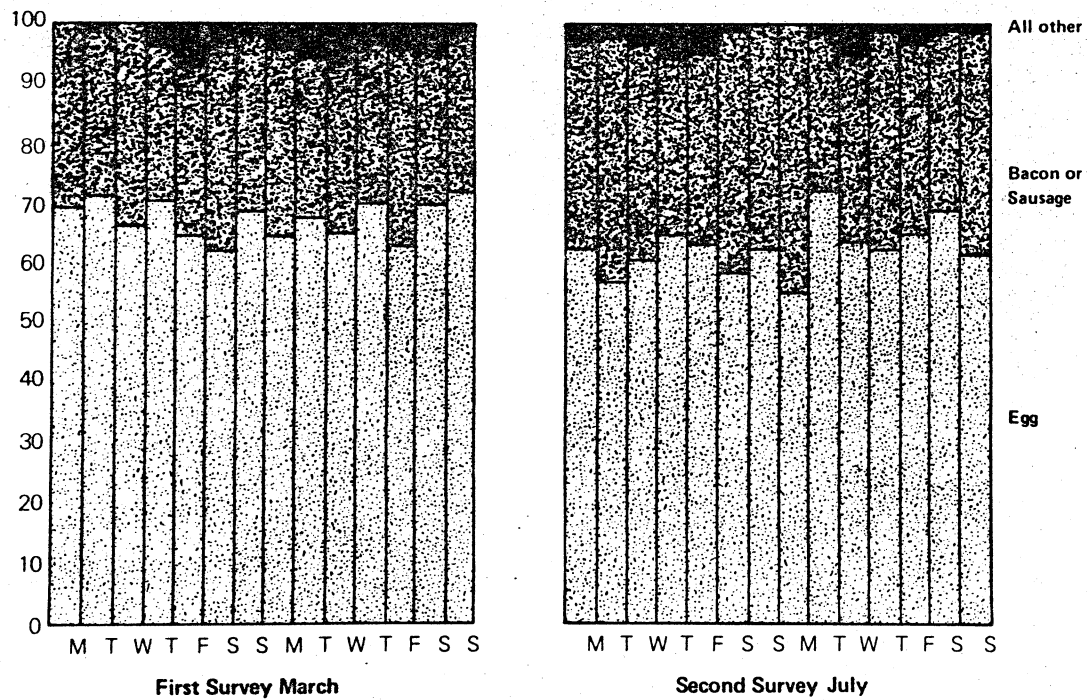
Fig 3: **TYPES OF COOKED BREAKFAST EATEN BY CHILDREN EACH DAY OF THE TWO SURVEY PERIODS**

First Survey March

Second Survey July

All other

Bacon or Sausage

Egg

41
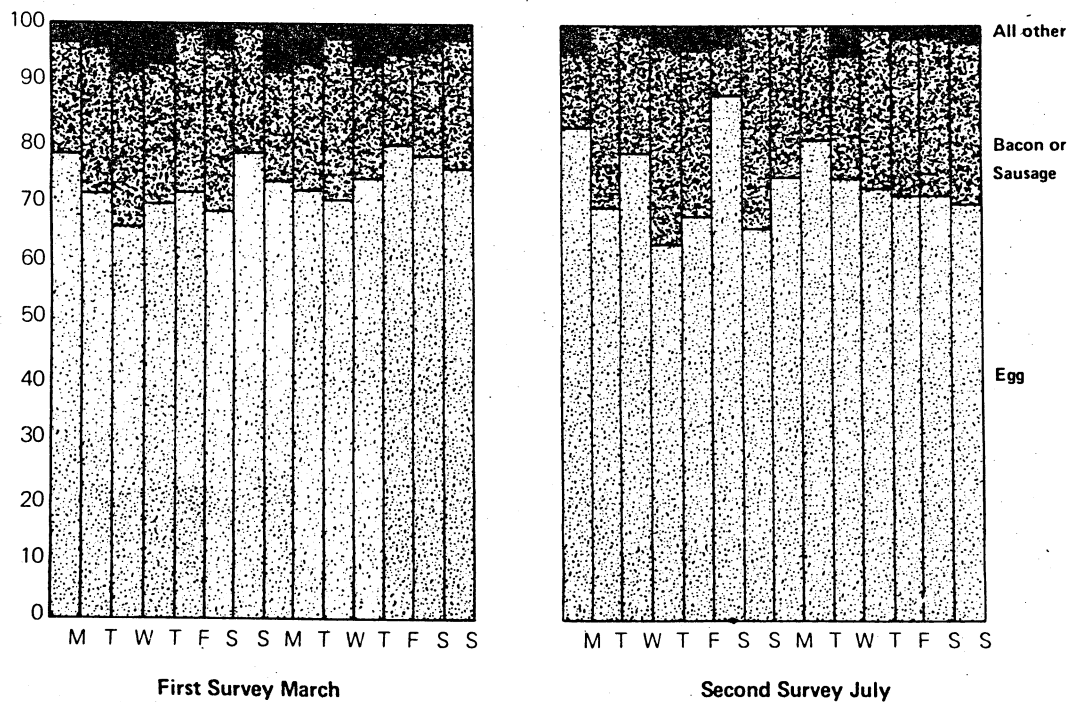
Fig 4: TYPES OF COOKED BREAKFASTS EATEN BY HUSBANDS EACH DAY OF THE TWO SURVEY PERIODS

First Survey March

Second Survey July

All other

Bacon or Sausage

Egg

42
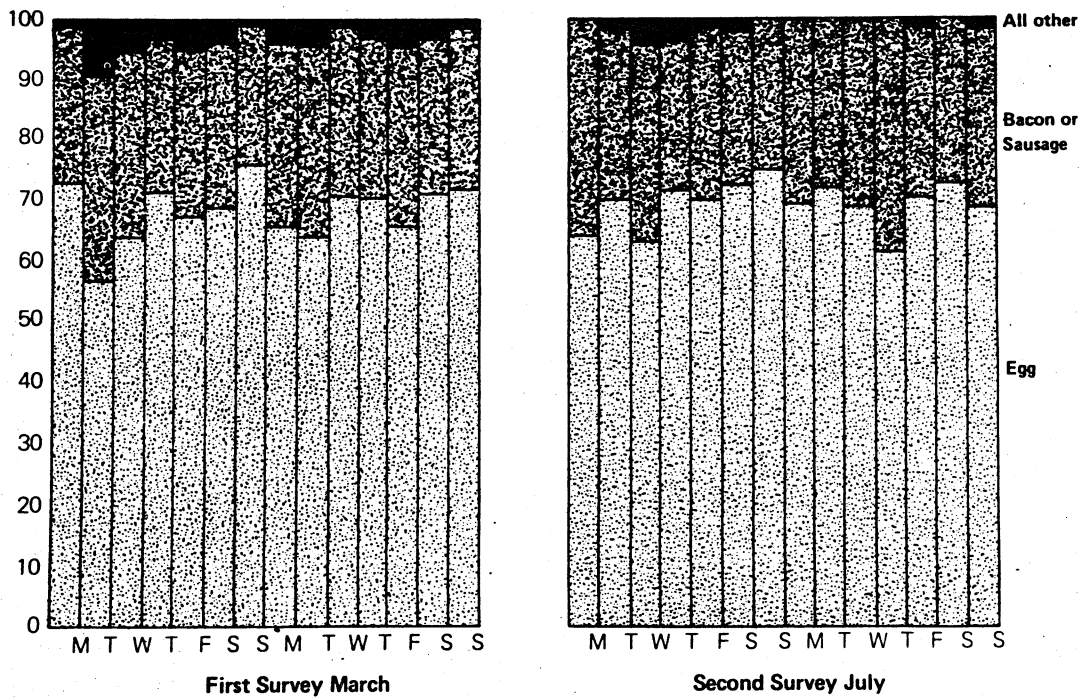
meal that was pleasurably anticipated all week.

Over the Monday-Saturday period about 58% of housewives' lunches were meat meals. Monday was the 'meatiest' of mid-week days, as the Sunday roast was rehashed and either eaten cold or, for example, minced and used in shepherd's pie. Friday, on the other hand, had the lowest frequency of meat meals. In many cases fish was substituted. 'Friday is fish day' is obviously a tradition that persists very strongly in the North East, and fish is also popular on Saturday. One may presume, that in an area with a strong working class community, much of the fish consumed is bought from the 'fish and chip shop'. This emerged from group interviews. The evidence suggests that Saturday morning is a big shopping morning and to save time and to give the family a treat, the housewife buys 'fish dinners' on her way back from the shops. On average, 12% of all housewives' lunches through the week were based on some sort of egg dish, whilst only 4% had cheese as the major ingredient.

Children, on average, had slightly more meat-type lunches over the Monday-Saturday period than their mothers (63% compared with 58%). Generally, however, their eating patterns were very similar, although there were some notable differences. Children did not seem to like having the Sunday roast rehashed on Monday, and more probably ate eggs. Over the two survey periods they had slightly more egg lunches than their mothers, but cheese was certainly not popular and, on average, accounted for an insignificant percentage of children's lunches.

Husbands eat almost 10% more meat midday meals than their wives (67% of all lunches). As with the children, very few ate cheese meals and even fewer had eggs for lunch; especially during the winter period. Nevertheless, generally the man had the same eating pattern as his wife. Meat meals were, for women, children and men more common in the early part of the week, dipped to a low on Friday and then rose high over the week-end.

Types of meat eaten have also been categorised into Sunday, and Monday to Saturday groups. The traditional roasts account for almost all meat consumption at Sunday lunch (Table 29). Beef is the most popular followed by lamb and poultry with pork some way behind. There is some suggestion that children were eating less beef than their parents and more poultry. In some cases it would seem that some housewives with the larger families, aware of the high price of beef, bought chicken for the children and a small piece of beef for themselves and their husbands. This was mentioned by some housewives in the preliminary group interviews. The type of meat eaten for Sunday lunch varied with the time of year (Table 30). Beef was more popular in the March survey, whilst lamb was more popular in July as supply of English lamb

Fig 5:

THE PATTERN OF HOUSEHOLD FOOD CONSUMPTION EACH DAY OF THE TWO SURVEY PERIODS

(i)   Housewives: Mid-day meal

Survey 1 March

Survey 2 July
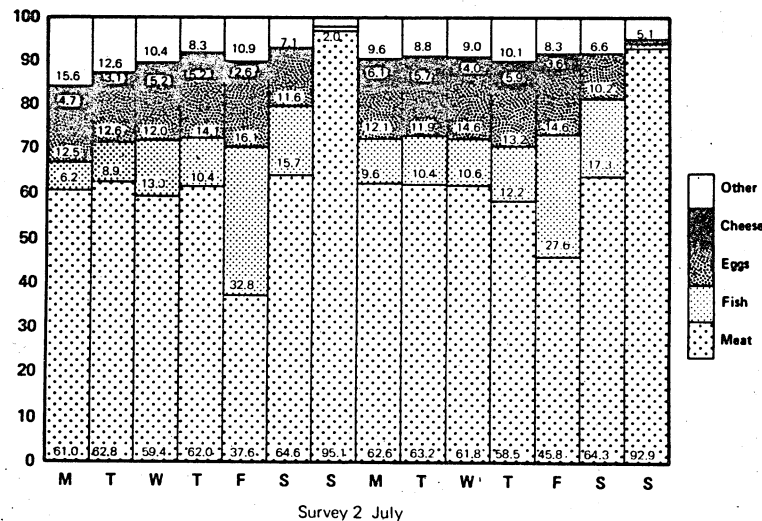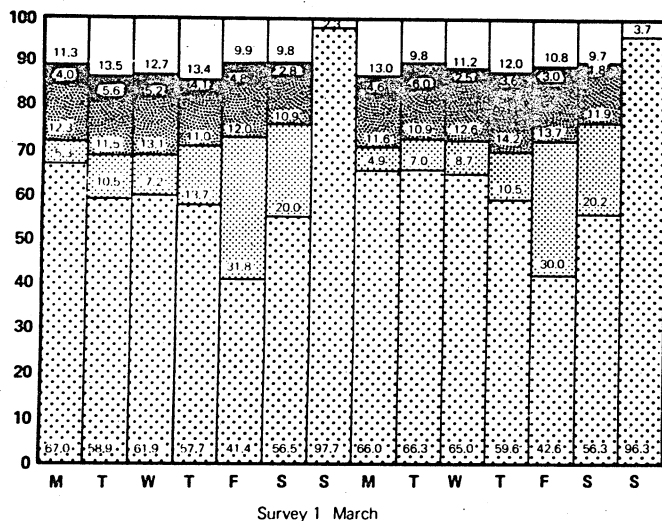
Fig 6: THE PATTERN OF HOUSEHOLD FOOD CONSUMPTION EACH DAY OF THE TWO SURVEY PERIODS

