

CHAPTER 8

TRADITIONAL FOODS, FREQUENCY OF CONSUMPTION & DISTANT PAST FOOD INTAKE

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CHAPTER 8

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8.0 INTRODUCTION

In this study, estimated intake of traditional or culture-specific foods was of interest for the following reasons:

- 1) To describe or define the food culture of the populations surveyed, in food terms (see also chapter 9)
- 2) To determine the degree of acculturation to traditional diets on migration
- 3) To examine the relationship between the retention of traditional diets and health (see chapter 12).

It is becoming apparent that peoples of all nations with different food cultures can have comparable life expectancy and morbidity rates (Powles, 1992). There is therefore a challenge to ensure that, with ever changing socio-cultural and socio-economic conditions, the fundamental characteristics of *food culture* which confer well-being, health and longevity are identified and retained (Wahlqvist et al., 1993).

The objectives of this chapter include:

1. Descriptive statistics by age group and gender for consumption of traditional Greek foods (grams/day and frequency) (see also chapter 9).
2. Qualitative changes to traditional food intake on migration

This chapter presents consumption of individual food items considered to be traditional Mediterranean food. Chapter 9 presents consumption of all foods, which have been classified into broader groups, with the aim of describing the total diet of elderly Greeks. This chapter also describes *current frequency of consumption* (number of times per week, per month) *and distant past food intake* in order to highlight changes to food intake on migration.

8.1 THE TRADITIONAL GREEK CUISINE

8.1.1 CLASSICAL GREECE

Discussions concerning the dietary habits of the classical Greeks (500BC-338BC) seem to be derived from a mixture of speculation and literary evidence (contemporary writings of poets, philosophers, doctors and other writers). Some historical accounts are preserved of cooking recipes, recommended foods and beverages for optimal health and also the medicinal properties of certain foods and beverages including herbs and spices (Braun, 1991). The basic diet of the classical Greek is described by White (1976) as *'strongly, though not exclusively vegetarian, comprising a variety of cereals (mainly as whole grain bread), vegetables (green and dried), pulses, fruit (fresh and dried), milk, cheese, olives, olive oil, fish, poultry and a little red meat, with wine (diluted with varying proportions of water) as the only drink, apart from water'*. In classical Greece, the commonest meat was that of goats. Beef was eaten occasionally after a sacrifice, but the cow, like the ox, was a working animal, and milk was normally obtained from sheep and goats, while olive oil took the place of butter. Fish, (both fresh and salted), and poultry were more commonly eaten compared to red meat. Meat was scarce and most people ate it only on the occasion of a sacrifice or celebration.

The two principal grains were wheat and barley, although barley was considered to be inferior to wheat. In general, cereal and its products (e.g bread, pasta) were regarded as the most valuable foods. The three most readily available fruit crops were grapes, figs and olives, which were also available in their dried form when out of season. Wines and olive oil were abundant enough to be exported and exchanged for grains. About 75% of Greece's terrain is mountainous, and thus not a good cereal growing country. The other foods in an ordinary diet would be cheese (in preference to milk) of many different kinds, made from goat or sheep milk, pulses (including lupin seeds), vegetables and fruit, particularly figs. The variety of vegetables was remarkable: cabbage, lettuce, watercress, celery, all kinds of green leaves (wild greens), leeks, radishes, onion, garlic and many more (potatoes were introduced much later) (Ackerknecht, 1971; White, 1970; Yianilos, 1970; Girkinizis, 1977; Waterlow, 1989; Simopoulos, 1989).

8.1.2 MODERN GREECE

8.1.2.1 The traditional mediterranean diet circa 1960's

It has been suggested that the dietary patterns in the early 1960s best characterize what we call today the 'traditional Greek food pattern' (Trichopoulou et al., 1993b). The Greek diet for this period has been recorded in the 'seven countries' study (Keys et al., 1968) (see also Chapter 2). The composition of the traditional Mediterranean diet circa 1960's was recently presented at the International Conference on the Diets of the Mediterranean in the USA (Harvard School of Public Health, January 1993). The diet was characterised by 1) plentiful fruits, vegetables, legumes, grains 2) olive oil as the principal fat 3) lean red meat consumed only a few times per month or somewhat more often in very small portions 4) low to moderate daily consumption of dairy products 5) poultry, fish and eggs consumed a couple of times per week 6) moderate consumption of wine (primarily at meals). Overall, the heart of the Mediterranean diet was defined as vegetarian - foods from plant sources formed the core of the diet, while foods from animal sources formed the fringe of the diet. Vegetables were used as an integral part of meals, not served on the side. Meat was used as a condiment and as a way to enliven large servings of grains, vegetables and beans. The occasional inclusion of even smaller quantities of cured and ground meats rounded out the traditional Mediterranean table. There is a similar pattern with dairy products.

A new food pyramid based on the traditional Mediterranean diet has been developed by the Harvard School of Public Health. This pyramid is based on the dietary traditions of Crete and Southern Italy circa 1960 due to availability of extensive data confirming the character of the food consumption patterns of these areas at the time. Professor Walter Willet revealed the pyramid at the conference (see figure 8.1.2.1). The pyramid was presented as an alternative to the one recently adopted by the US Food and Drug Administration. Although the two pyramids are similar at the base, recommending a large intake of grains and bread, then fruit and vegetables, the Mediterranean pyramid advises a limited intake of meat (few times a month as opposed to 100g daily) and olive oil as the principal fat. Another important difference is that legumes and nuts have been taken out of the meat section and given their own category to encourage increased consumption. In a controversial move, a glass of wine is set next to the pyramid to indicate an optional beneficial extra.

8.1.2.2 Regional differences in diet within Greece

In Greece, the dietary habits varied from region to region due to several factors (see also Chapter 4, section 4.1.2). One obvious factor was the availability of foodstuffs in the different regions. For example, people from the Greek Islands and from coastal regions (e.g South) consumed a greater amount of seafoods relative to other regions (e.g North) of Greece (Girkinezis et al., 1977). Pork was eaten more often in Northern Greece because it was chiefly raised there (Valassi, 1962).

