Community Meals Service Review

A review of the current community meals service in The Royal Borough of Kensington and Chelsea

> Final Summary Report The Caroline Walker Trust



THE CAROLINE WALKER TRUST



Contents

page number

Summary and Recommendations	3
 1.0 Introduction Aims of this review Community meals The personalisation agenda The current community meals service in RBKC Community meals users in RBKC September 2009 	8 8 10 10 12
 2.0 Baseline assessment of community meals users 2.1 Methodology 2.1.1 Data quality 2.2 Demographic data 2.3 Health and well being data 2.4 Nutritional risk and support around mealtimes 	13 13 14 14 16 18
 3.0 Qualitative data from home interviews 3.1 Methodology 3.2 Key themes from the qualitative data collection 3.2 1 Satisfaction with the current service 3.2.2 Criticisms of the current service 3.2.3 Interest in enhanced service arrangements 3.2.4 Interest in other methods of accessing home meals 	21 21 23 23 24 25 25
3.3 Summary	27
 4.0 Review of other community meal services and developments in London and elsewhere 4.1 Options within RBKC 4.1.1 Enhanced meal service 4.1.2 Lunch clubs and residential care 4.1.3 Other local meal providers 4.1.4 Other frozen meal options 	29 32 32 32 35 35
5.0 References	38
Appendices	
Appendix 1:Contracting for home meal delivery services: Nutritional considerationsAppendix 2:Data collected as part of the baseline assessmentAppendix 3:Home interview questionnaireAppendix 4:Community meals in London Boroughs	39 45 46 48
<u>Appendix 5</u> : Frozen meal options from supermarkets	50

Review Team

This is a summary report from a review led and written by Dr Helen Crawley, Director, The Caroline Walker Trust (E: <u>Helen@cwt.org.uk</u>)

Data used in this report was collected by Dr Lisa Wilson, Susan Westland, Erica Hocking and Alison Carpenter on behalf of CWT.

The Caroline Walker Trust is a registered charity (charity number: 328580) that promotes good health of vulnerable population groups through good food.

The Caroline Walker Trust 22 Kindersley Way Abbots Langley Herts WD5 0DQ

www.cwt.org.uk

Acknowledgements

We would like to thank all those community meal service users who so kindly gave up their time to see us; Dev Luchowa and all the social workers at Westway and elsewhere in the Borough who provided assistance and replied so helpfully to our queries; Apetito for allowing detailed discussion about the current service at their head office in Trowbridge; Jessica Taylor and the other dietitians for helpful discussions, Peter White at RBKC and other providers, commissioners and health and social care professionals who gave information, support and advice.

Summary and Recommendations

The importance of good nutrition for older people and the consequences of malnutrition among older people is well documented and there is unequivocal evidence that good nutrition among older people contributes to better health and well being and better quality of life. The role of community meals in supporting vulnerable older people to receive adequate nutrition has been established and when targeted appropriately community meals services can prevent or remedy deterioration in the nutritional status of at risk groups (O'Dwyer and Timonen, 2008).

The recommendations made as part of this review have been compiled after considering the needs of current local users, their opinions, the services available locally and current initiatives around older people and nutrition in the Borough. Some of the recommendations may be longer term and it is essential that there is a multi-disciplinary, multi-agency approach to implementing any recommendations involving both health and social care staff from both providers and commissioners

As we reported in the previous review of older people's food and nutrition services (Caroline Walker Trust (CWT), 2008), where people are well supported and can access services in the Borough these work well and there is much to commend in the services offered to many older people in the Borough. Older people currently receiving community meals are however a very vulnerable group by the nature of their need for support around food and are frequently socially isolated and in poor physical health. Weight loss and underweight remain the biggest concerns among the current cohort of community meal users. Community meals play a vital role in ensuring that eligible older people have daily contact with others and have some of their nutritional needs met. The vulnerability of this group means that their need for adequate nutrition and hydration must remain a priority when considering changes to current service provision.

Based on data collected for this review it is recommended a hot meal delivery service should remain at the heart of a community meals service, with consideration given to enhanced services for some users. While the primary benefit of community meals is the food they provide there are other advantages, such as their role in supporting individuals to remain in their own homes for as long as possible and their

3

role in supporting individuals on a short-term basis to regain independence after accident or injury. In addition community meals services can build social capital through engaging local people and by involving local businesses in the preparation and delivery of meals. The current service in RBKC is not embedded in the local community as the meals are produced outside the Borough and the service delivery is coordinated and staffed by those living outside the area.

The reviewers found high levels of satisfaction for the current community meals service among users and little interest in greater flexibility around meal options. The current cohort of community meal users reviewed were grateful for services and had a pragmatic approach to their own needs and physical limitations and the practicalities and costs of services. A number of options are available for revisions to a community meals service in the Borough and consideration should be given to investing in day centres, lunch clubs and residential settings as potential providers of community meals. Dividing the contract into wards or areas might allow smaller suppliers to be able to bid for contracts and investment in local services offers benefits for the local community, for meeting local procurement and 'green' targets and will help to realise the personalisation agenda. Involvement from dietitians is essential in ensuring any service provides adequate and appropriate nutrition.

Considerable work is underway within RBKC to develop food and nutrition services for older people through its new detailed food and nutrition policy developed and coordinated by the community nutrition and dietietic service. It is important that all health and social care professionals work jointly to ensure that older people receive the best possible support to eat well at home. Training of all those who have contact with vulnerable older people to recognise nutritional risk and the development of a responsive service to take action when this risk is assessed are at the core of improving nutrition in this population group and among those who have community meals.

Recommendations

The community meals service

- At the heart of any community meals service there needs to be a continued commitment to provide all those who are at nutritional risk in the community a home delivered, nutritionally adequate, hot, tasty and appropriate meal, seven days a week, at times convenient to the service user.
- Suppliers must be able to supply and deliver good quality meals from a choice menu, including meals appropriate for special diets and options enjoyed by members of diverse local communities.
- Dietitians are currently committed to ensuring that meals served in day centres, residential care homes and by community meals meet specified nutrient based standards and this needs to be supported across social care.
 Specifications for nutrient standards should be agreed between dietitians and service commissioners and monitored regularly,
- Ensuring the nutritional quality of the community meals served in the context of a service users total food intake must remain a priority and the expansion of the meals delivery to include meals and snacks for vulnerable service users to eat later in the day should be given serious consideration.
- The social care dimension to the service needs to be reviewed with the option of providing an enhanced service to some users. This might be by providing support to augment or replace some elements of homecare service around food. An enhanced meal service trial should be conducted with a number of service users to compare the effectiveness of this enhanced service with current arrangements around domiciliary support. The enhanced cost of this service may make it a viable option for smaller local providers or to lunch clubs and residential care settings.
- There is an opportunity to encourage local service providers to offer community meals and this would have a number of advantages. For example, increasing flexibility around times of service delivery, reducing transport to and across the Borough, maximising business opportunities for locally based suppliers and increasing community social capital. Specification for a meals service could consider splitting the Borough into 2 or 3 key areas to encourage smaller suppliers to offer local and more personal services.
- Consideration should be given to separate bids for supply and delivery of meals if clear benefits of such an arrangement with no loss of quality can be demonstrated. Third sector organisations should be involved in these discussions.
- Current frozen meals delivery is a cost neutral service to the Borough and where users are happy with the meals they obtain for the amount they pay then this should be a service offered to them. Some users however may prefer to obtain frozen meals, or meals which they can freeze themselves, from other providers and should be given an outline of a range of nutritionally

appropriate options open to them. A pictorial guide to alternative options should be put together by dietitians and the opportunity used to provide additional simple eating and drinking well information.

- Environmental health officers and dietitians who are currently working with food producers and retailers in the Borough should consider supporting small businesses to be able to bid for community meals contracts where they are able to offer an appropriate, responsive and nutritionally adequate service.
- Serious consideration should be given to the organisation and funding of lunch clubs and residential care setting as potential providers of community meals in the longer term. A more integrated and responsive service is likely to meet people's needs more efficiently, reduces the impact on the environment of meals travelling long distances, improves the nutritional content of meals at point of service, allows more flexibility in terms of timing of meal provision and provides an economy of scale in terms of staff training and skills development.

Monitoring and managing nutritional risk

- Older people currently receiving community meals are a vulnerable population and many are at risk of malnutrition, may be socially isolated and in poor physical health. Community meals play a vital role in ensuring that these older people have daily contact with others and receive hot food that the majority enjoy. The vulnerability of this group means that they must remain a priority when considering changes to current service provision.
- Where older service users live alone, are disabled, housebound, unable to prepare their own food, need prompting to eat, have mental ill health or take multiple medications there should be clear actions to ensure that adequate nutrition is provided and that weight and well being are monitored.
- There are a number of key factors that appear to determine the risk of malnutrition among service users, and an urgent need for a home based tool to ensure that there is a rapid response when malnutrition is suspected. Once there is development on communication pathways between health and social care professionals, and a route for action to be taken, then it is strongly recommended that an appropriate tool along the lines of the one suggested here is developed and piloted.
- Oral health of older adults does not seem to be included in health assessments made by social care workers despite the importance of good oral health for ensuring adequate nutrition. Dental services need to work more closely with social care to consider how oral health issues can be assessed and addressed among vulnerable older people in their own homes.
- Only 22 service users appeared from the records to be taking a vitamin D supplement, and only 7% of those who were noted as housebound appeared to be taking supplements. All those assessed as in need of a community meal are likely to need vitamin D supplementation and a strategy to coordinate this between GPs, dietitians and social care staff needs to be agreed, 1 in 5 service users appears to have already experienced fractures and falls.

Talking to service users

• It is essential that service users are listened to in terms of how they would like to access food and the components of the service that are important to them. This will be particularly important as the user group changes over time, and in the next decade there is likely to be increasing diversity of need. A series of regular home visits by registered public health nutritionists or dietitians to consider the meal service, and the wider food access issues experienced by service users, should be implemented.

Record keeping

- It is recommend that a new overview document is created for all adult service users who are considered vulnerable to poor nutrition which is clear and simple to keep up to date, accessible by social and health care staff and action orientated. This needs to be tied into changing record keeping implemented as part of the Older People's Strategy.
- It is essential that records are also kept which highlight those offered a community meal who refuse it, or those who stop the service, the reasons for refusal and the action to be taken to ensure and monitor adequate nutrition from that point.
- As suitability for a community meals requires assessment that someone cannot eat well independently and is therefore at nutritional risk, all recipients should receive a referral to a dietitian for screening and nutritional assessment.