(ii) Children: Mid-day meal

Survey 1 March

Survey 2 July

Other
Cheese
Eggs
Fish
Meat
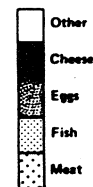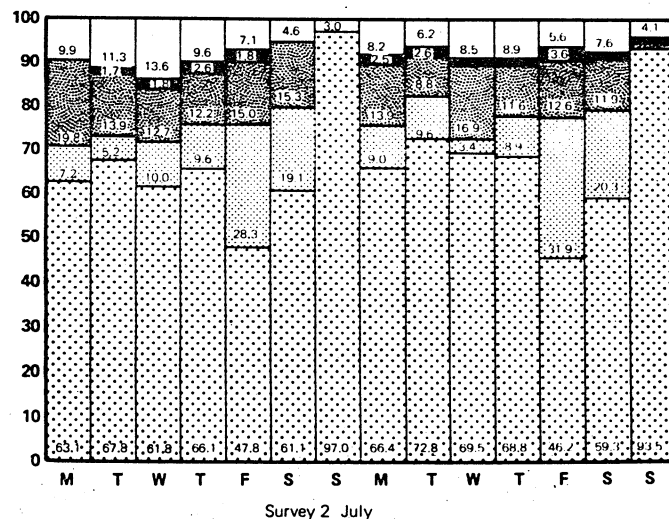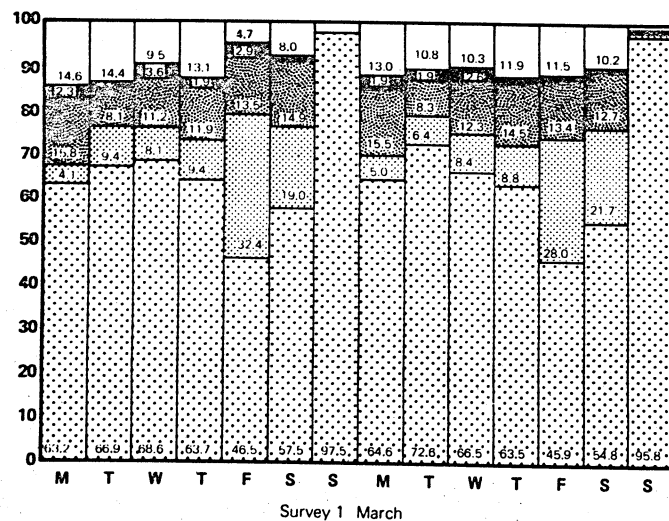
Fig 7: THE PATTERN OF HOUSEHOLD FOOD CONSUMPTION EACH DAY OF THE TWO SURVEY PERIODS

. (iii) Husbands: Mid-day meal
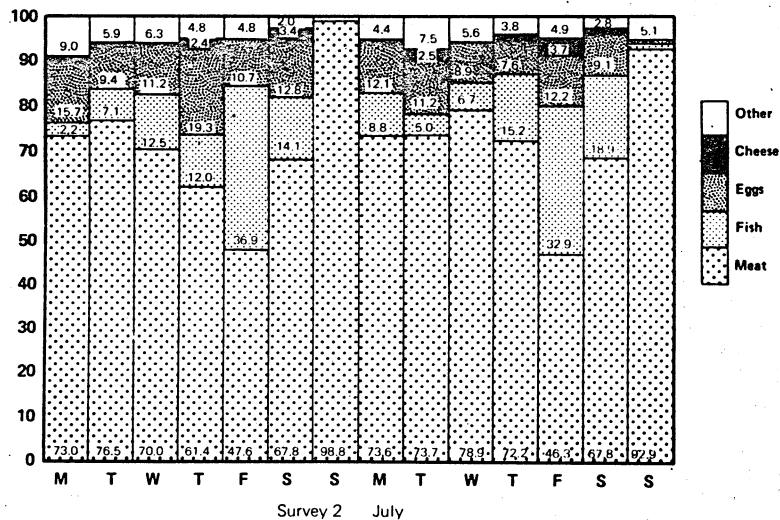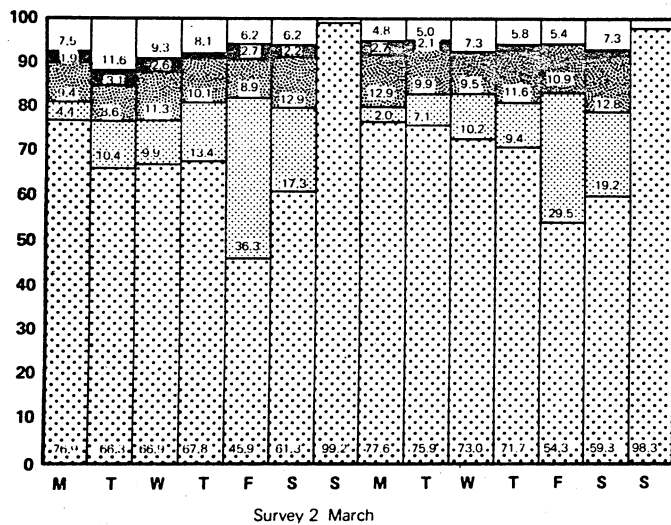
increased. More pork was eaten in March, showing that the traditional fear of eating pork when there is not an 'R' in the month still exists. This difference reflects those shown nationally (Table 27). However, considerably more poultry was eaten in the second period; doubtless this was partly brought about by chicken being substituted for beef as beef prices soared over the five month period.

Table 29: Household Consumption of Meat (by meat type) over the two Survey Periods

Midday meal

%	Mother		Children		Husband	
	Weekday	Sunday	Weekday	Sunday	Weekday	Sunday
Beef	20.7	31.0	20.8	28.4	21.9	30.2
Pork	5.4	14.0	4.2	15.4	6.5	15.1
Bacon	8.6	1.2	6.9	1.2	8.9	0.7
Lamb	7.4	24.8	6.1	23.5	7.3	24.8
Poultry	6.6	23.2	6.4	26.2	6.8	24.0
Meat unspecified	5.2	1.6	4.7	1.9	5.8	1.2
Processed meat	10.4	1.8	11.8	1.3	7.9	1.5
Meat pies	20.4	1.8	20.9	0.9	19.6	2.0
Sausages	10.5	0.2	14.2	0.8	10.2	0.1
Liver	4.8	0.4	4.0	0.4	5.1	0.4
Total	100	100	100	100	100	100

Types of meat eaten on weekdays are also shown in Table 29. The most remarkable feature is the number of meat pies consumed. These accounted for, on average, about 20% of total meat midday meals eaten by housewives, children and husbands. In the vast majority of cases these were pies bought from a shop. They included steak and kidney, mince, steak, meat and potato pie and meat pasty. Processed meats, such as corned beef, spam, chopped ham, pork and the like accounted for another 10% of meat meals and sausages for a further 10%. The latter were particularly popular with children while processed meats least often made the husbands' lunch. Thus about 40% of husbands' and wives' and almost 50% of children's meat lunches were accounted for by meat bought in prepared form. Of the fresh meats, beef was the most popular and this was mostly mince and stewing steak. Surprisingly, bacon was eaten at midday more often than lamb, pork or chicken. 'Meat unspecified' includes the responses of those housewives who gave insufficient detail, for example, 'meat and vegetables' or 'chop

Table 30: Comparison between the two Survey Periods
of Meat Types eaten by Households for
Midday Meals

	Weekdays						Sunday					
	Mother		Children		Husband		Mother		Children		Husband	
% Survey	1	2	1	2	1	2	1	2	1	2	1	2
Beef	21	21	23	19	24	20	33	29	33	24	35	26
Pork	6	5	4	4	7	6	16	12	18	13	17	14
Bacon	8	9	7	7	8	10	1	1	1	2	1	1
Lamb	6	8	5	7	6	9	24	26	23	24	23	27
Poultry	7	6	7	6	7	7	20	26	21	31	19	29
Meat unspe- cified	6	5	6	4	6	5	2	1	2	2	2	0
Processed meat	9	12	9	14	7	9	0	3	0	2	0	2
Meat pies	21	20	20	21	20	19	3	1	1	1	3	1
Sausage	11	10	15	14	10	10	0	0	0	1	0	0
Liver	5	4	4	4	5	5	1	1	1	0	0	0
Total	100	100	100	100	100	100	100	100	100	100	100	100

and chips'. About 5% of meat meals were accounted for by liver,
which was mainly eaten by adults. Seasonality of weekday meat
consumption was similar to that shown for the Sunday roasts but
was by no means as well marked (Table 30). The only notable
point was the increase in usage of processed meat during the
summer survey period.

The twelve most frequently reported individual items of
foodstuff are shown in Table 31. Stewing steak and mince were
the most popular fresh meat dishes. Interestingly steak was
eaten more by husbands and even children than by the housewife.
This substantiates results of the unfinished sentence survey
that 'men need meat, and especially steak, more than their
wives'. In the summer survey chicken and boiled ham were popu-
lar with all members of the family, probably eaten with salad,
whilst soup was less popular than in the winter. Cheese only
appeared in the housewives' lunch list, beefburgers were popular
with children and lamb chop was the most frequently reported
fresh meat cut other than beef for all 3 groups. Finally, pro-
cessed fish products (fingers and cakes) were more a winter type
mid-week lunch and most popular with children.

(iii) Evening meal

The evening meal, is the most substantial meal of the day,
for husbands but housewives thought that for themselves or the
children, it was less important.

For the housewife between 40-50 per cent of the evening
meals over the two survey periods were based on some sort of meat
cut (Fig. 8). However, on Sunday, when the main meal was lunch,
the percentage was much lower (25-35%). Cheese meals were more
popular than they had been at the midday meal, accounting on
average for over 9% of all evening meals from Monday to Saturday
and 13% for Sundays. Egg dishes were also more popular in the
evening (12%). Interestingly, eggs were eaten more frequently
during the March survey than over the June survey (9% compared
with 6%) and this trend was also true for both children and
husbands. 'All other' accounted for a much higher percentage
than it had for the midday meal. This category, in the main,
covered the 'English tea-time', i.e. tea and cakes, or jam sand-
wiches and a light sweet. Once again, Friday was overwhelmingly
the accepted 'fish day', whilst Monday and Sunday were not.
White fish was eaten from Monday to Friday and 'luxury fish',
salmon, tuna, and other tinned fish on Saturdays and Sundays.

Children eat a slightly higher percentage of meat meals
than do their mothers (45-55 per cent from Monday to Saturday
and 30-40 per cent on Sunday, Fig. 9). However they were as
likely as she to have an afternoon tea meal. Over 20% of all
evening meals did not have a protein food base. Sunday and Monday
were the most popular days for this type of meal. Cheese was less
popular with children during the week but was acceptable for Sun-
day tea. It accounted for over 12% of Sunday evening meals for
mothers, children and husbands. Children ate similar proportions
of egg meals as their mothers and fish was also for them a Friday
dish.

Husbands ate a much higher percentage of meat evening meals
than did their children and, a fortiori, their wives (in the
range 50-65 per cent for Monday to Saturday and 30-40 per cent
for Sunday, Fig. 10). Only meat met the requirement of a sub-
stantial meal after a day's work. Generally, the husband's con-
sumption of any of the four basic protein foods was higher than
that of his wife. Either housewives have a genuine dislike for
these dishes or deny themselves for the sake of their families.
Cheese and egg dishes are eaten as frequently by the father as
by his children throughout the week. However, fish is a more
popular Friday evening meal with the husband than with the rest
of his family; 20% of all Friday evening meals as opposed to 15%
for his wife and children; presumably because more mothers and
children had fish for Friday lunch whilst the husband's portion
was saved for when he returned from work.

