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**Local Food in Municipal Catering
— A Survey of Local Food Purchasing
in Finnish Municipalities**

ABSTRACT
SAVO VOCATIONAL COLLEGE
EkoCentria

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This report is the first published report on the use of local food in almost all of Finland's municipalities, and covers the use of local food products in public municipality catering fairly comprehensively.

The report presents the results of a telephone survey for the catering managers of Continental Finland. The survey was a part of EkoCentria's Sustainable Catering in Public Services Project in 2007 and was carried out by Local Food Advisors. The number of participating municipalities totals to 366, which is 92 % of municipalities in Continental Finland. The first hypothesis of the report was that the ratio of local products acquired is larger when the procurer is not part of any procurement circle. The second hypothesis was that preparing food from local ingredients is easier for kitchens that prepare fewer meals. Interviews were used to learn which foodstuffs in public catering come from local suppliers, are they put out to tenders separately and by whom, or are they acquired without tendering. The report takes a look at factors that enable and factors that reduce the usage of local food items. In addition, a search for kitchens that have cut their bulk purchases in order to favor local foodstuffs was conducted. The survey also enquired catering managers about the use of organic products in their kitchens and the conspicuousness of Step by Step –training program. The publication introduces different procurement methods of foodstuffs, locally available items and their tendering conditions, and logistics options and a willingness to utilize local resources in public municipal catering. According to the survey the most common item group is potato. More than half of the interviewees replied that they are serving domestic berries when they are in season. Less than half replied serving local bread. The survey would also indicate that the usage of fresh fish is relatively little – only a fifth reported using local fish. The usage of locally attained products in general was not enquired in the survey. However, in the future that may prove an interesting subject for further studies. At the end of the report there are nine examples presenting case models of the procurement of local products in different municipalities. In conclusion, there would be room for local products in public municipality catering if production, harvest and processing quantities could be raised and the supply chain between producers was coalesced.

TIIVISTELMÄ
SAVON AMMATTI- JA AIKUISOPISTO
EkoCentria

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Tämä selvitys on ensimmäinen selvitys lähes kaikkien Suomen kuntien lähiruuan käytöstä ja kuvaa varsin kattavasti lähituotteiden käyttöä kuntaruokailussa.

Selvityksessä esitellään EkoCentrian Lähikeittiöhanke Lähikeittiöneuvojien Manner-Suomen kuntien ruokapalveluvastaaville vuonna 2007 puhelinhaastatteluna tekemän kyselyn tulokset. Haastateltuja kuntia oli 366, mikä vastaa 92 % Manner-Suomen kunnista. Selvityshypoteeseista ensimmäinen oli, että lähiruokaa hankitaan enemmän silloin kun ei kuuluta hankintarenkaaseen. Toisena hypoteesina oli, että lähiruuan käyttö on helpompaa keittiöissä, joissa valmistetaan pieni määrä aterioita. Kyselyllä haluttiin vastauksia siihen, mitä elintarvikkeita julkisen sektorin ruokapalveluihin hankitaan läheltä, kilpailutetaanko elintarvikkeet erikseen ja kuka tuotteet kilpailuttaa vai hankitaanko ne ilman kilpailutusta. Selvityksessä tarkastellaan lähiruuan käyttöä mahdollistavia tekijöitä sekä tekijöitä, jotka estävät tai vähentävät lähiruuan käyttöä. Lisäksi etsittiin keittiöitä, joissa on vähennetty tukkuostoja ja siirrytty käyttämään lähituotteita. Selvityksessä kysyttiin ruokapalveluvastaavilta myös keittiöiden luomutuotteiden käytöstä ja Portaat Luomuun -valmennusohjelman tunnettuudesta. Julkaisussa kuvataan elintarvikkeiden hankintatapoja, lähialueelta hankittavat tuotteet ja niiden kilpailutus- ja kuljetustavat sekä halukkuus lähituotteiden käyttöön kuntien ruokapalveluissa. Lähikeittiöhanke selvityksen mukaan kuntaruokailussa yleisimmin käytetty tuoteryhmä on peruna. Yli puolet selvitykseen vastanneista ilmoitti käyttävänsä kotimaisia marjoja ruokapalveluissa ja niitäkin pääasiassa sesongin aikana. Alle puolet vastanneista ilmoitti käyttävänsä lähileipää. Selvityksessä nousee esille tuoreen kalan käytön vähäisyys kuntaruokailussa. Vain viidesosa vastaajista ilmoitti käyttävänsä lähikalaa. Selvityksessä ei kysytty läheltä hankittujen tuotteiden käyttömääriä, joka voisi olla jatkossa mielenkiintoinen tutkimuksen kohde. Raportin lopussa esitellään yhdeksän esimerkin avulla kuinka lähituotteiden hankintaa toteutetaan eri kunnissa. Johtopäätösten mukaan tuoreille lähituotteille olisi tilaa kuntaruokailussa, mikäli tuotanto-, keruu- ja jatkojalostusmäärät saataisiin kasvamaan ja tuottajien yhteinen toimitusketju pelaamaan.

SAMMANFATTNING
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Denna utredning är den första utredningen om användning av lokal mat i nästan alla finska kommuner och beskriver rätt täckande användning av närproducerade råvaror i kommunal kostverksamhet.

Utredningen redogör för resultaten av förfrågan som Närkökskonsulenterna inom projektet Närkök av EkoCentria utfört som telefonintervju till kommunernas förmän inom mattjänstbranschen i Kontinentala Finland år 2007. Det finns 366 intervjuade kommuner vilket motsvarar 92% av alla kommuner i Kontinentala Finland. Den första utredningshypotesen var att man anskaffar mera lokal mat om man inte hör till en upphandlingsring. Den andra hypotesen var att användning av lokalproducerat är lättare i de köken där man tillagar ett litet antal måltider. Målet för förfrågan var att utreda vilka livsmedel som upphandlas på nära håll till den offentliga sektorns mattjänster, om dessa livsmedel konkurrensutsätts skilt, vem som konkurrensutsätter produkterna eller om de upphandlas utan konkurrensutsättning. I utredningen granskas faktorer som möjliggör användning av lokal mat samt faktorer som hindrar eller minskar användning av lokal mat. Ytterligare sökte man fram sådana kök där man har minskat inköp i parti och gått över till användning av lokalproducerat. I utredningen blev förmännen inom kommunala mattjänster tillfrågade om användning av ekologiska produkter i köken och om de kände till utbildningsprogrammet Steg för steg mot eko. I publikationen beskrivs upphandlingssätt av livsmedel, produkter som anskaffas på nära håll och deras konkurrensutställnings- och transportsätt samt kommunernas benägenhet att använda lokalproducerat i kommunal kostverksamhet. Enligt utredningen av projektet Närkök är potatis den mest allmänt använda produktgruppen i kommunala måltider. Över hälften av de som svarade på förfrågan uppgav att de använde inhemska bär i mattjänster och de används i huvudsak under säsongen. Under hälften av svararna använde lokalt bröd. I utredningen kommer det fram det lilla utnyttjandet av färsk fisk i kommunala måltider. Endast en femtedel av svararna uppgav sin användning av lokal fisk. I utredningen tillfrågades inte hur stora mängder lokalproducerat som användes, vilket skulle i fortsättningen vara ett intressant mål för en undersökning. I slutet av rapporten presenteras med hjälp av nio exempel hur upphandling av lokala matvaror förverkligas i olika kommuner. Enligt slutsatserna skulle det vara möjligt att använda mera färska lokala matvaror i kommunala mattjänster. Detta kräver att produktions-, plocks- och vidareförädlingsmängder skulle kunna höjas och att producenternas gemensamma leveranskedja skulle fungera.

Foreword

Prime Minister Matti Vanhanen's second Government Programme states that the Finnish government initiates a Finnish food culture advancement programme aiming to, among other things, promote the usage of organic- and local foods as well as sustainable development both in consumption and production of foodstuffs. As a result, for instance Finland's Environmental Administration and Ministry of Employment and the Economy established a diverse workgroup to create an action plan for sustainable acquisitions. This action plan was published in February 2008.

This sustainable acquisitions –programme sets goals for five areas of operation in order to reduce public administration's environmental load. Groceries are one of the areas that have received recommendations for sustainable procurement. This recommendation mentions for instance that food produced according to sustainability ideals shall be served in public administration at least once per month by the year 2010 and at least once a week by the year 2015. Public procurement will receive guidelines for the principles of sustainable food procurement. These actions aim at reducing the environmental effects of food preparation.

The national Sustainable Catering in Public Services Project, Lähikeittiöhanke, launched in 2006, funded by the Ministry of Agriculture and Forestry and operated by EkoCentria under the Savo Consortium for Education, is based on the recommendations of sustainable production and consumption action programme (KULTU). The aim of the project has since the very beginning been to improve the on-the-plate food quality the public sector caters for the young and children. During the first activity year daycare- and primary school children were familiarized to the entire food chain by arranging 'Day's of Taste' on local area organic food farms. The main goal of the second year of operation was to spread information about the public sector procurement law of June 2007 and the opportunities it provides for local procurement, and this was carried out by arranging seminars with the topic 'Fresh is Possible'. The seminars were mainly aimed at catering personnel, food refiners and producers i.e. the whole local food production chain. In addition the Sustainable Catering in Public Services Project carried out a telephone survey in 2007 about the usage of local foods in municipalities. The results of the survey are presented in this publication.

The telephone survey was carried out by local food advisors Eija Muukka, Leena Kuosmanen, Ulla Blomquist and Meeri Ylinampa. Data management and statistical analysis was carried out by project secretary Taira Soininen. The study has received guidance and support also from Savo Consortium for Education Research Manager Jukka Soininen and Project Manager, lecturer Irma Kärkkäinen and assistant Kirsi Malaska. In the proofreading phase also Anu Salo and Tommi Kampuri have helped. The report is the first study of local food usage in almost all Finnish Municipalities and should provide a comprehensive picture of local food usage in municipality catering. This report did not however examine the amounts of local foods used, which might be an interesting study subject in the future. At the end of the report there are nine examples of local foods procurement realization in various municipalities.

We would especially like to extend our gratitude to the catering personnel, who took the time to reply to our survey despite their busy work. In addition, thank you to catering managers, who provided examples of their municipalities methods of procuring and using local foods. Without your input this report would have never been completed.

Kuopio, September 2008

Table of Contents

1 Foreword	1
1.1 General issues	1
1.1.1 Factors in facilitating local product acquisition	3
1.1.2 EkoCentria	4
1.2 Goals.....	6
1.3 Structure.....	6
2 Data and Method.....	7
2.1 Telephone survey for municipal catering managers	7
2.2 Data description and representation	8
2.3 Data analysis	9
3 Results	11
3.1 Respondent recognition of Sustainable Catering in Public Services Project	11
3.2 Procurement	12
3.3 Step by Step training program	17
3.3.1 Program recognition	17
3.3.2 Organic product usage	17
4 Results examined	18
4.1 Level of knowledge about Sustainable Catering in Public Services Project.....	18
4.2 Procurement	19
4.2.1 The impact of procurement circle.....	19
4.2.2 Tendering	19
4.2.3 Procurement descriptions by municipalities	20
4.2.4 Local product acquisition.....	23
4.2.5 Products locally acquired.....	23
4.2.6 Factors affecting local food procurement	26
4.2.7 Local product usage.....	27
4.3 Step by Step training program	29
4.4. Examples of local food usage in Finnish municipalities	30
References	52

1 Foreword

1.1 General issues

Globalized food markets have increased the interest in food origin, quality, healthiness and the ethicality and sustainability of food production among more and more consumers and other food chain members. The sustainability of procurement and paying attention to environmental issues are also becoming more important in public sector (The Finnish National Commission on Sustainable Development 2005, KeHa workgroup 2008). The Finnish National Commission on Sustainable Development (2005) states that public sector professional kitchens are to be obliged to act as pioneers and examples in local- and organic food use and to carry the responsibility of the environmental impact of the products in their procurement. Finnish Government offices prepared guidelines for meeting arrangements based on sustainable development during Finland's EU Presidency term, conserving the nature and with responsibility towards the nature (Nikula 2006). Matti Vanhanen's second government program in 2007 (Finnish Government offices 2007) mentions that "The program of sustainable development and production will be carried out". According to the government programme the government will initiate a program to advance Finnish food culture aimed at, among other things, to advance organic- and local foods. In addition the programme states "In all public decision-making the integration and balancing of economic, social and ecological views will be improved". The aim of the national food economy quality strategy has been to convey the consumers information on the functions of Finnish food chain and with joint measures improve the quality of the products and actions as well as preserve quality (Quality chain 2007).

During the past thirty years the procurement functions of public sector professional kitchens and the legislation concerning it has undergone significant changes. The activities of schools, daycare centers and facilities with various food chain agents used to be diverse and naturally integrated as a part of education and teaching as well as daily functions. The relations of kitchens and consumers with local product suppliers and other agents in the food chain have, however, nearly become extinct in this millennia. Nevertheless, public food services are considered as one of the local food usage groups with most potential. (Efektia et al. 2004, KULTU committee 2005).

There is no simple definition for the term 'local food'. The Local Food Committee defined it in terms of local economics (Rural Policy Committee 6/2000). It is seen to include food production and consumption that uses local ingredients and production efforts to contribute to local economy

and employment. According to the committee, the local food thinking emphasizes traceable quality and sustainable methods throughout the production chain. Pulliainen (2006) has also included environmental values strongly into the definition. According to him "Local food means food production and consumption that uses ingredients from the local economical area and aims for as small an economic footprint as possible, thus promoting local area economy and employment in a sustainable manner". In the Sustainable Catering in Public Services Project we have defined local food as foodstuffs that are strategically significant to their own province or area. Also this definition emphasizes the significance of local food to the well-being of the area.

Isoniemi et al. (2006) charted consumer- and municipal administration personnel views on local and organic food. Isoniemi et al. found that, in the views of administrative level personnel, the significance of locality was emphasized. For the representatives of industrial kitchens the most important features of local foods were the short delivery chain, a personal contact with the producer and manufacturer as well as food being produced on the same area they lived in. For municipal management people it was important that the food is produced in the same region they live in and manufactured according to the traditions of a certain area or province. The larger the province, the more readily they accepted also food made of foreign ingredients as local food. Also Paananen and Forsman-Hugg (2005) report that in large kitchen units all food manufactured in Finland is regarded local food.

The most common method for procuring local food in 2004 was direct procurement without using tenders. (Isoniemi et al. 2006). In addition limited open tendering or some other open acquisition method was used. Local foods were mostly used in the following product groups: potato and root vegetables as well as bread and bakery products. Local potato and carrot was the most common one among the industrial kitchens that responded. Three quarters of the respondents reported using local potato and root vegetables in excess of a half of the usage of the whole product group. As the biggest impediments for using local foods the uneven availability of products, available funding, and lack of product offers, expensiveness, low pre-treatment level and company delivery capabilities were mentioned (Isoniemi et al. 2006). The benefits of local food in industrial kitchens were seen to lie in improving product safety (52 %) and making it easier to find out food origins (51 %) as well as increasing the use of seasonal products (41 %). Almost all industrial kitchen representatives (90 %) as well as municipal managers (94 %) hoped the use of local foods would increase.