Olive oil and grapes was the chief produce of Crete and certain Southern regions (e.g Kalamata), and for this reason olive oil was practically the only type of fat utilised whereas butter and pig fat was used more extensively in areas of Macedonia in the Northern part of Greece (Tzakou, 1967). Another reason for the regional variation in dietary habits in Greece was the introduction of new food preferences into different regions when the mass migration of Greeks returning from other lands to mainland Greece took place. The million or so Greeks who returned to Greece from Turkey as refugees during the years 1922-23, and settled in the Northern part of Greece, differed from the 'old Greeks' (Macartney, 1925).

They brought with them different customs, reflected as differences such as dialect, traditional dances and dietary practices. A common practice in the rural areas of Northern Greece for example was the making of a homemade variety of 'breakfast cereal' during the winter months consisting of sour milk and semolina (wheat flour) which was prepared as a soup called trahanas (Valassi, 1962). Other common dishes/foods include pork and leek casserole, chillies and cooked capsicum served with oil and garlic. Such regional differences are no longer evident in Greece due to wider availability of food stuffs and modern agriculture. However, anecdotal evidence suggests that Greeks from different regions of Greece, including migrants, still prefer many of the traditional dishes of their region. This preference is probably related to familiarity with such dishes and knowledge of recipes.

8.1.2.3 Consumption of specific foods

Barer-Stein (1979) describes consumption of specific foods within the traditional contemporary Greek diet as follows:

a) *Milk and Milk Products*

Milk is not a favourite beverage for adult Greeks; it is drunk by infants and small children and rarely by adults. Yoghurt and cheese are preferred when it comes to milk products. Yoghurt, usually made at home from sheeps milk, is considered a snack or eaten in place of the evening meal, especially in summer when high temperatures affect the appetite. Yoghurt is also consumed as an appetiser e.g mixed with diced cucumber and olive oil, or plain as an accompaniment to a hot starchy meal such as rice.

In Australia, low fat flavoured yoghurts and particularly dairy desserts (yoghurt culture not used or removed) have become very popular. However, elderly Greeks reported preferring the traditional yoghurts containing the initial culture giving the characteristic yoghurt flavour. The current interest in fermented foods or 'probiotics' and their cancer prohibiting effect is interesting given that yoghurt has been consumed by Greeks and other middle Eastern countries for thousands of years and is belived to be essential for good health (see Chapter 7, section 7.2).

The most popular cheese is feta, a pungent goat's or sheep's milk cheese preserved in brine. In Australia, feta is made from full cream cows milk. In the traditional Greek diet, where meat was not commonly consumed, cheese was the major source of protein. In the contemporary Greek diet, meat has taken the place of cheese as a major source of protein (Kosmidis, 1979). Other popular cheeses consumed in Greece are the hard yellow cheeses casseri (mild, moderately salty), kefalotiri and kefalograviera (salty hard grating cheeses).

b) *Vegetables and Fruits*

A meal without fresh or cooked vegetables of some kind is rare. All main courses are accompanied by either casseroled vegetables (e.g ratatouille or briam) or raw (Greek salad tomatoes, cucumber, feta, olives) or cooked chilled salads (boiled cauliflower or chicory or zucchini). Vegetables are considered to be an indispensable part of a meal by Greeks, and in fact may constitute the main dish without the accompaniment of meat (Valassi, 1962). Stews of vegetables with a small amount of meat (optional) are usually cooked with onions, fresh tomato or tomato paste and olive oil. Dishes which are principally cooked with olive oil, onions, tomatoes and vegetables are called 'ladera or yiahni' because they are very oily. Tomato paste is used in many dishes and many Greeks make their own paste from tomatoes. Freshly squeezed lemon juice is used a great deal in cooking, and added to salads, fish and meat.

Vegetables which are commonly fried are green peppers, eggplant, zucchini and potatoes. All salads are dressed with plentiful lemon juice, olive oil and sometimes oregano. Seasonal vegetables (and their dishes) are usually consumed in their natural season. For example, eggplant and zucchini dishes, okra, artichokes, broad bean pods and vine leaves are principally 'summer' dishes.

A practice common in Greece, especially in rural areas, is the gathering of wild leafy greens which are utilised in the diet according to seasonal availability. Wild greens such as mustard leaves, chicory, endives and dandelion leaves are collectively known as 'horta' and highly prized for their therapeutic qualities. They are boiled and served with oil and lemon juice. Olives are of special importance in the Greek diet; they form part of every meal and are often combined with bread and cheese to form a simple meal or snack. The most popular fruits include grapes, figs, watermelon, cantaloupe and peaches. The traditional ending to a Greek meal, and a favourite snack, is a platter of an assortment of fresh fruit. Fruit is less often prepared as a compote or fruit salad.

b) *Meat, Fish, Chicken*

Goats are plentiful in Greece but because they are generous with their milk, they are seldom used as food. Pork, chicken and beef have increased in popularity over the years and the staple Greek lamb has decreased. Fish is still very popular. It is served with lemon juice, herbs and oil, often cooked on a bed of vegetables. Fish roe is considered a special delicacy and is made into a popular dip used as an appetizer (taramosalata).

c) *Nuts*

Another valuable source of protein in Greece is in the many varieties of nuts: almonds, pine nuts, walnuts, pistachios, chestnuts, pumpkin seeds and roasted chickpeas. These are used in pastries and confections and often mixed with rice as a stuffing for vegetables or as a 'pilaf'. They are mainly considered as snack foods to share in casual company.

d) *Legumes*

Thick and hearty legume soups such as lentil soup (fakes) and bean soup (fasolada) are favourites in the Greek cuisine. These soups are served with bread, olives and cheese (unknowingly the Greeks have created a 'complete protein' with such food combinations). Legumes have often satisfied appetites in hard times, and are also the Lenten staples

when meat is forbidden. In the distant past, legumes formed a staple part of the diet. They were eaten at least twice a week. Over the past 30 years, intake has decreased significantly. Legumes have been slowly replaced by meat dishes.

e) Eggs

Eggs are used in pastries, omelettes and the famed avgolemono sauce (beaten frothy egg and lemon juice) used to finish soups, glaze fish and meat dishes, top casseroles and add a golden lemon touch to vegetables.

f) Bread and Cereals

In Greece, wheaten bread is held superior to bread made from other kinds of grain. However, cornbread is also available as well as breads made from mixed cereals such as barley, rye and oats. White breads are preferred. Bread was eaten in relatively large quantities, and accompanied almost every meal and snack, even with such foods as potatoes, rice and pasta (Vouyoucalos 1975).