Table 31: The Twelve most frequently Consumed Foodstuffs
over the Two Survey Periods - Monday to
Saturday (in order of frequency of mention)

Midday meal

		Survey 1	Survey 2
(a) Mother			
	1	Meat pies	Meat pies
	2	Soup	Fish
	3	Mince	Boiled ham
	4	Egg dishes	Sausage
	5	Sausage	Mince
	6	Fish	Liver
	7	Bacon/liver	Egg dishes
	8	Stewing steak	Lamb chop
	9	Lamb chop	Chicken
	10	Fish cakes/fingers	Roast beef
	11	Meat	Roast pork
	12	Cheese	Soup
(b) Children			
	1	Meat pies	Meat pies
	2	Soup	Mince
	3	Mince	Sausage
	4	Egg dishes	Beefburgers
	5	Sausage	Egg dishes
	6	Fish	Fish
	7	Fish cakes/fingers	Chicken
	8	Stewing steak	Soup
	9	Beefburgers	Boiled ham
	10	Lamb chop	Liver
	11	Liver	Roast pork
	12	Steak	Lamb chop
(c) Husband			
	1	Meat pies	Meat pies
	2	Fish	Fish
	3	Sausage	Mince
	4	Mince	Egg dishes
	5	Soup	Lamb chop
	6	Egg dishes	Sausage
	7	Stewing steak	Chicken
	8	Steak	Stewed steak
	9	Lamb chop	Liver
	10	Liver	Boiled ham
	11	Meat	Steak
	12	Fish fingers	Roast lamb

Fig 8 : THE PATTERN OF HOUSEHOLD FOOD CONSUMPTION EACH DAY OF THE TWO SURVEY PERIODS

(iv) Housewives: Evening meal

Survey 1 March

Survey 2 July

Other
Cheese
Eggs
Fish
Meat
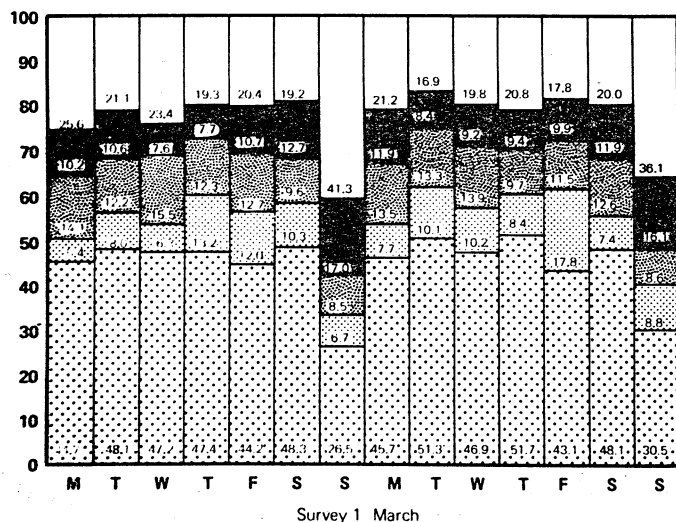
Fig 9 : THE PATTERN OF HOUSEHOLD FOOD CONSUMPTION EACH DAY OF THE TWO SURVEY PERIODS

(v) Children: Evening meal
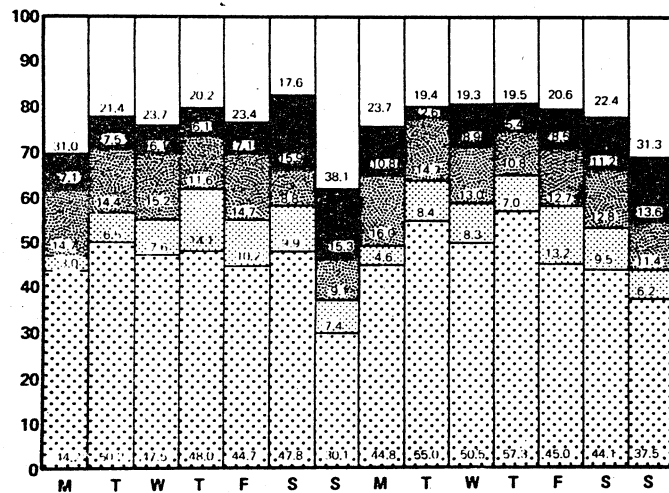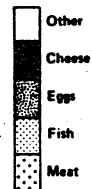
Fig 10: THE PATTERN OF HOUSEHOLD FOOD CONSUMPTION EACH DAY OF THE TWO SURVEY PERIODS

(vi) Husbands: Evening meal

Survey 1 March

Survey 2 July
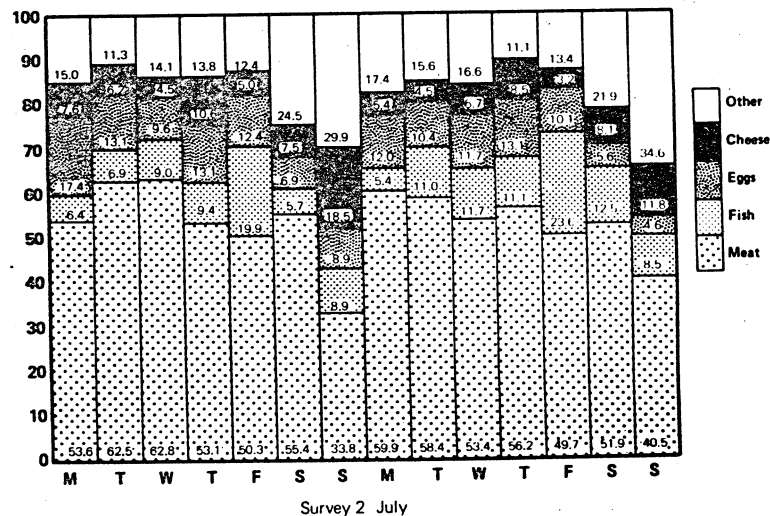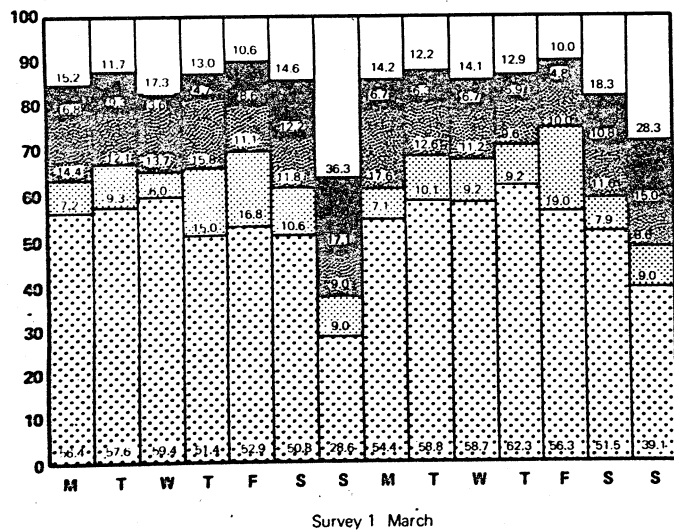
The types of meat eaten at the evening meal are shown in
Table 32. Again the figures are reported as Monday-Saturday and
Sunday alone. Beef was the most popular mid-week fresh meat meal
followed by pork, poultry and lamb for all members of the family.
On a Sunday, however, the positions were virtually reversed and
took the order poultry, lamb, beef or pork. Much of this meat
was the remains from the Sunday joint on which the husband had
the first claim as his frequency of consumption is slightly
higher than the rest of his family. The low position of beef is
surprising as it was the most frequently consumed Sunday joint
(Table 29). Thus beef joints are either finished at one sitting
or are re-used for sandwiches taken out of the home, or as a
second meal on Monday. From Monday to Saturday bacon accounts
for between 8 and 9 per cent of all meat meals for all people but
this drops to 4-5% on Sunday.

Table 32: Household Consumption of Meat (by meat type)
over the Two Survey Periods

Evening meal

%	Mother		Children		Husband	
	Weekday	Sunday	Weekday	Sunday	Weekday	Sunday
Beef	14.4	4.8	14.4	6.3	16.7	8.6
Pork	7.8	6.7	6.6	4.8	7.2	6.4
Bacon	8.3	4.2	7.9	4.1	8.7	5.1
Lamb	5.1	8.2	4.7	7.9	5.8	10.4
Poultry	6.7	12.1	6.0	12.2	7.2	11.8
Meat unspecified	4.4	6.8	4.5	7.2	5.2	9.2
Processed meat	27.9	38.5	27.0	34.9	22.7	34.1
Meat pies	12.0	9.1	13.0	10.2	12.9	7.1
Sausages	9.7	9.6	12.1	12.4	9.2	7.3
Liver	3.7	0.0	3.8	0.0	4.4	0.0
Total	100	100	100	100	100	100

The outstanding feature of evening meals, as of midday meals,
was the importance of prepared meat. Processed meats accounted
for 28% of meat meals for mother and children and 23% for the hus-
band during the Monday to Saturday period, and on Sunday the fig-
ures rose to 38 and 34 per cent respectively. Meat pies were
again very popular, averaging between 12 and 13% for all people
through the week, and on Sunday 9-10% for mothers and children,
and 7% for husbands. Similarly, frequency of sausage-based meals
was high and especially for children; 12% of all meat evening

meals over the whole week. Even if one adds the percentage of
meat which the respondents did not specify to the total for speci-
fied fresh meat, then the figures still indicate that for mothers
and children less than 40 per cent of all meat meals have any
element of fresh meat in them. For the husband the figure is only
slightly higher at under 45%.

Seasonality of meat type consumption is shown in Table 33.
It is notable that pork, particularly for the Sunday evening meal,
was more popular in July than in March. This can be explained by
the fact that July is the salad season and pork is a popular cold
cooked meat, for this purpose, that can be bought by the slice in
the grocer's shop. Consumption of processed meat meals is gene-
rally higher in the second survey period, once again indicating
its use as a salad meat.

Table 33: Comparison between the two Survey Periods
of Meat Types eaten by Households for
Evening Meals

| | Weekdays | | | | | | Sunday | | | | | |
| | Mother | | Children | | Husband | | Mother | | Children | | Husband | |
% Survey	1	2	1	2	1	2	1	2	1	2	1	2
Beef	16	12	16	12	19	15	6	4	5	8	9	9
Pork	7	8	5	8	6	8	3	10	2	8	5	7
Bacon	9	7	9	7	9	9	5	3	5	4	6	4
Lamb	5	5	5	4	5	6	8	9	8	8	10	10
Poultry	7	6	6	6	7	7	8	16	8	16	7	17
Meat unspe-cified	5	4	5	4	6	5	7	7	6	8	12	6
Processed meat	25	32	23	31	20	25	40	37	42	28	35	34
Meat pies	13	12	14	12	14	12	10	8	10	10	7	7
Sausage	10	10	13	12	10	9	13	6	14	10	9	6
Liver	3	4	4	4	4	4	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100	100	100	100	100

The twelve most frequently mentioned individual items of food
at the evening meal are shown in Table 34. One may note that
mothers and children eat more fruit as the main part of the evening
meal whereas presumably this was not considered substantial enough
for the husband, and more reference was given to such fillers as

Table 34: The Twelve most frequently consumed Foodstuffs
over the Two Survey Periods (in order of
frequency of mention)

Evening meal

		Survey 1	Survey 2
(a) Mother			
	1	Egg dishes	Bread and cakes
	2	Bread and cakes	Cheese
	3	Cheese	Fruit
	4	Boiled ham	Boiled ham
	5	Fish	Fish
	6	Fruit	Salad
	7	Salmon (weekend tea)	Egg dishes
	8	Meat pie	Chopped ham and pork
	9	Sandwich	Salmon (weekend tea)
	10	Mince	Chicken
	11	Cheese sandwiches	Corned beef
	12	Sausages	Sausages
(b) Children			
	1	Bread and cakes	Bread and cakes
	2	Fruit	Fruit
	3	Egg dishes	Boiled ham
	4	Cheese	Cheese
	5	Boiled ham	Sausage
	6	Meat pie	Egg dishes
	7	Fish	Fish
	8	Sausages	Salmon (weekend tea)
	9	Sandwiches	Salad
	10	Mince	Chopped ham
	11	Chopped ham	Meat pie
	12	Salmon	Corned beef
(c) Husband			
	1	Bread and cakes	Bread and cakes
	2	Meat pies	Boiled ham
	3	Egg dishes	Fish
	4	Boiled ham	Meat pies
	5	Cheese	Cheese
	6	Fish	Salad
	7	Mince	Salmon (weekend tea)
	8	Cheese sandwiches	Chicken
	9	Liver	Mince
	10	Salmon	Liver
	11	Steak	Fruit
	12	Sausages	Lamb Chops

pies, liver and, in a few cases, steak. Sandwiches were more
popular during the winter survey period whilst salads and the
cold prepared meats, especially for mothers and children, were
typically summer foods. Tinned salmon was eaten by many fami-
lies as a weekend tea-time dish.

(iv) Supper

Supper, the fourth meal of the day, was the least important
for housewives and their children. However it was a relatively
popular meal with the husbands (Table 28).

On average a little over 50% of housewives' suppers had
some sort of protein food base (Fig. 11). Meat meals showed a
definite pattern, from Monday-Thursday they represented only
about 16 per cent of meals eaten, but increased to about 20 per
cent on Friday and 39 per cent on Sunday. Fish meals accounted
for about 8.5 per cent of all suppers. In the main these were
bought from the local fish fryer. Very little fish was eaten on
Sunday, meat meals being by far the most popular. The pointers
from the 'unfinished sentences' survey that cheese was thought a
snack or a supper dish is corroborated; over 15 per cent of all
suppers had cheese as their basis, typically either as a sand-
wich or with crackers and pickle. Eggs were not popular for
this meal, averaging only about 6% of all suppers. The most
frequent mentions were given to coffee or tea and a biscuit,
fruit or cakes.