1.1.1 Factors in facilitating local product acquisition

The procurement law renewed in 2007 encourages the use of tendering in public sector acquisitions, and this also applies to theme weeks and seasonal procurement. In Finland local food use is most successful during the relatively short seasons. Seasonal weeks (such as local food week/day) allow kitchens to make acquisitions also elsewhere than the companies with whom they have yearly contracts or procurement contracts, as long as the value of the acquisitions is under the national threshold value of 15 000 € (Lundström 2007). These procurements are recommended to be tendered according to municipal guidelines for procurement.

The purchasing unit may and must clearly define what it wants to buy (Nordberg 2007). It is the only way to receive what it orders. In tendering the basis for procurement decision may be either the lowest bid or combined affordability (Haapamäki 2007). The criteria for evaluating combined affordability must be measurable and comparable. These may include, for instance, price, quality, delivery time, life cycle costs, aesthetical values or environmental values. In addition, terms of contract may be used that have to be fulfilled by all bidders to stay in the competition. These terms may concern, for instance, product delivery, packaging, delivery time or schedule. The selection criteria must be explained in advance when setting out tenders, and there may not be new factors entered during the selection phase. Also the value weighting the criteria must be explained in the request for tenders.

Environmental issues

The new public sector procurement law allows for taking environmental issues into account as procurement criteria, which in turn allows for demanding as short a delivery chain as possible for the products. Different forms of transport have been given calculations on their carbon dioxide loads and it can be used as one criterion for selection. The environmental load should, in addition to carbon dioxide emissions, include the natural resources needed for the transport system building, the environmental impact of foreign species introduced to sea along with ballast water releases, intentional or accidental oil spills as well as environmental problems from ultimately scrapping the transport equipment.

Also the ecology of the packaging and the amount of packaging material waste can be emphasized in the criteria for acquisitions (Haapamäki 2007). The tenders may also demand that none of the materials or chemicals used can be hazardous to the environment. It is not allowed to demand an eco label, but similar grounds as used for the criteria for the label, such as the choice of materials,

may be used in the criteria for selection, as long as they are related to the product being acquired. (Nordberg 2007). For instance, it is possible to state that a certain eco label fulfills the environmental requirements set for the product, but in the name of equality, another kind of report on the issues must be accepted. The technical specifications may demand that the product has been produced naturally, because organic production is a form of production that has its own regulations and monitoring systems.

Quality

In the tenders the word 'quality' may not be used as basis for comparison as is; it has to be defined what the word entails in the context of the current procurement (Nordberg 2007). In the procurement the quality stems from an accurate description of the object. In foodstuffs' procurement the concept of quality may encompass, for instance, product weight, form, salt- and fat content, nutritional value, structure or bacterial count. As an example 'rye bread' is not bought, but 100 % rye bread baked within 24 hours of delivery.

1.1.2 EkoCentria

EkoCentria (previously Finnish Organic Catering Centre) was established nearly a decade ago. Since the very beginning the EkoCentria activity has been concentrated on promoting sustainable development in industrial/professional kitchens and schools of the field. EkoCentria enjoys project fundings from different ministries and is operated by the Savo Consortium for Education subsidiary Savo Vocational College.

Sustainable Catering in Public Services Project; Fresh is Possible!

One of the projects EkoCentria has carried out on national level is the Sustainable Catering in Public Services Project, funded by the Ministry of Agriculture and Forestry. The main goal of the project is to develop the quality of the food the public sector provides the children and the youth. The project, initiated in 2006, started with advisors in Helsinki, St.Michel, Tampere, Kuopio and Rovaniemi. The advisors worked in cooperation with daycare- and primary school children and their interest groups. The aim of operation was to raise awareness of the children and their interest groups about the route the food takes from the original producer to the plate. Local food advisors arranged "Day of Taste" for children, teachers, daycare workers and parents all around Finland in cooperation with for instance chefs, provincial MTK-Unions (The Central Union of Agricultural

Producers and Forest Owners (MTK)), ProAgrias as well as other national and local food chain developers and participants.

In 2007 there were four advisors working at the Sustainable Catering in Public Services Project, based in St.Michel, Tampere, Kuopio and Rovaniemi. A central aim was to inform the public sector food services personnel about the new possibilities the new public sector procurement legislation offered for food acquisitions and further support the plate quality development of public sector foods provided for the children and the young. Procurement law information was spread by arranging local and regional 'Fresh is Possible!' -seminars, carried out in cooperation with other food chain operators. In addition national local food use in public sector food services was examined.

In 2008 Sustainable Catering in Public Services Project had advisors in Tampere, Rovaniemi and Kuopio as well as two part-time employees in western Finland as well as one in eastern Finland. During the year 2008 the focus was on promoting local food use in cooperation with pilot kitchens, local producers and regional and national food chain developers in development circles. The aim was to increase the use of strategically significant regional fresh produce use in municipal food services, especially in seasonal use.

Local Food Relay Race and Local Food Weeks 2008

In 2007 Local Food Weeks and Local Food Bike Race were held for the first time, and they were a part of EkoCentria functions also in 2008. In August the Local Food Bike Race ran from Suomussalmi, going roughly along the eastern border towards Helsinki. In September Local Food Weeks means professional kitchens preparing fresh, seasonal food prepared from fresh ingredients. The national program of Local Food Weeks also included a Local Food Seminar. The seminar took place in the Parliament Building in Helsinki.

Step by Step –program

The raising awareness about environment among consumers challenges professional kitchens to study their own operation and the sustainability of the ingredients they use. Step by Step training program guides kitchen personnel in procuring organic products and their use and provides information. The program involves over 250 professional kitchens, which, according to consumer and sustainability demands, offer organic and local foods to their clients.

1.2 Goals

The survey aimed at those responsible for public sector catering services aimed to clarify how local food is used in public sector food services in 2007. The first hypothesis was that local foods are likely to be acquired more when the procurer is not a part of a procurement circle. The second hypothesis was that using local foods is easier in kitchens with a limited number of meals to prepare.

The survey was carried out in order to get answers to what food products are locally procured within public sector food services, are there separate tenders used for food products and who carries out the tendering, or are they procured without tenders. The survey examines factors facilitating the use of local foods as well as factors preventing or reducing the usage of local foods. Furthermore, kitchens that had reduced wholesales purchases in favor of local products were scanned for. The survey questioned food services managers also about organic products being used in kitchens and how the Step by Step training program was recognized.

1.3 Structure

After the foreword, in chapter two, we shall describe the data and methods used in the study. The realization of questionnaires is clarified, the data is examined in more detail and data presentation is explained. The main results are presented in chapter three and chapter four deals with results analysis. Chapter five presents the usage of local food in public sector in Finland based on examples given by food services managers.

2 Data and Method

2.1 Telephone survey for municipal catering managers

For this study a telephone survey of municipal catering managers was carried out. The telephone surveys were the responsibility of Sustainable Catering in Public Services 2007 Local Food Advisors, among who Finland was divided into four regions. By regions, the southern Finland advisor was responsible for surveying Finland Proper, Uusimaa, Eastern Uusimaa, Tavastia Proper, Päijänne Tavastia, Kymenlaakso, Southern Carelia, and Southern Savonia. The western Finland advisor was responsible for Satakunta, Ostrobothnia, Southern Ostrobothnia and Pirkanmaa. Eastern Finland advisor was responsible for Central Finland, Northern Savonia, Northern Carelia and Kainuu. The northern Finland advisor dealt with Central Ostrobothnia, Northern Ostrobothnia and Lapland.

The contact information of municipal catering managers was acquired from ACNielsen (2006) HoReCa register. Because all the contact information needed was not available in the said register, some contact information was gathered from either municipal Internet sites or by enquiring from the municipal telephone directory services. The most common position held by respondents was Food Services Manager/Catering Manager or foreman (Table 1). In some of the municipalities Social Services were in charge of food services for the elderly, care institutions and daycare and the section of Education, culture and recreation was in charge of school catering. The interview was, if possible, carried out with the person in charge of school catering. If the procurement was mainly carried out in similar fashion under both administrative systems, only one interview was carried out in the municipality. In case of two interviews carried out in a single municipality, the responses were dealt with as one single response.

Table 1. Position held by the respondents (N=406).

Position held	n	%
Food/Catering Manager/ Nutrition Manager/-Foreman	195	48
Chef/Cook	139	34
Food- and Cleaning Services Manager	17	4
Services Manager	10	3
Other	37	9
Missing nomination	8	2
Total	406	100

An attempt was made to carry out the interviews prior to the Fresh is Possible seminar, so as to simultaneously inform the catering personnel about the seminar; its content and aims as well as present an invitation to join. Some of the interviews had to, however, be carried out after the seminar due to a lack of time. The actual interview call time was agreed upon beforehand. Interviews could be completed in almost all municipalities in Continental Finland (Table 2).

2.2 Data description and representation

In nearly all cases (96 %) the municipality was the provider of food and catering services. In some instances there was a catering company in charge of municipal food services. In most municipalities, all food and catering services responsibilities were carried by one person. For some of the municipalities, however, separate school- and social services food managers were interviewed. There are also several responses from municipalities in which kitchens acquire their ingredients autonomously. If there were several responses from the same municipality, they were dealt as a single response, which is the reason the responses are labeled by municipalities instead of respondents. A number of responses have been presented by the number of responses and thus indicated by captions.

Table 2. The number of municipalities in continental Finland in 2007 and the number and percentage of municipalities by region.

Region	Municipalities (count)	Municipalities in the survey (count)	%
Lapland	21	17	81
Northern Ostrobothnia	38	34	89
Kainuu	9	9	100
North Carelia	16	16	100
Northern Savonia	23	21	91
Southern Savonia	18	17	94
Southern Ostrobothnia	26	26	100
Ostrobothnia	17	11	65
Tampere Region (Pirkanmaa)	28	27	96
Satakunta	25	22	88
Central Ostrobothnia	12	10	83
Central Finland	28	27	96
Finland Proper	53	53	100
Southern Carelia	12	11	92
Päijänne Tavastia	12	10	83
Tavastia Proper	16	16	100
Uusimaa	24	21	88
Eastern Uusimaa	10	8	80
Kymenlaakso	12	10	83
	400	366	92

Source: http://en.wikipedia.org/wiki/Regions_of_Finland (9th Jan 2009)

The number of meals prepared by municipal kitchens was calculated based on meals prepared during weekdays. According to this criterion the municipalities were divided in three classes. Municipalities that prepare 1–999 meals are referred to as small in this report, those preparing 1000–4999 meals a day medium-sized and those preparing in excess of 5000 meals a day are referred to as large (Table 3). The division is not based in any generally used classification of municipalities. It was merely necessary to separate food services according to their size that led to dividing the municipalities in this manner.

Table 3. Meals prepared during weekdays – classification of the continental Finland municipalities in the survey (N=366).

	Meals/day	municipality (count)	municipality (%)
1	1–999	189	52
2	1000–4999	140	38
3	5000–	37	10
total.		366	100

2.3 Data analysis

In this study the collected data was analyzed quantitatively using SPSS 15.0 for Windows statistical analysis program. The data was derived from semi-structured forms based on telephone interviews. Data is presented in direct distributions and percentages. In addition, the insight provided by the structured data is enhanced and extended by analyzing the open responses in the questionnaires.

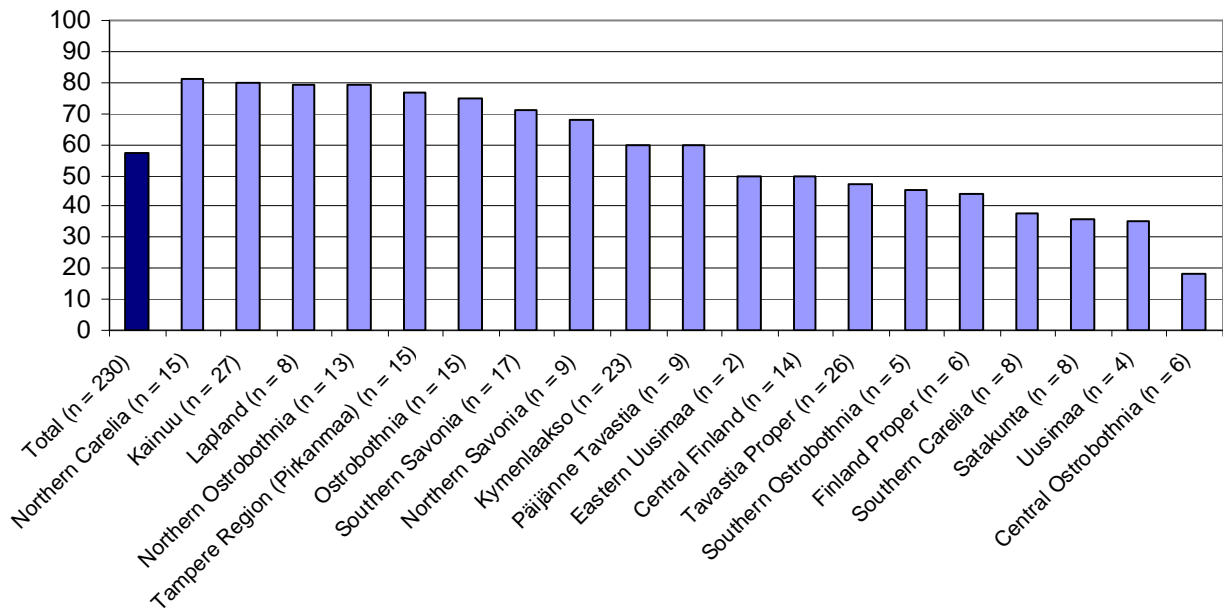
In deciding on possible methods for analyzing data there are three basic issues to deal with: the scale to use for data variables, their normal distribution and the size of data on the whole. Often in humanistic studies a graded scale is employed, or an ordered scale, the normal distribution hypothesis becomes questionable, or a small sample is preferred. In these cases the background assumptions of parametric tests are not always fulfilled and a more reliable or even the only choice is to use tests without parameters, i.e. distribution-independent tests. Methods not using parameters require less background assumptions than those that use parameters and are typically more often based on the sequence of findings rather than actual scoring (Metsämuuronen 2005, 871–872; Metsämuuronen 2004, 8-10, 20–21; Holopainen & Pulkkinen 2002, 175, 183.) In this study the variables used are for the most part graded- or at least order scaled. This alone is enough to limit the data analysis to non-parametric methods.

In data analysis cross-tabling of various sizes was used and as such, χ^2 -test employed in examining them. χ^2 -test is used to find an answer to the question of whether the variable deviates from the expected in a statistically significant manner. The hypothesis is that none of the frequencies are less than zero and at the most 20 % are less than five 5. (Metsämuuronen 2004, 134–135.) This causes certain limitations when analyzing a relatively small sample with large-scale cross-tabling. Nevertheless, in this study the values stay above the limit.