1.0 Introduction

As part of a project to improve the nutritional status of older people in contact with health, social services and the local authority services in the Royal Borough of Kensington and Chelsea (RBKC), The Caroline Walker Trust (CWT) was commissioned to provide a baseline assessment of current service provision around community meals ('meals on wheels'). The aim was to perform an independent and detailed review of current community meals service users and to investigate potential future options which might be appropriate and desirable for community meals. The review aimed to ensure that data was collected which responds to the personalisation agenda as well as to nutritional concerns. This summary report provides background information to support the recommendations made.

1.1 Aims of the review

- Collate detailed baseline data about current community meals service users.
- Investigate what options other than the current community meals service might be made available in the Borough
- Investigate older people's opinions of a number of options for community meals provision through detailed qualitative interview
- Review options for a more personalised community meals service

1.2 Community meals

Where it is has been assessed that an adult is unable to provide themselves with a main meal in their own home, and that this could lead to a decline in health or wellbeing or a decrease in quality of life, community meals are usually provided. Community meals can be provided as a hot meal served daily, or on a number of specified days, or as a frozen meal which is heated in a microwave either by the service user or by their home carer or other carer or supporter at a time to suit them. It has long been established that community meals are an essential service to improve the nutritional status of older people, maintain their independence and support them to live in their own homes (CWT, 2004). In addition community meals services can build social capital by providing isolated older people with social interaction, although this element of many services has declined in recent years as volunteer type community meals services have been replaced. Despite the fact that community meals provision is common across the UK and in much of the developed world there remains little data which provides clarity over the contribution that meals make to nutritional status, health and well-being of older people. Approximately 2% of British people aged 65 years and over receive a community meal compared to about 2.4% of older people in Ireland, 2.6% of older adults in Australia and 3-7% of older people in Sweden (O'Dwyer and Timonen, 2008). Community meals service users are more likely to be aged 75 years or over, female, living alone, less mobile, more socially isolated and to have lower incomes than the general older population as well as be more nutritionally vulnerable (O'Dwyer and Timonen, 2008). The actual nutritional value of community meals has however been infrequently analysed in sufficient detail, and current specifications, whilst suggesting that nutritional adequacy is part of the contracted service, typically do not hold providers to account in terms of regular reporting of nutrient content at points of delivery for all nutrients in the specification.

Recent evidence from a detailed review of community meals in Ireland highlighted a number of difficulties with the community meals service that are not frequently addressed. Firstly, the report highlighted the lack of emphasis placed on meal utilisation by service users i.e. the amount of the meals actually consumed. The assumption is that all of the meals are eaten but in reality many users throw out or share all or part of a meal or keep some or all of it for later use without using appropriate storage (O'Dwyer and Timonen, 2008). One study reported that on average only 81% of the energy content of community meals was consumed on average (Fogler-Levitt, 1995). Poor appetite, chewing difficulties and slowness of eating may make eating the meal at one time difficult or waste may be related to, unappetising food. Secondly, there is evidence that community meals do not provide adequate nutrition and that whilst meals are likely to provide sufficient energy (where this aims to provide about a third of an adult's daily requirement) the amount of fibre, iron, calcium, folate, vitamin C and vitamin D are typically inadequate (O'Dwyer and Timonen, 2008). It is also reported that the community meal is heavily relied on as the main provider of nutrition each day for many clients, but many community meals are lacking in both quantity and variety of fruit and vegetables and dairy foods with an over-reliance on meat in main meals.

9

1.3 The personalisation agenda

Personalisation means that every person who receives health and social care support, whether provided by statutory services or funded by themselves, will have choice and control over the shape of that support in all care settings. The expectation is that by 2010/11 councils will have made significant steps towards redesigning and reshaping their adult social care services, with the majority having most of the core components of a personalised system in place. Councils should be able to demonstrate to their partners better use of resources across the entire system by investing in early intervention to ensure that the new systems are embedded at a local level. This review of community meals also reflects some of the key strategies in the RBKC Older People's Nutrition Action Plan. Namely:

Priority 5:

The appointment of a contract for the hot/frozen meals services in Kensington and Chelsea will in future follow a review of the services needed to give older people the greatest choice and develop services according to their needs rather than a one size fits all approach.

1.4 The community meal home delivery service in RBKC

(NB. this data relates to findings from 2008/2009)

Community meals are currently provided in RBKC by Apetito services. Apetito offer both a hot meal delivery service and a frozen meal service through meals branded as Wiltshire Farm Foods. Meals for users requiring special diets or altered textured diets are provided and users are given a weekly menu to choose their lunch choices usually given at weekend deliveries. Community meal users pay £3.20 for either the hot meal or frozen meal service, but where the frozen meal cost almost covers the cost of this service, the hot meal cost paid by users represents only 40% of the meal cost to RBKC of £7.55/meal. In addition there are higher costs for speciality meals catering for those who require a culturally appropriate meal, or a special diet, and these meals can vary in price from £7.96 to £11.09 per meal.

Hot meal service users generally receive their meals 7 days a week but can choose the days convenient to them. The meal service is centrally coordinated from The Old Kent Road where meals that are made in Wiltshire, or imported from overseas, are kept as frozen meals until either delivered as frozen or heated up in special delivery vehicles for hot food service. The majority of hot meal delivery vans have food placed in the heaters approximately 2 hours before meal service. The central service is able to be responsive to users needs should they not require a meal on a certain day and the meals coordinator also acts as a central point of contact with social workers to report problems and difficulties reported by the delivery team. The hygiene aspects of the service are currently reviewed annually within RBKC by a member of the children's catering services team.

A number of points were highlighted in this review:

1. Despite the contractual arrangements agreed it is impossible for many drivers to offer a responsive service to older people they deliver meals to as they are:

- required to deliver considerable numbers of meals in a short period
- are subject to parking tickets during deliveries which causes considerable stress
- have not been sufficiently trained to understand the importance of good nutrition and hydration for older people and the importance of their role

2. The community meals coordinator does not have access to information about what other services the older person may receive (e.g. home care visits) and has no clear central contact for feeding back information where there are concerns about non-response or illness.

3. The choice of meals received by the service users are frequently specified by the user and may not be appropriate to current needs.

4. Both the provider and the borough request user assessments of the hot meals service on a regular basis using tick box questionnaires and the value of these should be reviewed.

In July 2009 a further piece of work was undertaken looking in at nutritional standards for community meals and to review important areas to consider for contract review. Key recommendations from this review are included in Appendix 1. Dietetic involvement in determining appropriate nutritional and food based standards for any community meals service commissioned is essential.

1.5 Community meals users in RBKC

In September 2009 a list of home meal users was provided for audit by the social services team responsible for older people in the Borough and 264 current home meal users were included in the sample. The data in Table 1 on home meal provision was taken from the data records held by social services

	Males	Females	
	N= 87	N= 177	
Hot meal	77 (88.5%)	149 (84.2%)	
Daily	54 (62.1%)	109 (61.6%)	
5-6 days a week	17 (19.5%)	24 (13.6%)	
3-4 days a week	6 (6.9%)	23 (13.0%)	
1-2 days a week	9 (10.3%)	14 (7.9%)	
Not stated	1 (1.1%)	7 (4.0%)	
Frozen meal	10 (11.5%)	28 (15.8%)	
Meal type			
Normal	66 (76.0%)	130 (73.5%)	
Special diet	20 (23.0%)	41 (23.2%)	
of which			
Diabetic	12	21	
Soft/puree	5	5	
Kosher/Halal	1	5	
Vegetarian	1	7	
Low protein/low salt	1	2	
Gluten free	0	1	
Not stated	1	6	
Date meals started			
2009	23 (26.5%)	60 (33.9%)	
2007-2008	34 (39.1%)	55 (31.1%)	
2005-2006	17 (19.5%)	23 (13.0%)	
2004 or earlier	13 (14.9%)	32 (18.0%)	
Not stated		7 (4.0%)	

Table 1. Community meals uptake in RBKC

In the week of October 10th 2009 a list of service users showed 263 users of community meals that week and this list allowed an assessment of special meal types. The majority of users had normal meals with about 23% having a special diet, of which just over half had diabetic meals. Table 2 shows the typical current special meals provision per week.

Table 2 – Special dietary meals provided by the community meals service

Meal type	Typical number meals ordered October 2009
Diabetic	28
Soft/pureed meals	8
Vegetarian	7
Low salt	4
Diabetic vegetarian	2
Low calorie	2
Halal	2
Kosher	2
Diabetic low salt	1
Low calorie, low salt	1
Gluten-free	1
Halal, low salt	1

2.0 Baseline audit of community meals users

As part of this study permission was obtained to do a detailed and thorough paper review of the current community meal user group social care records in order to describe the population. All researchers involved in the study had enhanced CRB clearance and the study had RBKC research governance approval.

2.1 Methodology

The main social care records for adults in the social care system are held in a system called Lotus Notes, and these records are compiled by social work teams, responsible for individual clients in different areas of the Borough. The Lotus Notes system comprises of a series of documents for each user held in a similar way to a file of paper notes: each document is independent of others and new information is added in as a new document. Depending on an individual's length of time with adult social care and the complexity of their needs notes held will vary from a few pages, to over a hundred pages, held in one or more sub-records.

In order to collect information which described the health needs, the social care needs and any information relevant to their ability to access food and meals in a variety of ways, it was necessary to search multiple individual record sheets per person. Baseline information about the service user (date of birth, place of residence etc.) was collated from the initial referral form, the FACE health assessment, care plans, referral sheets and OT assessments. Data on community meal use was found on the home meal order. The data set collected for community meals users from the social care records is summarised in Appendix 2. The data was

collated into Excel spreadsheets in text format and then anonymised and converted into data suitable for analysis in the statistical package SPSS (version 17).

2.1.1 Data quality

Data kept in paper records did not include information on all variables of interest for all community meals users, and therefore significant amounts of information could not be collated for the client group. It is recommended that a new overview document is created for all adult service users who are considered vulnerable to poor nutrition which is clear and simple to keep up to date, accessible by social and health care staff and action orientated. The lack of full data records for the cohort group needs to be considered when reviewing the following data.

2.2 Demographic data

Table 3 summarises the cohort of community meals users audited in terms of their demographic data and personal situation. The majority of service users were over 65 years of age: there were 8 users under 65 years of age (4 women and 2 men) but overall almost half of all service users (47.3%) were 85 years or older and 7% were over 95 years of age. Women service users were older on average as would be expected, median age 85 years compared to a median age of 79 years for men.