Children who eat suppers had less protein foods for this
meal than their mothers, averaging less than 40 per cent. Meat
meal consumption again showed a similar pattern to that of their
mothers, but on a lower level, remaining steady at about $11\frac{1}{2}$% of
all suppers from Monday to Thursday and rising from 16% on Fri-
day to 30% on Sunday (Fig. 12).

Eggs were slightly more popular as a supper dish for chil-
dren than they were for their mothers (7% of all suppers). How-
ever cheese was much less popular ($8\frac{1}{2}$% as compared with 15% for
the parent) as was fish ($6\frac{1}{2}$% compared with $8\frac{1}{2}$%). In addition
to coffee, tea or milk, fruit, bread and cakes many children
had breakfast cereal or chips for their suppers.

About 60 per cent of all suppers that were eaten by husbands
contained one or more of the protein foods (Fig. 13). Men eat
more meat meals than their wives and children, averaging 22% of
all suppers taken from Monday to Thursday, and rising from
around 25% on Friday to 45% on Sunday. Cheese was a popular meal.
Again, men most often ate cheese in sandwiches or with a biscuit.
Fish and egg dishes accounted for 8 and 9% respectively of all
suppers.

Fig 11: THE PATTERN OF HOUSEHOLD FOOD CONSUMPTION EACH DAY OF THE TWO SURVEY PERIODS
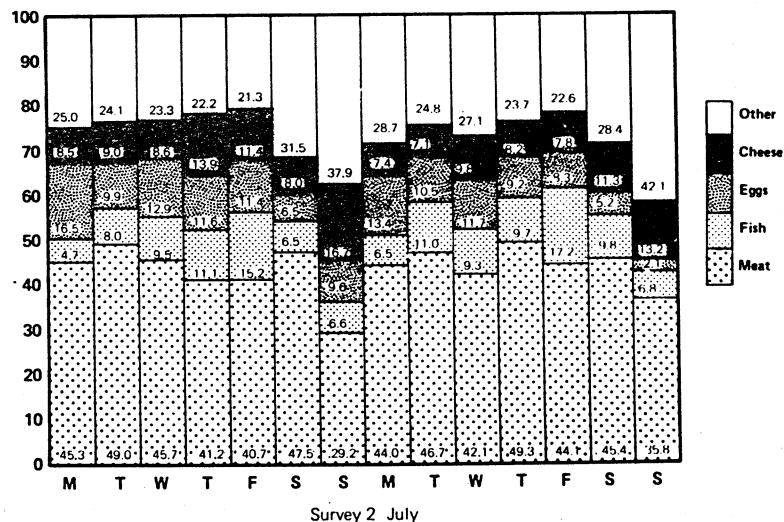
(vii) Housewives: Supper
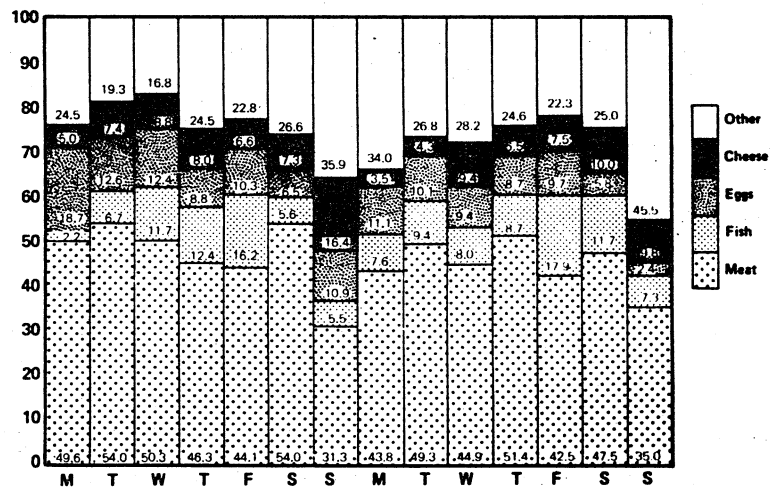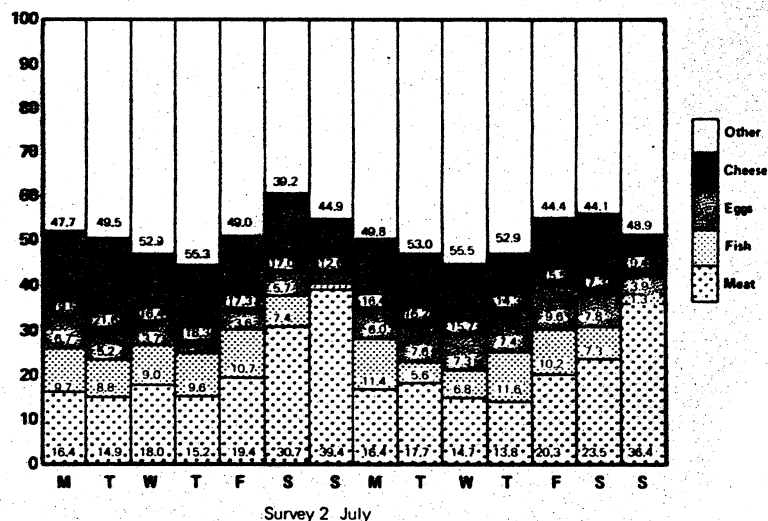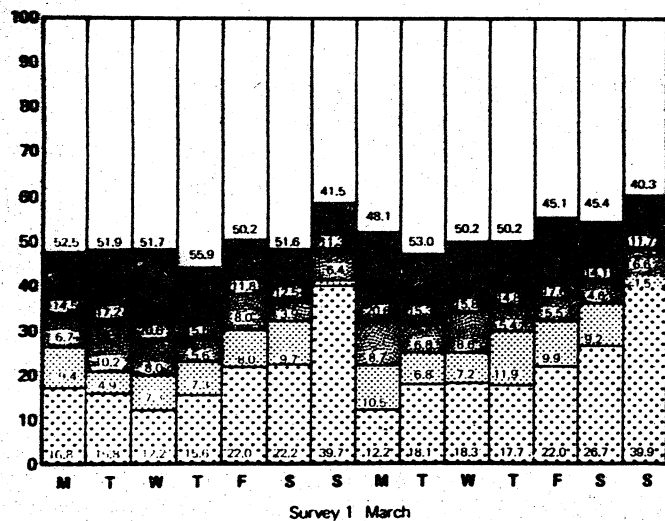
Fig 12: THE PATTERN OF HOUSEHOLD FOOD CONSUMPTION EACH DAY OF THE TWO SURVEY PERIODS

(viii) Children: Supper
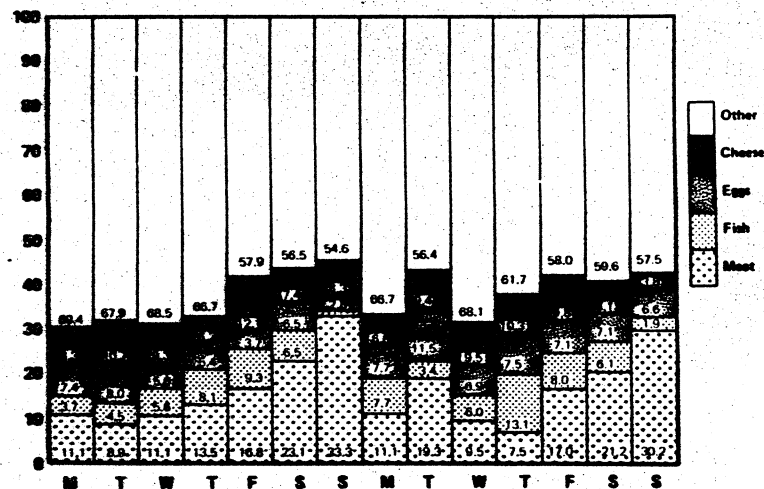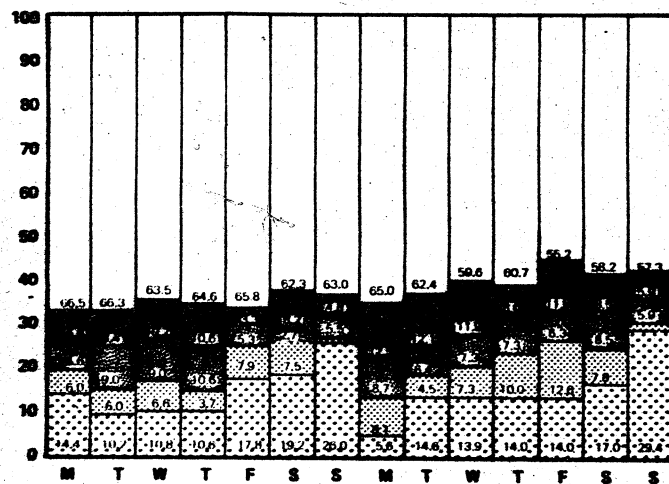
Fig 13: THE PATTERN OF HOUSEHOLD FOOD CONSUMPTION EACH DAY OF THE TWO SURVEY PERIODS

(ix) Husbands: Supper
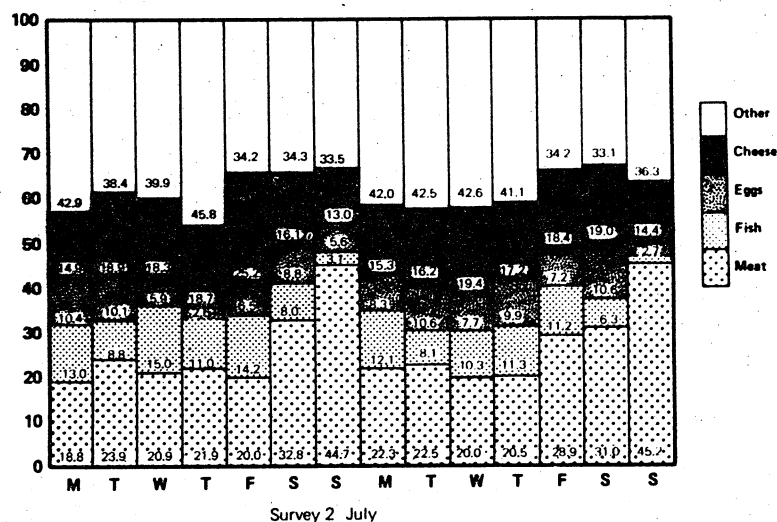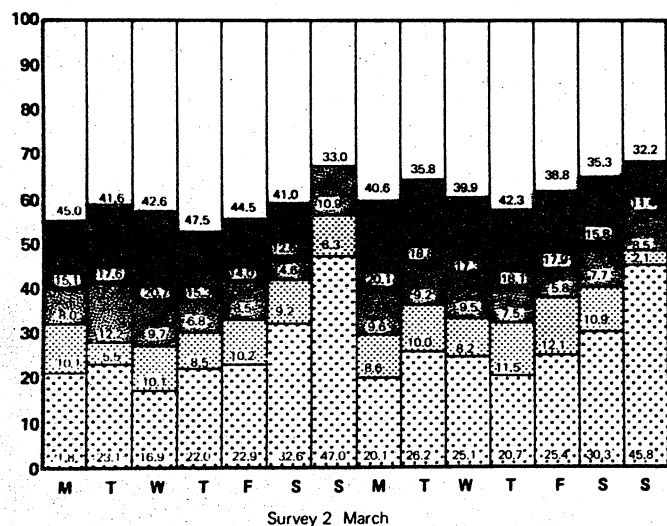
At supper time processed meats and bacon were the two most popular weekday meats, for all members of the family (Table 35). They were most frequently eaten with bread as a sandwich. As with the midday meal and evening meal, meat pies and sausages were eaten by many respondents and their families. Sausages again were the most popular meat dish with children. The traditional fresh meats accounted for only 30 per cent of mid-week meat suppers for the housewife and less than 25 per cent of her children and husband. On Sundays, however, the four 'fresh' meats accounted for over 60 per cent of all meat suppers. Predictably this reflected the re-use of the Sunday joint

Table 35: Household Consumption of Meat (by meat type)
over the Two Survey Periods

Supper

	Mother		Children		Husband	
	Weekday	Sunday	Weekday	Sunday	Weekday	Sunday
Beef	8.6	18.0	7.0	15.0	10.2	18.0
Pork	4.6	10.0	3.5	10.8	4.4	11.4
Bacon	19.8	7.1	18.0	5.1	19.5	8.8
Lamb	2.3	13.7	1.0	13.5	2.9	12.6
Poultry	10.2	23.4	8.2	19.8	9.9	22.2
Meat unspecified	4.6	10.9	4.0	9.5	5.2	9.4
Processed meat	23.5	6.6	19.8	10.8	19.1	6.5
Meat pies	12.8	4.0	15.5	7.6	14.0	4.2
Sausage	12.1	6.3	19.5	7.9	12.9	6.9
Liver	1.5	0.0	3.3	0.0	1.9	0.0
Total	100	100	100	100	100	100

Seasonality of meat consumption at supper is shown in Table 36.