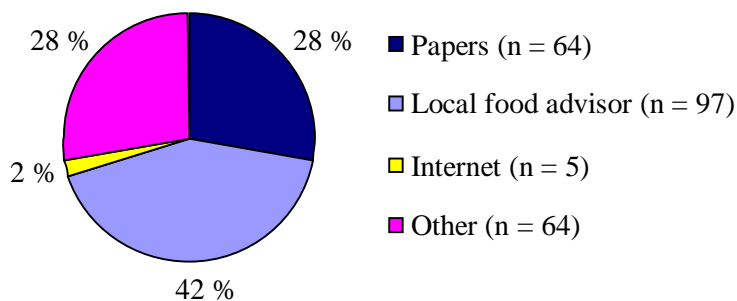
3 Results

3.1 Respondent recognition of Sustainable Catering in Public Services Project

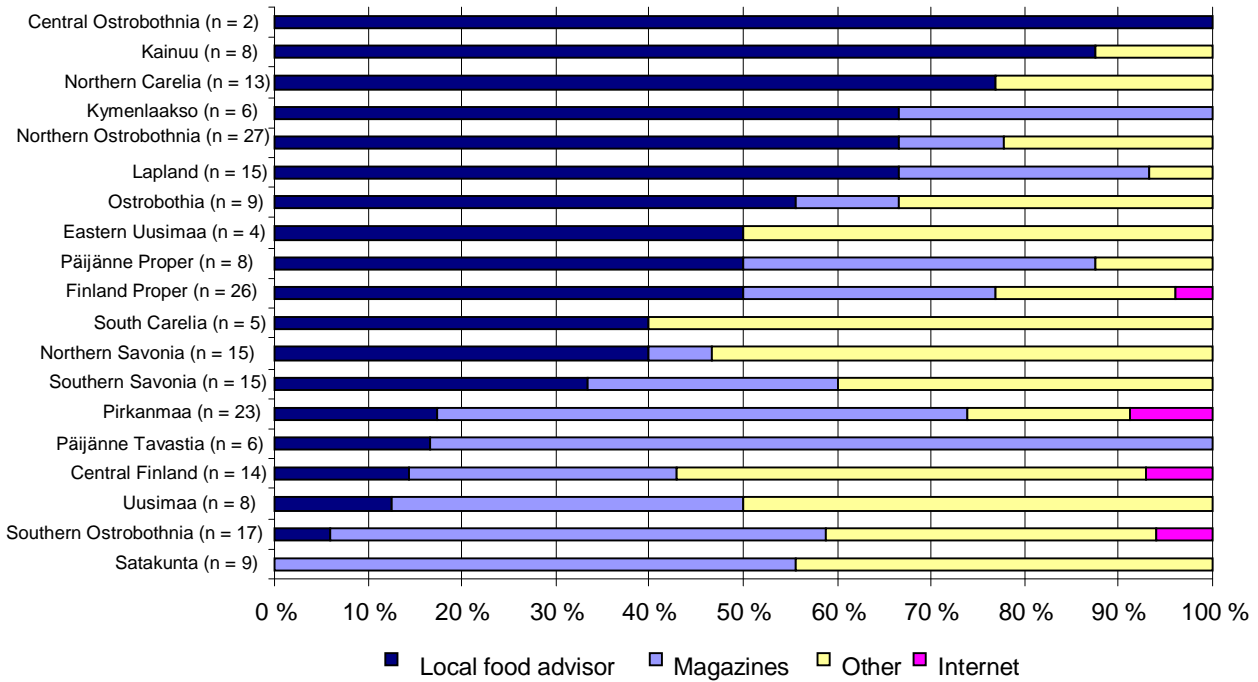
57 % of respondents were aware of the Sustainable Catering in Public Services Project (N = 406).



Graph 1. Sustainable Catering in Public Services Project awareness by region (N = 406)

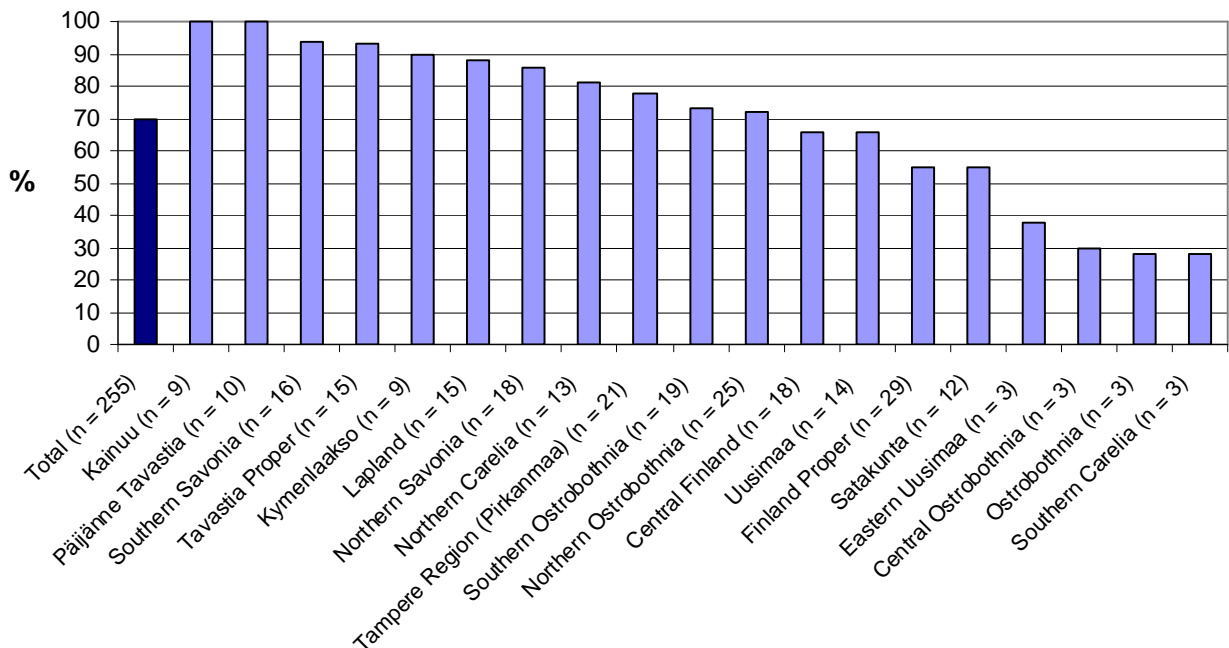


Graph 2. Information source for those aware of the Sustainable Catering in Public Services Project (n = 230, N = 406).

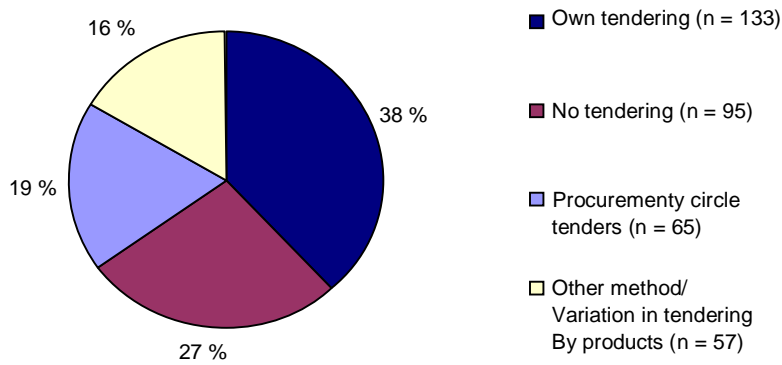


Graph 3. . Information source for those aware of the Sustainable Catering in Public Services Project, by region (n = 230, N = 406).

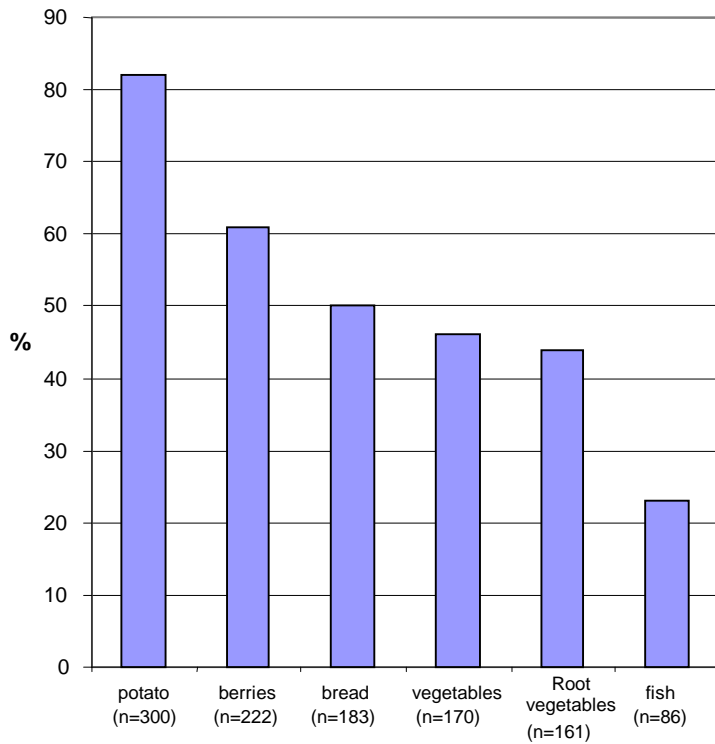
3.2 Procurement



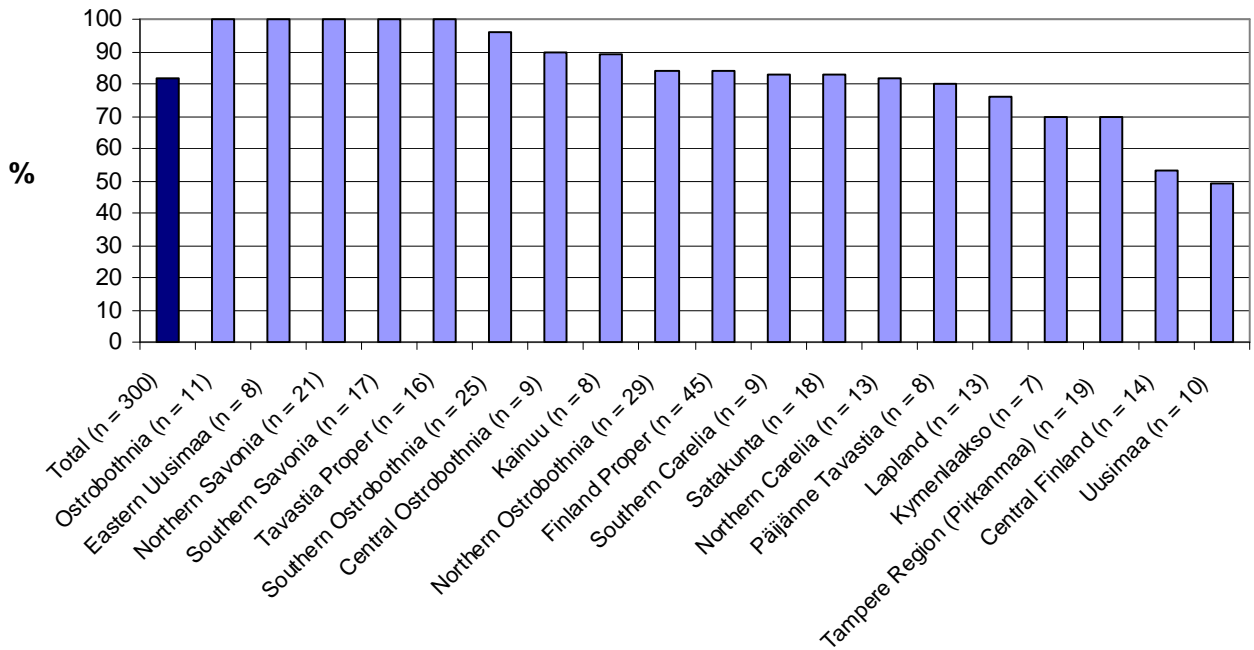
Graph 4. Regions taking part in procurement circle (N = 366).



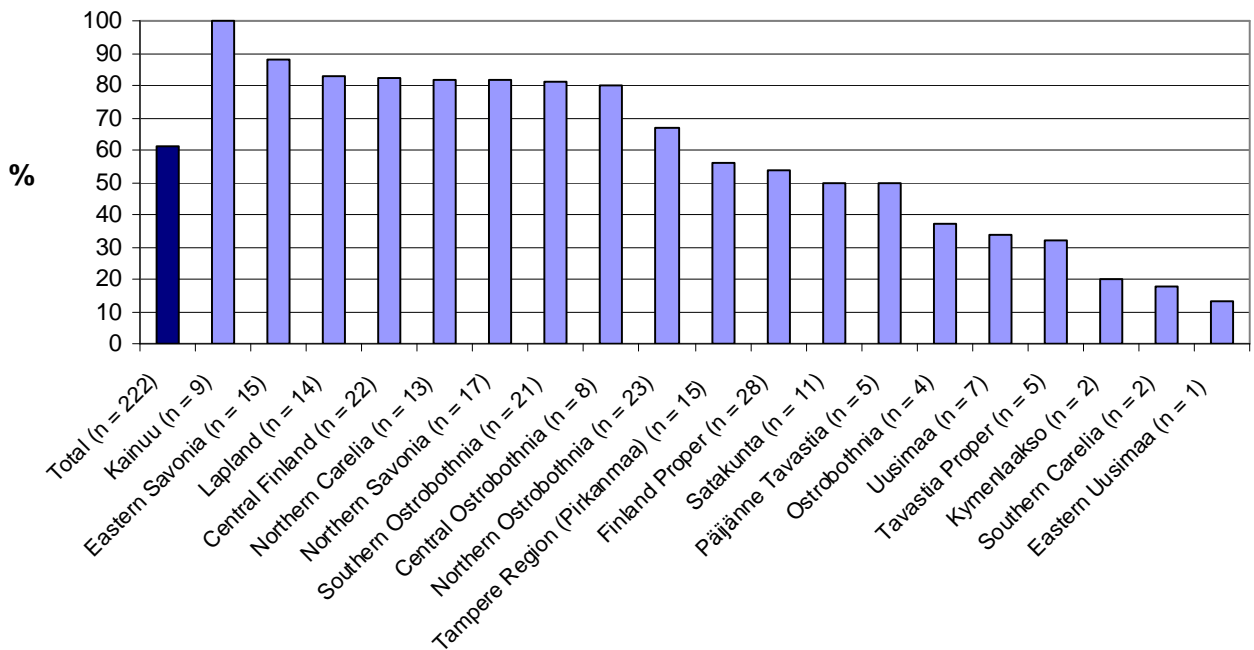
Graph 5. Methods for local products tendering (respondents n = 350, N = 406).