The majority of service users (about 65%) were White British by background with around 10% of service users of Irish origin and 8% from elsewhere in Europe. Around 20% of service users were born outside the UK in Asia (4%), Africa or the Caribbean (5%) or elsewhere (10%). Younger service users were significantly more likely to come from a minority ethnic group, and when the data is analysed by age group (under 80 years versus over 80 years) about 60% of those of Asian or Afro-Caribbean background were younger compared to 25% of those of White British background and 47% of those of White Irish background (P= 0.05). This may reflect differing levels of family support available to older people from ethnic minority groups who may have fewer family members living in the same area or may reflect different patterns of illness and disability in different population groups.

Table 3 Demographic information about community meal service users

Males	Females
n=87	n= 177

Mean age (range) years	79 (45-97)	84 (40-104)
Ethnicity		
White British	51 (58.6%)	120 (67.8%)
White Irish	12 (13.8%)	16 (9.0%)
White Other	7 (8.0%)	13 (7.3%)
Afro-Caribbean	7 (8.0%)	7 (4.0%)
Asian	5 (5.7%)	6 (3.4%)
Other	5 (5.7%)	15 (8.5%)
Housing		
Flat or bedsit	70 (80.5%)	152 (85.9%)
House	5 (5.7%)	7 (4.0%)
Other/not stated	12 (13.8%)	18 (10.1%)
Housing tenure		
Owner	11 (12.6%)	37 (20.9%)
Council or housing association	44 (50.6%)	76 (42.9%)
Other/not stated		
	32 (36.8%)	64 (36.2%)
Lives in sheltered or very	29 (34.4%)	47 (26.6%)
sheltered accommodation		
(if stated)		
Lives alone (if stated)	83 (95.4%)	140 (79.1%)
Has telecare or pull cord or has	53 (60.9%)	108 (61.0%)
applied for this (if stated)		
Attends a day centre one or	15 (17.2%)	36 (20.3%)
more days a week		
Miranda Barry	4	9
Quest	2	5
Kensington	1	6
EPICS	3	7
Other	5	9
On waiting list or referred	18	2

2.3 Health and well-being audit of community meals users

Table 4 provides some relevant health related information about community meals users taken from their social care records. This data was not complete for all service users: for example, it appeared from records that 42 service users (16%) have a visual impairment, but this does not mean that all other service users have good vision. Data is reported as it was recorded as this demonstrates some of the health issues that need to be noted in this cohort and reflects the data that it is important for record keepers to make clear in social care records for vulnerable people.

Social care records rate older people for overall risk in the categories low, medium and high, reflecting the level of overall support the person is likely to need .Overall about 2/3 of service users in this cohort were considered to be at medium overall risk and about a quarter at high risk. From the data recorded around 16% of service users were visually impaired and 20% hearing impaired, around half of men and 60% of women had restricted mobility restricted and about 1 in 7 community meal service users were housebound. Some information on mobility aids was given in textual data, but again this is likely to be an under estimate with 4% users noted to be wheelchair users, and around 15% frame and stick users.

Around 10% of service users were noted to have diabetes, with cardiovascular diseases, stroke, cancer and COPD as the main diseases noted in records. About a quarter of service users appeared to have no main disease diagnosis but 45% had diseases which could be considered significant in terms of impairing their health and well being. Just over a half of service users had some mental ill health noted, with 35% women and 25% men having dementia or confusion/memory loss and 1 in 5 women and 1 in 3 men having another mental health diagnosis. Some medications may impact on appetite, bowel health or nutritional status and those taking multiple medications (polypharmacy) may be more at risk of medication related nutritional issues. Where information was available on medication it appeared that about 20% of community meals users took more than 4 different medications every day, and many took 7 or more. Substance abuse (alcohol and/or drugs) was noted for 7% of community meals users.

16

Table 4 Health and well-being data collated from community meals users social care records

	Males (n=87) N (%)	Females (n=177) N (%)
Service user with a visual impairment	14 (16.1%)	28 (15.8%)
Deafness noted	23 (26.4%)	30 (16.9%)
Has restricted mobility (total)	43 (49.4%)	107(60.5%)
Arthritis/osteoarthritis	21 (24.1%)	49 (27.7%)
Fractures and falls	15 (17.2%)	38 (21.5%)
Other or age related frailness	7 (8.1%)	20 (11.3%)
Not known	44 (50.6%)	70 (39.5%)
Can leave home unaided	12 (13.8%)	22 (12.4%)
Can leave home with help	12 (13.8%)	20 (11.3%)
Housebound	13 (14.9%)	26 (14.7%)
Not known	50 (57.7%)	109 (61.6%)
Mobility aids		
Wheelchair	5 (5.7%)	5 (2.8%)
Frame	8 (9.2%)	12 (6.8%)
Sticks	7 (8.1%)	12 (6.8%)
None or not known	67 (77.0%)	148 (83.6%)
Main diagnosis disease		
Diabetes	9 (10.3%)	20 (11.4%)
Heart disease/heart condition	11 (12.6%)	33 (18.6%)
/hypertension		
Stroke	10 (11.5%)	12 (6.8%)
Cancer	9 (10.3%)	5 (2.8%)
Chronic obstructive pulmonary disease	11 (12.6%)	9 (5.1%)
(COPD)		
No significant disease noted	19 (21.8%)	52 (29.4%)
Disease is significant impairer of health	42 (48.3%)	78 (44.1%)
Mental ill-health noted (total)	51 (58.6%)	97 (54.8%)
Dementia (diagnosed)	14 (16.1%)	35 (19.8%)
Confusion/memory loss	8 (9.2%)	26 (14.7%)
Other mental health disorder	29 (33.3%)	36 (20.3%)
(anxiety/depression/personality		
disorder/schizophrenia)		
Medication		
Takes up to 3 medicines a day	4 (4.6%)	24 (13.6%)
Takes 4-6 medications a day	6 (6.9%)	25 (14.1%)
Takes > 7 medications a day	7 (8.1%)	12 (6.8%)
No medication	3 (3.4%)	3 (1.7%)
No information given on medication	67 (77.0%)	113 (63.8%)
Substance abuse noted for service user	7 (8.1%)	11 (6.2%)
Overall risk assessment for service user	, , , , , , , , , , , , , , , , , , , ,	
Low risk	8 (9.2%)	12 (13.8%)
Medium risk	53 (60.9%)	112 (63.3%)
High risk	22 (25.3%)	47 (26.6%)

2.4 Nutritional risk and support around meal times for community meals users

People are offered a community meal service because they are considered unable to prepare meals for themselves and are therefore at nutritional risk. From the data held in the records available indicators that might be associated with nutritional risk were identified, and these are shown in Table 5.

|--|

	Males n=87 N (%)	Females n=177 N (%)
Service user still prepares some of their own food	42 (48.3%)	71 (40.1%)
Poor appetite noted	20 (48.3%)	28 (15.8%)
Weight gain/heaviness noted	5 (5.7%)	8 (4.5%)
Weight loss noted	20 (23.2%)	33 (18.6%)
Fluid concerns noted	9 (10.3%)	6 (3.4%)
Nutrition/dietetic input noted	7 (8.0%)	17 (9.6%)
Vitamin D supplement noted	9 (10.3%)	13 (14.9%)
Other health issues of relevance noted: Anaemia Urinary tract infections Pressure sores/ulcers Constipation/bowel problems Chewing/swallowing difficulties Poor teeth	3 (3.0%) 5 (5.8%) 6 (6.9%) 4 (4.6%) 5 (5.8%) 1 (1.1%)	8 (4.5%) 12 (6.8%) 20 (11.3%) 14 (7.9%) 12 (6.8%) 3 (1.7%)
Receives practical home care only Receives practical and personal home care Not clear or no data recorded	20 (23.0%) 45 (51.7%) 22 (25.3%)	31 (17.5%) 129 (72.9%) 17 (.6%)
No home help support around eating noted Prompts to eat noted Home help prepares food noted Home help prompts/prepares and helps to eat No information given	30 (34.5%) 6 (6.9%) 27 (31.0%) 15 (17.2%) 9 (10.3%)	56 (31.6%) 3 (1.7%) 61 (34.5%) 28 (15.8%) 29 (16.4%)
Social services is main care provider Other (private care/family/friends/sheltered housing staff) are main care providers Not clear/no data given	44 (50.6%) 17 (19.5%) 26 (29.9%)	89 (50.3%) 32 (18.1%) 56 (31.6%)

Being unable to prepare a meal is one of the assessment criteria for being offered

community meals and approximately half of men and 60% of women were unable

to prepare their own food. All community meal service users are likely to be at risk of vitamin D insufficiency and whilst 22 service users (8%) appeared to be taking a supplement, only 3 out of 39 people considered housebound (7%) had supplementation noted.

Reported unintended weight loss was used to review factors that may impact on nutritional risk in this cohort. Weight loss was noted for 23% men and 19% of women in this sample but appetite loss was noted for almost half of all men. Weight gain or heaviness was only noted for around 5% of service users. Weight loss was noted for 53 community meal service users but dietetic input and monitoring was only noted for 24 community meal users overall, and for 14 of those who had lost weight. Fluid concerns were not frequently noted in records despite dehydration being a significant issue among vulnerable older people. Similarly dental health was rarely noted in records, despite poor oral health being a major risk factor for malnutrition among older people and the need for proactive support around oral health care among vulnerable older people.

The mean age of those who had recorded weight loss was 82 years, about a quarter of those who had lost weight were visually impaired and a quarter were deaf and 55% had significant disease. Only a third of those who had recorded weight loss were in the high risk category according to the social care risk rating. Weight loss did not appear to be related to age of service user but some significant relationships were noted and these are shown in table 6. This suggests that nutritional support and monitoring should always be actioned where community meals users are unable to prepare their own food, have a poor appetite, are housebound, take multiple medications, need prompting to eat, have a mental ill health diagnosis and have been rated at high risk in social care records. There appeared to be an increased significant risk of weight loss where service users need prompting to eat. Table 6. Factors significantly associated with weight loss among community meals <u>users</u>

Explanatory variable	Number and proportion of sample where weight loss noted N (%)	
Total sample	53 (20.0%)	
Service user unable to prepare food	17 (32%)	
Has poor appetite	35 (66 %)	
Significant disease noted	13 (25%)	
Mental health diagnosis	12 (23%)	
Housebound or needing help to leave house	13 (25%)	
No home help input to food or eating	6 (11.3%)	
Needs help around food preparation	8 (15.1%)	
Needs prompting to eat	29 (54.7%)	
Needs prompting to eat/help around food preparation and eating	25 (47.1%)	
Takes 4 or more medications a day	15 (28.3%)	
Date community meals started		
2009	11 (20.8%)	
2007-2008 2005-2006	13 (24.5%) 9 (16.9%)	
Pre 2005	9 (16.9%) 6 (11.1%)	
Social care risk assessment		
Low	8 (15.1%)	
Medium	10 (18.9%)	
High	14 (26.4%)	

Summary

Weight loss (usually a prime indicator of nutritional risk) was related to service users living alone, being physically disabled or having mental ill health, being housebound, unable to prepare their own food, needing prompting or help to eat and taking multiple medications. It is recommended that all community meal service users are referred for nutritional assessment and that records relating to these key risk factors are kept, monitored and acted upon for all service users.