The 12 most popular supper menus are shown in Table 37. Tea and biscuits, and bread or cakes were most frequently eaten of any of the individual foodstuffs. Cheese would seem to be very much a supper snack, by itself or with a sandwich it was popular with housewives, husbands and children.

Cross-tabulations of frequency of consumption by age of respondent and family size indicate that cheese is served least frequently by the younger housewife. The over-sixties exhibit an interesting cheese consumption pattern. Over 11 per cent never eat

Table 36:   Comparison between the Two Survey Periods
            of Meat Types eaten by Households for
            Supper

	Weekdays						Sunday					
	Mother		Children		Husband		Mother		Children		Husband	
% Survey	1	2	1	2	1	2	1	2	1	2	1	2·
Beef	11	6	10	4	11	10	16	20	16	14	18	18
Pork	4	5	2	5	4	5	14	6	14	7	16	7
Bacon	19	21	17	19	19	20	9	5	6	4	11	6
Lamb	2	3	1	1	1	4	12	15	9	18	11	14
Poultry	11	10	9	8	10	10	21	26	18	22	17	27
Meat unspe- cified	3	6	5	3	4	6	10	12	10	9	10	9
Processed meat	23	24	19	21	21	17	9	4	13	9	6	7
Meat pies	13	13	16	15	15	13	3	5	8	7	4	5
Sausage	13	11	20	19	13	13	6	7	6	10	7	7
Liver	1	1	1	5	2	2	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100	100	100	100	100

cheese for supper, however, almost 35 per cent served cheese 16
or more times over the four weeks (Appendix E, Table 1). This
pattern is repeated for tabulation by family size. Families with
only 1 adult, often a single pensioner, again had a relatively
high percentage of non-cheese eaters but also had the greatest
percentage of high consumers of all age groups (Appendix E, Table
2).

     Soups and egg dishes were used in a supper meal in both
survey periods as was also the 'fish-supper' from the 'chip shop'.
Cereals, chips or fruit were foods only for children's suppers,
whilst their parents, and particularly the father, would be more
likely to have a bacon or ham sandwich or perhaps a meat pie at
this time. Sausage was a popular supper dish with most fami-
lies.

     (v)   All Meals

     The findings of the meal sheet survey illustrate three
important factors:

     (1)   Overall frequency of meat consumption by housewives,

Table 37: The Twelve most frequently Consumed Foodstuffs over the two survey periods (in order of frequency of mention)

Supper

		Survey 1	Survey 2
(a) Mother			
	1	Tea and biscuits	Tea and biscuits
	2	Bread and cakes	Bread and cakes
	3	Cheese	Cheese
	4	Fish	Fish
	5	Cheese sandwich	Cheese sandwich
	6	Eggs	Boiled ham
	7	Soup	Sandwich
	8	Sandwich	Sausage
	9	Boiled ham	Egg dish
	10	Bacon sandwich	Chips
	11	Meat pie	Chicken
	12	Chicken sandwich	Salad
(b) Children			
	1	Tea and biscuits	Tea and biscuits
	2	Bread and cakes	Bread and cakes
	3	Cereals	Cereals
	4	Cheese	Chips
	5	Soup	Cheese
	6	Chips	Fish
	7	Fish	Sandwich
	8	Fruit	Eggs
	9	Sandwich	Soup
	10	Eggs	Sausage
	11	Sausage	Baked beans
	12	Cheese sandwich	Fruit
(c) Husband			
	1	Tea and biscuits	Tea and biscuits
	2	Bread and cakes	Cheese
	3	Cheese	Bread and cakes
	4	Fish	Fish
	5	Cheese sandwich	Cheese sandwich
	6	Egg dishes	Egg dishes
	7	Soups	Bacon sandwich
	8	Sandwiches	Boiled ham
	9	Boiled ham	Sausage
	10	Meat pie	Soup
	11	Sausage	Sandwich
	12	Bacon sandwich	Meat pie

children and husbands was lower than perhaps might
have been expected.

(2)   Consumption of fresh meat cuts was very low compared
with consumption of the prepared meats.

(3)   Housewives consumed less meat, and indeed less pro-
tein foods generally, than their children and parti-
cularly their husbands.

Meat was most frequently eaten at the midday meal.   Between
57-67 per cent of all family members eat a meal based on meat of
some sort.   However for the evening meal the range was between
about 45% to 60%.   The unfinished sentences survey identified
the three most competitive strengths that meat had *viz-a-viz* its
competitors.   It was tasty, the most nourishing and substantial
food and was the centre-piece of any main meal.   Considering its
strength in these respects it was surprising that no meat was
eaten at the two main meals of the day, by at least 40% of fami-
lies surveyed.   For about half of all mothers and children the
evening meal, on any one day, was a meatless meal.   Although the
level of meat consumption was generally low the housewives be-
lieved that their husbands needed the nourishment of more meat
meals than they did themselves.   The husbands, therefore, ave-
raged about 10% more meat-based meals.   Children were placed
midway between their parents for frequency of meat meal consump-
tion.

Further, if meat was eaten there was a very strong possi-
bility that it would more often be prepared meats such as corned
beef, boiled ham or chopped ham and pork, than fresh meat pur-
chased from the butcher's shop.   Out of a sample of each of 100
husbands, children and mothers, it would be likely that 27 of
the husbands, 20 of the children and only 18 mothers would have
eaten a dish based on fresh meat as their evening meal.

This can be further illustrated by reference to Table 38.
Of the 16 most popular types of meat consumed, summed over all
meals in the surveyed periods, only five were consumed at all by
at least sixty per cent of all housewives.   These were meat meals
that had as their basis sausages, meat pies, processed meats,
mince or chicken.   It is interesting to note that it was only
these types of meat, with the exception of chicken, that exhib-
ited significant relationships when cross-tabulated with the 4
classifying variables, number of adults and children in the
household, socio-economic class and age of respondent (Appendix
D).

As the number of children in the family increased then so
did the number of mince meals consumed (Appendix E, Table 3).

Table 38: Frequency of Consumption by Housewives of
Various Types of Meat Meals over the Two
Survey Periods

Type of Meat \ No. of meals in which consumed %	None	1-2	3-4	5-6	7-8	9 or more	Total
Sunday Joints							
Leg of pork	97.7	2.3	0.0	0.0	0.0	0.0	100
Topside	97.7	2.3	0.0	0.0	0.0	0.0	100
Leg of lamb	86.8	10.7	2.5	0.0	0.0	0.0	100
Roast pork	50.0	38.4	7.9	3.2	0.0	0.5	100
Roast lamb	44.9	35.2	13.9	4.1	1.9	0.0	100
Roast beef	40.5	39.5	15.1	3.4	1.5	0.0	100
Chicken	23.7	24.6	28.4	12.5	7.3	3.5	100
Midweek Meat Cuts							
Lamb chops	45.4	42.9	9.3	1.4	0.5	0.5	100
Pork chops	70.8	27.3	1.4	0.5	0.0	0.0	100
Steak	59.9	30.6	8.2	1.3	0.0	0.0	100
Stewing steak	52.8	38.9	6.9	0.9	0.5	0.0	100
Mince	29.7	37.9	27.2	4.7	0.5	0.0	100
Sausage	22.4	32.3	25.9	11.2	5.2	3.0	100
Meat pies	5.6	21.1	25.0	22.8	14.7	10.8	100
Processed meat	6.9	21.1	23.7	18.5	13.4	16.4	100
Liver	51.7	36.6	9.9	1.8	0.0	0.0	100
Fish	4.3	9.9	19.0	31.0	15.9	19.9	100

Similarly, as number of adults increased, then so did numbers of
processed meat meals (Appendix E, Table 4). Meat pies and saus-
ages were served more, as overall family size increased (Appendix
E, Tables 5 to 8). Typically these 2 meat types were eaten more
often by groups C_2 and D families (Appendix E, Tables 9 and 10).
Further, it was the younger housewife who was more likely to serve
meat pies (Appendix E, Table 11).

Prepared meats are generally more expensive than their fresh
meat equivalents and, therefore, their only advantages would seem
to be that they act as a good standby and are easily storable and,
perhaps of paramount importance, they are easily identifiable and
quick and easy to prepare. Few meat cuts can satisfy these 2
last-mentioned criteria. Lamb chops, mince and stewing steak are
in most cases easily identifiable and are considered easy to pre-
pare and the latter two are thought versatile, but for many meat

cuts the identity of the cut is not known, or it is thought to be
too difficult to cook and prepare, or both.

Appendix A

<u>Sentence Completion Questionnaire</u>

UNIVERSITY OF NEWCASTLE UPON TYNE

DEPARTMENT OF AGRICULTURAL MARKETING

I am working for Newcastle University. We are doing some research about cooking and eating food. Would you be so kind as to help by answering a few questions?

<u>SECTION A</u>

A(1) Do you buy most of the food for your family,   YES   1

                                                     NO   2

      (If YES go to A3)

A(2) Who does normally buy most of the food? ....

A(3) Do you normally cook the food for your family?   YES   1

      (If answer is NO close interview)   NO   2

A(4) Can you tell me at what times do you normally eat your main meal of the day during the week and on Saturday and Sunday?

      (a)   Firstly during the week?   ....

      (b)   Secondly on Saturday?   ....

      (c)   And on Sunday?   ....

A(5) Thank you. We are carrying out a meal survey in this area; can you help us? It will take very little time and to make it a bit more interesting we are having a draw with prizes for those who take part. Starting next Monday you would receive in the post each day for a two week period a meal sheet which you could complete and post back to us the next day in the stamped addressed envelope, which would be enclosed.

      <u>(Show specimen meal sheet and briefly explain how to fill it in, stressing ease of completing it)</u>

         If you post back to the University the 14 completed meal sheets then your name would be included in our first competition draw. There are eight prizes of £10 each. The second competition will be held in July and again we would want you to fill in the meal sheets for two weeks. This time there will be a first prize of £50, four second prizes of £8 and eight third prizes of £5. We would want you to enter both parts of the draw. It would be a great help to the University if you could do so.

Agree   1

                        Disagree   2

          (If DISAGREE close interview)

A(6)a   Thank you very much. Now I'll explain in detail how you
        fill in the meal sheets. Let's take the meals you and
        your family had at home yesterday as an example.

        (Show example meal sheet and explain fully all sheet
        headings and work through the meals the family eat from
        first meal in the morning to last meal or snack or
        drink at night. Emphasise the need for as full details
        as possible).

        Have you any questions about filling in the meal sheet?

        Is everything clear?

A(6)b   You will receive the first meal sheet on Monday morning,
        13th March. Fill it in after every meal and then send it
        back in the stamped addressed envelope provided as soon
        as possible the next day, and so on for the following two
        weeks. Is that quite clear? The week-end obviously will
        be different as you only get post on a Saturday. There-
        fore, on Saturday morning you will receive sheets for
        both Saturday and Sunday. Fill the sheets in for the
        appropriate days and send them both back to us in the
        stamped addressed envelope on Monday.

             Have you any questions about sending or receiving
        the meal sheets?

             Is everything clear?

A(6)c   The draw will take place on Wednesday, 29th March at the
        University. Winners will be notified immediately by
        post, and the winning numbers will be published in the
        'Shields Gazette'.

SECTION B

                        Respondent Classification

B(1)   Now, if I could have your name and address please
        (encircling MRS/MISS/MR).

        MRS / MISS / MR ....

        Address   (Press for postal code)

                      ....

                      ....

                      ....

                                68

B(2)   In your household, that is taking all those for whom you
       provide the meals, how many adults over 16 are there, and
       how many children 10 to 15 years old, and how many children
       under 10 years old?

             Adults 16 years old and over ....

             Children 10 to 15 years old   ....

             Children under 10 years old   ....

       (If respondent is 'MISS' go to B(4))

B(3)   May I ask what is your husband's occupation? (Probe for
       precise description)

       (If NO HUSBAND go to B(4))

       JOB   ┌───┐
                    │   │
                    │   │
                    └───┘

       (Go to B(6))

B(4)   Do you yourself have a paid job at all, part-time or full-
       time?
             N/A   0
             Part   1
             Full   2
             None   3
       (If NONE go to B(6))

B(5)   May I ask what job it is? (Probe for precise description)

       JOB   ┌───┐
                    │   │
                    └───┘

B(6)   Do you mind telling me your age?   ....