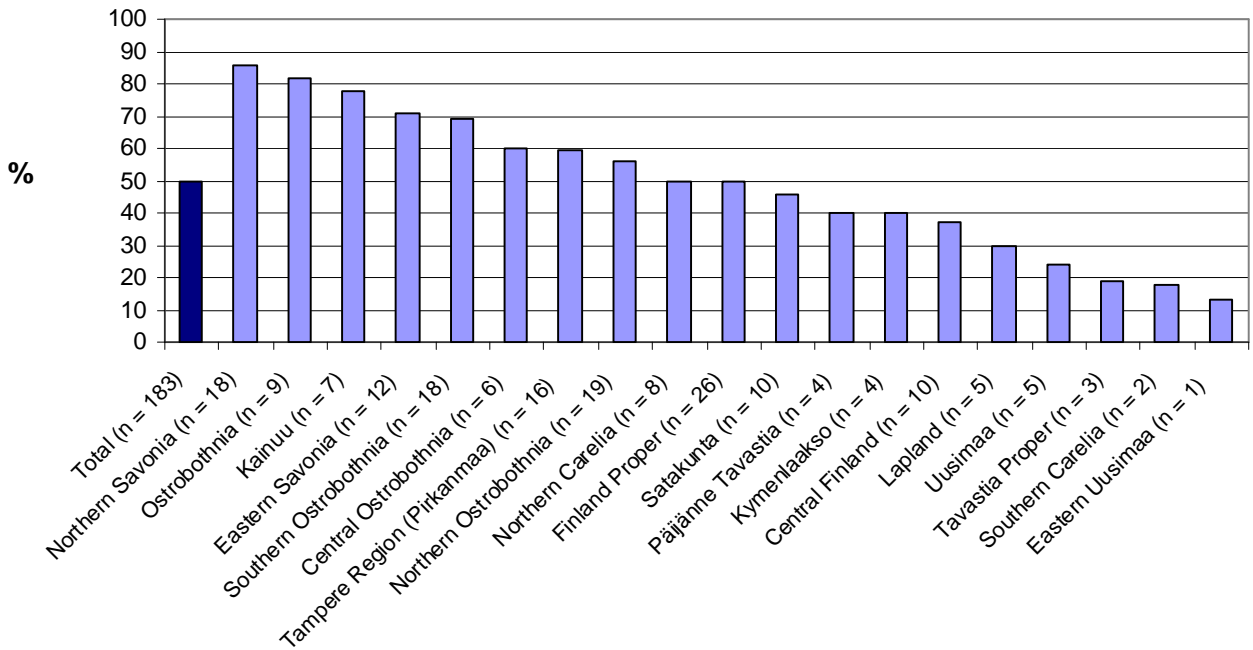
Graph 6. Products (n = the number of municipalities using) most often acquired from local producers nationally (N = 366).



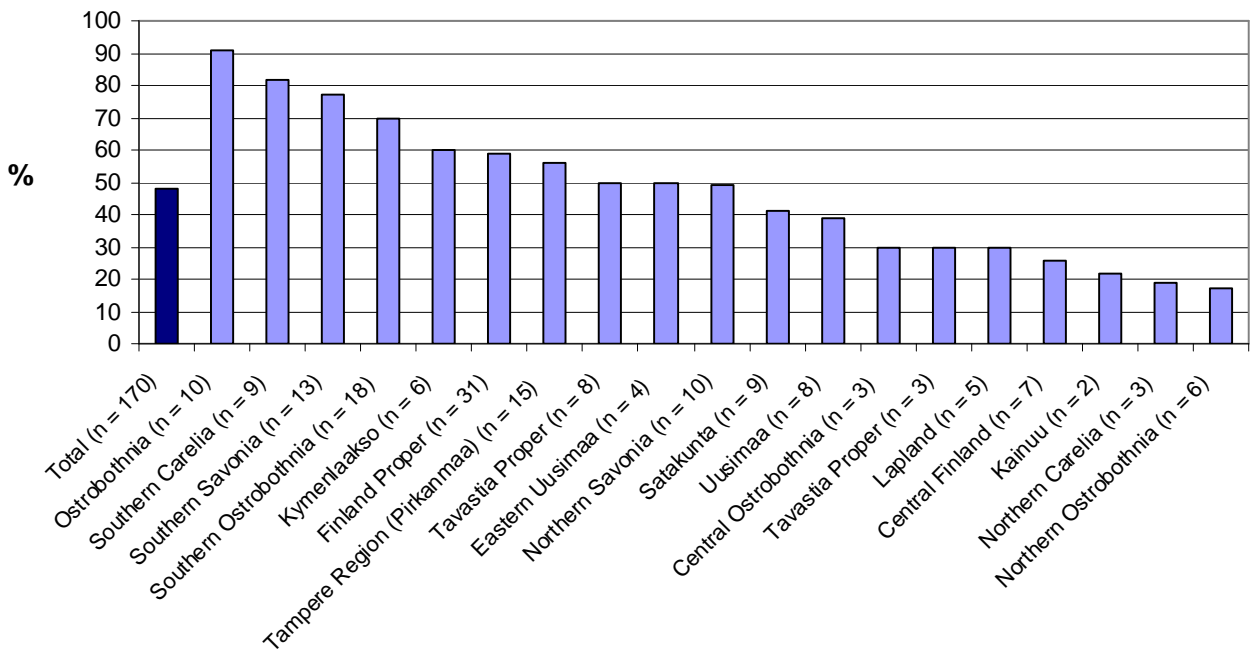
Graph 7. Municipalities using local potato by region (N = 366).



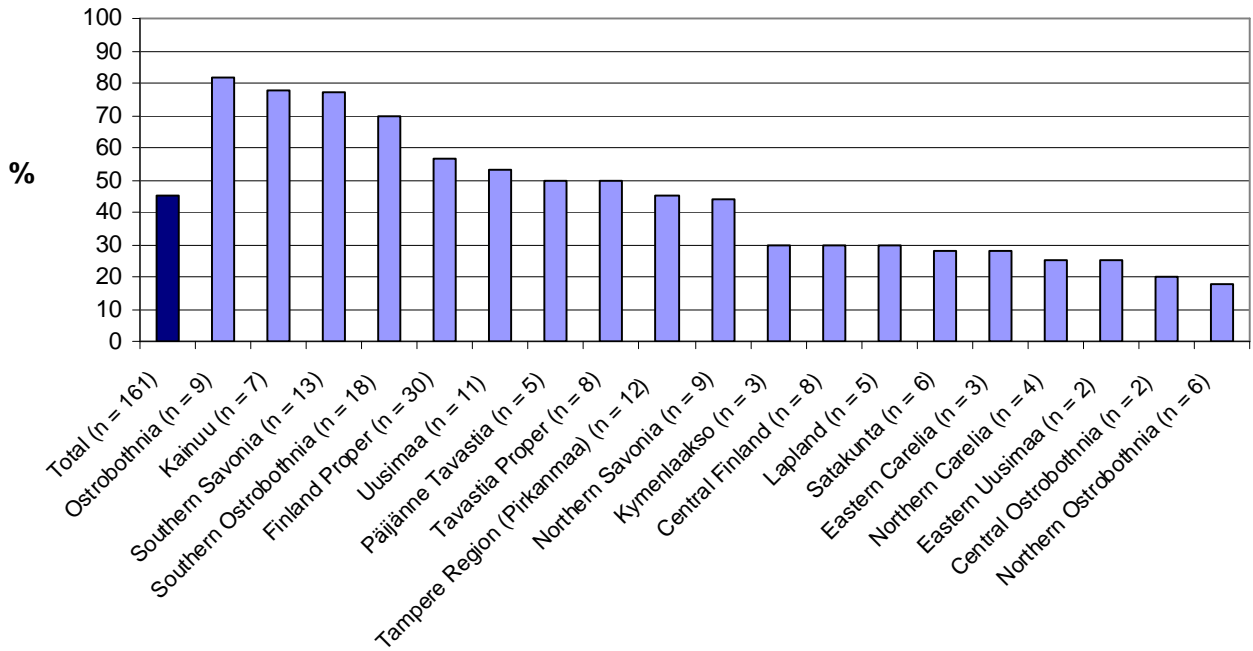
Graph 8. Municipalities using local berries by region (N = 366).



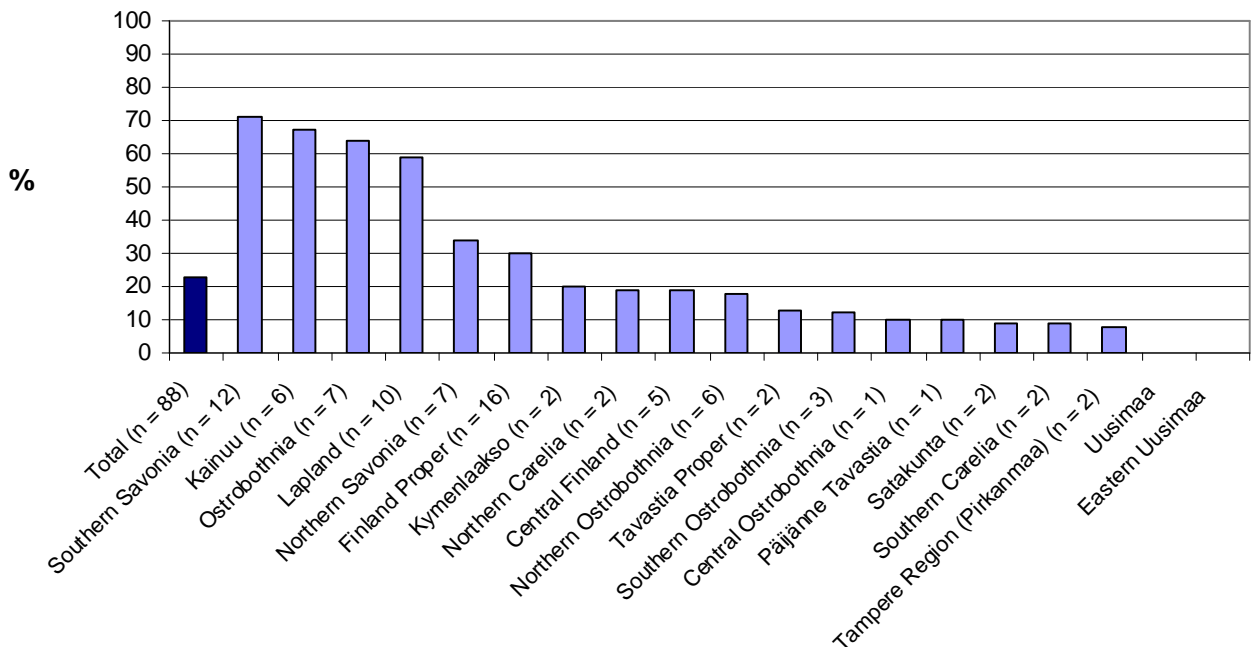
Graph 9. Municipalities using local bread by region (N = 366).



Graph 10. Municipalities using local vegetables by region (N = 366).



Graph 11. Municipalities using local root vegetables by region (N = 366).



Graph 12. Municipalities using locally caught fish by region (N = 366).

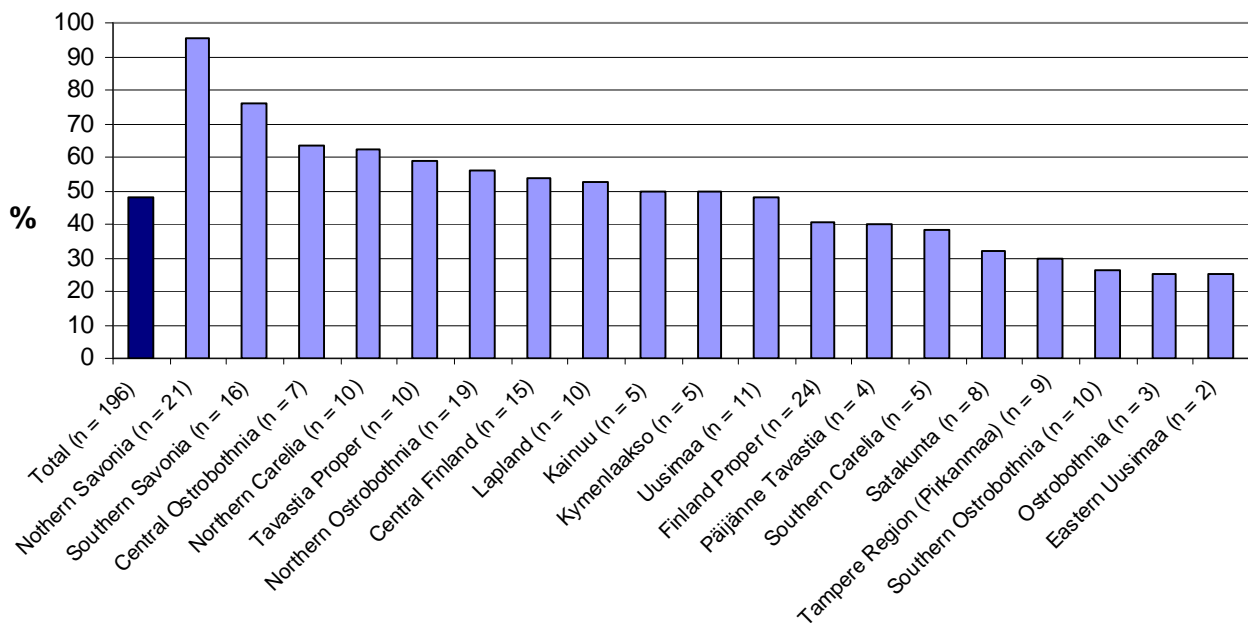
Willingness to use local products

Nearly all respondents (n = 320, N = 366) indicated willingness to use the strategically significant products of their own county and area. In eight municipalities a conscious move toward local procurement has already been made.

3.3 Step by Step training program

3.3.1 Program recognition

48 per cent of the respondents were aware of Step by Step program (N = 406).



Graph 13. Respondents aware of the Step by Step program, by region (N = 406).

3.3.2 Organic product usage

Of the respondents in this question, 64% (n = 371) stated they do not use organic products. Those who used organic products daily amounted to 3.5 % and those using them weekly amounted to 2.7 %. The remaining 30 % reported using organic food products seasonally or by other frequency. There were four daily users of organic products in both Northern and Southern Savonia, two in Lapland and one in Southern Ostrobothnia, Central Finland and Finland Proper.

4 Results examined

4.1 Level of knowledge about Sustainable Catering in Public Services Project

In order to examine the effectiveness of information spread on the Sustainable Catering in Public Services Project, the questionnaire included a question about the recognition of the project among the respondents. Information about the Sustainable Catering in Public Services Project has been spread using various communication channels including the media but also direct marketing, fairs and personal customer contacts. In 2007 the personnel in charge of municipal and parish food services were approached by both email and telephone and informed about the seminars being arranged in their area. Nearly 60 % of the respondents had heard of the project (Graph 1). Even though there has been much written about the Sustainable Catering in Public Services Project, the role of the Local Food Advisors proved significant for the spread of information. Nearly half of the respondents had received information from the advisors, a quarter from papers and an equal number of respondents reported not remembering the source of information (Graph 2). The Internet websites were the source of information for only two per cent of the respondents. Email is used for communication between professional kitchens, because out of the 162 responses in this question 90 % reported informing a colleague about the Fresh is Possible! seminar. On 60 percent of the forms, however, the question was left unanswered, which might be due to the seminar having already been arranged in the locality, and thus informing about it was no longer necessary.