Bread is felt to be an emotional as well as physical necessity in Greece. This emotional aspect may be partly the result of the traditional baking of 'prosforo' a home made bread stamped with religious symbols and offered to the church on certain religious occasions. With main meals, bread is typically consumed plain, without spread, a practice in contrast to the Australian habit of spreading butter on bread. The types of bread commonly used by Greek migrants in Australia are the 'split Vienna' and 'Pastadoura' varieties (Kosmidis, 1979). Rice and pastas are eaten in moderate quantities, mostly in soups, in occasional casserole dishes or in 'pilafs' to add variety to the menu. Pilaf is the name given to a rice-based dish of Turkish origin where sauced meat and/or vegetables are served over a mound of rice. Manestra (kritharaki) is a form of pasta made of flour and shaped like rice and also commonly consumed in Greece.

Filo pastry is one of the most popular sources of wheat in the Greek diet. This pastry is rolled into paper thin sheets and liberally spread with butter and oil and filled with spinach or cheese or pumpkin or custard. Commercially prepared instant breakfast cereals are not a common feature in Greece, however they are popular with the second generation Greek-Australians and Americans. It seems only some Greek migrants of first generation have adapted to an 'Australian-type cereal breakfast' (Girkinezis et al., 1977).

g) Sweets

The offering of sweets is an important symbol of hospitality in the home and are usually prepared for special/festive occasions or for guests. Sweets include special sweet breads, honey soaked semolina cakes (ravani, melamakarona, halva), shredded wheat cakes (kataifi), honey and nut soaked pastries (e.g baklava), fritters (loukoumades), rich butter cookies (kourambiedes) and spoon sweets.

Homemakers take great pride in preparing treasured recipes for spoon sweets 'gliko tou koutaliou'. Choice fruits in season are carefully preserved in thick sugar syrups and enjoyed with guests. They may be made from citrus and watermelon peels, grapes, sour cherries, quince and even eggplant or tiny tomatoes. Pastries, cakes and other types of sweet courses are not usually served with a family meal, as is the practice in Australia (Kosmidis, 1979).

h) Seasonings and salt

In Greece, salt is generally used 'sparingly' in cooking. Herbs, lemon juice and vinegar are used to give flavour. However, the use of feta cheese, which is usually stored in brine, olives which are cured and sometimes stored in brine, as well as consumption of salted roasted seeds may increase salt intake markedly.

Mostly the fragrance of Greek cooking has a pleasant freshness that comes from the generous use of fresh lemons and wild herbs. Together with lemons, garlic, onions, parsley, celery leaves, mint, oregano, green dill (not the seeds) bay leaves and rosemary are most used. A surprise to some tastes is the use of cinnamon or cloves in many meat dishes. Orange flower water is a flavouring extracted from the oil of orange blossoms and it is used to flavour delicate sweets. Mastic is made from resinous shrub and gives its clean pungent flavour to sweets, breads (e.g tsoureki) and even chewing gum.

i) Beverages

Water is the most frequently used beverage in Greece. Natural well-springs are respected and cherished and most will be found to mark the location of monasteries and villages. Water and a sweet will be offered to a stranger even before his name is known. The usual beverage with meals is either cold water or home made wine. Retsina is pine flavoured resin extracted from pine trees and gives its name to the well-known white Greek wine. Retsina is very popular in rural areas of Greece. Red wines are also popular.

Wines are traditionally consumed with meals and rarely between meals. In Greece, social controls on drinking are strong and in general, drunkenness is rare and alcoholism virtually unknown. For example, Vouyoucalos (1975) observes that drinking any alcoholic beverage without at least an accompanying 'meze' or snack such as cheese, olives, salami is considered by many Greeks as 'certain to cause sickness, and if habitual will brand the drinker as an alcoholic'.

Ouzo is prepared by infusing distilled grape spirit with a blend of fennel, aniseed, saponaria and mastic. It is drunk mainly by men between meals with nuts and appetizers. Greek coffee is a pleasant relic from the Turkish occupation and normally taken after meals to 'aid digestion'. It is a strong powdered coffee prepared by boiling with water and sugar. It is usually served with a glass of water. Tea is not as popular in Greece as it is in Australia. Tea is only drunk or recommended if one feels unwell or has indigestion. Rural Greeks prefer herbal teas and many medicinal properties are ascribed to such teas (e.g chamomile, mountain tea).

8.2 TRADITIONAL FOODS

All foods play a role in nutritional health. It is not the presence or absence of any one food or nutrient, but the appropriate selection of foods in proper amounts and combinations, as seen in many *food cultures*, that may be important to health. In order to determine to what extent the Greek elderly were following the traditional dietary pattern, traditional Greek foods were firstly identified. Consumption of these foods were subsequently scored to give an index of adherence to the Mediterranean diet.

8.2.1. TRADITIONAL FOODS SCORE

The quantitative food frequency questionnaire designed for this study included 250 foods, of which 70 foods/dishes were specific to the Greek cuisine (see Methods Table 3.5.2.1). Popular Australian foods were retained in the questionnaire so that possible changes in food habits on migration could be observed. A traditional food score ranging from 0-70 was constructed (see Appendix 10 and Chapter 3). About two thirds of the traditional foods comprising the score were plant foods/dishes. If the food was consumed at least once in a year in any quantity then it received a score of 1. A food variety score was also constructed ranging from 1-238 (see chapter 9).

Results: Total food variety was low in both Spata (43) and Melbourne (54); the mean score represented only 20% of the maximum achievable score. Gender and age group

differences were not significant within centres. Melbourne elderly consumed a significantly greater variety of foods compared with Spata elderly. Consumption of traditional foods was also low in both Spata (35) and Melbourne (27); the mean score represented 44% of the maximum achievable score.