B(7)   Have you a refrigerator?   YES   1   NO   2

B(8)   Have you a deep freeze ?   YES   1   NO   2

Now to finish here are some unfinished sentences. I will read them to you one at a time and I'd like you to finish them for me with whatever they make you think of.

(Show appropriate card)

1. In a restaurant I would choose for my main course ....

2. But if it was not available I would choose ....

3. Working men eat a lot of ....

4. If food prices keep going up I shall have to cut down on ....

5. And perhaps buy more of ....

6. I think for a meal to be interesting and appetising it must ....

7. The most nourishing food you can buy is ....

8. Because ....

9. If some of my friends came round for an evening meal I would cook them a ....

10. The most versatile food you can buy is ....

11. The sort of food a growing child needs is ....

12. Some people say that fish, cheese, meat and eggs are all good because they contain a lot of protein but ....

13. Some children like eggs because ....

14. If meat prices go up a lot this year I ....

15. I think a cheese omelette ....
    ....

16. Many housewives only serve fish once a week because ....
    ....

17. Most husbands prefer meat to cheese because ....
    ....

18. Eggs contain as much protein as meat but ....
    ....

19. Many housewives do not serve eggs for the main meal because
    ....

20. Children think fish meals are ....
    ....

21. I would give fish more often to my family if ....
    ....

22. My favourite meal with eggs in is ....
    ....

23. Cheese and eggs are good for ....
    ....

24. I think most people like meat because ....
    ....

Now, this is the last one

25. Meat is different from cheese, fish and eggs because ......
    ....

Thank you very much for your help. Remember the first meal
sheet will arrive by post on Monday morning.

Appendix B

Sentence Completion Tables

Table 1(b):   'In a restaurant I would choose for
              my main course ....'
              by Socio-Economic Group

Column Percentage	A and B	C_1	C_2	D	E	Row Total
Chinese meal	0.0	1.8	2.4	2.0	0.0	1.7
Curry	0.0	1.8	9.7	8.2	1.8	6.1
Steak	41.4	44.6	33.1	28.6	12.7	31.2
Steak and Kidney Pie	0.0	0.0	1.6	4.1	5.5	2.5
Beef	10.3	16.1	12.1	21.4	32.7	18.2
Chicken	10.3	5.4	6.5	10.2	14.5	8.8
Pork	0.0	0.0	4.8	1.0	1.8	2.2
Lamb	0.0	0.0	6.5	3.1	3.6	3.6
Fish	10.3	0.0	4.0	2.0	10.9	4.4
Scampi	13.8	8.9	4.8	3.1	1.8	5.2
Pork chops	3.4	1.8	0.8	1.0	0.0	1.1
Lamb chops	0.0	0.0	0.8	2.0	0.0	0.8
Gammon/Ham	3.4	10.7	3.2	5.1	3.6	5.0
Cheese	0.0	1.8	0.0	0.0	1.8	0.6
Eggs	3.4	0.0	0.8	1.0	0.0	0.8
Mixed Grill	0.0	5.4	5.6	7.1	9.1	6.1
Other	3.4	1.8	3.2	0.0	0.0	1.7
Column total	8.0	15.5	34.3	27.1	15.1	100.0

Probability .995

Table 1(c)   'In a restaurant I would choose for
              my main course ....'
             by Age of Respondent

Column Percentage	Under 21	22-30	31-40	41-50	51-60	60 or over	Row Total
Chinese meal	0.0	2.9	3.4	1.1	0.0	0.0	1.7
Curry	0.0	11.8	11.2	3.4	0.0	2.1	6.1
Steak	36.4	44.1	38.2	22.5	35.7	10.4	31.3
Steak and Kidney Pie	0.0	0.0	1.1	3.4	1.8	8.3	2.5
Beef	9.1	8.8	11.2	24.7	17.9	33.3	18.0
Chicken	18.2	7.4	5.6	9.0	12.5	10.4	8.9
Pork	0.0	0.0	2.2	5.6	0.0	2.1	2.2
Lamb	0.0	2.9	3.4	5.6	1.8	4.2	3.6
Fish	9.1	1.5	1.1	3.4	3.6	16.7	4.4
Scampi	9.1	2.9	5.6	7.9	7.1	0.0	5.3
Pork chops	0.0	1.5	3.4	0.0	0.0	0.0	1.1
Lamb chops	0.0	0.0	2.2	1.1	0.0	0.0	0.8
Gammon or ham	0.0	5.9	3.4	5.6	5.4	6.2	5.0
Cheese	0.0	1.5	0.0	0.0	1.8	0.0	0.6
Eggs	9.1	0.0	1.1	0.0	1.8	0.0	0.8
Mixed Grill	9.1	7.4	6.7	4.5	5.4	6.2	6.1
Other	0.0	1.5	0.0	2.2	5.4	0.0	1.6
Column total	3.0	18.8	24.7	24.7	15.5	13.3	100.0

Probability .995

Table 2(b): 'But if it was not available I would choose .....' by 'In a restaurant I would choose for my main course .....'

	Chinese meal	Curry	Steak	Steak & Kidney Pie	Beef	Chicken	Pork	Lamb	Fish	Scampi	Pork Chops	Lamb Chops	Gammon or Ham	Cheese	Eggs	Mixed Grill	Other	Total
Chinese meal	0.0	4.5	1.8	0.0	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Curry	16.7	9.1	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	1.7
Steak	16.7	18.2	3.5	0.0	1.5	18.8	0.0	7.7	43.8	42.1	25.0	33.3	17.6	50.0	0.0	22.7	0.0	12.0
Steak and Kidney pie	0.0	0.0	0.9	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	20.0	1.9
Beef	16.7	0.0	8.0	33.3	3.1	28.1	12.5	15.4	25.0	5.3	0.0	33.3	0.0	50.0	0.0	18.2	20.0	10.9
Chicken	16.7	13.6	33.6	22.2	18.5	0.0	50.0	38.5	12.5	10.5	25.0	0.0	17.6	0.0	33.3	13.6	40.0	22.0
Pork	0.0	9.1	5.3	0.0	9.2	6.2	0.0	15.4	0.0	0.0	25.0	0.0	5.9	0.0	0.0	0.0	20.0	5.8
Lamb	16.7	4.5	0.9	0.0	26.2	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8
Fish	0.0	4.5	18.6	33.3	12.3	21.9	12.5	15.4	0.0	10.5	0.0	33.3	35.3	0.0	33.3	13.6	0.0	15.6
Scampi	0.0	4.5	5.3	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	2.8
Pork chops	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	6.2	5.3	0.0	0.0	5.9	0.0	0.0	0.0	0.0	1.7
Lamb chops	0.0	0.0	4.4	0.0	6.2	3.1	0.0	0.0	6.2	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3
Gammon or Ham	0.0	0.0	7.1	11.1	1.5	6.2	12.5	7.7	0.0	5.3	0.0	0.0	0.0	0.0	0.0	9.1	0.0	4.7
Eggs	0.0	4.5	0.9	0.0	0.0	0.0	0.0	0.0	6.2	5.3	0.0	0.0	5.9	0.0	0.0	4.5	0.0	1.7
Mixed Grill	16.7	27.3	6.2	0.0	7.7	6.2	0.0	0.0	0.0	15.8	0.0	0.0	5.9	0.0	0.0	0.0	0.0	7.0
Other	0.0	0.0	0.9	0.0	1.5	3.1	0.0	0.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0	9.1	0.0	1.7
Column total	1.7	6.1	31.5	2.5	18.1	8.9	2.2	3.6	4.5	5.3	1.1	0.8	4.7	0.6	0.8	6.1	1.5	100.0

Probability .975

Table 4(b): 'If food prices keep going up I shall
            have to cut down on ....'
            by Socio-Economic Group

Column Percentage	A and B	C_1	C_2	D	E	Row Total
Meat	24.0	26.9	29.1	29.3	35.8	29.5
Expensive Meat	24.0	15.4	3.6	4.3	5.7	7.5
Beef	4.0	0.0	0.9	0.0	0.0	0.6
Butter	4.0	13.5	19.1	15.2	15.1	15.4
Cakes/biscuits	32.0	25.0	20.9	16.3	5.7	18.7
Cigarettes	0.0	3.8	3.6	8.7	7.5	5.4
Fruit and Vegetables	0.0	0.0	3.6	1.1	5.7	2.4
Fish	0.0	0.0	0.9	0.0	0.0	0.3
Luxury food	4.0	9.6	4.5	6.5	3.8	5.7
Food generally	0.0	0.0	2.7	12.0	13.2	6.4
Certainly not food	4.0	3.8	4.5	1.1	3.8	3.2
Non-food items	4.0	0.0	1.8	2.2	1.9	1.9
Other	0.0	1.9	4.5	3.3	1.9	2.8
Column total	7.5	15.7	33.1	27.7	16.0	100.0

Probability .975

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Table 5(b):   'And perhaps buy more of .....' by 'If food prices increase I will cut down on ....'

	Meat	Expensive Meat	Beef	Butter	Cakes and Biscuits	Cigar- ettes	Fruit and Vege- tables	Fish	Luxury Food	Foods Generally	Certainly not Food	Non- Food Items	Other	Total
Fruit and Vegetables	20.2	8.0	0.0	10.2	51.8	20.0	50.0	0.0	53.3	42.9	0.0	33.3	37.5	27.5
Margarine	3.4	0.0	0.0	73.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.9
Cheaper cuts	20.2	68.0	0.0	4.1	10.7	13.3	0.0	100.0	6.7	28.6	100.0	0.0	8.3	18.2
Cheese	6.7	0.0	0.0	0.0	7.1	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0	3.9
Fish	16.9	4.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4
Eggs	13.5	0.0	0.0	4.1	8.9	6.7	0.0	0.0	6.7	0.0	0.0	0.0	8.3	7.9
Chicken	12.4	12.0	100.0	0.0	1.8	0.0	0.0	0.0	0.0	14.3	0.0	0.0	0.0	6.4
Mince	4.5	8.0	0.0	2.0	0.0	6.7	25.0	0.0	6.7	0.0	0.0	0.0	0.0	4.0
Other	2.2	0.0	0.0	6.1	16.1	53.3	25.0	0.0	20.0	14.3	0.0	66.7	45.8	11.8
Column total	31.8	8.9	0.7	17.5	20.0	5.4	2.9	0.4	5.4	2.5	0.3	1.0	3.2	100.0

Probability .995

Table 5(c): 'And perhaps buy more of ....' by Age of Respondent

Column Percentage	Under 21	22-30	31-40	41-50	51-60	60 or over	Row Total
Fruit and Vegetables	66.7	28.6	27.8	27.5	22.5	23.5	27.9
Margarine	11.1	8.9	16.7	14.5	17.5	11.8	13.9
Cheaper cuts	22.2	26.8	18.1	11.6	15.0	20.6	18.2
Cheese	0.0	3.6	4.2	4.3	0.0	8.8	3.9
Fish	0.0	5.4	6.9	8.7	7.5	2.9	6.4
Eggs	0.0	10.7	8.3	8.7	10.0	0.0	7.9
Chicken	0.0	3.6	1.4	7.2	12.5	11.8	6.1
Mince	0.0	7.1	4.2	0.0	0.0	11.8	3.9
Other	0.0	5.4	12.5	17.4	15.0	8.8	11.8
Column total	3.2	20.0	25.7	24.6	14.3	12.2	100.0

Probability .750

Table 6(b): 'I think for a meal to be interesting and appetising it must .....' by Socio-Economic Group

Column Percentage	A and B	C_1	C_2	D	E	Row Total
Served and presented well	17.9	21.4	29.0	29.6	20.0	25.8
Colourful	17.9	21.4	12.9	15.3	12.7	15.2
Look nice/ attractive	35.7	17.9	13.7	12.2	14.5	15.8
Well cooked	7.1	17.9	21.0	16.3	27.3	19.1
Served hot	0.0	3.6	4.8	5.1	9.1	5.0
Good taste/ flavour	10.7	8.9	6.5	11.2	7.3	8.6
Variety	7.1	3.6	7.3	3.1	1.8	4.7
Smell nice	3.6	3.6	1.6	2.0	0.0	1.9
Other	0.0	1.8	3.2	5.1	7.3	3.9
Column total	7.8	15.5	34.3	27.1	15.3	100.0

Probability .950

Table 6(c): 'I think for a meal to be interesting
             and appetising it must ....'
             by Age of Respondent

Column Percentage	Under 21	22-30	31-40	41-50	51-60	60 or over	Row Total
Served and pre-sented well	36.4	33.8	28.1	21.3	18.2	22.9	25.6
Colourful	36.4	14.7	15.7	12.4	16.4	14.6	15.3
Look nice/ attractive	9.1	10.3	19.1	15.7	20.0	14.6	15.8
Well cooked	9.1	14.7	15.7	24.7	21.8	20.8	19.2
Served hot	0.0	2.9	6.7	2.2	5.5	10.4	5.0
Good taste/ flavour	0.0	14.7	2.2	11.2	10.9	6.2	8.6
Variety	9.1	4.4	4.5	6.7	3.6	2.1	4.7
Smell nice	0.0	4.4	2.2	0.0	1.8	2.1	1.9
Other	0.0	0.0	5.6	5.6	1.8	6.2	3.9
Column total	3.1	18.9	24.7	24.7	15.3	13.3	100.0

Probability .750

Table 7(b): 'The most nourishing food you can buy is ...'
             by Age of Respondent

Column Percentage	Under 21	22-30	31-40	41-50	51-60	60 or over	Row Total
Meat	66.7	29.4	27.3	25.6	26.8	23.4	27.7
Steak	0.0	5.9	4.5	7.0	1.8	6.4	5.1
Milk	22.2	20.6	12.5	16.3	19.6	21.3	17.5
Eggs	0.0	17.6	19.3	15.1	19.6	14.9	16.9
Cheese	11.1	10.3	17.0	12.8	12.5	8.5	12.7
Fish	0.0	4.4	4.5	9.3	7.1	12.8	7.1
Vegetables and/ or Fruit	0.0	5.9	9.1	5.8	8.9	8.5	7.3
Chicken	0.0	1.5	0.0	1.2	1.8	4.3	1.5
Other	0.0	4.4	5.7	7.0	1.8	0.0	4.2
Column total	2.5	19.2	24.9	24.3	15.8	13.3	100.0

Probability .500

Table 8(b): 'It is the most nourishing food because ....' by 'Most nourishing food you can buy ......'