Based on the survey it appears that in the areas where a single advisor had worked since the beginning of the project, the most usual manner of learning about the project was from the advisor. (Graph 3). In Uusimaa and Eastern Uusimaa regions as well as Satakunta region the information origin was mainly newspapers. The Sustainable Catering in Public Services Project had an advisor in Uusimaa region in 2006 for a period of seven months, but not in 2007. Also in Central Finland, Pirkanmaa and Southern Ostrobothnia regions, where the advisor changed in early 2007, the project information was mostly spread via newspapers. Based on the results it can be deduced that an established and known organization with little variation in personnel could achieve better results than with personnel changing constantly.

4.2 Procurement

4.2.1 The impact of procurement circle

Nearly 70 % of the municipalities were a part of a procurement circle (Graph 4). In Southern Carelia only a quarter of the municipalities in the study, but in Päijänne Tavastia and Kainuu regions all the representatives of the responding municipalities employed procurement circles in their acquisitions. Two percent of the respondents did not inform whether or not they participated in a procurement circle.

Contrary to assumptions, being a part of a procurement circle appears to have no impact in the usage of local products. There was no significant statistical difference between local product usage and procurement ring participation ($p > 0.05$). Nevertheless, according to some respondents, being involved in a procurement circle restricts the municipality's own tendering processes. On the other hand, a centralized procurement was regarded as a factor making acquisitions easier.

4.2.2 Tendering

The methods for local product acquisition are very varied. Some of the kitchens do not send out tenders for local products, some put out separate tenders for local products and for some, the procurement circle tenders also local products (Graph 5). Nearly 40 % of those who responded about tendering ($n = 350$, $N = 406$) used a separate tendering process for local products. A little over a quarter does not put out tenders for local products, for a fifth the procurement circle does the tendering for them as well and a little less than a fifth of purchasers reported that either the circle does the tendering of they do it themselves. Based on weekday diner amounts there was no statistically significant difference between the tendering methods of the three classes of kitchens ($p > 0.05$).

Some kitchens have started buying fresh products years ago without tendering, and are carrying on until further notice. Especially fresh products and seasonal products are acquired past the procurement circle, because in small municipalities the need for certain fresh products amounts to so little. Several responses indicated that fresh products (vegetables, root vegetable and potato) as well as bread are often left out of the procurement circle and to be tendered by the municipalities directly. Certain product groups have been intentionally left out of the circle in order to "support local food" and "support local entrepreneurship, pay attention to employment". It was indicated that more active responses to tenders from local entrepreneurs and producers are called for.

Of local products, potato is overwhelmingly most often tendered for outside the procurement circles. Berries are bought from pickers directly or from local producers at daily prices. In some municipalities also school children pick berries and deliver to schools. This habit, quite common in the past days, might prove sensible even today at least in the localities where the berry areas are readily accessible by school students. Perhaps also the students would value their meals better if they participated in acquiring the ingredients of their meals themselves?

Some respondents felt that their opportunities to affect the purchases are limited when being a part of a procurement circle. In order to change this conception, Fresh is Possible! seminars in 2007 were arranged. The seminars have included reminders and offered example cases to show that it is possible to acquire fresh products with short delivery chains. The tendering process must receive special attention in writing the inquiries. The personnel in charge of acquisitions, such as procurement managers, must be given the minimum criteria for the products in exact detail, because it is the buyer who defines what products of what level of quality they want. The people who prepare the food are in the final stages experts in what kind of ingredients they need in order to be able to prepare their customers the food they want to offer.

4.2.3 Procurement descriptions by municipalities

General procurement issues

In Lapland nearly all the municipalities were a part of a procurement circle and the products were mainly bought based on the tendering carried out by the procurement circle. A few respondents reported making additional purchases from local producers when it comes to fresh products. In some municipalities potato and bread, in some root vegetables and fresh products were left outside the procurement circle.

In Northern Ostrobothnia three out of four municipalities responded being a part of a procurement circle and all the suppliers were chosen based on tendering by the procurement circle. Some municipal kitchens bought groceries directly from local stores. Potato and bread were tendered for outside the circle the most. Kitchen managers are also asked for requirements for the products being tendered, but they are not usually participating in writing the tenders. The most common criteria given for purchases were low price and sometimes nutritional requirements such as low salt content of bread.

In Kainuu nearly all the municipalities that responded were a part of Kainuu Procurement Circle which carries out tendering and acquisitions. In several municipalities bread, berries, potato and root vegetables have been left outside the circle, and the municipalities sent out tenders for those themselves.

In Northern Carelia 80 % of the municipalities responding were in procurement circles. The respondents reported acquiring food products via the procurement circle. Some procured bread, potato, root vegetables, berries and sometimes fish from local producers. However, it was seen as a problem that local producers fail to offer their products by not responding to tenders. In a municipality not part of a procurement circle, an effort was made to use a lot of local food, with kitchen managers themselves writing the tenders.

In Northern Savonia nearly 90 % of the responding municipalities were in procurement circles. Some of the municipalities had joined large procurement circles, some in smaller procurement units or acquired the products themselves. With respect to procurement, it was stressed that for fresh products, each municipality is responsible for acquisitions. One respondent also mentioned that "in function- and festivities catering more local products can be used, if the client so desires".

Also in Southern Savonia region nearly 90 % of the municipalities that responded were in procurement circles. Although all the procurement was carried out based on the tendering put out by the circle, also local producers are included in the tendering. In some Southern Savonia municipalities fresh products were tendered for directly by municipalities or products were directly purchased from small producers, if suitable products were available.

In Southern Ostrobothnia 75 % of the responded municipalities were in procurement circles. In some of them potato, bakery products and fresh products were left out of the circle and the municipalities tendered for them directly.

In Ostrobothnia and Central Ostrobothnia 30 %, in Pirkanmaa 80 % and in Satakunta nearly half of the municipalities were in some procurement circle. Municipal kitchens also acquired products from local stores. As reasons for that, the small size of the municipality and remoteness were given. In some municipalities the kitchens were also authorized to purchase products directly from local producers.

In Central Finland 70 % of the municipalities were partaking in procurement circles. Tenders were used to select most often the cheapest product. Some municipalities had permissions to purchase directly from farmers or berry pickers, if produce was available. Vegetables were purchased from several sources and not tendered for.

In Finland Proper a little over half of the municipalities that responded were in procurement circles. Responses to the question dealing with procurement description came mostly from the municipalities who were not a part of a procurement circle. In Finland Proper there are many small municipalities, which is a probable reason for many of the respondents saying they buy a lot of groceries from local stores or local producers. Some municipalities acquired fish from local fishermen, berries from pickers directly and root vegetables from farmers. Some responded that there were no local producers in the area.

In southern Carelia only 30 % of the municipalities that responded were in procurement circles. Most of the respondents carry out tendering independently. Some of the respondents indicated using local stores and buying from local entrepreneurs.

In Päijänne Tavastia all the responding municipalities were in procurement circles. It was possible to make small purchases of fresh products outside the circle.

In Tavastia Proper nearly 90 % of the municipalities that responded were in procurement circles, and food products were acquired from companies as per tendered by the circle. Some municipalities also used the option to procure fresh products individually.

In Uusimaa 70 % of municipalities were in procurement circles. The responses, however, do not include the large city municipalities of the capital region. Also in Uusimaa the municipalities that were in procurement rings acquired fresh products independently.

In Eastern Uusimaa less than 40 % of the municipalities that responded were part of procurement circles. Some municipalities acquired their fresh produce from the adjoining region. In Eastern Uusimaa there were also catering companies in charge of food services – the municipalities have outsourced the food services functions to them.

In Kymenlaakso 90 % of the responding municipalities were in procurement circles. The municipalities reported acquiring their foodstuffs via procurement circles.

4.2.4 Local product acquisition

The aim of this study was to find out whether the public sector kitchens procure local products and if so, what are these products. The survey did not include the amounts of foods being acquired. However, in many cases the respondents indicated what products they regularly use and what are used only seasonally.

The hypothesis was that acquiring local foods is more common when the amounts of food to be prepared are small. However, in this data, where the municipalities were divided in three classes according to the number of meals they serve, there was no statistical difference found between the procurement of local products and the number of meals served. Nevertheless, local vegetables were used in a larger percentage of municipalities of large number of meals served than smaller ones. In contrast, however, local berries were used in a larger percentage of small- and medium sized municipalities than large ones.

4.2.5 Products locally acquired

In most of the interviewed municipalities (93 %) at least one of the local product groups examined in this study was used. The most common local products procured by the municipalities were potato, berries, bread, vegetables, root vegetables and fish (Graph 6). In addition, local producers were used for acquiring meat or meat products, fruit, cereals, mushroom, dairy products and herbs. Potato and bread were most commonly procured throughout the year. Especially berries and fish were more seasonally acquired. Most respondents also hoped to increase the procurement of said products, potato, root vegetables, vegetables and berries locally. Examined by region, Uusimaa was clearly distinguished from others, since in a third of the municipalities interviewed in Uusimaa did not use local products at all. Graphs (7–12) clarify the number of municipalities procuring local foods by region.

Berries

Of local food products fish and berries were most often not tendered. Nearly 60 % of the municipalities that responded procured berries locally. (Graph 8). Local berry use was most common in Eastern Finland, especially in counties famed for berries, Kainuu and Lapland. In some of the municipalities berries were only bought locally when in season or in the fall in amounts as

offered by the local pickers. There were a number of purchasing agreements made also with local berry farmers. There were some cases indicating that it was forbidden to buy from local pickers past the procurement circle. It was easiest to buy berries in wholesales.

Bread

There is a diverse bread culture in Finland. According to Food Finland theme group data one third of the nation's foodstuffs companies were bakeries. (Food Finland 2007). The taste of bread varies in different parts of the country, which is the reason some of the public sector kitchens and their clients prefer local bread as a counterbalance to bread prepared by large national bakeries with a single recipe for the whole country. The number of bakeries operating in a given area does not, however, seem to correlate with the level of local bread use. Local bread is most commonly used in Northern Savonia, Kainuu and Ostrobothnia and least commonly in Tavastia Proper (Graph 9). Even though in Tavastia Proper, Uusimaa and Southern Carelia there is a lot of bakeries, municipalities did not employ their services. In many Northern Savonia municipalities the use of local bread may have been partly increased due to the national Local Bread Project having a strong presence in the eastern Finland area in 2005–2007, which possibly included active promotion of local bakery products for public sector use. On the other hand, it must be noted that of the 19 bakery companies in Kainuu (Food Finland 2007) only two companies were involved in the Local Bread Project, yet in Kainuu the use of local bread was second to most common.

Potato, vegetables and root vegetables

Of all local products used, potato was the most common everywhere in Finland (Graph 7).

Local vegetables and root vegetables were used in almost half of the municipalities that responded (Graphs 10 and 11). Both the use of root vegetables and vegetables was most common in Ostrobothnia and in southeast Finland. In Kainuu several places used local root vegetables, but not vegetables. According to the register of greenery companies (2005) the second to largest number of greeneries and the largest number of greenhouse vegetable cultivation sites were to be found in Ostrobothnia in the area of Employment and Economic Development Centers, making the area a prime candidate for using local products. The largest number of greeneries and open-field production was to be found in Finland Proper, where also the second to largest number of greenhouses were found (Greenery Companies Register 2005). In Kainuu the number of greenhouse farmers was the lowest in the country, which is a probable cause for the low usage level of local vegetables. In southeastern Finland local vegetables and root vegetables were used in several

locations. There also is a little more than the Finnish average number of both greeneries and greenhouse plants in the area.

The most commonly used root vegetable was carrot. There are problems in using carrots, however, for instance in that even if carrot were readily available, its level of preprocessing is not high enough for kitchens. According to the Food Finland theme group data (2007) there was most refining and preprocessing of berries and fruits as well as vegetables happening in Finland Proper, Uusimaa, Satakunta and Southern Ostrobothnia regions. The data, however, does not clarify which areas of Finland have the most root vegetable refineries and preprocessors. There is a need for refineries working between the producers and kitchens to process the ingredients into a more suitable form for usage in professional kitchens.

The impact of processing on the nutrition value of grated carrot

Currently the grated foods used in professional kitchens are often prepared a great distance from the kitchens, and thus need to withstand transportation and storage for several days. Safe storage is possible if the grated material can be made hostile to microbes so they cannot multiply in it. In the process of sanitation, however, precious nutrients of carrots are lost. When calculating the nutrient value of dishes, the values of whole carrots are used, disregarding the impact of processing on the nutrient value of the final product. In order to clarify this issue the Oulu University Laboratory of Biotechnologies carried out a small-scale test in Sotkamo in the spring of 2007, measuring the mineral content of grated carrot (non-published data acquired from Leena Heinola 9th Jan 2008). In the test the impact of washing and centrifuge drying to grated carrot mineral value was tested. The content of potassium, calcium and magnesium in both freshly grated and washed and centrifuged grated carrot was measured. The treatment proved to lower the amounts of potassium, calcium and magnesium to clearly less than a half of what they had been in freshly grated carrots. Most likely, being water-soluble, potassium, calcium and magnesium are easily dissolved in the washing water. The researchers who carried out the study felt that thorough, scientific studies would be in order concerning the nutrient values of salad ingredients processed for storage (vitamins and minerals) as opposed to fresh products. In case of results being similar to these findings, it is worth asking of children, the sick and the elderly should be served freshly grated carrots instead of pre-processed grated carrots.

Fish

Local fish was most commonly used in southern Savonia. Also in Kainuu, Lapland and Ostrobothnia local fish was used (Graph 12). The responses however did not indicate how often local fish is available. Even though there is a great number of lakes and rivers in Finland, only a few towns have professional fishermen capable of delivering fresh, pre-processed fish to kitchens. It is a challenge to deliver local fish to kitchens in suitable quantities and at a suitable time. One solution might be making an effort to procure fish locally, but keep frozen fish in storage to ensure the availability of ingredients. Such thinking requires flexibility from the kitchen staff, as the recipes may suddenly change due to the change in ingredients.

Even though the data collected by Food Finland theme group (Food Finland 2007) reveals that in 2007 the largest number of fish farms was to be found in Uusimaa and eastern Uusimaa, local fish was not used in the area. The percentage of fish farms in foodstuff companies of the area was 7 %. Local fish was also not used in Tavastia Proper, where there are a few fish farms, amounting to 6 % of the area's foodstuff companies. The percentage of fish farms in the areas where much local fish was used (Graph 12) was 10 % of area's foodstuff companies, except in Ostrobothnia 14 %. In southern Carelia and Satakunta there were conversely several fish farms (17 % and 12 % of food companies) but few places used local fish. It can be deduced that the kitchens either do not have information about the fish farms of the area and local fish possibly available, or due to convenience acquire frozen, foreign fish from wholesales.