Table 8.2.1

Traditional foods score

score 1-70/year	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	36.2 ⁱ	35.5 ^j	27.5 ⁱ	26.0 ^j
SD	8.7	9.9	7.1	7.9
Minimum	16.0	6.0	12.0	13.0
5%	20.0	6.0	17.0	15.0
25%	30.5	33.0	23.0	20.0
50%	37.0	36.0	27.0	26.0
75%	42.5	43.0	33.0	31.0
95%	51.0	47.0	38.0	42.0
Maximum	52.0	47.0	48.0	46.0
WOMEN				
N	31	22	59	36
Mean	33.2 ^k	33.8 ^l	28.2 ^k	25.9 ^l
SD	8.4	6.8	7.5	8.7
Minimum	12.0	22.0	8.0	5.0
5%	20.0	23.0	16.0	8.0
25%	28.0	32.0	23.0	20.0
50%	35.0	34.5	28.0	26.5
75%	40.0	35.0	34.0	31.5
95%	46.0	47.0	41.0	42.0
Maximum	50.0	50.0	42.0	44.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: nil. Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

*A high score indicates that diet includes more traditional foods

Gender and age group differences were not significant within centres. Spata men and women in both age groups consumed a greater variety of traditional Greek foods compared with Melbourne Greeks (see Table 8.2.1). By dividing the *mean traditional score/mean total variety*, a significantly greater proportion of total food variety in Spata was obtained from traditional foods (80%) compared with Melbourne (50%). It appears that the variety of traditional foods consumed has decreased on migration. However, for

certain traditional foods, Melbourne elderly consumed a greater quantity e.g legumes (see below).

8.2.2 CONSUMPTION OF TRADITIONAL FOODS

Intake of traditional foods, mainly mixed dishes, is presented as mean g/day and percentile distribution (see Tables 8.2.2.1-8.2.2.11). Chapter 9 also includes foods which are considered traditional such as lamb, yoghurt, fish. Due to the lack of reported data on consumption of traditional Greek foods, comparisons were not possible. The frequency of intake (i.e number of times per week or month) and the percentage of subjects not eating the food is presented in the next section (8.3).

Results: The changes to traditional food intake on migration are summarised in Table 8.2.2. Overall, consumption of non-traditional meats (beef, chicken and pork) was higher in Melbourne Greeks but intake of traditional lamb was similar to Spata Greeks. Total amount of fish and seafood consumed was similar between centres, however a greater proportion of Melbourne elderly were non-consumers.

Total cheese intake was also similar, however intake of traditional feta cheese was lower in Melbourne Greeks and non-traditional yellow cheeses higher. Total vegetable intake was higher in Melbourne Greeks due to a greater intake of non-traditional vegetables (carrots, lettuce, silverbeet, pumpkin). Intake of certain traditional vegetables (capsicum, garlic, onions) was also greater in Melbourne, but consumption of wild greens was significantly lower. The majority of mixed vegetable dishes, pies and legume dishes were eaten in greater quantity by Melbourne Greeks, except eggplant, artichokes and okra.

Total fruit intake was similar in both centres. However, intake of certain traditional fruits was lower in Melbourne Greeks (figs, stone fruit) but higher for certain non-traditional fruits (citrus fruits, bananas, tropical fruit). Total cereal intake was lower in Melbourne Greeks, mainly from bread and pasta, and not from rice. Total fat intake was similar between centres but Melbourne Greeks had a lower intake of olive oil and a higher intake of margarines and polyunsaturated oils. Non-traditional instant coffee, tea and beer were also higher in Melbourne Greeks with a lower intake of traditional Greek coffee, herb teas, water and wine.

Sections 8.2.2.1-8.2.2.11 present descriptive statistics by age group and gender for consumption of specific traditional foods.

Table 8.2.2
Significant (p<0.05) differences in traditional food intake
between Melbourne and Spata Greeks

Greater intake in Melbourne Greeks	Lower intake in Melbourne Greeks	Same intake in Melbourne Greeks
beef, chicken, pork processed meat chicken soup* soup	tripe*, goat* other organ meats salted cod* fish*, squid*, octopus*	lamb*, rabbit, birds egg meat soup, fish
milk, cheese pie*, tasty/processed cheese	feta cheese*	yoghurt*
breakfast cereals	bread*, pasta* crisp bread	rice*, pastichio* trahana soup*
spinach & rice*, leeks & rice* stuffed vegetables* cabbage dolmas* green bean casserole* spinach pie*	cabbage & rice* eggplant casserole* artichoke casserole* okra casserole*	vine dolmas* ratatouille* mousaka*
lentil soup*, haricot soup*	split pea soup* lima beans*	broad beans*, chick peas*, black eye beans* almonds*, roasted chickpeas
capsicum*, lettuce, carrots, silverbeet zucchini* pumpkin, corn, onion* garlic*, olives*, peas broccoli, cauliflower	wild greens* potatoes pickled vegetables*	chicory*, cucumber* tomatoes,
citrus, apples, bananas, fruit juice	figs*, stone fruit*	grapes*, watermelon* cantaloupe*
margarine, polyunsaturated oils	olive oil*	
instant coffee, tea beer	water*, herb teas*, Greek coffee*, wine*	

p<0.05 Wilcoxon rank sums test
 * traditional foods

8.2.2.1 Pasta dishes

i. Spaghetti pie (pastichio)

Results: Average intake of spaghetti pie was 3g/day in Spata and 7g/day in Melbourne. Gender and age group differences were not significant within centres. Centre differences were observed for the men only aged 70-79 - Melbourne men consumed more pastichio than Spata men (see Table 8.2.2.1a).

Table 8.2.2.1a

Spaghetti pie (pastichio) g/day (+ non-consumers)

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	2.2 ⁱ	3.6	9.2 ⁱ	5.2
SD	3.6	6.1	12.9	9.9
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	0.0	0.0	0.0	0.0
75%	4.1	4.0	19.3	9.6
95%	10.7	21.4	33.9	25.7
Maximum	10.7	21.4	53.6	33.9
WOMEN				
N	31	22	59	36
Mean	3.8	3.4	7.0	6.1
SD	5.2	4.3	10.4	10.6
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	2.6	1.3	6.4	0.0
75%	5.3	5.3	12.8	6.4
95%	16.0	10.7	25.7	33.9
Maximum	21.4	16.0	64.2	51.4

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79.

ii. Trahana soup

Results: Average intake of semolina and yoghurt soup was 5.5g/day in Spata and 9.5g/day in Melbourne. Gender, age group and centre differences were not significant (see Table 8.2.2.1b).