Column Percentage	Meat	Steak	Milk	Eggs	Cheese	Fish	Vegetables and Fruit	Chicken	Other	Row Total
Full of protein	27.7	11.1	24.2	36.2	41.9	52.0	4.0	0.0	35.7	29.4
Full of goodness	23.4	27.8	25.8	20.7	16.3	24.0	24.0	0.0	7.1	21.8
Full of vitamins	20.2	22.2	19.4	6.9	14.0	12.0	36.0	20.0	14.3	17.4
Full of nutritious- ness	12.8	11.1	17.7	13.8	9.3	4.0	12.0	20.0	0.0	12.2
Versatile	2.1	0.0	3.2	10.3	2.3	0.0	8.0	0.0	7.1	4.1
Substantial	6.4	0.0	1.6	1.7	4.7	4.0	0.0	20.0	0.0	3.5
Non-fattening	1.1	0.0	0.0	1.7	2.3	0.0	0.0	20.0	0.0	1.2
Habit	3.2	5.6	1.6	3.4	0.0	0.0	0.0	0.0	0.0	2.0
Other	3.2	22.2	6.5	5.2	9.3	4.0	16.0	20.0	35.7	8.4
Column total	27.3	5.2	18.0	16.9	12.5	7.3	7.3	1.5	4.0	100.0

Probability .995

Table 10(b): 'The most versatile food you can buy is .....' by Age of Respondent

Column Percentage	Under 21	22-30	31-40	41-50	51-60	60 or over	Row Total
Eggs	70.0	48.5	52.3	37.1	33.9	35.6	43.3
Cheese	10.0	10.3	10.2	11.2	7.1	15.6	10.7
Meat	0.0	5.9	12.5	18.0	25.0	26.7	16.0
Chicken	10.0	7.4	4.5	9.0	17.9	6.7	8.7
Mince	0.0	4.4	6.8	7.9	5.4	4.4	5.9
Bacon/Ham	0.0	2.9	3.4	4.5	3.6	6.7	3.9
Fish	0.0	5.9	2.3	1.1	3.6	0.0	2.5
Milk	10.0	8.8	3.4	4.5	0.0	4.4	4.5
Other	0.0	5.9	4.5	6.7	3.6	0.0	4.5
Column total	2.8	19.1	24.7	25.0	15.7	12.7	100.0

Probability .750

Table 13(b): 'If meat prices go up a lot this year I ....' by Socio-Economic Group

Column Percentage	A and B	C_1	C_2	D	E	Row Total
Buy cheaper cuts	24.1	16.1	18.5	25.5	11.1	19.4
Still buy the same amount	24.1	25.0	24.2	13.3	13.0	19.7
Buy less	31.0	35.7	41.9	43.9	53.7	42.4
Do without altogether	0.0	1.8	4.0	5.1	14.8	5.3
Buy more chicken	6.9	8.9	3.2	6.1	1.9	5.0
Use more eggs or fish	10.3	7.1	7.3	5.1	3.7	6.4
Use more cheese	0.0	1.8	0.0	1.0	1.9	0.8
Eat more vegetables	3.4	3.6	0.8	0.0	0.0	1.0
Column total	8.0	15.5	34.3	27.1	15.1	100.0

Probability .900

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Table 13(c): 'If meat prices go up a lot this year
I ....' by Age of Respondent

Column Percentage	Under 21	22-30	31-40	41-50	51-60	60 or over	Row Total
Buy cheaper cuts	18.2	17.6	25.6	21.6	19.6	6.4	19.4
Still buy the same amount	0.0	22.1	23.3	22.7	14.3	14.9	19.7
Buy less	81.8	39.7	35.6	36.4	48.2	53.2	42.2
Do without altogether	0.0	5.9	2.2	3.4	5.4	14.9	5.3
Buy more chicken	0.0	7.4	2.2	10.2	1.8	2.1	5.0
Use more eggs or fish	0.0	4.4	8.9	4.5	7.1	8.5	6.4
Use more cheese	0.0	0.0	2.2	0.0	1.8	0.0	0.8
Eat more vegetables	0.0	2.9	0.0	1.1	1.8	0.0	1.2
Column total	3.1	18.9	25.0	24.4	15.6	13.0	100.0

Probability .900

Table 21(b): 'My favourite meal with eggs in is ....'
by Socio-Economic Group

Column Percentage	A and B	C_1	C_2	D	E	Row Total
Omelette	44.8	35.2	23.4	24.5	18.2	26.4
Egg salad	3.4	9.3	8.9	5.1	9.1	7.5
Yorkshire Pudding	0.0	3.7	8.1	18.4	7.3	9.4
Scrambled egg	3.4	5.6	16.9	9.2	18.2	12.2
Egg custard	10.3	3.7	3.2	8.2	5.5	5.6
Savoury flan	6.9	3.7	4.8	6.1	5.5	5.2
Bacon and egg	10.3	9.3	9.7	7.1	7.3	8.6
Souffle	13.8	7.4	1.6	2.0	1.8	3.6
Scotch egg	0.0	0.0	2.4	2.0	0.0	1.4
Egg and chips	0.0	1.9	4.0	3.1	1.8	2.8
Fried egg	0.0	0.0	6.5	6.1	5.5	4.7
Poached egg	0.0	5.6	2.4	1.0	7.3	3.1
Boiled egg	3.4	5.6	2.4	1.0	3.6	2.8
Mixed Grill	0.0	5.6	2.4	1.0	0.0	1.9
Other	3.4	1.9	0.8	4.1	5.5	2.9
Pancakes	0.0	1.9	2.4	1.0	3.6	1.9
Column total	8.1	15.0	34.4	27.2	15.3	100.0

Probability .950

Table 21(c): 'My favourite meal with eggs in is ....'
by Age of Respondent

Column Percentage	Under 21	22-30	31-40	41-50	51-60	60 or over	Row Total
Omelette	18.2	23.9	28.1	30.3	20.0	27.1	26.2
Egg salad	9.1	6.0	4.5	11.2	12.7	2.1	7.5
Yorkshire Pudding	63.6	16.4	9.0	4.5	3.6	4.2	9.5
Scrambled egg	0.0	7.5	13.5	11.2	10.9	22.9	12.3
Egg custard	0.0	4.5	3.4	6.7	7.3	8.3	5.6
Savoury flan	0.0	7.5	6.7	2.2	5.5	6.2	5.3
Bacon and egg	0.0	7.5	7.9	10.1	10.9	8.3	8.6
Souffle	9.1	6.0	3.4	2.2	3.6	2.1	3.6
Scotch egg	0.0	0.0	3.4	1.1	1.8	0.0	1.4
Egg and chips	0.0	1.5	3.4	3.4	3.6	2.1	2.8
Fried egg	0.0	7.5	4.5	3.4	5.5	4.2	4.7
Poached egg	0.0	4.5	2.2	2.2	1.8	6.2	3.1
Boiled egg	0.0	3.0	2.2	2.2	3.6	4.2	2.8
Mixed Grill	0.0	1.5	2.2	2.2	3.6	0.0	1.9
Other	0.0	1.5	3.4	3.4	3.6	2.1	2.8
Pancakes	0.0	1.5	2.2	3.4	1.8	0.0	1.9
Column total	3.1	18.7	24.8	24.8	15.3	13.3	100.0

Probability .900

Table 24(b): 'I think most people like meat
              because ....' by Socio-Economic
              Group

Column Percentage	A and B	C_1	C_2	D	E	Row Total
Flavour	24.1	9.1	5.0	5.5	0.0	6.6
Taste	6.9	20.0	22.5	39.6	18.2	24.6
Variety of dishes	10.3	10.9	12.5	8.8	3.6	9.7
Full of nourishment	3.4	5.5	12.5	7.7	12.7	9.4
Tradition or habit	17.2	14.5	14.2	9.9	20.0	14.3
Satisfying/ substantial	13.8	12.7	6.7	3.3	10.9	8.0
Filling	0.0	3.6	4.2	8.8	3.6	4.9
Appetising	6.9	5.5	4.2	3.3	5.5	4.6
Basis of the main meal	6.9	12.7	10.8	7.7	18.2	11.1
Good gravy	3.4	1.8	1.7	2.2	1.8	2.0
Non fattening	3.4	1.8	2.5	0.0	0.0	1.4
Natural	3.4	1.8	0.0	0.0	5.5	1.4
Other	0.0	0.0	3.3	2.2	0.0	1.7
No answer	0.0	0.0	0.0	1.1	0.0	0.3
Column total	8.3	15.7	34.3	26.0	15.7	100.0

Probability .995

Table 25(b): 'Meat is different from cheese, fish and eggs because ....' by Socio-Economic Group

Column Percentage	A and B	C_1	C_2	D	E	Row Total
More substantial	24.1	17.3	6.6	7.4	13.7	11.0
Better/different flavour	17.2	5.8	8.3	4.3	9.8	7.8
Satisfying	20.7	3.8	6.6	2.1	0.0	5.2
Tastier	6.9	5.8	10.7	8.5	7.8	8.6
Can vary it	0.0	13.5	11.6	14.9	7.8	11.2
More filling	3.4	1.9	6.6	9.6	7.8	6.6
Makes good gravy	0.0	1.9	7.4	8.5	17.6	7.8
Can make a dinner out of it	6.9	15.4	19.8	20.2	19.6	18.2
Different texture	6.9	9.6	5.8	4.3	3.9	5.8
Better nourishment	6.9	7.7	4.1	8.5	5.9	6.3
More appetising	3.4	0.0	2.5	0.0	2.0	1.4
Need to chew it	0.0	7.7	4.1	3.2	0.0	3.5
More expensive	0.0	1.9	0.8	2.1	0.0	1.2
More savoury	3.4	5.8	1.7	4.3	2.0	3.2
No answer	0.0	1.9	3.3	2.1	2.0	2.2
Column total	8.4	15.0	34.9	27.1	14.1	100.0

Probability .950

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Table 25(c): 'Meat is different from cheese, fish and eggs because ....' by Age of Respondent

Column Percentage	Under 21	22-30	31-40	41-50	51-60	60 or over	Row Total
More substantial	0.0	17.7	4.5	8.0	12.5	20.5	11.0
Better/different flavour	0.0	6.5	11.4	4.6	12.5	4.5	7.8
Satisfying	11.1	1.6	4.5	9.2	3.6	4.5	5.2
Tastier	11.1	4.8	11.4	9.2	10.7	4.5	8.7
Can vary it	0.0	6.5	11.4	16.1	14.3	6.8	11.3
More filling	0.0	6.5	8.0	3.4	5.4	13.6	6.6
Makes good gravy	0.0	4.8	6.8	10.3	8.9	9.1	7.8
Can make a dinner out of it	33.3	21.0	18.2	14.9	17.9	15.9	17.9
Different texture	22.2	6.5	8.0	4.6	1.8	4.5	5.8
Better nourishment	11.1	12.9	2.3	6.9	5.4	4.5	6.4
More appetising	0.0	1.6	2.3	1.1	0.0	2.3	1.4
Need to chew it	0.0	6.5	4.5	4.6	0.0	0.0	3.5
More expensive	0.0	1.6	1.1	1.1	0.0	2.3	1.2
More savoury	0.0	0.0	4.5	2.3	5.4	4.5	3.2
Other	11.1	1.6	1.1	3.4	1.8	2.3	2.2
Column total	2.6	17.9	25.4	25.1	16.2	12.8	100.0

Probability .750

Appendix C

<u>Naming of Meals and Times Eaten - Questionnaire</u>

UNIVERSITY OF NEWCASTLE UPON TYNE

DEPARTMENT OF AGRICULTURAL MARKETING

I am working for Newcastle University. We are doing some research into the buying and cooking of food. Would you be kind enough to help by answering a very few questions? It will only take a few minutes.