4.2.6 Factors affecting local food procurement

In the responses it could be seen that the same limiting factors for procurements appeared all over Finland. There would be a readiness to use local products, if the price would be competitive with the products available through current sources. In many cases the prices have been negotiated so low, that small producers cannot compete with large companies. On the other hand, there would be opportunities for small companies to improve their functions, but this requires investments the producers haste to commit to due to the short duration of supply contracts. If public sector kitchens really want to use local food, it requires a new kind of thinking. It would require readiness to genuinely cooperate with the producers for instance by developing their products into something that kitchens can use for their needs. Joint meetings between kitchen buyers and the producers require time initially, but as the cooperation matures, there will be less need for meetings.

Several kitchens indicted dissatisfaction with the delivery certainly and trustworthiness of the deliveries in general. The kitchen staff and the producer needs do not always meet, which may cause problems for cooperation.

Local food producers are also hesitant to commit themselves to suppliers, because the amounts required by professional kitchens are large quantities. In some municipalities a good method has been found in buying local products for as long as they are available after harvest, after which purchases are directed to wholesales.

Skilled, professional producers are not always skilled traders. Kitchens do not necessarily possess information on local foodstuff supply. There may not be supply available, or little supply or sporadically. The lack of supply is most obvious in Lapland, which is understandable due to the northern location of the area. In some towns there would be potato and root vegetable farming but no refining available, which keeps professional kitchen procurement from them.

As for the quality of local products, in general there was satisfaction indicated, but there were some opposite views as well. Producers do not always understand how important the homogeneity of ingredient deliveries is to the preparation in kitchens. This is something the producers should pay special attention to. Moreover, the refinement level of local products was seen as a problem. The kitchens often can not buy unwashed potatoes or root vegetables but instead require foodstuffs to be suitable pre-processed for each need. As the number of centralized kitchens rises, so does the need of pre-processed products.

The idea of centralized procurement is trying to supply the products to the client from a single place. Also the number of invoices must be as low as possible, because handling invoices demands time and increases the costs. The problem could be alleviated by, for instance, by producer networking. This would mean one producer to carry the duties of product sales and transport to kitchens. Local products could be delivered in a single shipment, cutting down on the time required by accepting deliveries and handling invoices.

4.2.7 Local product usage

When the respondent was asked to describe their procurement, some interesting factors arose from the responses. In some cases the stressed criteria for selection was cheapest price. Sometimes the selection criteria had been thought of in more detail, which meant the most important criteria to be a

nutritional feature, such as low salt content of bread. The responses revealed that local procurers do not offer their products to professional kitchens. This also came out in the dialogue sections of Fresh is Possible! -seminars. The food services personnel do not have the information on what kind of local products are available and from whom.

It would be in order to collect up-to-date information on all Finnish regions concerning their producers and refiners that could supply products to professional kitchens. This would enable kitchens to send their tenders to the suppliers as they wish to select. A good system has been found also in the situations where the refiner and the professional kitchen cooperate in developing the product into something suitable for professional kitchen use. In order to support the Finnish food heritage it would also be necessary for public sector kitchens to prepare traditional meals from local ingredients whenever possible. There are several factors at work in using local products in kitchens.

Quotations from respondents on the reasons for not using local products:

”Price is the key”, Lapland

”Local products good, potato delivered works well, but not other products. Too much variation in quality and delivery reliability, which keeps us from getting excited about local products. It’s an idea worth developing, however”, Northern Ostrobothnia

”This system has been used. Been consciously increasing the use. If new producers arise, we usually test them for cooperation”, Northern Carelia

”It’s easiest not to use”, Southern Ostrobothnia

”Not enough availability, or frequently enough”, Southern Ostrobothnia

”Would require better pretreatment”, Ostrobothnia

”We already use what we can get”, Ostrobothnia

”We do well like this”, Pirkanmaa

”Small ones haven’t got enough resources and quality doesn’t meet with expectations”, Pirkanmaa

”Amounts small, so there is little willingness to go find and pick up yourself (i.e. transport)”, Pirkanmaa

”It’s a big obstacle they’re available raw only [meats for instance], ready-made functions better”, Pirkanmaa

”Wholesales purchasing easier”, Satakunta

”Not used, price is the reason, we would need large quantities at once”, Central Finland

"There aren't enough local products offered as we would require. Some small purchases are made on kitchen level", Uusimaa

Quotations from respondents on the reasons for starting to use local products again:

"Reindeer meat has been taken into use, localness. City strategy is to support entrepreneurship. Using local suppliers and national culture", Lapland

"Local, whenever possible. Active offering is hoped from local small entrepreneurs and producers", Northern Ostrobothnia

"We always have had the principle that potatoes and root vegetables should be locally acquired. We have paid more conscious attention into procuring local food. It is more costly, so cannot be taken into continuous use", Northern Ostrobothnia

"Good availability, good quality, not much more expensive as through wholesales", Northern Savonia

"We get all we can locally, freshwater fish purchases have been increased, local marmalade ordered and prepared for the elderly. The food services manager wants to support local entrepreneurs and get other people in the county behind the cause", Northern Savonia

"Cannot get offers from all + price prohibitive. Really only berries have recently been acquired as local products", Southern Ostrobothnia

"If possible, and also if even organic, even better. Vegetables and root vegetables [usage increased]", Pirkanmaa

4.3 Step by Step training program

Step by Step training program proved fairly well known as half of the respondents were aware of the program. Daily and weekly users of organic products amounted to about 6 % of the respondents. Seasonal use of organic products was, however, more common. Some kitchens reported using organic products seasonally, because they were locally available and their quality was regarded good, based on experience.

4.4. Examples of local food usage in Finnish municipalities

In the following some real-life examples of local food procurement in the nine Finnish regions are presented.

Haapajärvi

In Northern Ostrobothnia the city of Haapajärvi begun using local products based on personal enthusiasm of the food Services Manager Marjatta Tiitto. *”Although it was easy to make the decision to use organic potato back in the day, because in addition to my personal interest in it, it was a school office policy in this matter and there was an available organic potato farmer in the area.”*, Tiitto explains. In the city of Haapajärvi area there is a strong farming presence and active 4H-club activity. During weekdays the city’s three preparation- and twelve service kitchens serve to 2100 lunch clients.

Haapajärvi is not participating in region’s procurement circles, but instead tenders for foodstuffs directly. In the procurement documents, an effort is made to facilitate local acquisition in municipal food services. The documentation, for instance, includes a mention that the city reserves a right to acquire fresh products at daily prices also from alternative sources. However, here always is a price comparison made prior to purchasing. In addition, in tenders the offers are divided in product classes and the city reserves the right to accept partial offers.

Haapajärvi city has contract providers that also refine their products to suit the kitchen needs. At the moment, the local producers also deliver the products to kitchens themselves. It is, however, hoped that the farmers were more active in contacting the kitchens directly. Also a wish for more vegetable and herb farming in the area is called for.

Although there are factors limiting the use of local foods (such as small delivery quantities, sometimes quality-value ratio), the Food Services Manager Marjatta Tiitto believes the use of local foods will carry on growing in the next few years: *”Local products yield so-called added value to food services products. I believe this valuation will grow as food product use globalizes further. It is a shame municipal decision-makers still lack the required will to make the financial decisions to benefit the issue. That is most likely due to dire financial situation of municipalities. The good quality of products and the level of refinement increase the interest in using the products. Not to mention it also has regional financial significance.”*

Local products used in Haapajärvi city throughout the year and seasonally

Used throughout the year	Used seasonally (percentage of yearly procurement)
Organic carrots	Strawberries 20 %
Potatoes	Rhubarbs 50 %
Blueberries	Wild mushroom 50 %
Lingonberries	Parsley 10 %
	Dill 10 %
	Salad 5 %
	Swede 100 %
	Leek 5 %
	Garden raspberries 5 %

Juankoski

Located in Northern Savonia, Juankoski city local food usage was initiated as the level of food services refinement was improved in 1998. At the same time a centralized model of food services production was implemented and along with the re-organization new product groups, peeled potato and carrot were introduced. Prior to the organizational change local producer's unwashed carrot and potato were used.

In the city of Juankoski 1000 lunches are served daily. The food is prepared in two preparation kitchens, in addition to which there are four service kitchens. The city is a part of Northern Savonia municipal procurement circle. The use of local products is based on the city procurement policy. City council has decreed that local products are bakery products as well as potato and vegetables. The procurement of local products has been possible due to good availability and quality-value ratio. Local products are also seasonally purchased in some amounts also past the procurement circle tendering. However, in this case the decision-making also includes a price comparison. The city also accepts partial offers for food product groups, such as coffee and normal breads. Tenders also have been added terms concerning package sizes and delivery times and their frequency. A constant feedback discourse is carried out between the city and the producers and suppliers. Procurement contracts are re-negotiated on a yearly basis.

The city also has some contract farmers, who refine their products as per their contract requirements. The producers deliver the products to the kitchens directly. Currently the greatest challenge in carrying on with local product use is the aging suppliers – there is a lack of a new generation to carry on. In addition an electric ordering system should be made to work with smaller

suppliers as well. *”The quality of the material, flexible supply, appropriateness and the added value of the product affect decisions. In addition, the impact on regional finance is recognized”*, the Services Manager of Juankoski city, Jari T. Korhonen lists as reasons for using local products. *”I believe that the use of local products stays at the minimum at the current level. Perhaps it could grow, if the production keeps up. Much depends on the activity of the producers themselves. For instance, there are gardens in the area, but products are not offered. Is it too hard to deliver them? We would hope, however, that for instance berries could be acquired locally all the year round”*, Korhonen plans the functions for the next five years.

Local products used in Juankoski throughout the year and seasonally

Used throughout the year	Used seasonally (percentage of yearly procurement)
Normal bread	Berries when in season; Strawberry, Raspberry, Cloudberry, Blueberry, Northern Highbush Blueberry, Currants, Lingonberry, Cranberry. Approx. 3 %
Pastries	Swede 10 %
Potato	Onion 50 %
Carrot	Cucumber, Tomato, Sweet pepper 5 %
	Salad, Zucchini, Egg Plant (minor)

Jämsä

In Central Finland, Jämsä City prepares 3700 lunches daily. The city has three production (preparation) and 13 service kitchens as well as 32 points of sale. The city is a part of Jämsä river valley public communities’ procurement circle, in which the members take turns in dealing with tendering. Originally the decision to acquire local products was made in the city Board for Promotion of Culture. Later a similar decision was made also in the City Council at the proposal of the procurement circle.

Jämsä city has had farming contracts with local potato and vegetable farmers already since 1970s. Also some help for using local products has been had from Jämsä farming and gardening school production and various local food projects.

”Supply, competitive prices, quality products in general and continued refinement”, the Food Services Manager Merja Nieminen lists as factors facilitating the use of local foods. *“Also partial offers are accepted. It is possible to make an offer for all the requested products or just certain*

products. In general, the contract farmers of the city also refine their products themselves. Nieminen indicates hopes for the farmers to more actively contact kitchens as well as a need for more producers. "More refinement is needed - sliced or Julienne potatoes directly supplied for daily production. Gluten-free products in the bakery", Nieminen lists.

In Jämsä the tenders do not include any terms of delivery, but the delivery dates are negotiated based on the needs of the kitchens. *"The producers deliver their own products. Some deliver them in the morning directly for food production and also ready-to-use products directly to service kitchens. Some only deliver on certain days, limited quantities, and only to production kitchens. The quality must remain good and the products safe for use", Nieminen says.*

"It is good to not have fixed the deliveries on certain days, but that products are available daily according to the needs. Fresh produce, correctly refined, (grated, cubed, shredded, chunked, puréed, marmelades) give a great taste for foods. Cucumbers and tomatos are harvested the day before delivery. There is no need for unnecessary, long deliveries and work is preserved in the local region", Nieminen gives as benefits to using local products. She also has a clear vision of the future:"If the supply remains the same or increases, also the use of local products increases in the city food services".

Local products used in Jämsä throughout the year and seasonally

Used throughout the year	Used seasonally (percentage of yearly procurement)
Potato 60 %	White cabbage 25 %
Carrot 90 %	Red cabbage 10 %
Swede 90 %	Leek 10 %
Onion 40 %	Parsley, Dill 20 %
Lettuce 98 %	Tomato 40 %
Bread 50 %	Cucumber 40 %
	Lingonberry 20 %
	Strawberry 5 %
	Red- and Blackcurrant 5 %
	Cauliflower 5 %
	Zucchini 25 %
	Sweet pepper 25 %
	Honey 10 %

Konnevesi

Konnevesi municipality in Central Finland prepares 650 lunches under the lead of Nutrition Manager Mirja Minkkinen, in seven preparation kitchens. The nutrition center prepares meals for the health center, home for the elderly, the service home for the elderly, activity centre and the Meals On Wheels home delivery meals. The day home makes meals for daycare children. The school kitchen of the parish prepares meals for the comprehensive school, secondary and upper-secondary school. In the neighboring villages there are four comprehensive school kitchens, where combination workers also prepare meals. Konnevesi is not a part of a procurement circle.

In Konnevesi products have always been procured from the own municipality or from neighboring municipalities. For instance wild berries, mushroom, potato and fish have traditionally been locally produced. *"Personally I have had this notion that the Finnish Mark — and now the Euro — is best kept rotating in the neighborhood whenever possible. Diligent people can make extra income by picking berries. Familiarity and knowing the source are a good thing, you know what you'll get. Known people selling only good products in a known environment. Fishing and farming are natural sources of living in our municipality. The changes in society, however, changes the spheres of operations in the countryside and such entrepreneurs are harder and harder to find. Locals do not often direct their production into something like this, but instead, after for instance ending cattle farming they may quit entirely. City people moving back to the country or returning inhabitants might prove a potential for entrepreneurs in this field. This is a change that is a part of a larger change in lifestyles, has to do with larger, philosophical issues"*, Minkkinen says.

Nutrition Manager Minkkisen says that getting local food into procurement must include a personal interest. In Konnevesi the municipal decision-makers have taken a favorable stand on using local foods, because *"in the previous board term the council has made a motion that in Konnevesi the municipal kitchens would use locally produced food. There is as of yet no council decision on the matter, but there is a motion signed by all parties in the council on the matter of local food use."* The use of local products is facilitated by the availability of local producers in the vicinity. *"There is a potato producer in the neighboring municipality. Another municipality has a vegetable producer that provides us with organic carrot, onion and swede. Unfortunately there is not enough supply for the entire year. Also we have had berry pickers who deliver the berries directly to the kitchens. Strawberry- and other garden berries are available in the municipality. As of now, we have still had also fishers, providing fish from either Konnevesi lake or Keitele lake. In the*

municipality area there are good opportunities for picking berries and mushroom, as well as people who are willing and able to do the work."