Table 8.2.2.1b

**Semolina & Yoghurt soup (trahana) g/day
(+ non-consumers)**

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	6.9	5.2	8.9	11.8
SD	10.6	7.7	18.8	30.4
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	2.9	0.0	0.0	0.0
75%	8.8	11.7	12.5	9.3
95%	35.7	23.5	50.0	50.0
Maximum	35.7	23.5	100.0	150.0
WOMEN				
N	31	22	59	36
Mean	5.0	5.1	5.7	12.3
SD	8.6	8.3	11.9	33.0
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	0.0	2.9	0.0	0.0
75%	5.8	5.8	6.2	10.9
95%	23.5	17.8	37.5	100.0
Maximum	35.3	35.3	50.0	175.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: nil. Age group differences: nil. Centre differences: nil.

8.2.2.2 Pies

i. Eggplant pie (mousaka)

Results: Average intake of eggplant pie was 2g/day in Spata and 1.7g/day in Melbourne. Gender, age group and centre differences were not significant (see Table 8.2.2.2a).

Table 8.2.2.2a

**Eggplant pie (mousaka) g/day
(+ non-consumers)**

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	1.5	2.2	2.8	0.8
SD	3.1	4.4	6.2	2.8
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	0.0	0.0	0.0	0.0
75%	1.3	2.6	0.0	0.0
95%	10.7	16.0	16.0	10.7
Maximum	10.7	16.0	32.1	10.7
WOMEN				
N	31	22	59	36
Mean	2.5	2.0	1.5	1.9
SD	4.1	4.0	3.8	4.6
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	0.0	0.0	0.0	0.0
75%	5.3	2.6	0.0	0.0
95%	10.7	8.0	10.7	10.7
Maximum	16.0	16.0	21.4	21.4

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: nil.

Age group differences: nil.

Centre differences: nil.

ii. Spinach pie (spanakopita)

Results: Average intake of spinach pie was 2g/day in Spata and 10g/day in Melbourne. Gender and age group differences were not significant within centres. Centre differences were significant for men and women in both age groups - Melbourne elderly consumed more spinach pie than Spata elderly (see Table 8.2.2.2b)

Table 8.2.2.2b

**Spinach pie (spanakopita) g/day
(+ non-consumers)**

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	2.6 ⁱ	1.4	11.3 ⁱ	8.7
SD	3.8	1.4	11.4	13.2
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	1.3	0.0	0.0	0.0
50%	2.0	1.3	9.1	3.0
75%	2.6	2.6	18.2	15.1
95%	8.0	4.0	32.1	24.2
Maximum	21.4	4.0	48.5	60.7
WOMEN				
N	31	22	59	36
Mean	1.3 ^k	1.2 ^l	11.3 ^k	7.1 ^l
SD	1.5	1.3	14.7	8.5
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	1.3	1.3	6.0	6.0
75%	2.0	2.0	15.1	12.1
95%	5.3	4.0	48.5	24.2
Maximum	5.3	4.0	60.7	36.4

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79; women 70-79 and 80+.

iii. Cheese pie (tiropita)

Results: Average intake of cheese pie was 2g/day in Spata and 9g/day in Melbourne. Gender and age group differences were not significant in Spata. In Melbourne, gender differences were not seen, but men aged 70-79 consumed more cheese pie than the men 80+. Centre differences were significant for the men and women aged 70-79 - Melbourne elderly consumed more cheese pie than Spata elderly (see Table 8.2.2.2c)

Table 8.2.2.2c

**Cheese pie (tiropita) g/day
(+ non-consumers)**

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	2.4 ⁱ	1.8	12.7 ^{fi}	4.4 ^f
SD	4.3	2.6	15.3	6.9
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	0.0	0.0	6.9	0.0
75%	2.7	4.0	17.9	5.9
95%	16.0	8.0	42.9	23.7
Maximum	17.8	8.0	71.1	23.7
WOMEN				
N	31	22	59	36
Mean	2.5 ^k	2.2	11.6 ^k	6.6
SD	3.4	2.6	14.6	10.6
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	1.3	1.3	5.9	2.9
75%	4.0	4.0	17.8	7.4
95%	10.7	5.4	47.4	35.6
Maximum	12.9	10.7	59.3	47.4

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group
e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: nil.

Age group differences: Spata nil; Melbourne men.

Centre differences: men 70-79; women 70-79.

8.2.2.3 Vegetable & rice dishes

The vegetable & rice dishes (along with the mixed vegetable dishes) are traditionally known as 'ladera' which means 'oily'. Vegetables would be cooked with a little water, alot of oil, rice, onion and tomato paste. The dishes containing rice are eaten in summer and winter in place of legumes or meat. The most common dishes include: spinach & rice dish (spanakorizo), leeks & rice (prasorizo), cabbage & rice dolmas (lahanorizo, lahanodolmades), vine leaves & rice dolmas (dolmadakia) and stuffed vegetables (gemista).

i. Spinach & rice (Spanakorizo)

Results: Average intake of spinach and rice dish was 4g/day in Spata and 11g/day in Melbourne. Gender and age group differences were not significant within centres. Melbourne women aged 70-79 and men aged 80+ consumed more spanakorizo than the Spata subjects (see Table 8.2.2.3a)

Table 8.2.2.3a

**Spinach & rice dish (spanakorizo) g/day
(+ non-consumers)**

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	4.8	3.2 ^j	10.5	13.7 ^j
SD	5.4	3.6	11.7	14.3
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	1.2	0.0	0.0	0.0
50%	3.5	2.9	6.9	11.8
75%	5.1	5.8	17.7	23.7
95%	17.6	11.7	35.5	47.4
Maximum	21.2	11.7	45.0	47.4
WOMEN				
N	31	22	59	36
Mean	3.7 ^k	3.4	10.5 ^k	8.5
SD	3.5	3.8	11.6	10.5
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	2.9	2.9	7.0	4.7
75%	5.8	4.1	17.7	15.9
95%	11.7	11.7	32.1	32.1
Maximum	11.7	11.7	47.4	35.5

Same pair of letters show significant differences, Wilcoxon p<0.05:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: nil.