1. Do you buy most of the food for your family? YES 1

                                                 NO   2

   <u>(If YES go to 3)</u>

2. Who does buy most of the food?

3. Do you normally cook the food for your family? YES 1

                                                   NO   2

   <u>(IF ANSWER IS NO CLOSE INTERVIEW)</u>

4(a) Can you tell me at what times do you normally
      eat your meals <u>during the week?</u>

	Time	What do you call this meal?	Name	Which members of the household are present?			
1st meal	____		_____	1	2	3	4
2nd meal	____		_____	1	2	3	4
3rd meal	____		_____	1	2	3	4
4th meal	____		_____	1	2	3	4

(Encircle code number: respondent 1, husband 2, children 3, other 4)

  (b) Can you tell me at what time do you normally eat your
       meals <u>at the weekend?</u>

	Time	What do you call this meal?	Name	Which members of the household are present?			
1st meal	____		_____	1	2	3	4
2nd meal	____		_____	1	2	3	4
3rd meal	____		_____	1	2	3	4

	Time	What do you call this meal?	Name	Which members of the household are present?
4th meal	____	_____		1 2 3 4

(Encircle code number: respondent 1, husband 2, children 3, other 4)

5. Thank you, and now may I ask your name and address?

Mrs/Miss _____

Address _____

(If MISS go to 9)

6. Now could you please tell me in your household (that is taking all those for whom you provide the meals) how many adults over 16 are there, how many children under 16?

Adults _____   Children _____

7. What are the ages of the children?

8. What is your husband's occupation?

(Probe for precise description)

9(a) Do you have a paid job at all, part-time or full-time?

(If NO go to 10)

 (b) May I ask what job it is?

10. Do you mind telling me your age?

OR indicate the approximate range (ring as appropriate)

24 or less   25-34   35-44   45-54   55-64   65+

11. Besides this short survey I think you might be interested in a piece of research we are carrying out. We shall be asking a number of housewives to take part this week in further discussions about food and cooking, some in group discussions and some individually in their own homes. Because this will take longer we shall make a payment for the time people give up. Without committing yourself, if the day and time were convenient, would you help in this if asked to?

(If NO close interview)

12. Are there any mornings, afternoons or evenings (say after 6.00 p.m.) this week that will be particularly convenient for you?

(Tick if convenient)

	Morning	Afternoon	Evening
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			

UNIVERSITY OF NEWCASTLE UPON TYNE

MEAL SHEET FOR SUNDAY 16th JULY

ALL INFORMATION IS TREATED IN STRICT CONFIDENCE

PLACE THIS SHEET IN THE ENVELOPE PROVIDED AS SOON AS YOU HAVE COMPLETED
IT AND POST IT AS SOON AS POSSIBLE

1st MEAL IF ANY	Time Eaten	What did you and your family eat for the first meal at home today? Please give AS FULL DETAILS AS POSSIBLE. If any members of the family were not present state 'not present'.
Yourself		
Children under 10 yrs old		
Over 10 yrs old		
Husband		
Others		
2nd MEAL IF ANY	Time Eaten	What did you and your family eat for the second meal at home today? Please give AS FULL DETAILS AS POSSIBLE. If any members of the family were not present state 'not present'.
Yourself		
Children under 10 yrs old		
Over 10 yrs old		
Husband		
Others		
3rd MEAL IF ANY	Time Eaten	What did you and your family eat for the third meal at home today? Please give AS FULL DETAILS AS POSSIBLE. If any members of the family were not present state 'not present'.
Yourself		
Children under 10 yrs old		
Over 10 yrs old		
Husband		
Others		
4th MEAL IF ANY	Time Eaten	What did you and your family eat for the fourth meal at home today? Please give AS FULL DETAILS AS POSSIBLE. If any members of the family were not present state 'not present'.
Yourself		
Children under 10 yrs old		
Over 10 yrs old		
Husband		
Others		
5th MEAL IF ANY	Time Eaten	What did you and your family eat for the fifth meal at home today? Please give AS FULL DETAILS AS POSSIBLE. If any members of the family were not present state 'not present'.
Yourself		
Children under 10 yrs old		
Over 10 yrs old		
Husband		
Others		

Appendix E

Cross-tabulations of Frequency of Consumption of various
Foodstuffs by Family Size, Age and Socio-Economic Group

Table 1:   Number of Meals in which Cheese was Eaten over
           the two Survey Periods by Age of Respondent

Frequency of Consumption	Under 21	21-30	31-40	41-50	51-60	60 or over	Row Total
0	12.5	14.0	3.7	4.6	5.6	11.3	7.2
1-3	25.0	34.9	25.9	15.4	22.2	19.2	23.3
4-6	50.0	23.3	20.4	24.6	22.2	3.8	21.6
7-9	0.0	7.0	14.8	27.7	13.9	15.4	16.4
10-12	0.0	18.6	14.8	7.7	19.4	11.5	13.4
13-15	12.5	2.3	13.0	9.2	0.0	3.8	6.9
16 or more	0.0	0.0	7.4	10.8	16.7	34.6	11.2
Column total	3.4	18.5	23.3	28.0	15.5	11.3	100.0

Probability .995

Table 2:   Number of Meals in which Cheese was Eaten over
           the two Survey Periods by Number of Adults in
           the Family

| Frequency of Consumption | Number of Adults | | | Row Total |
	One	Two	Three or more	
0	15.0	7.7	3.5	7.3
1-3	25.0	21.3	28.1	23.3
4-6	0.0	24.5	21.1	21.6
7-9	5.0	18.1	15.8	16.4
10-12	15.0	14.2	10.5	13.4
13-15	5.0	5.8	10.5	6.8
16 or more	35.0	8.4	10.5	11.2
Column total	8.6	66.8	24.6	100.0

Probability .975

Table 3: Number of Meals Consumed in which Mince was
Eaten over the two Survey Periods by Number
of Children in the Family

Frequency of Consumption	Number of Children					Row Total
	None	One	Two	Three or Four	Five or more	
0	42.0	21.6	20.9	20.6	0.0	29.7
1-2	33.0	33.3	48.8	41.2	75.0	37.9
3-4	25.0	33.3	23.3	32.4	0.0	27.2
5-6	0.0	11.8	7.0	2.9	25.0	4.7
7-8	0.0	0.0	0.0	2.9	0.0	0.5
Column total	43.1	22.0	18.5	14.7	1.7	100.0

Probability .995

Table 4: Number of Meals in which Processed Meats
were Eaten over the two Survey Periods by
Number of Adults in the Family

Frequency of Consumption	Number of Adults				Row Total
	One	Two	Three or Four	Five or more	
0	20.0	5.2	5.8	20.0	6.9
1-2	10.0	23.2	21.2	0.0	21.1
3-4	45.0	18.7	30.8	20.0	23.7
5-6	5.0	20.0	17.3	40.0	18.5
7-8	5.0	17.4	5.8	0.0	13.4
9 or more	15.0	15.5	19.2	20.0	16.4
Column total	8.6	66.8	22.4	2.2	100.0

Probability .950

Table 5: Number of Meals in which Meat Pies were Consumed
over the two Survey Periods by Number of Adults
in the Family

Frequency of Consumption	Number of Adults				Row Total
	One	Two	Three or Four	Five or more	
0	20.0	4.5	1.9	20.0	5.6
1-2	25.0	19.4	26.9	0.0	21.1
3-4	15.0	25.8	23.1	60.0	25.0
5-6	20.0	25.2	19.2	0.0	22.8
7-8	5.0	16.1	15.4	0.0	14.7
9 or more	15.0	9.0	13.5	20.0	10.8
Column Total	8.6	66.8	22.4	2.2	100.0

Probability .900

Table 6: Number of Meals in which Meat Pies were Consumed
over the two Survey Periods by Number of
Children in the Family

Frequency of Consumption	Number of Children					Row Total
	None	One	Two	Three or Four	Five or more	
0	9.0	2.0	4.7	2.9	0.0	5.6
1-2	26.0	23.5	20.9	2.9	25.0	21.1
3-4	30.0	21.6	16.3	29.4	0.0	25.0
5-6	16.0	23.5	34.9	26.5	25.0	22.8
7-8	13.0	19.6	11.6	14.7	25.0	14.7
9 or more	6.0	9.8	11.6	23.5	25.0	10.8
Column total	43.1	22.0	18.5	14.7	1.7	100.0

Probability .900

Table 7:   Number of Meals in which Sausage was Eaten
over the two Survey Periods by Number of
Adults in the Family

Frequency of Consumption	Number of Adults				Row Total
	One	Two	Three or Four	Five or more	
0	50.0	20.0	17.3	40.0	22.4
1-2	5.0	32.3	42.3	40.0	32.3
3-4	40.0	27.7	17.3	0.0	25.9
5-6	5.0	12.9	9.6	0.0	11.2
7-8	0.0	3.9	9.6	20.0	5.2
9 or more	0.0	3.2	3.8	0.0	3.0
Column total	8.6	66.8	22.4	2.2	100.0

Probability .975

Table 8:   Number of Meals in which Sausage was Eaten
over the two Survey Periods by Number of
Children in the Family.

Frequency of Consumption	Number of Children					Row Total
	None	One	Two	Three or Four	Five or more	
0	36.0	17.6	7.0	8.8	25.0	22.4
1-2	29.0	39.2	30.2	35.3	25.0	32.3
3-4	21.0	23.5	39.5	26.5	25.0	25.9
5-6	9.0	13.7	7.0	17.6	25.0	11.2
7-8	3.0	3.9	11.6	5.9	0.0	5.2
9 or more	2.0	2.0	4.7	5.9	0.0	3.0
Column total	43.1	22.0	18.5	14.7	1.7	100.0

Probability .950

Table 9: Number of Meals in what Meat Pies were Consumed over the two Survey Periods by Socio-Economic Group

Frequency of Consumption	Socio-Economic group					Row Total
	A/B	C_1	C_2	D	E	
0	10.5	12.8	0.0	0.0	15.2	5.6
1-2	21.1	25.5	19.2	18.2	24.2	21.1
3-4	26.3	21.3	25.6	27.3	24.2	25.0
5-6	31.6	25.5	19.2	23.6	21.2	22.8
7-8	0.0	8.5	20.5	23.6	3.0	14.7
9 or more	10.5	6.4	15.4	7.3	12.1	10.8
Column total	8.2	20.3	33.6	23.7	14.2	100.0

Probability .975

Table 10: Number of Meals in which Sausage was Eaten over the two Survey Periods by Socio-Economic Group

Frequency of Consumption	Socio-Economic group					Row Total
	A/B	C_1	C_2	D	E	
0	42.1	27.7	12.8	14.5	39.4	22.4
1-2	21.1	36.2	33.3	41.8	15.2	32.3
3-4	26.3	21.3	28.2	21.8	33.3	25.9
5-6	5.3	8.5	16.7	12.7	3.0	11.2
7-8	5.3	6.4	3.8	7.3	3.0	5.2
9 or more	0.0	0.0	5.1	1.8	6.1	3.0
Column total	8.2	20.3	33.6	23.7	14.2	100.0

Probability .900

Table 11: Number of Meals in which Meat Pies were
           Consumed over the two Survey Periods by
           Age of Respondent

Frequency of Consumption	Under 21	21-30	31-40	41-50	51-60	60 or over	Row Total
0	0.0	11.6	3.7	1.5	0.0	19.2	5.6
1-2	0.0	25.6	14.8	21.5	22.2	30.8	21.1
3-4	37.5	16.3	18.5	24.6	44.4	23.1	25.0
5-6	25.0	20.9	25.9	27.7	13.9	19.2	22.8
7-8	12.5	16.3	22.2	10.8	13.9	7.7	14.7
9 or more	25.0	9.3	14.8	13.8	5.6	0.0	10.8
Column total	3.4	18.5	23.3	28.0	15.5	11.3	100.0

Probability .975

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