In Konnevesi there is no tendering for local products, because the amounts being acquired are less than the limit for mandatory tendering. The price of local products is dictated by supply and demand, for instance on a yearly basis depending on the yield of berries and mushroom from the wild. Potato is procured from a contract farmer in the neighboring municipality. Root vegetables, such as carrot, are not available locally all the year round. There is a wish for having pre-treated local cabbage and other root vegetables as well in the future. In Konnevesi the potato is received peeled, but in general the refinement level of local products is hoped to be better. The producers are in active cooperation with kitchens, for instance by offering new potato varieties for test uses. In addition there are discussions with the local fishers about the suitability of local lake fish for foods prepared in the kitchens.

Local producers deliver their own products as per contract. Potato is delivered three times a week, carrot once a week or every other week, fish as per orders and wild berries as they are picked etc. *"The largest obstacles to procuring local products are the negative attitudes, in bigger issues the tendering. In mushrooms it's for instance preparing salted mushroom, because the current law prohibits selling directly to kitchens. I have two producers of salted mushroom, and I keep procuring the mushroom directly from them instead of going through the wholesales. Interesting to see what kind of a sentence I could get for doing that".*

Konnevesi wants to offer the clients good from best possible ingredients. Nutrition Manager Minkkinen says: *"it is a pleasure to offer Finnish wild berries to the clients, likewise with locally acquired fish. The elderly clients also find it tastes better when they know who's caught the fish. Also with this, knowing and familiarity are key issues "*. In Konnevesi they wish that *"laws and decrees will not change so that they make local purchases impossible. Professional and knowledgeable kitchen staff can certainly decide who to buy from. It is my wish there would be more offering of products from the producers"*.

Local products used in Konnevesi throughout the year and seasonally

Used throughout the year	Used seasonally (percentage of yearly procurement)
Potato	Whitefish 100 %
Blackcurrant	Burbot 100 %
Lingonberry	Chanterelle 100 %
Cranberry	Funnel Chanterelle 100 %
Red Currant	Rhubarb 50 %
Strawberry	Apple 20 %
Raspberry	
Blueberry	
Mushrooms	
Vendace, Pike, Pike-perch	
Carrot, Onion, Swede as much as possible	

Pälkäne

In Pirkanmaa, Pälkäne municipality starting to use of local products has been a natural choice. Key factors in procuring local products have been reasonable pricing, quality and overall economicality. In addition the location of Pälkäne, situated along a major road network, has helped the deliveries of local products to kitchens. Food Services- and Cleaning Manager of Pälkäne, Seija Snäkin-Laitinen, however, states that the variety local products bring to the menus is one of the main reasons for its use.

In Pälkäne there are 1500 daily lunch customers. Food is prepared in ten preparation kitchens of varying sizes. The municipality is a part of Valkeakoski procurement circle. *"Potato is in common tendering. Otherwise local products are not tendered for, due to occasional nature of their use Tenders are written so that they would also enable small producers to enter. It is not required to be able to deliver to all points of operation. The possibility of using products seasonally as indicated in the procurement laws is also used to some degree"* Laitinen explains. *"Partial offers are also accepted. For instance the meat refinery provides fresh meat to schools, but delivery to also Luopioinen is not required, so that the products will suffice. Or, when it comes to potato, it can be defined to which points of operation deliveries are arranged to. Despite being a part of a procurement circle, the municipality can decide based on the offers it receives"*, she continues.

Farmers do not at the moment refine their products according to the needs of the kitchens, but *"it would be marvelous if they did"*, Seija Snäkin-Laitinen ponders. More farmer activity is called for as well as more cooperation with food services. Snäkin-Laitinen would welcome a lot more contact-

making from the producers' part: *"The producers should provide more information on what is regionally available. It would be wonderful if during harvest one car would make rounds and collect produce from several producers. It would enable also us to alter menus according to the supply. It is wished that everyone that produces even small amounts would contact us. Local fish, cucumber, tomato, peas, salad, cabbage, carrot, more peeled potato, all berries, rhubarb, apple, eggs and meat. We are lacking in all departments. We could use more of any given local products; if only we could at least get local potato and carrot to all our kitchens throughout the year!"*, Snäkin-Laitinen sighs.

Seija Snäkin-Laitinen feels that the benefits of using local food lie especially in the high quality and purity of raw materials. It is hoped that in the future local food use is increased in the municipality. *"Hopefully for instance the portion of local berries can be significantly increased"*, Snäkin-Laitinen says.

Local products used in Pälkäne throughout the year and seasonally

Used throughout the year	Used seasonally (percentage of yearly procurement)
Strawberry	Raspberry 8 %
Rhubarb	Lingonberry 20 %
Ostridge meat	Blueberry 15 %
Potato unwashed, in part also peeled	Bread/pastries 20 %
	Carrot 4 %
	Fish negligible

Salo

Located in Finland Proper, the city of Salo prepares 5500 lunches a day in a single central kitchen and 12 preparation kitchens as well as 18 service kitchens. Salo is a part of Salo region municipal procurement circle, but also procures small amounts of local products past the circle and without tendering. The city also accepts partial offers in foodstuff acquisitions, in cases where the supplier states there is not enough produce available for the entire procurement circle to use.

The use of local products in Salo was initiated when a move to centralized kitchen model was realized. Both the Food Services Manager and the producers shared an interest in using local products in municipal food services and it provided the spark for the current functions. The Food Services Manager Kirsti Kakko thinks it is indeed the good producers that facilitate the use of local

products. There is a hope to get more producers to the area. There would be interest in, for instance, acquiring the complete range of fresh products from local suppliers.

The only hindrance in procuring local products in Salo has been finding a good provider. *”When you find a good partner, you hold on to it tooth and nail: you always know what you get and where it comes from ”*, the Food Services Manager Kirsti Kakko states. In the following years Kakko believes the use of local foods will only increase: *”Hopefully we can find good cooperation partners — I do believe the use of local products will increase. In addition I would hope for more good fresh produce wholesales operations to emerge in the area and more responses to the tenders the kitchens send out.”*

Local products used in Salo throughout the year and seasonally

Used throughout the year	Used seasonally (percentage of yearly procurement)
Carrot	Rhubarb 100 %
Lettuce	Apple negligible
Dried peas	

Teuva

In Southern Ostrobothnia, Teuva municipality caters for 1300 daily luncheon customers. All the 11 kitchens of the municipality remain as preparation kitchens. In the municipality, the use of local products is possible due to good producers and products as well as competitive prices.

”In my own kitchen local products have always been used, such as berries and 4H-youth's vegetables. In addition since the mid- nineties there were projects initiated in the area that facilitated the use of local products”, Lehtiharju hospital Nutrition Manager Anne Niemelä says.

”My own interest has probably been the starting point, but also in the procurement ring there has been progress in this matter; kitchen managers are in an important role in the procurement circle and administrators have also been in agreement”, Niemelä continues.

Teuva is a part of Suupohja area municipal procurement ring together with Isojoki, Jurva and Kauhajoki. The procurement circle tenders the acquisitions, and products are not generally acquired without tendering. According to need it is however possible to buy a cheaper available product or a

special product not normally used outside the procurement ring tendering. The municipality also accepts partial offers. *"Acquisitions are dealt with in product groups. Local producers may also offer products not otherwise available, such as certain berry assortments, or products especially suited for a certain use in another manner. For instance crushed strawberry, lightly marinated meat etc."*, Anne Niemelä explains. The Suupohja procurement circle handles the tendering in a centralized fashion and makes comparisons with common criteria. Each municipality, however, makes its own procurement decisions. *"All the suppliers are evaluated on the same basis, regarding delivery time and certainty, package size and quality, for instance salt, fat, fibre content etc."*

Teuva municipality has no contract farmers. Local producers deliver also refined products to kitchens. Producers keep in contact with kitchens well and there is feedback discourse helping to improve the deliveries. According to Niemelä the area has a sufficient number of producers, but there would be room for more: *"A few more would not hurt!"* In addition the food services indicated a wish for more products along with the current ones: *"refined potato foods. Currently we get peeled potato, but we'd like to get soup cubed potato, shredded etc. They are available in the neighboring municipality, but not for us"*, Niemelä says.

In Anne Niemelä's view there are no real prohibitive factors for using local products: *"I don't see them, but the larger kitchens sometimes have problems with availability or use ready-made products that aren't available from local producers."*

As more good sides to using local products aside from those mentioned, Niemelä also mentions flexibility and a good service. In the future Niemelä believes the activities will go on unchanged: *"Much depends on the producers themselves, how can they deliver the goods. But of course also what kind of changes happen in the kitchens, such as centralization toward bigger units. Or tendering and along with that an increase in the number of private food service companies. Still, I would imagine within a five-year span the situation will remain largely the same.."*

Local products used in Teuva throughout the year and seasonally

Used throughout the year	Used seasonally (percentage of yearly procurement)
All strawberry, currants, raspberry, lingonberry, blueberry, sea buckthorn, rhubarb... fresh when in season, otherwise frozen.	
Juices	
Jams	
Potato	
Pork mince, raw Marinated kassler, canned meat	
Partially root vegetables and vegetables	

Vieremä

In Northern Savonia, Vieremä municipality, there are 900 lunch customers per day. Food is prepared and served in a single central kitchen and two preparation kitchens and three warming-up kitchens. The municipality is a part of Upper Savonia Procurement Circle.

"I attended a local food seminar at Kajaani country fair about ten years ago and the ideology behind using local foods seemed like a good one. Leena Valtanen gave a great show and got me convinced how important it is to use local foods. Since then I have attended several similar occasions and soon after Kajaani there was one organized also in Vieremä. Invitations for the Vieremä seminar were sent out to about three hundred producers but none of them arrived. The only people present were local and neighboring municipal kitchen workers, people who had already received the 'enlightenment'. However, the use of local food was increased in all our municipality kitchens" explains Jaana Vidgrén, Food Services Manager how local food use was initiated in the municipality. In the beginning there was little support from the municipality:"As the previous suggests, municipal decision-makers (or our producers) were not interested in increasing the use of local foods, so buying and using local food was really a result of my personal activity. Nevertheless, in the municipal livelihood program for instance local food is mentioned. In reality the responsibility for promoting the cause is entirely on my interest. Luckily in the neighboring municipality, Kiuruvesi, there was at the same time, roughly ten years back, a large upper-Savonia local food project initiated, which has enabled us to benefit from many new local food acquisition channels."

There have, however, already been steps taken to facilitate the use of local products in the municipality. *”In making decisions about foodstuff procurement, the minutes of the municipal administration meeting shall include the clause: ‘Vegetables, potato, fruit, berries, fish and bakery products shall be acquired by the food services manager at daily prices either from local producers or wholesales. Local food shall be increasingly used as it becomes more readily available along with the increase of offers.’ This option provides relatively good prerequisites for procuring local food past the main wholesales (central wholesales, meat- and milk wholesales). If it is possible to stay within the fiscal budget or possible increases are well argued, acquiring local food is quite easy. Upper-Savonia procurement circle will also leave fresh- and bakery products out of its large-scale tendering operations, leaving every municipality of community to acquire them as they see best.’ Local products are also acquired without tenders, if there is only one provider available. Also in this case, naturally, offer prices or so-called day prices are requested. Also partial offers are accepted. For instance a farmer may be specialized in just one or a few varieties, in which case the rest of the required varieties may be bought from another producer”,* Vidgrén clarifies. The Vieremä municipality does not have contract farmers in a literal sense. *“With Farmers also refine their products according to our needs. Cooperation has been made with for instance the mentioned potato-and carrot farmer. Local bakeries have at our request even created special products that have remained in their product line to be sold elsewhere as well.”*

According to Vidgrén the producers keep in contact with kitchens quite commendably. *”The producers we have dealt with for a long time are active. None of these producers however live in the municipality area, they are all from the neighboring municipalities (Kiuruvesi and Sonkajärvi). Within our own municipality there has for some reason not been interest in cultivating and refining basic produce. The only provider in the municipality is the local bakery. The local food project that acted in Kiuruvesi brought us a lot of cooperation partners, some of whom have been quite active in marketing their products. Also the colleagues often relay information on good and useable products. I would however hope for at least one entrepreneur in our own municipality to become interested in local products. It is very difficult to acquire meat and dairy products, but fresh products, frozen berries, eggs and fish are already rather well available. Frozen vegetables, chopped (carrot, onion, soup vegetables), is what we’d still hope to have along with the current local products.”*

”Our tenders include certain delivery terms. The delivery time for instance for peeled potato is extremely important, and when it comes to frozen berries and bakery products the package size and

packing methods matter much. When dealing with non-perishable foods, the deliveries may take place well in advance and larger quantities are indeed usually preferred to keep transport costs of the producer reasonable. In some cases a commitment to deliver to every point of operation in the municipality is required, or at least an effort is made to negotiate such terms."

Vidgrén however also finds factors that may in their part make the procurement of local products difficult: *"The first is price. In the livelihood-programme the use of local food is recommended to be increased, but when making budgets the Euro speaks with a louder voice than promises. So far there have been no problems in acquiring local food, as the main items are procured elsewhere anyway (meat and dairy products, dry goods, preservatives and frozen goods excluding berries). The second factor is a lack of selection. There are many products already available, but there would still be a lot of room to increase their acquisitions. Furthermore, transport and distances involved cause problems. Transport arrangements have developed due to the local food project, but distances are something that cannot be helped. There aren't too many inhabitants in our municipality while the geographical distances are significant and that inevitably translates to higher transport costs even when the product origin is the very neighboring municipality."*

The factors advocating the use of local food are nevertheless strong. *"Use of local food adds to the financial development of the area. The product is safe to use, it can be traced and its production is as environmentally stressful as can be. As a rule the product quality is excellent, they are produced 'with love'. We have also had direct customer feedback on the good taste of products. I also wish the downsizing of farming in Finland would end and people would realize the significance of self-sufficiency."*

Jaana Vidgrén estimates the use of local food in Vieremä will increase in the following years:

"We shall increase the use of local food as soon as suitable products enter the market. In the fall of 2008 we intend to extend the purchases to spices and herbs and in the near future also to shredded carrot and onion."

Local products used in Vieremä municipality throughout the year and seasonally

Used throughout the year	Used seasonally (percentage of yearly procurement)
Potato, peeled	Strawberry, fresh 5 %
Potato, washed	Wild mushroom 50 %
Carrot, peeled	Spices and herbs, starting fall 2008 approx.50 %
Carrot, washed	
Strawberry, frozen	
Lingonberry, frozen	
Blueberry, frozen	
Blackcurrant, frozen	
Redcurrant, frozen	
Raspberry, frozen	
Eggs	
Bakery products	
Freshwater fish	

Kiuruvesi

In Kiuruvesi the School Services Nutrition Manager Helena Juntunen states that locally produced foodstuffs have always been used according to availability. *"However we begun to pay more attention to the issue in 2000 and that is when we also took part in an Organic Kitchen course arranged by the Finnish Organic Catering Centre in Suonenjoki. That initiated the actual development work on local-and organic food. Firstly we have the decision made by the Board of Education and now also city support with their strategy lining. A motion to procure local food in Kiuruvesi was made to the Board of Education by school kitchen staff, and it was very positively accepted by the board. The city has also jumped on the bandwagon with their strategy on the whole. In other words the entire city stands behind the decision",* Juntunen says.