3.0 Qualitative review of community meals users

To investigate options around meal provision among the current cohort of community meals users, a series of home visits were undertaken. The aim of the qualitative interviews was to determine what other choices users might make should a range of meal options be offered, what users priorities are around meal provision and what support and resources people might have which are not currently fully explored around meal provision.

3.1 Method of selection for the home visits

From the original list of service users provided by social carer services (n= 264) each service user was assigned an appropriate risk category from their Lotus Notes, No risk data was provided for 10 users. This resulted in 20 low risk users, 164 medium risk users and 68 high risk users stratified for initial random selection. The initial aim was to visit 50 current users and to allow for change of circumstances, refusals and unavailability 75 users were selected: 6 at low risk, 49 at medium risk and 20 at high risk from this list using a simple selection procedure from the alphabetical list provided. A review of the records highlighted those that would be unsuitable for a home visit because they were too cognitively impaired, had been assessed as potentially violent, were unable to answer the telephone or door or where direct contact was not recommended by social care staff. Where someone was excluded from the initial list, the next person at that level of risk from the alphabetical list was selected and the records re-checked. Those visited represent a purposive and pragmatic sample of community meal users able to give opinions about the service they receive.

Individuals selected were contacted directly by telephone to see if they were willing for one of the team to visit them. The sample selection process is shown in Table 7. In all 31 home interviews were conducted by the research team which represents in depth discussion with about 12% of community meals users in RBKC.

21

Table 7. Selection of sample for home visit

	Low risk	Medium risk	High risk
Number originally identified for visits	6	49	20
Number suggested as unsuitable for home visit by social workers	0	8	9
Number where no response from social worker on suitability for home visit arrived in time frame.	0	17	0
Number for attempted contact (proportion of original sample)	6 (100%)	24 (49%)	11 (50%)
No response to contact phone call	1	2	1
Person unable to agree an interview due to cognitive difficulties	0	0	1
Refused visit	1	0	1
Appointment made but no response when visited	0	3	0
Successfully visited and interviewed (% of original group)	4 (75%)	19 (39%)	8 (35%)

The characteristics of the community meal service users who were home visited is shown in table 8.

Table 8. Characteristics of those visited for home interview

	Males n= 6	Females n= 25
Mean age (range) years	76 (69-89)	85 (54-97)
Lives in sheltered accommodation	0	8 (32%)
Hot meal	3 (50%)	22 (88%)
Frozen meal	3 (50%)	3 (12%)
Social care risk assessment		
Low	2 (33%)	1 (4%)
Medium	3 (50%)	16 (64%)
High	0	7 (28%)
Not specified	1 (17%)	1 (4%)

Home visits took between 20 minutes and 45 minutes and were structured around an interviewer led questionnaire with interviewer observation. The interview outline can be found in Appendix 3. The interviews were conducted by either a dietitian or

registered public health nutritionist with experience of interviewing vulnerable people, and verbatim responses were recorded where appropriate.

Interview transcripts were reviewed by two researchers, who created thematic maps from the interview data and condensed responses into 4 key themes relating to satisfaction with the current service, criticisms of the current service, interest in enhanced service arrangements and interest in other home meal services, Within these themes, sub-themes relating to more specific areas of the service and opinions around the service were highlighted.

3.2 Key themes from the qualitative data collection

Expert analysis of the qualitative interview transcripts led to the following key themes, which are illustrated with verbatim quotes. Sub-themes within these main themes explain further some of the attitudes and opinions of the user group interviewed around the main themes.

3.2.1 Satisfaction with the current service

There was considerable consensus among the older people interviewed that the current community meals system meets their needs and most users expressed satisfaction with the current service. There was considerable appreciation of the practicalities of providing hot meals to people's homes and nearly all users were grateful for the service.

'I wouldn't change anything, the meals are very good. Obviously a lot of thought have gone into producing them'. (Female 86y hot meals)

'It is a very good service and I would be very sorry if it was stopped' (Female 91y, hot meals)

Many service users mentioned the temperature of the meals when they arrive as being very important to them

'Having a hot meal is so important when you are old, and the meals are always piping hot and delivered so nicely' (Female 92y hot meals)

The care and consideration of the delivery staff, and their reliability, was also almost universally praised *'They are very good to me and I wouldn't change anything. They know me* '(Female 83y hot meals)

The convenience and peace of mind associated with having meals delivered was also a key issue

'I've lived here a long time, I never go out on the winter and need someone to bring me food or I would be in a big worry' (Female 85y hot meals)

Practical reasons for needing community meals were mentioned by many users who felt that organising their own hot lunch was outside their capabilities even though they were still able to perform some tasks of daily living.

'If I didn't have frozen meals delivered I wouldn't cook as I'm tired and not interested since my husband died' (Female 85y, hot meals)

The cost of meals was generally agreed to be reasonable by service users who were pragmatic about the service and the cost of home delivery.

'They do a good job for the money, you have to be practical' (Male 89y hot meals)

There were mixed comments on the portion sizes of meals. Generally younger users felt the portions were too small, but many older people found them adequate or too large.

'I'd like bigger portions' (Female 54y hot meals)

'Portions are too big for me' (Female 85y frozen meals)

3.2.2. Criticisms of the current service

Although most users expressed contentment with the service, when probed they were sometimes critical about the choice of meals they received and the lack of variety. This was particularly the case around vegetables, which for many people was the weakest aspect of the meals they received.

'Would like something other than yoghurt for dessert, some apple and custard maybe? (Female 91y, soft meal)

'I get a bit tired of the same everyday, lack variety. would like a cold meat and salad sometimes – some crunchy salad' (Male, 83y frozen meals)

There were also a few comments about receiving food chosen and difficulties with deliveries in some cases. Most service users however expressed patience with difficulties in meal choices and were accepting of some difficulties and willing to be flexible.

'They don't always deliver what I order, but sometimes they run out of things and you have to be a bit flexible' (Female, 91y hot meals)

3.2.3. Interest in enhanced service arrangements

Service users were asked it they would like to have someone plate their meal and offer them a drink, and the reactions to this were mixed, Some users were very happy with the containers they receive, others would prefer to have a plate. The hotness of meals came up again here as an issue.

'I don't like eating out of little box would be good if they could put on a plate' (Female 84y hot meals)

'Best thing about the meals – they arrive hot and you eat them! You can throw away the containers and I can't stand for long so couldn't wash up anyway'. (Female 91y hot meals)

3.2.4. Interest in other methods of accessing home meals

Other options for accessing meals were discussed with service users and a number of ideas and options suggested. One of the key issues often suggested is that older people eat better if they are with others, but there were mixed responses to this, and some of the service users said they had community meals because they don't wish to eat with others. However several expressed a desire for flexibility with guests or meals.

'I don't want to go to a lunch club, am not ready for that yet! would like to be able to order an extra meal and invite a friend round sometimes though or have a special meal for a special occasion' (Male 89y hot meals)

Many interviewees were unhappy with suggestions that the community meals service might change in the future to offer more options, but some acknowledged that they should be seen as an emergency measure for some people. They were still seen by many as an essential safety net. 'Meals on wheels are there for when we really need them, it is passing the buck to try and get people who are on them to sort food out themselves, if people could do that they would! ' (Female, 74y former user)

Most agreed that they had community meals because they did not want to burden family or friends and there was little enthusiasm for paying others to organise food for them. There was also concern that arrangements made could break down.

'I could pay someone to cook for me, but that is not a realistic long term proposition and if it all fell apart it might be difficult to get back on to meals on wheels' (Male 89y hot meals)

When asked about using cafes and restaurants most service users thought these would be too expensive and might not meet their needs. Some users were interested in the variety of food that they could access if this was made possible in the same price range.

'Restaurants would be nice but too expensive, and the problem with alternatives is you can't guarantee what they would taste like or if they would be good for you. I know what I'm getting with these meals'. (Female 94y hot meals)

Service users were asked whether they thought frozen supermarket meals would be a good option and responses to this were mixed, and determined by experiences people had had with alternatives. Again there were concerns from some about setting up alternative services of any kind.

'You can't compare supermarket and Apetito meals. The meals on wheels are set and I get the catalogues. I'm very happy with what I get and can pay by direct debit, it's all set up and I don't need to worry'. (Male 72y frozen)

There was a mixed response to the suggestion that lunch clubs and day centres could offer a home meals service. Issues of lack of choice and hotness of the meal came up again as a disadvantage.

'Not much difference between meals on wheels and lunch club food, day centre marginally better as can choose portion size, but home meals are hotter' (Male, 69y hot meals)

'I go to a lunch club once a week and I like the food there, but don't want to go more and like my hot meals arriving as they are' (Female 83y hot meals)

Other areas for discussion included community chefs and this was not an option than anyone thought was viable Have a chef come into my house and cook for me? Oh no thank you, that would be ridiculous! (Female 92y hot meals)

Several service users made comments about the need to consider environmental issues and for the food to be more local

'I would prefer food that has been made closer to home and that is cheap, healthy and doesn't need to be driven long distances – that is not good for my grandchildren (Male 89y hot meals)

And some service users were open to suggestions that they could make more of the fact that London is such a vibrant multi-cultural food capital

'We are so lucky in London with all the amazing food available – shame when you get old that you don't have access to it' (Male 89y hot meals)

3.3 Summary

Users were highly satisfied with the community meals service and there was little appetite for a change in service provision. Service users were particularly appreciative of the hotness of meals arriving, the choice given and the level of service given to them by the drivers. Comments on the inadequacy of portion sizes were made by younger interviewees and most complaints about meals were around lack of choice or poorly cooked or repetitive vegetable choices.

Most users were aware of their own physical limitations around food preparation, accepted the need for help and felt that this may involve some compromise. Convenience and reduced stress related to the burden of meal provision when frail or tired was commented upon. Community meal users interviewed here were grateful for services and were willing to be flexible and relatively undemanding No-one interviewed seemed keen to involve family and friends in their meal arrangements, with concerns that these arrangements may impact on their independence and security of service and place an undue burden on others.