Age group differences: nil.

Centre differences: men 80+; women 70-79.

ii. Leeks & rice (prazorizo)

Results: Average intake of leeks and rice dish was 0.7g/day in Spata and 3g/day in Melbourne. In Spata, gender and age group differences were not significant. In Melbourne, gender differences were not seen but men aged 70-79 consumed more than men 80+. Melbourne elderly consumed more leeks and rice dish than Spata elderly (see Table 8.2.2.3b).

Table 8.2.2.3b

**Leeks & rice dish (prazorizo) g/day
(+ non-consumers)**

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	0.7 ⁱ	0.2	6.5 ^{fi}	1.2 ^f
SD	2.0	0.7	9.9	2.7
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	0.0	0.0	0.0	0.0
75%	0.0	0.0	11.1	0.0
95%	4.1	2.9	26.8	7.4
Maximum	10.6	2.9	53.6	11.1
WOMEN				
N	31	22	59	36
Mean	0.7 ^k	1.1	3.3 ^k	1.4
SD	1.5	3.4	4.6	2.6
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	0.0	0.0	0.0	0.0
75%	0.0	0.0	6.7	1.4
95%	4.4	11.7	14.8	7.4
Maximum	5.8	11.8	14.8	8.8

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: nil. Age group differences: Spata nil; Melbourne men.

Centre differences: men 70-79; women 70-79.

iii. Cabbage & rice dish

Results: Average intake of cabbage and rice dish was 3.4g/day in Spata and 2.7g/day in Melbourne. Gender and age group differences were not significant within centres. Spata elderly consumed more cabbage and rice dish than Melbourne elderly (see Table 8.2.2.3c).

Table 8.2.2.3c
Cabbage & rice dish (lahanorizo) g/day
(+ non-consumers)

	MELBOURNE		SPATA	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	3.4 ⁱ	3.2 ^j	3.3 ⁱ	3.5 ^j
SD	4.2	3.2	7.9	7.5
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	2.9	2.9	0.0	0.0
75%	4.4	5.8	0.0	1.1
95%	16.5	11.7	17.7	22.2
Maximum	17.6	11.7	45.0	29.6
WOMEN				
N	31	22	59	36
Mean	3.7 ^k	3.2 ^l	1.5 ^k	2.4 ^l
SD	3.3	3.2	3.4	4.7
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.9	0.0	0.0	0.0
50%	2.9	2.9	0.0	0.0
75%	5.8	4.1	0.0	2.9
95%	11.7	11.7	11.1	11.1
Maximum	11.7	11.7	14.8	22.2

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

iv. Stuffed vegetables (gemista)

Results: Average intake of stuffed vegetables was 8g/day in Spata and 11g/day in Melbourne. In Spata, gender differences were not seen, but men aged 70-79 consumed more stuffed vegetables than the 80+ men. In Melbourne, the men aged 70-79 consumed more than the women and more than the men aged 80+. Centre differences were significant - Melbourne elderly consumed more stuffed vegetables than Spata elderly (see Table 8.2.2.3d).

Table 8.2.2.3d
Stuffed vegetables (gemista) g/day
(+ non-consumers)

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	9.2 ^{ei}	5.4 ^{ej}	14.5 ^{cfi}	10.7 ^{fj}
SD	8.4	4.0	9.6	9.0
Minimum	2.9	0.0	0.0	0.0
5%	2.9	0.0	0.0	0.0
25%	4.4	2.9	6.7	4.4
50%	5.8	2.9	13.4	9.4
75%	9.7	8.8	17.8	13.4
95%	35.3	14.3	35.7	30.1
Maximum	35.7	14.3	36.0	35.7
WOMEN				
N	31	22	59	36
Mean	7.9 ^k	8.3	10.7 ^{ck}	9.6
SD	8.3	7.0	7.9	7.1
Minimum	0.0	1.4	0.0	0.0
5%	0.0	2.9	0.0	0.0
25%	2.9	2.9	4.4	4.4
50%	5.8	5.8	8.9	8.9
75%	11.7	8.9	17.8	15.5
95%	26.7	26.7	26.7	21.2
Maximum	35.3	26.7	35.7	26.7

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: Spata nil; Melbourne 70-79.

Age group differences: Spata men; Melbourne men.

Centre differences: men 70-79 and 80+; women 70-79.

v. **Cabbage dolmas**

Results: Average intake of cabbage dolmas was 2g/day in Spata and 11g/day in Melbourne. Gender and age group differences were not significant within centres. Melbourne elderly consumed more cabbage dolmas than Spata elderly (see Table 8.2.2.3d).

Table 8.2.2.3d

**Cabbage dolmas g/day
(+ non-consumers)**

	MELBOURNE		SPATA	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	1.9 ⁱ	1.0	15.7 ⁱ	8.7
SD	2.6	1.8	22.4	18.2
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	0.0	0.0	7.5	0.0
75%	5.3	3.5	21.4	9.3
95%	7.0	5.3	64.2	42.8
Maximum	7.0	5.3	85.7	85.7
WOMEN				
N	31	22	59	36
Mean	2.2 ^k	1.8 ^l	13.1 ^k	6.5 ^l
SD	4.1	3.1	18.1	10.0
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	0.0	0.0	5.3	5.3
75%	3.5	3.5	21.4	10.7
95%	5.3	10.6	42.8	21.4
Maximum	21.2	10.6	96.4	53.5

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group
e,f,g or h within centres - between age-groups for a given gender
i,j,k or l between centres - for a given age-group and gender

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79; women 70-79 and 80+.

vi. Vine dolmas

Results: Average intake of vine dolmas was 2g/day in Spata and 3g/day in Melbourne. Gender, age group and centre differences were not significant (see Table 8.2.2.3e).