During weekdays the Kiuruvesi city in Northern Savonia prepares 1200 meals in centralized school kitchens and approximately 420 meals in its eight village schools. In the basic social services side the central kitchens and one preparation kitchen prepare 800 meals per day altogether. In school services all the kitchens prepare their food in most part from local and organic ingredients. There is only one primary, one secondary and one village school acting as service kitchens only, and the village kitchen is being converted into preparatory kitchen by no later than 2010. On the other hand, by the year 2011 five village schools will be shut down. All the remaining village school kitchens are planned to retain food preparation facilities.

Kiuruvesi is a part of Upper-Savonia procurement circle. The circle handles the ingredients not available locally. Tendering for local products is planned in cooperation with the Manager of Education, because the combined value of purchases is too high for the Nutrition Manager to make the decisions alone. Tenders are carried out jointly with the basic social services and education services. Both use potato, bread, berries and a certain amount of local root vegetables from the same suppliers. Tenders also allow for partial offers. *”Only when the number of products is very small, there is no tendering. Also if someone offers good quality material direct from the field and that hasn’t been included in tenders, such as herbs, garlic or other specialty produce, we buy them directly to kitchens. Cold-pressed oil is also purchased without tendering because the amounts are small.”*

According to the Nutrition Manager Juntunen *“Procurement aims for overall value in decisions. There may be a producer farther away in Upper Savonia offering organic chinese cabbage for instance, which is something nobody else can offer, and also carrot, onion or some other similar product. In such cases we make decisiosn and the contract in such a manner that due to the longer distance the producer doesn't only deliver chinese cabbage but can also supply carrot and onion at the same time. This is exactly how we try to make the decisions on all locally produced foods and this is what I regard as overall value thinking.”*

Using local products is possible in Kiuruvesi because there are producers and suppliers in the local areas, also for organic products. Juntunen says *this gave us hope in the future. When we made a strong effort to realize this - the number of interested farmers has only grown along the way. Later the local food project helped, allowing us to develop some refining of products, which is beneficial.”* There are about ten contract farmers in Kiuruvesi, with whom there has been cooperation made to refine the products to fit the needs of the kitchens. Cooperation has worked well and there is a good amount of refined products available. Juntunen explains that *”producers are in active discourse with kitchens, it’s easy to discuss matters when delivering the goods. This is the key in this issue. According to her Kiuruvesi and the nearby areas have a sufficient supply of products for their current requirements. However, it is also hoped that the use of local products will increase at a quicker rate in professional kitchens.”*

In addition to the current local products used lean meat, fresh and chopped, is requested. There can be no purchasing of local vegetables if the producer cannot supply them peeled, as kitchens are not allowed to buy unpeeled vegetables.

Tenders include certain terms of delivery. *"Like the delivery method for peeled potato/carrot (in water or a tub, berries frozen, bag sizes etc. When we make a purchasing contract with a supplier, these are defined in more detail. Tenders mention overall value / partial offer terms etc".*

In Kiuruvesi the local suppliers deliver local products based on orders, usually on a daily basis. *"Naturally for those from farther away we try to make orders in such a way that there is no need to transport small amounts. For some of the products there is also joint delivery arranged, like the meats, bread and fish are delivered by a local transportation entrepreneur who also delivers local store goods to kitchens. For instance to village schools there are two weekly deliveries from the local storekeeper for daily use products, and the same delivery handles goods from the central kitchen or bakery and the fishing entrepreneur. In my view such transport logistics have worked well for us.."*

According to Juntunen it pays to procure local products. *"Why should you look farther than need be? There are so many benefits to using local products already when examining national economy and local economy as well as freshness, that is certainly is worth it to buy local. In time the quality/price ratio and the refinement level of products has also been continuously improving. It would not cross my mind to change the system any more. Recent news on imported foodstuffs has also been such that security of food is also best assured when you know the origin of food and that in the least allows for directly contacting the producer should something arise. If anything worth mention has occurred, it has been in general been an easy task to remedy the situation."*

Juntunen says that it is difficult to estimate the use of local food in Kiuruvesi for next five years, because she will only hold the office for about two years. She however remains hopeful on the issue of continuing to use local food: *"I wish the world will retain enough sense to not eliminate all the good things in it."*

Local products used in the city of Kiuruvesi throughout the year and seasonally

Used throughout the year	Used seasonally (percentage of yearly procurement)
Potato	Vegetables during fall, approx. 30 %
Carrots (nearly all)	All vegetables fresh during fall, approx. 20 %
Swede, chinese cabbage, leek, celery, parsnip partially throughout the year.	Berries used heavily direct from harvest to service, depending on availability 10-20 %
Onion (almost throughout the year)	Wild berries during fall, approx. 10 %
Strawberry, blackcurrant, sea buckthorn, green currant, raspberry all through the year. Also pressed berry juices acquired from own press and local berries	Herbs, also wild herbs when in season.
Flour, grit, flakes mainly from own mill and local grain, which is almost entirely organic	
Meat products; smoke-cured ham, BBQ sausage, sausages, home-made Wurst	
Fish, fresh and frozen and partially as ready-made foods from fish (balls and patties)	
Various pickled cucumber preservatives	
Some vegetable- and greeneries preservatives	

In the following the Kiuruvesi city Food Services Manager Helena Juntunen explains how local and organic products are used in Kiuruvesi. The schools in Kiuruvesi city are taking part in Step by Step –training program, which translates to considerable use of local organic products in the city.

Local- and organic food usage in city of Kiuruvesi school catering

Menu

A common menu all through the food services is a powerful tool allowing for significantly more options for activity planning in orders as well as deliveries. In the menu that is designed for six to eight weeks at once in Kiuruvesi there are certain dishes appearing repeatedly because local ingredients are readily available for them. This is a good basis for using local food. The same menu is rotated with small changes throughout the year by making adjustments for seasonal changes and holiday seasons as well as important dates. Within the same period the menu might even include the same dish twice, when it has been noted to please the diners. The list also provides a good starting point for making tenders and orders.

In Kiuruvesi the menu and the recipes including local ingredients are planned with food production software after the names of ingredients have been entered into the program. The names might be

entered as follows: Carrot peeled L (local), Carrot cubed L, Carrot sliced L. The same applies to meat products, such as Country-style smoke-cured ham L, Smoke-cured ham L, BBQ sausage L, Sausage L or Bar sausage L and so on. This nomination also distinguishes them from wholesales and retail products in the ingredients register. This serves to clarify the price updates and calculation of per meal costs. In a later stage the supplier information and prices are also entered. The nutritional values of ingredients have been entered into the program using Kela codes.

In Kiuruvesi the existing recipes have been copied under a new nomination of "Recipe L" and adjusted for local ingredient use. Often the recipe has to be first examined, tried out and then adjusted according to the outcome.

Recipes

Kiuruvesi food services also employ a lot of locally produced organic food, which has required some changes in recipes. For instance the use of ready-made stock or bouillons has been reduced gradually – at first 1/3 of the stock product was changed to sea salt, as it had been found the best and tastiest. Sea salt is applied in amounts approximately 5-10 % less than the recommendations allow. A reduction in using ready-made stock products is desired due to the large amounts of additives they contain.

The use of ready-made foods has been reduced to as low an amount as possible, and an effort is made to phase out their use completely. For this reason an attempt is made in Kiuruvesi to find replacement foods that could be self-prepared. In case there are local steaks, meatballs etc. available, they may be used. Regrettably, their price is rather prohibitive, which has led to them being used rather infrequently.

Freshwater fish in Kiuruvesi is available from a local entrepreneur, who either catches the fish or buys the fish from local fishers, prepares and refines them into fish products in their own fish refinery. Freshwater fish has been found to provide good and welcome variation in the recipes. In school catering fish pulp is a versatile ingredient that is used for many foods and variations: fish soup/sauce/loaf/casserole. Fish pulp is treated prior to cooking as follows: the raw mass is spread out on an oven sheet as an approximately 2 cm slab and coagulated (baked) using a low temperature. After this, the slab is cut in small cubes with a plastic spatula and used for soups and sauces. The children often fear fish bones and there are none in the soups and sauces, so they are well liked by the children.

Helena Juntunen speaks of the fish recipes: *“Pike-perch is an excellent fish to bake as well as in soups, and it has few bones. Vendace is fried not in the traditional manner, but in an oven; floured, spread on an aluminum sheet and melted butter sprinkled on top. Then they are baked until crispy in a hot oven.”*

“Currently the local fish entrepreneur prepares fish balls for us as ready-made products, as well as fish loaf, either as raw pulp, frozen or cooked and ready to consume. Cooperation is made with the entrepreneur in such a way that they pick the oven tins and transport cases (= insulated boxes) and deliver the ready loafs direct for servicing to the large kitchens. Frozen fish arrives in returnable Styrofoam cases” Juntunen explains the cooperation scheme with the fish entrepreneur.

*“Meats arrive un-marinated. Prepared meat is only used for a few dishes, because only raw and un-marinated meats are in our local food policy. **Cooking oil** has been changed into cold-pressed local turnip rape oil. **Salad dressing** is used a lot, and we prepare them ourselves now and then, or acquire them from small manufacturers who use very little additives.”*

“Meat products, such as sausages and ham, are now acquired from a local entrepreneur and that provided us with more products at our disposal. Although sausage is not available as cubes or slices, we feel in bar sausage format the cutting is still quite easy and quick to do in our own kitchen. Ham for salads and casseroles is also acquired from a local entrepreneur. In this case the order states thick slices, which we further refine in our kitchen. This allows for us to better facilitate using local area production. There is a local food provider a bit farther off providing us with meat balls. This company is also registered in the Step by Step – training program and prepares the meatballs for us according to a special recipe.”

“Onion use is significant with us, and it also pays to increase its use gradually. Also garlic gives a nice taste for foods, and it is also gradually added to foods as diners get used to the taste.

*Local **herbs** are used as much as possible. They are not radiated and are very tasty. However, it pays to be careful with their use at first. Herbs from the nature are very good. We use nettle as green powder, as well as lady’s mantle, ground elder etc. We serve nettle powder daily, and it is a good addition to nutrition. We replace spinach with ground nettle that is used in sauces, soups, pancakes etc, 1/10 part dried for freshness.”*

”Berries are all locally produced, and we also use dried berries such as blueberry as powder. Blueberry powder is used for yoghurts and quarks. By using berry powder it is possible to achieve a much better and more solid end product than using for instance frozen blueberry. Dried rhubarb also makes for a terrific berry soup or fool pudding with strawberry. We have a local refrigerator facility where the berries are frozen and the operating entrepreneur packs and delivers them upon orders to end users. Similarly, the berry drying is carried out locally, in the company hatchery Leivonen.”

”Berry offer is very varied. We get many different currants, sea buckthorn, strawberry, raspberry, rhubarb and of course forest berries. During autumn we acquire several berry varieties direct from farmers to be directly served, and wild berries from pickers. We do not buy jams, but instead cook them ourselves in small quantities (such as blackcurrant or strawberry jam). Lingonberry is served as fresh and mashed, with some sugar added. It is used as garnish for meat dishes. Juices come from a local berry farmer, who also presses them into concentrates. We don’t much use other juices.”

*”Potato is acquired from a local farmer who also peels and pre-treats them as ordered. Potatoes are delivered to the central kitchen daily. **Vegetables** are very readily available in Kiuruvesi area. All vegetables arrive peeled. They are locally produced, locally frozen cubes, slices and purées. During autumn a lot of domestic apple is bought, which however is not produced in our area.”*

*”Some vegetables such as tomato, cucumber and lettuce are not locally available, so domestic vegetables like tomato, cucumber and lettuce are bought from wholesales. There is a greenery entrepreneur in the neighboring municipality, but due to the small amount of products used, it is not feasible for them to deliver to Kiuruvesi. **Vegetable preservatives** are bought from the neighboring municipality, where a small entrepreneur cultivates cucumber, tomato and sweet pepper for making preservatives. In school catering local producer’s pickled cucumber slices, cubes and relish as well as pickled beetroot is used and they are very popular in school meals.”*

*”Soft bread is acquired from a local bakery and it is also organic. Kiuruvesi school catering is a part of Step by Step – training program and thus the soft bread is also organic. There is a wide selection; various rolls, oven tin breads, rye, barley bread. Rye and barley grain is mostly acquired locally and also ground to flour locally. **Flours and grains** are mainly local crops and ground here. The miller operates near the center and delivers also in small quantities.”*

In Kiuruvesi food is seen as local as long as it is acquired from approximately 100 km radius. In Kiuruvesi school catering the Euro amount of yearly purchases of local ingredients amounts to about 40 – 45 %. Local partakers retain approximately 35 – 40 % of Euro value and the rest goes to the suppliers in the neighboring municipalities. The total foodstuff budget in Kiuruvesi school catering is approximately 200 000 €excluding taxes.

Local food benefits according to Helena Juntunen:

- freshness
- less additives and preservatives used
- shorter transport -> less emissions
- reduction in packaging diminishes stress on environment
- less handling reduces risks in food preparation
- food has a "face"
- gives meaningful work to personnel

When ingredients are acquired locally, there is no need for excessive packaging. Often local providers deliver using returnable containers, eliminating packaging waste. In Kiuruvesi the pickled cucumber, potato, carrot etc. arrive from the local supplier in plastic buckets or pails that are returned. The entrepreneur has an official permit for re-using the packaging. Although, the covers are trashed when it comes to preservatives.

Mill packages, i.e. paper sacks or bags are recycled.

Vegetable and fruit preservatives are hardly at all acquired as canned products, so there is very little tin can waste and even that small amount is taken to a metal recycling facility. Since fruit cans are not used, fruit like apples and apples, watermelon etc. are peeled into salads by hand. This also adds to the nutritional value of products.

Helena Juntunen says an entrepreneur is expected to be:

An entrepreneur must be **extremely active**. One has to keep in constant contact with the kitchens and cooperate to develop activities and products to better serve the kitchen staff.

Product development for kitchen requirements = assortments, packing size, cutting size (cubed, sliced etc.)

Development also included the logistics and it pays to use existing channels as much as possible. There is no sense in each supplier to only transport their own products. In Kiuruvesi the K-store delivery is handled by an independent delivery service to which delivery has been outsourced to, and they also collect and deliver local products to village schools (as well as private customers).

A summary of local food

It is worth it to prefer local food already from the standpoint of national economics. The money spent begets good in the local area. Food prepared from local ingredients is healthy and very tasty. The work involved is interesting and somewhat demanding, but the end result is worth the extra effort.

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