Enhanced services to plate meals in the home were viewed differently depending on individual circumstances and preferences. There was little enthusiasm for other suggested meal provision services such as community chefs or greater use of local restaurants or other services with most service users having a fairly pragmatic approach to the cost of food delivery, the practicalities and continuity of it and their own disabilities. Lunch clubs and day centres were seen as a possible option by some, but with caveats that food choice and food hotness might be compromised even if the service could be successfully established. There was a sense of 'missing out' on variety of food and the vibrant food culture of London by some individuals, but the main theme arising from these interviews was one of acceptance that once an individual is unable to provide their own meals, that compromise has to be made in order to ensure a cost effective, consistent service is available.

4.0 Review of other community meal services and developments in London and elsewhere

A review was completed of community meals services in other London Boroughs and a summary of how each Borough sources community meals is shown in Appendix 4. At the time of this review all Boroughs with the exception of Tower Hamlets and Bexley contracted out their meals service to one of the main suppliers Sodexho, Apetito, Flowfoods or Fresh Community Meals. Bexley provided only information about different suppliers of frozen meals to their residents. Tower Hamlets provided the least expensive meals and all meals provided were freshly cooked in local kitchens, meal planning was supported by a dietitian and meals were distributed to both schools and community meals users. The cost of community meals to recipients varied from £2.55 to £4.45 with the mean cost being £3.30. Four Boroughs only offered frozen meals.

Other initiatives across the UK

Some examples of alternative practices or results of community meals reviews in other areas of the country were also collected and are given below. These are included only to demonstrate some of the options under review and consideration elsewhere and further details of these systems can be requested from the relevant Local Authority if required.

- South Gloucestershire provide their community meals through six school kitchens in the Borough using fresh, organic ingredients. They can provide diabetic, vegetarian, low fat and gluten free meals, however, specific cultural and religious requirements are met by external suppliers. This service also delivers a tea time snack if required.
- In Rotherham an information pack is provided to community meals users with information from the large suppliers and some smaller community based suppliers and service users are encouraged to make their own provision from the suggested suppliers in their area. Some small scale local suppliers such as Farmhouse Catering offer lunch and tea choices every day delivered to the door, with hot and cold meal choices, a roast dinner on Sunday, sandwiches,

cakes and household essentials such as milk and orange juice. For \pounds 7.00 users can order a hot lunch, hot dessert, a sandwich, a savoury (such as a sausage roll) and a cold dessert (which would provide approximately 70% of the users daily energy needs). Other small providers recommended to service users include Pit Stop Diner, which offer a service of freshly cooked hot and cold meals between 8am and 6pm every day including hot meals, salads, sandwiches, jacket potatoes, omelettes and desserts at prices of between \pounds 1.50 and \pounds 3.50.

 In Leicestershire a number of smaller community meals producers have been commissioned to fill local and minority user needs in a highly multi-cultural area, an enhanced service to more vulnerable users has been successfully piloted and has been found to be more cost effective in supporting eating and spotting risk than domiciliary services.

Community Chefs

Community chefs are employed by Primary Care Trusts in some parts of the UK, for example in the Isle of Wight and in Eastern and Coastal Kent. In Kent the community chef project forms part of Kent County Council's (KCC) 'towards 2010' strategy and is one of five healthy eating pilots currently being rolled out. The aim of Community Chef projects is to take food preparation into the home and develop skills and these projects are particularly well suited to adults with learning disabilities or mental ill health who may find it difficult to access meals but are physically able to cook and prepare foods with support. There is a potential for community chefs to work with older adults who may be physically able to prepare food but who do not have the skills (e.g. bereaved men who have not been involved in food preparation) to encourage independence. This is however an expensive service to implement and it may be more cost effective to encourage older people able to learn food preparation skills in day centres, lunch clubs and other settings. No evidence of this service being used for older people to replace community meals services was identified.

Third sector providers

Historically the Women's Royal Voluntary Service (WRVS) were the main providers of community meals and used volunteer drivers to deliver meals across the UK. The lack of volunteers available and the contracting of many services to national providers caused a decline in WRVS services, particularly in cities. In November 2008 WRVS launched a new community meals service called 'Tasty Food Company' in South Essex offering chilled home quality meals priced from £3.50. WRVS offer an enhanced service in terms of the training of their volunteers and staff and the service to the user and have the advantage of being more fully embedded in the local community and a not for profit service. Third sector providers should be involved in discussions around meal delivery and meal planning as they may be able to offer new and enhanced services in one of those areas. In addition some third sector organisations in the Borough offer home services such as bathing and nail clipping and are therefore in a position to observe service users well being and circumstances. It is important therefore that these groups are involved and consulted when possible new community meal options are discussed, even if they themselves have no capacity to act as providers.

4.1 Options within RBKC

4.1.1. Enhanced meal service

An enhanced meal service can potentially enhance the well being of service users, maintain their level of independence and potentially delay their need for additional services. The service offers non-personal care and requires training of staff in the importance of supporting older people to eat and drink well as well as in spotting potential hazards in the household. Tasks that are undertaken could include plating of meals, preparation of drinks, cutting up of food, encouraging to eat and ensuring fluids and snacks are to hand where necessary.

An enhanced meal service could be considered for more vulnerable service users and it is recommend that a pilot be established to investigate the cost effectiveness, suitability and acceptance of this service compared to meals delivery combined with domiciliary care. The enhanced cost of this service may make it a viable option for smaller local providers or to lunch clubs and residential care settings.

4.1.2. Lunch clubs and residential care settings as community meals providers

The current community meal users across the Borough have been mapped against day centres and residential care homes and this can be seen in the map on the following page. The north and south of the Borough offer a number of opportunities for the development of locally responsive services but these are more limited in the centre of the Borough. In the review of the meals service for older people in RBKC in 2008, a number of lunch clubs expressed an interest in developing a community meals service, but at present do not have the funding or staffing capacity to develop options in this area.

There would be a number of advantages and opportunities to developing local lunch club and residential care services to also offer home meals delivery. This is a longer term option that would require considerable commitment in terms of finance, but the advantages in the longer term are clear and would fulfil a number of objectives within RBKC.

• Contribute to personalisation of adult care

- Promote good health and nutrition
- Consider the use of resources in a green environment
- Stimulate local providers and support ward based initiatives
- Encourage local enterprises
- Support strategies which best enable independence of service users

There is currently a review of voluntary services within the Borough to see how these can be better joined together to offer a more holistic service to residents. The following table summarises some of the issues that may require consideration when developing third sector services around community meals.

Opportunities from developing lunch clubs and residential care homes as community meals providers	Challenges to developing lunch clubs and residential care homes as community meals providers
The development of services within lunch clubs and residential care homes offers an economy of scale around training of staff and development of local older people strategies around good nutrition and increases continuity of care.	Longer term and more committed funding required for services to allow the development of expertise around planning and producing meals appropriate for community meals users
Lunch clubs and residential care settings are able to respond to local need and offer a trustworthy local service to older people who may be known to staff and carers in those settings	Significant investment needed in equipment, skills training, packaging, storage and any other infrastructure required for a functioning home delivery meal service
Local investment in developing these services builds social capital, increases employment and skills within RBKC	Smaller operators will be unable to offer as much choice on menus as larger providers, but could cater for more specific local needs
Greater control around local procurement and sustainable food initiatives	There may be greater risk associated with smaller providers which are more likely to depend on fewer personnel
More control over the quality and nutritional content of community meals could ensure greater contribution to older people's nutrition in the Borough.	Greater commitment will be needed within the Borough to support the community meals service and manage day to day deliveries across providers, ensure adequate feedback mechanisms, safety and quality of service delivery.
Greater creativity possible in areas such as meal packaging e.g. using returnable non disposable serving containers	A central point to coordinate meals delivery for all providers needed and contingency plans needed for emergencies.



4.1.3 Other local meal providers

There are considerable numbers of food outlets and catering establishments across the Borough which offer food delivery, and the range of choices is vast. There are a number of potential difficulties in using these options for community meals.

- Meals may be too expensive
- Portion sizes may be inappropriate
- Nutritional content may be inappropriate for service users

In addition:

- Ordering may be too complex for many people
- Delivery may not be assured
- Cash payment may be difficult to organise
- There may be considerable packaging waste
- Food outlets may not be sufficiently trained to assure food is safe for vulnerable service users
- Food may not arrive sufficiently hot and there may be issues around transport and safe storage
- Communication between outlets and service users may be more difficult
- There may be personal safety issues and access to property issues for more vulnerable service users
- There is a loss of the feedback mechanism should providers find difficulties among service users
- Training of staff may be more complicated to organise and staff turnover may be higher

Qualitative discussions with service users did not show any great desire among the majority of current service users to obtain meals from general outlets, with many commenting that they would do this already if it was not too expensive or inappropriate to their needs.

In order for the local authority to suggest particular outlets to service users as suitable for providing their community meals there would need to be consultation with the environmental health officers to ensure that the establishment had sufficient health and hygiene scores and that the food was nutritionally appropriate.

4.1.4 Other frozen meal options

There are arguments that there is little need for service users to use a central community meals service for frozen meals, since similar meals to these can be ordered and delivered by most supermarkets.

The advantages of using a meal provider who specialises in community meal provision for the delivery of frozen meals are:
- Economy of scale in training of meals providers around the needs of vulnerable older people
- Range of meals available appropriate to service users needs
- Nutritional composition in line with hot meals service
- Consistency and reliability of service with feedback mechanism if user does not respond to caller
- Central knowledge of service users who may potentially develop needs for a hot meal service over time
- Safe service for vulnerable older people who may have access issues
- Safe payment methods can be organised

The advantage for the service users of getting frozen community meals is that they have the flexibility to have their meal at a time that suits them rather than when the delivery arrives, and for some people this is the preferred option. Community meal users who received frozen meals were for the most part content with the meals they received but there were some comments about a lack of variety in the meals and small portion sizes. Some community meals users expressed a preference for meals from other providers (notably M&S) and we have investigated the nutritional composition of a range of frozen meal options to see whether many of these are a cost effective, healthy alternative option.

In Appendix 5 a range of typical frozen meal options have been compared against the current guidance for a community meal for energy, protein, fat, fibre and salt given by the National Association for Care catering (NACC). It is obviously difficult to compare individual dishes since the meal guidance is for a main course and dessert. An assumption has been made that 2/3 of the nutrients should come from the main course and 1/3 from the dessert for energy, fat and fibre and that the spilt should be 75:25 for salt (sodium) as this is likely to be higher in the main course, to give the approximate comparison figures shown below.