Table 8.2.2.3e

**Vine dolmas g/day
(+ non-consumers)**

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	3.7	2.0	4.1	3.0
SD	6.7	3.1	5.5	5.0
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	1.0	0.0	0.0	0.0
50%	1.8	1.0	0.0	0.0
75%	4.1	2.0	7.2	5.4
95%	24.6	12.3	14.4	16.0
Maximum	32.1	12.3	19.3	18.5
WOMEN				
N	31	22	59	36
Mean	1.5	1.7	2.9	2.9
SD	1.9	2.1	5.8	4.7
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	1.0	1.0	0.0	0.0
75%	2.0	2.0	4.8	3.8
95%	6.4	6.1	9.6	16.0
Maximum	6.4	8.2	38.5	19.2

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: nil. Age group differences: nil. Centre differences: nil.

8.2.2.4 Mixed vegetable dishes

Like the vegetable and rice dishes, the mixed vegetable dishes are also known as 'ladera' which means 'oily'. Vegetables would be cooked with a little water, alot of oil, onion and tomato paste. Such traditional dishes include: green bean casserole (prasina fasolakia), eggplant casserole (melitzanes laderes), okra casserole (bamies laderes), artichoke casserole (aginares) and ratatouille (briam). Such dishes are usually cooked in summer when vegetables are in season, and are eaten in place of legumes or meat.

i. Green bean casserole

Results: Average intake of green bean casserole was 13g/day in Spata and 22g/day in Melbourne. Gender and age group differences were not significant within centres. Melbourne elderly consumed more green bean casserole than Spata elderly (see Table 8.2.2.4a).

Table 8.2.2.4a
Green bean casserole (fasolakia ladera) g/day
(+ non-consumers)

	MELBOURNE		SPATA	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	13.0 ⁱ	12.2 ^j	23.1 ⁱ	21.9 ^j
SD	8.5	11.0	14.7	12.7
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	6.4	4.6	12.8	15.1
50%	10.5	6.9	20.7	22.3
75%	21.8	25.0	28.5	28.0
95%	26.4	39.6	46.4	46.4
Maximum	27.7	39.6	69.6	46.4
WOMEN				
N	31	22	59	36
Mean	12.5 ^k	14.2	21.9 ^k	20.7
SD	10.0	12.8	13.8	15.4
Minimum	0.0	2.3	0.0	0.0
5%	0.0	2.3	4.3	0.0
25%	4.6	4.6	11.6	7.1
50%	9.2	9.2	23.2	23.2
75%	18.5	18.5	23.2	26.0
95%	37.0	37.0	46.4	50.0
Maximum	37.5	55.5	69.6	52.2

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79.

ii. Eggplant casserole

Results: Average intake of egg plant casserole was 8g/day in Spata and 6g/day in Melbourne. In Spata, gender differences were not seen, but men aged 70-79 consumed more eggplant than the 80+ men. Gender and age group differences were not significant in Melbourne. Centre differences were seen in men aged 70-79 - Spata men consumed more eggplant casserole than Melbourne men (see Table 8.2.2.4b).

Table 8.2.2.4b
Egg plant casserole (melitzanes laderes) g/day
(+ non-consumers)

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	10.2 ^{ei}	6.1 ^e	6.2 ⁱ	5.1
SD	8.0	4.8	6.4	4.8
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	4.6	3.7	0.0	0.0
50%	7.5	3.9	5.6	4.6
75%	11.8	7.5	8.5	8.2
95%	27.0	17.8	20.0	14.2
Maximum	30.0	17.8	28.5	15.0
WOMEN				
N	31	22	59	36
Mean	7.9	8.2	6.0	5.5
SD	7.0	7.6	5.7	6.3
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	3.7	0.0	1.3	0.0
50%	3.7	7.5	3.7	3.7
75%	11.2	15.0	8.9	9.3
95%	26.7	21.0	17.8	16.8
Maximum	26.7	22.5	20.0	22.5

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: nil.

Age group differences: Spata men; nil.

Centre differences: men 70-79.

iii. Okra casserole

Results: Average intake of okra casserole was 6.2g/day in Spata and 5.8g/day in Melbourne. Gender and age group differences were not significant within centres. Centre differences were seen only in men aged 80+ - Melbourne men consumed less okra than Spata men (see Table 8.2.2.4c).

Table 8.2.2.4c

**Okra casserole (Bamies laderes) g/day
(+ non-consumers)**

	MELBOURNE		SPATA	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	6.5	5.5 ^j	6.8	4.2 ^j
SD	6.4	4.2	9.3	6.0
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	1.5	3.1	0.0	0.0
50%	5.1	3.1	4.3	0.0
75%	9.3	9.3	9.2	7.2
95%	18.7	18.7	27.8	18.5
Maximum	25.0	18.7	46.0	18.5
WOMEN				
N	31	22	59	36
Mean	7.6	5.4	5.5	6.8
SD	7.5	5.9	6.0	10.6
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	3.1	1.5	0.0	0.0
50%	6.2	3.1	4.3	3.7
75%	9.3	6.2	8.7	8.7
95%	22.5	18.7	18.5	37.1
Maximum	37.5	18.7	18.5	46.4

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: nil. Age group differences: nil. Centre differences: men 80+.

iv. Artichoke casserole

Results: Average intake of artichoke casserole was 8.5g/day in Spata and 5.5g/day in Melbourne. Gender and age group differences were not significant within centres. Centre differences were seen in men and women aged 70-79 - Spata elderly consumed more artichokes than Melbourne elderly (see Table 8.2.2.4d).

Table 8.2.2.4d
Artichoke casserole (aginaires avgolemono) g/day
(+ non-consumers)

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	11.5 ⁱ	7.2	5.0 ⁱ	5.3
SD	8.2	6.2	5.5	6.3
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	4.4	3.3	0.0	0.0
50%	9.4	4.4	3.3	2.2
75%	17.8	8.9	8.9	11.1
95%	26.7	26.7	13.4	17.8
Maximum	26.7	26.7	17.8	17.8
WOMEN				
N	31	22	59	36
Mean	8.6 ^k	6.7	6.6 ^k	5.3
SD	6.6	4.6	16.4	6.5
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	4.4	4.4	0.0	0.0
50%	8.9	5.5	3.3	3.6
75%	8.9	8.9	8.9	8.9
95%	26.7	13.4	17.8	17.8
Maximum	26.7	17.8	125.0	26.7

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: nil Age group differences: nil. Centre differences: men 70-79; women 70-79.

v. Mixed vegetable casserole (briam)

Results: Average intake of vegetable casserole was 11g/day in Spata and 10g/day in Melbourne. Gender, age group and centre differences were not seen (table 8.2.2.4e).