	Main meal	Dessert
Energy kcals	450	200
Fat (maximum) g	14	6
Fibre (g)	4	2
Salt g (Sodium mg) maximum	1.9 (750)	0.6 (250)

In addition vegetable and fruit portions in a meal or dessert less than 80g and meat/fish portions of less than 50g per meal have been highlighted as potentially

inadequate. Where meals may be inadequate compared with current guidance highlights have been made.

Information about other frozen meal options could be regularly collected and reviewed by the dietetic service to produce a pack of guidance for community meal users on acceptable ready meals to replace those currently provided. Standards by which meals are judged need to be agreed in line with the standards for community meals. It is recommended however that more rigorous nutrient standards are included in any meals commissioned within RBKC and most frozen meals may not provide sufficient amounts of micronutrients, most of which will also not be known from products as purchased.

5.0 References

Caroline Walker Trust (2004) Eating well for older people. CWT. London. www.cwt.org.uk

Fogler-levitt E, Lau D, Csima A, Krondi M, Coleman P (1995) Utilisation of community meals by recipients 75 years if age or older. *J Am Diet Assn*, 95, 550-558.

NACC (2005) A recommended standard for community meals. NACC. Sussex. www.

thenacc.co.uk

O'Dwyer C, Timonen V (2008) The role and future development of the meals-onwheels service for older people in Ireland. National Council on Ageing and Older People, Trinity College Dublin.

Royal Borough of Kensington and Chelsea (2007) Older People's Strategy. RBKC, London

Appendix 1: Contracting for home meal delivery services: Nutritional considerations

This is a summary of some of the observations and recommendations made by CWT to RBKC for consideration when commissioning community meals services, based on visits to providers and service observations.

1. What should the minimum standards for community meals be?

The Service Provider should be required to ensure that their meals and menus provide a balanced diet to all the Service Users. The Service Provider should be required to provide a variety of meals for all specified diet types on a daily basis and should provide all meals in accordance with the standards identified by The National Association of Care Catering (NACC, 2005). CWT has recommended standards which cover a main meal and a snack that can be reviewed in the report *Eating well for older people* (CWT, 2004) but for this review NACC standard review was requested,

Nutrient	Recommended amount	Notes
Energy	600-650 kcals	Currently calculated
Protein	20g	Currently analysed
Fat	25-30g (max 50g)	Currently analysed
Carbohydrate	75-80g	Calculated by difference
Fibre as non-starch polysaccharides	6g	Currently analysed
Iron	3-4mg	Not included in current analysis
Calcium	160mg	Not included in current analysis
Zinc	3mg	Not included in current analysis
Sodium/salt	MAX 1000mg (2.54g salt)	Currently analysed
Thiamin	0.3mg	Not included in current analysis
Riboflavin	0.4mg	Not included in current analysis
Niacin	5mg	Not included in current analysis
Folate	80ug	Not included in current analysis*
Vitamin C	10mg	Amount present after cooking but before holding* – not included in current analysis
Vitamin A	230ug	Not included in current analysis

Recommended nutrients per meal (NACC, 2005)

* the loss of vitamin C (and folate) when hot food is held for long periods means that ideally there should also be some analysis at point of delivery to see whether adequate amounts remain in food as served.

These recommended meal standards for traditional non-therapeutic meals (with consisting of a main course and a dessert) specify minimum requirements for the amount of nutrients that should be provided per meal.

In addition a <u>minimum of 2 portions of fruit and vegetables</u> (excluding potatoes) should be served in each meal (main course and dessert) to a minimum of 160g cooked weight.

<u>Fluid</u>

Increased awareness of the importance of hydration for vulnerable adults means that it is also prudent for the community meals service to ensure that all service users are provided with a drink with their meal. This can be water, ideally tap water from the service users home given with the meal. Bottles of water or tetrapak drinks provided at the door can be given if access to the kitchen is difficult, Where meals do not easily meet vitamin C recommendations, NACC suggest that the provision of a fruit juice or fruit drink fortified with vitamin C be considered. NACC are considering a formal recommendation for fluid in community meals standards but this has not yet been formally agreed,

2.0 How to meet the standards

These are demanding standards to meet on a per meal basis. It is recommended that menu plans aim to achieve these values on average over a period of 1 week or more. Currently it is unlikely that meals do meet these standards on a per meal basis. In order to do this, providers will need to show menu plans which meet the guidance using real menu choices from service users as a model.

Most providers do not provide information on the micronutrient content of meals and don't have facilities for in house micronutrient testing. This could however be outsourced to povide an analysis annually for samples of each meal produced. It may be worth discussing this with potential providers.

Currently many community meals do not include 2 portions of fruit and vegetables. Many main meals have one or two vegetables – but this may not meet 160g vegetables in total. The amount of vegetables in main dishes is not specified but can be calculated from the ingredients. The amount of fruit in many puddings is low (e.g. some apple pies have 2% dried apple). This is an area where there should be some room for improvement. Where meals are low in fruit and vegetables, 100% fruit juice could make up a second portion. Meals could specify number of portions of fruit and vegetables that they contain on the label and many providers include this information on their packaging. This could be discussed with potential providers and the information should be included on all product information sheets.

Providers claim to ensure that all community meals recipients are given a drink with their meals. The provision of fluid needs to be made more explicit as a requirement in the contract, with each service user having a section on their order form which shows how fluid will be provided: tap water in a glass in the home, a bottle of water with the meal or a fruit juice/fruit juice drink with the meal. Discussions with NACC suggest that many older people prefer tetrapak drinks to bottles of water should be provided, but this has implications for driver time (see suggestions on 'plus' services below). There may be cost implications if additional drinks are charged for, but where fruit and vegetable portions are low, or vitamin C intakes are likely to be low, this should be seen as part of the meal option.

3.0 Other points for community meals contracts on dietary provision

The Service Provider should cater where practicable to meet therapeutic, cultural and religious dietary requests. The Service Provider should identify in their Means of Delivery Statement how they propose to meet such requests and provide details of any proposed sub-contractors and suppliers of meals.

The NACC provides some guidance as to the composition of cultural or religious meals (NACC, 2005). However, the Service Provider should additionally be required to seek the advice of a dietitian and appropriate cultural or religious advisors regarding their composition and preparation. The Service Provider shall be required to ensure that all components of such meals are sourced from suppliers who meet any cultural or religious requirements or limitations on how products are prepared. The Council may wish to vet any such suppliers and to involve members of the ethnic

community in the selection process. Details of therapeutic meals requested by service users should be sent to the dietetic department monthly for review showing the weekly menu choices of each client who receives therapeutic meals.

The Service Provider should confirm the full range of meals that they can provide within their Means of Delivery Statement along with an indication of the range of meals available for each diet type. The Service Provider should also be required to indicate the nutritional values of such meals and where these are non-therapeutic meals these should also meet the minimum standards set out by NACC (2005).

Menu plans for a 4 week period should be suggested by the potential supplier, demonstrate typical food choices for a service user and show how these meet the NACC nutritional guidelines over a period of a week or more. This type of modelling is very simply done with a menu planning tool and looking at routes through the menu is important to ensure that there is variety and balance in terms of food choice and nutrient intake. This also allows the dietitian and others who support service users to look at potential choice routes so that he/she can advise the service user where necessary. Where a client has a therapeutic diet, we have suggested that this is monitored by the dietetic service to ensure that the user receives an appropriate dietary choice, and again, it is useful for the provider to show example menus for different therapeutic diets and model potential routes through the menu.

4.0 Other issues to consider when commissioning community meals

- A Home Meals Service should provide variety of choice to the service users, taking into account a variety of cooking methods, colour of food, a variety of tastes, flavours, textures and garnishing.
- Meals should be non-repetitive and offer seasonal variations, speciality dishes, theme days and treats on bank holidays and festive occasions.
- Menu cycles should be for at least 4 weeks and changed every quarter to ensure variety
- All the meals on offer should be available and where special diets are offered there should be at least 3 different choices of these each day.

- Prior to each new menu period commencing the Service Provider should submit new menus six weeks prior to their proposed introduction for review by the dietetic department.
- Clear and accurate menu leaflets should be made available to service users which accurately describe the meals available on a particular day.

5.0 Food Testing and Surveys

- Service Providers should carry out regular audits of the quality of the meals provided in terms of the appearance, taste and texture after regeneration.
 Details of the nutritional analysis of sample meals and menus should also be made for each menu cycle. The Service Provider shall agree with the Authorised Officer as part of the annual monitoring plans the areas to be tested and the frequency of any tests and the quality levels. Further details of areas to be tested within the self-monitoring process are set out in the Service Specifications.
- Annual reports should be prepared which summarise the monitoring of the quality and nutritional content of the meals provided, show the menu plans for each quarter and how food offered across a period of 1 week or more meets current NACC nutritional guidelines. In addition routes through each menu plan by service users should be modelled as previously described to show how typical food choices meet nutritional guidelines.
- Regular qualitative review of service users to find out about the service provision should be considered rather than questionnaire data collection.

6.0 Training

Dietitians should offer a training session to all the delivery drivers every 6 months to ensure that they are aware of the importance of the home meals service and to remind them of the role they play in providing good nutrition and hydration. It would also be useful for the dietitians to become more involved in the service provision since it is also a recommendation that they review clients on therapeutic diets. Consideration could also be given to expanding the service to a 'plus' type service where drivers spend 8-10 minutes with each client ensuring that the food is plated and served, a drink is provided, the person is comfortable and has all they need to manage and enjoy their meal (e.g. correct seating position, cutlery, glasses, teeth etc.). Although this service has cost implications it can be cheaper than paying for a home help to be present when the meal is delivered and some service users (or their relatives, friends or advocates) may be willing to pay extra for this service. Additional monitoring of this enhanced service would however also be required.

NACC (2005) A recommended standard for community meals. NACC. Sussex. www. thenacc.co.uk

Appendix 2: Data collected about community meal users

Demographic data

Gender Age Ethnicity Housing type Housing tenancy Sheltered status Live alone Telecare use Day centre/lunch club attendance

Community meals service data

Date meals started Pays for meals Hot or frozen meals Frequency of meals/how many days Meal type/special meal requirements

Health data

Blind/very poor vision noted Deafness noted Mobility issues noted/main diagnosis mobility related health 2 or more mobility related problems Use of mobility aids Main diagnosis disease related health/significant disease noted 2 or more disease related problems Anaemia noted Regular urinary tract infections noted Pressure sores/ulcers noted Constipation noted Diarrhoea noted Any chewing/swallowing difficulties Poor teeth/dentures noted Mental health issues noted/diagnosis Substance misuse recorded Overall health/social care risk

Food related information

Still prepare some of their own food/hot meals Poor appetite/loss ever noted Fluid issues Weight gain/heaviness/over eating ever noted Weight loss ever noted Weight loss monitored/recorded Nutrition/dietetic input Number of medications Vitamin D supplementation noted Home help hours/day Home help input around food./main care provider around food

Appendix 3

RBKC COMMUNITY MEALS PROJECT: HOME INTERVIEW

Name: ______ Date interview: 1. Are you currently having MoW Y/ N 2. If no – when did you last have them and why? 3. If yes are these hot 1 2 3 4 5 6 7/7 frozen weekly fortnightly 4. What sort of meals do you have? vegetarian soft/puree other (specify) normal diabetic Do the MoW delivery people give you a drink with your meal? 5. Do you get to choose the food you want? Y/ N/ DK/ Sometimes If no/don't know/sometimes – why not? 6. What is the best thing about having meals delivered? 7. What would you change about the service if you could? 8. For frozen meal people only: Do you think the frozen meals you get from Apetito are better than/the same as/worse than the sort of frozen meals you can buy in supermarkets? (probe for why)

8. Do you ever go/have gone to a lunch club or day centre? Y/ N

9. If yes, which one?

10. If yes, was the food/ food service you had there better or worse than meals on wheels

11. If you were given the money to buy a meal rather than having to have the current meals, which one of these options might be possible for you? (parapharase as appropriate or amend from verbatim responses)

I could pay someone (a friend, relative, neighbour, warden) to make me a meal and bring it to me hot when I need it

I could pay someone (a friend, relative, neighbour, warden) to make me frozen meals which I could heat up/my carer/someone can help me heat up when I need them

I could buy meals that are ready prepared and heat those up (if so – where would they get meals, what types)

I could ask my home carer to buy ready prepared meals and heat them up (as above)

I could go to a local restaurant/food outlet to buy some food (if yes, which ones, what sort of food)

I could ask a local restaurant/food outlet to deliver me food (If so – which one, what sort of food)

Any other things mentioned?

12. for those going to lunch club/day centre If it was an option, would you like the day centre/lunch club to bring meals to you at home

comments:

12. Would you like to be able to choose how you get your food like this?

if no - what are your concerns?

13. Any other comments

Borough	Hot meal/ Cost	Frozen meal/Cost	Supplier	Needs assessment	Other relevant information
Barking & Dagenham	£3.40		FreshCM	Yes	Deliver about 400 a day, staff will cut or mash food if required.
Brent	£3.30	£3.30	Apetito	Yes	
Bromley		Starts at £2.55 main meal, 55p dessert	Flow Foods	No	Meals are subsidised, if help with heating required, will require a needs assessment.
Camden	£3.00	£3.00	Fresh CM	Yes	About 600 users
City of London	£2.90		Tower Hamlets	Yes	All cooked fresh in Tower Hamlets kitchen.
Croydon	£3.20	£3.20	Apetito	Yes	
Ealing	+	£2.50	Sodexho	Yes	Satisfaction survey results available on website
Enfield	£3.40	£3.26	Sodexho	Yes	+
Greenwich		£3.30	Apetito	No	
Hackney	£2.90	£2.90	Apetito	Yes	
Hammersmith and Fulham	£3.80		Apetito	Yes	
Haringey	£3.00		Sodexho	Yes	Hot meals subsidised if meet criteria, £2.75. Sign posted for private frozen service.
Harrow	£4.45	£2.90	Apetito	Yes	
Havering	£3.65	£3.20	Apetito	Yes	Also offer optional tea time snack at £1.45
Hillingdon	£2.80		Fresh CM	Yes	Hot meal subsidised, option of private frozen meals
Hounslow	£4.00		Apetito	Yes	

Appendix 4: Community meals in London Boroughs.

Islington	£3.15	£3.15	Fresh CM	Yes	
Lambeth	£3.00	£3.00	Fresh CM	No	Subsidised
Kingston-Upon – Thames	£3.55	£3.55	Sodexho	dk	
Lewisham	£3.00		Apetito	dk	
Merton	£3.33	£3.17	Sodexho	No	
Newham	£3.20	£2.50		Yes	
Redbridge	£3.00	£3.00	Sodexho	Yes	
Richmond-Upon- Thames		From £3.10	Apetito	Yes	If assessed subsidised, if not, from £5.99. Privately arranged hot meals are signposted and are not assessed or subsidised.
Southwark	£3.44	£2.87	Apetito	Yes	
Sutton	£3.20		Apetito		
Tower Hamlets	£2.35		In-house	Yes	About 500 users, meals prepared from fresh ingredients in kitchens which prepare the school meals for the Borough.
Waltham Forest	£3.61		Apetito	Yes	
Wandsworth	£4.30	£3.15	Apetito	Yes	Can be purchased privately, most expensive kosher and Caribbean (starts at £6.00)
Westminster	£2.55	£2.55	Sodexho	Yes	f not assessed £3.00 frozen, £3.95 hot – again Kosher most, starts at £5.95

Appendix 5: Frozen meal options from supermarkets

Those areas highlighted in pink show meals that do not meet minimum standards as described in section 4.1.4.

Brand	Meal type	Total Weig	Individual	weight of cor	nponents			Nutr	ients			Cost	Fresh	Freezing details
		ht	Meat/fish /alternative	Vegetable	Pasta/rice/ potato	kcal	Fat	Sat fat	Sugar	Fibre	Salt		frozen	
Marks & Spencer	Fish & chips meal for one	340g	Cod fillet 102g (30%)		Chips 180g (53%) crumb 20g (6%)	510	20.4g	4.1g	1.0g	5.1g	1.63g	£1.99	Fresh	Freeze on day of purchase, use within 1 month
Marks & Spencer	Cod in parsley sauce meal for one	400g	Cod fillet 108g (27%)		Potato 144g (36%)	320	11.6g	7.2g	5.2g	6.8g	1.9g	£2.99	Fresh	Freeze on day of purchase, use within 1 month
Marks & Spencer	Traditional: Roast Chicken dinner (Chicken Breast Potato, Poultry Gravy, Carrot, Swede, Stuffing Ball)	405g	Chicken 53g (13%) stock & stuffing 73g (18%)		Potato 97g (24%)	330	15.6g	5.7g	7.5g	3.9g	1.8g	£1.99	Fresh	Freeze on day of purchase, use within 1 month
Marks & Spencer	Roast Beef dinner (beef, gravy, roast potato, yorkshire pudding)	360g	Beef topside 76g (21%)		Potato 155g (43%) York. Pud. 36g (10%)	520	18g	5.4g	0.4g	5.8g	2.6g	£3.99	Fresh	Freeze on day of purchase, use within 1 month
Marks & Spencer	Vegetarian: Vegetable Pasta Bake	350g			Pasta 98g (28%)	455	18.2g	10.5g	7.7g	5.6g	2.28g	1.99	Fresh	Freeze on day of purchase, use within 1 month
Marks & Spencer	Indian: Chicken balti & Pilau Rice	400g	Chicken balti (58%) of whch chicken 70g (30%)	Tomatoes 56g (24%) Red pepper 14g (6%)	Rice 168g (42%)	500	16.8g	1.6g	14.4g	6.4g	3.3g	£2.99	Fresh	Freeze on day of purchase, use within 1 month
Marks & Spencer	Beef Lasagne	400g	Beef 108g (27%)	Tomatoes 68g (17%)	Pasta 68g (17%)	625	32.9g	14.5g	12.8g	7.3g	2.4g	£1.99	Fresh	Freeze on day of purchase, use within 1 month
Marks & Spencer	Count on us Beef Lasagne	365g	Beef 55g (15%)	Tomatoes 66g (18%)	Pasta 69g (19%)	365			9.9g	5.8g		£1.99	Fresh	Freeze on day of purchase, use within 1 month

Brand	Meal type	Total Weig	Individual	g					ients			Cost	Fresh	Freezing details
		ht	Meat/fish /alternative	Vegetable	Pasta/rice/ potato	kcal	Fat	Sat fat	Sugar	Fibre	Salt		frozen	
Waitrose	Salmon & Asparagus Pie	400g	Salmon 84g (21%)	Asparagus 16g (4%)	Potato about 156g (39%)	512	28.4g	18.3g	9.1g	4.2g	1.8g	£2.79	Fresh	Freeze on day of purchase, use within 1 month
Waitrose	Traditional: Chicken casserole (Chicken Breast Dumplings, Gravy, Carrot)	450g	Chicken 90g (20%)	Carrots 50g (11%)	Wine gravy & dumplingss 99g (22%)	540	24.8g	10.8g	5.9g	4.1g	3.38g	£2.99	Fresh	Freeze on day of purchase, use within 1 month
Waitrose	Traditional: Sausage & Mash	420g	Pork sausage & thyme gravy 101g (24%)	Onion 101g (24%)	Mashed potato 189g (45%)	517	31.1g	13g	5.9g	5.5g	3.05g	£2.29	Fresh	Freeze on day of purchase, use within 1 month
Waitrose	Vegetarian: Spinach & mushroom lasagne	400g		Spinach 44g (33%), mushroom 44g (33%) Tomato sauce 84g (21%)	Pasta 52g (13%)	373	14.1g	8.4g	9.9g	5.2g	1.7g	£2.19	Frozen	* 1 week, ** 1 month, *** 3 months, **** until best beore date.
Waitrose	Indian: Chicken Tikka Massala with Pilau Rice	400g	sauce 248g (62%) of which chicken 65g (26%) chicken, 184g (74%)	None given	Rice 152g (38%)	566	27.2g	8.8g	4.4g	14.8g	2.2g	£2.09	Frozen	* 1 week, ** 1 month, *** 3 months, **** until best before date.
Waitrose	Beef Lasagne	400g	beef 52g (22%)	No breakdown	Pasta 52g (13%)	445	20.5g	9.2g	10g	3.1g	2.28g	£1.71	Frozen	* 1 week, ** 1 month, *** 3 months, **** until best before date.
Waitrose	Jam roly poly pudding and custard	150g x 2		Custard 75g, jam, 8g (5%)		334	13.5g	7.5g	26.6g	2.5g	0.7g	£1.89 for 2	Fresh	Freeze on day of purchase, use within 1 month
Waitrose	Bread & butter pudding	145g x 2		Egg custard 120g sultanas 13g		181	3.4g	1.4g	24.7g	1.9g	0.37g	£1.89 for twin pack	Fresh	Freeze on day of purchase, use within 1 month

Brand	Meal type	Total Weig	Individual	Individual weight of components Nutrients								Cost	Fresh	Freezing details
		ht	Meat/fish /alternative	Vegetable	Pasta/rice/ potato	kcal	Fat	Sat fat	Sugar	Fibre	Salt		frozen	
Asda	Fish, pie	360g	Pollock 15g (14%) Cheese sauce 126g (35%)	None stated	Potato 173g (48%)	322	10.6g	5.0g	5.0g	1.0g	2.3g	£1.00	Frozen	* 1 week, ** 1 month, *** 3 months, **** until best before date.
Asda	Traditional: Chicken dinner (Chicken Breast Potato, Gravy, Carrot, Peas, Pork/Sage & Onion Stuffing	375g	Chicken 90g (24%) Pork stuffing 19g (5%)	Carrots 28g (7.5 %), Peas 28g (7.5%)	Potato 83g (22%)	429	8.6g	2.6g	4.5g	5.3g	1.9g	£1.50	Frozen	* 1 week, ** 1 month, *** 3 months, **** until best before date.
Asda	Traditional: Beef dinner (Beef, gravy, peas, carrots, potato, yorkshire pud)	375g	Beef 38g (10%)	Carrots, 56g (15%), Peas 49g (13%)	Potato 94g (25%) York Pud 15g (4%)	307	5.6g	1.1g	7.5g	0.71g	1.8g	£1.50	Frozen	* 1 week, ** 1 month, *** 3 months, **** until best before date.
Asda	Beef & dumplings	400g	Beef 60g (15%)	Onion 19g carrot 16.4g swede 4.4g	Dumplings 56g (14%)	356	8.4g	4.8g	3.6g	4.8g	2.3g	£1.50	Frozen	* 1 week, ** 1 month, *** 3 months, **** until best before date.
Asda	Indian: Chicken tikka massala with rice	400g	Chicken 48g (12%)	Onions 60g	Rice 152g (38%)	424	4.8g	2.4g	10g	4.4g	0.72g	£1.00	Frozen	* 1 week, ** 1 month, *** 3 months, **** until best before date.
Asda	Beef Lasagne	400g	Meat sauce (of which beef) 27g (15%)	Not stated	Pasta 40g (10%)	410	13.2g	5.6g	8.4g	2.4g	2.4g	£1.00	Frozen	* 1 week, ** 1 month, *** 3 months, **** until best before date
Asda	Vegetarian: Cheesy Brocolli Bake	400g	Red cheddar 30g (7.4%),	broccoli 68g	Sauteed potato 96g	400	17.6g	8.4g	4.8g	5.6g	2.2g	£1.50	Frozen	* 1 week, ** 1 month, *** 3 months, **** until best before date

Brand	Meal type	Total Weig	Individual	weight of con	mponents			Nutr	ients			Cost	Fresh	Freezing details
		ht	Meat/fish /alternative	Vegetable	Pasta/rice/ potato	kcal	Fat	Sat fat	Sugar	Fibre	Salt		frozen	
Tesco	Tuna pasta bake	400g	Tuna 60g (15%)	Tomatoes 72g (18%)	Egg pasta 96g (24%)	525	21.6g	11.1g	8.8g	4.8g	2.7g	2.00	Fresh	Freeze on day of purchase use within 1 month
Tesco	Traditional: Chicken dinner (Chicken Breast Potato, Poultry Gravy, Pork Sausage Carrot, Peas, Pork stuffing ball)	405g	Chicken 117g (29%) Gravy 85g (21%) Sausage 32.4g (8%) Pork stuffing 28.4g (7%)	Vegetables 60.7g (15%)	Potato 93.2g (23%)	465	13.9g	5.1g	6.4g	7.0g	2g	2.00	Frozen	* 1 week ** 1 mth *** use by best before date
Tesco	Traditional: Beef dinner (beef, gravy, peas, carrots, potato, yorkshire pudding)	405g	Beef 40.5g (10%) Beef Gravy 113g (28%)	Vegetables 125.6g (31%)	Potato 105.3g (26%) York Pud 14g (3.5%)	370	8.9g	2.1g	6.1g	8.2g	1.9g	2.00	Frozen	* 1 week ** 1 mth *** use by best before date
Tesco	Vegetarian cottage pie	450g	Micro protein 27g (6%)	No breakdown	Potato 198g (44%)	423	19.4g	7.2g	6.4g	8.5g	2.2g	1.79	Fresh	Freeze on day of purchase use within 1 month
Tesco	Indian: Chicken curry with rice	400g	Chicken 48g (12%)	No breakdown	Rice 200g (50%)	485	11g	7.2g	7.2g	6.4g	1.2g	1.00	Frozen	* 1 week ** 1 mth *** use by best before date
Tesco	Beef Lasagne	400g	Beef 44g (11%)	No breakdown	Pasta 64g (16%)	535	22.5g	12.1g	13.6g	5.8g	1.5g	1.00	Frozen	* 1 week ** 1 mth *** use by best before date

Brand	Meal type	Total Weig	Individual	weight of co	mponents			Nutr	rients			Cost	Fresh	Freezing details
		ht	Meat/fish /alternative	Vegetable	Pasta/rice/ potato	kcal	Fat	Sat fat	Sugar	Fibre	Salt		frozen	
Sainsburys	Cod Mornay	400g	Cod 80g (20%)	No breakdown carrots & broccoli	Mash 156g (39%)	285	6.6g	4.3g	3.0g	6.4g	1.46g	3.29	Fresh	Not suitable?
Sainsburys	Traditional: Chicken dinner (Chicken Potato, Gravy, Carrot, Peas, Pork/Sage & Onion Stuffing	415g	Chicken 103.8g (25%) Pork stuffing 20.8g (5%)	Vegetables 83g (20%)	Potato 87.2g (21%)	465	15.7g	4.6g	6.3g	8.7g	2.28g	2.00	Frozen	* 1 week ** 1 mth *** use by best before date
Sainsburys	Traditional: Beef dinner (beef, gravy, peas, carrots, potato, yorkshire pudding)	400g	Beef 40g (10%) Gravy N/A	Vegetables 112g	Potato 100g (25%) York Pud N/A	366	6.4g	1.6g	8.3g	7.1g	1.63g	2.00	Frozen	* 1 week ** 1 mth *** use by best before date
Sainsburys	Vegetarian meal Tomato & mozzarella bake	400g		Tomato & onion – 76% of sauce	Pasta 164g (41%)	484	12.8g	5.2g	13.3g	8.4g	1.81g	1.99	Fresh	Freeze on day of purchase use within 1 month
Sainsbury's	Indian: Chicken curry with rice	400g	Chicken 48g (12%)	No breakdown	Rice 192g (48%)	456	8.7g	4.4g	5.9g	5.9g	2.2g	1.00	Frozen	* 1 week ** 1 mth *** use by best before date
Sainsburys	Beef Lasagne	400g	Beef 44g (11%)	No breakdown	Pasta 56g (14%)	346	10.4g	5.5g	11.1g	3.6g	2.1g	1.00	Frozen	* 1 week ** 1 mth *** use by best before date

Brand	Meal type	Total Weig	Individual	weight of cor	nponents			Nutr	ients			Cost	Fresh /	Freezing details
		ht	Meat/fish /alternative	Vegetable	Pasta/rice/ potato	kcal	Fat	Sat fat	Sugar	Fibre	Salt		frozen	
Morrisons	Traditional: Roast Chicken dinner (Chicken Potato, chicken sauce, Carrot, broccoli)	375g	Chicken 71.3g (19%)	Vegetables 60g (16%)	New Potatoes 108.8g (29%)	307	13.5g	4.2g	Trace	8.3g	1.5g	3.00		Not suitable
Morrisons	Traditional: Braised Beef & mash (beef, gravy, onion, carrots, potato)	375g	Beef 75g (20%)	No breakdown	Mash 180g (48%)	318	8.5g	3.9g	4.8g	6g	1.8g	2.19		Freeze on day of purchase use within 1 month
Morrisons	Vegetarian meal Roasted mushroom lasagne	400g	-	Mushrooms 116g (29%) Tomatoes 68g (17%)	Egg pasta 60g (15%)	552	22.8g	13.2g	1.6g	3.6g	1.5g	1.99		Freeze on day of purchase use within 1 month
Morrisons	Indian: Chicken curry with rice	400g	Chicken 48g (12%)	None stated	Rice 172g (43%)	494	11.3g	5.8g	14.7g	4.4g	1.5g	1.00		* 1 week ** 1 mth ***/**** use by best before date
Morrisons	Beef Lasagne	400g	Beef 48g (12%)	No breakdown	Egg pasta 64g (16%)	820	48.1g	28.5g	11.8g	4.5g	3g	1.00		* 1 week ** 1 mth ***/**** use by best before date

Brand	Meal type	Total Weig	Individual	weight of cor	nponents			Nutrients				Cost	Fresh /	n Freezing details
		ht	Meat/fish /alternative	Vegetable	Pasta/rice/ potato	kcal	Fat	Sat fat	Sugar	Fibre	Salt		frozen	
Birds eye	Fish pie	350g	Fish 35g (10%)	Vegetables 21.6g (14%)	Potato 154g (44%)	265	4.9g	2.5g	8.4g	2.5g	1.5g	1.59	frozen	Store below -18 C best before use by date
Birds eye	Traditional: Chicken dinner (Chicken Breast Potato, Gravy, Carrot, Peas, sage stuffing)	368g	Chicken 106.7g (29%) Gravy 69.9g (19%)	Vegetables8 0.9g (22%)	Potato 84.6g (23%) Stuffing 25.8g (7%)	380	11.0g	3.3g	4.0g	4.8g	1.8g	1.98- 2.49	Frozen	Store below -18 C best before use by date
Birds eye	Traditional: Beef dinner (beef, gravy, peas, carrots, potato, yorkshire pudding)	340g	Beef 51g (15%) Gravy 95.2g (28%)	Vegetables 78.2g (23%)	Potato 102g (30%) York Pud 13.6g (4%)	310	6.8g	3.1g	4.4g	5.1g	1.8g	1.98- 2.49	Frozen	Store below -18 C best before use by date
Youngs	Fish fillet dinner (fish fillet potatoes, carrots and green beans in a cheese and chive sauce)	380g	Basa 72.2g (19%)	Vegetables 76g (20%)	Potato 107.2g (28%)	362	15.2g	7.0g	8.0g	5.32g	1.5g	2.49		Store below -18 C best before use by date
The Norfolk Pudding Company	Hot dessert: raspberry sponge pud with custard	120g	Custard 37g (31%),	raspberry sauce 12g (1%)		280	7.0g	3.1g	32.8g	0.6g	0.4g	£1.00 for twin pack	Frozen	* 1 3 days, ** 1 week, *** 1 month, **** until best before date