8.2.2.5 Legume dishes and nuts

The legume dishes are traditionally eaten in winter, every Wednesday and Friday and during religious fasts of animal foods. These dishes, also cooked with a lot of oil, include: haricot bean soup (fasolada), lentil soup (fakes), split pea soup (fava), gigantes plaki (lima bean casserole), broad bean salad (koukia ladera), chick pea soup (revithia) and black eye bean salad (mavromatika salata).

Table 8.2.2.4e
Mixed vegetable casserole (briam/ratatouille) g/day
(+ non-consumers)

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	12.1	7.8	12.0	9.0
SD	10.2	6.7	12.6	10.5
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	5.4	4.1	0.0	0.0
50%	8.8	4.1	9.3	8.5
75%	17.2	12.4	17.4	12.9
95%	33.0	24.7	34.8	23.2
Maximum	49.5	24.7	55.7	46.4
WOMEN				
N	31	22	59	36
Mean	13.6	11.6	10.5	9.5
SD	12.3	10.9	11.1	9.9
Minimum	0.0	0.0	0	0
5%	4.1	0.0	0.0	0
25%	8.3	4.13	0.0	0.0
50%	16.5	8.26	11.6	10.4
75%	45.0	14.29	17.4	11.6
95%	50.0	35.79	34.8	34.8
Maximum	55.7	37.50	34.8	34.8

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: nil. ge group differences: nil. Centre differences: nil.

i. Broad bean salad

Results: Average intake of broad beans was $3\text{g}\pm 3/\text{day}$ in Spata and $4.5\text{g}\pm 6/\text{day}$ in Melbourne. In Spata, men aged 70-79 consumed more broad beans than the women; no other differences were seen. In Melbourne, gender and age group differences were not significant and centre differences were not observed.

ii. Lima beans & Black eye beans

Results: Lima beans and black eye beans were the least popular legumes. Average intake of lima beans and black eye beans respectively was $2\text{g}/\text{day}$ and $3\text{g}/\text{day}$ in Spata and $1.5\text{g}/\text{day}$ and $7\text{g}/\text{day}$ in Melbourne. Gender and age group differences were not significant within centres. Centre differences were seen only for lima beans - Spata men and women consumed more lima beans than Melbourne elderly.

iii. Lentil soup (fakes)

Results: Average intake of lentil soup was $12\text{g}/\text{day}$ in Spata and $20\text{g}/\text{day}$ in Melbourne. In Spata and Melbourne, the men aged 70-79 consumed more lentil soup than the women. Age group differences were not significant. Melbourne elderly aged 70-79 consumed more lentil soup than Spata elderly (see Table 8.2.2.5a).

Table 8.2.2.5a

Lentil soup (fakes) g/day (+ non-consumers)

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	17.1 ^{ai}	9.8	24.7 ^{ci}	21.0
SD	16.1	7.7	20.9	18.6
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	5.3	5.3	10.7	10.7
50%	13.3	10.7	21.4	21.4
75%	25.0	10.7	35.7	30.3
95%	32.1	32.1	64.2	48.2
Maximum	85.7	32.1	96.4	85.7
WOMEN				
N	31	22	59	36
Mean	9.9 ^{ak}	12.0	18.2 ^{ck}	15.9
SD	11.9	10.1	20.1	16.3
Minimum	0.0	0.0	0.0	0.0
5%	0.0	2.6	0.0	0.0
25%	1.3	5.3	4.0	0.0
50%	5.3	10.7	10.7	10.7
75%	10.7	16.0	21.4	32.1
95%	42.8	32.1	64.2	42.8
Maximum	42.8	42.8	85.7	42.8

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: Spata 70-79; Melbourne 70-79.

Age group differences: nil. Centre differences: men 70-79; women 70-79.

iv. Chickpea soup

Results: Average intake of chickpea soup was 9g/day in Spata and 7g/day in Melbourne. Gender and age group differences were not significant within centres. Spata men aged 70-79 consumed more chickpea soup than Melbourne men (see Table 8.2.2.5b).

Table 8.2.2.5b

**Chickpea soup (revithia) g/day
(+ non-consumers)**

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	11.7 ⁱ	8.2	8.8 ⁱ	7.3
SD	10.4	7.5	12.8	8.2
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	3.5	3.5	0.0	0.0
50%	10.0	5.3	0.0	3.1
75%	18.6	10.7	15.0	15.0
95%	33.0	21.4	40.0	20.0
Maximum	42.8	21.4	50.0	20.0
WOMEN				
N	31	22	59	36
Mean	7.7	8.2	7.1	5.6
SD	9.7	7.8	12.0	7.5
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	3.5	3.5	0.0	0.0
50%	3.5	5.3	0.0	0.0
75%	10.7	10.7	10.0	10.0
95%	32.1	21.4	40.0	20.0
Maximum	42.8	32.1	60.0	30.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: nil. Age group differences: nil. Centre differences: men 70-79.

v. Haricot bean soup (fasolada)

Results: Average intake of haricot bean soup was 13g/day in Spata and 28g/day in Melbourne. In Spata, gender and age group differences were not significant. In Melbourne, gender differences were not observed, but men and women aged 80+ consumed less soup than their younger counterparts. Melbourne elderly consumed almost twice as much haricot bean soup compared with Spata elderly (Table 8.2.2.5d).

Table 8.2.2.5c

**Haricot bean soup (fasolada) g/day
(+ non-consumers)**

	MELBOURNE		SPATA	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	15.4 ⁱ	11.1 ^j	33.8 ^{fi}	26.7 ^{fj}
SD	13.2	7.8	23.2	29.5
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	5.3	5.3	19.2	11.2
50%	14.1	10.6	25.7	22.5
75%	21.4	14.1	51.4	37.1
95%	32.1	32.1	64.2	57.8
Maximum	64.2	32.1	128.5	154.2
WOMEN				
N	31	22	59	36
Mean	10.3 ^k	14.2	32.7 ^{hk}	19.7 ^h
SD	10.3	12.2	26.8	23.0
Minimum	0.0	0.0	0.0	0.0
5%	0.0	1.7	0.0	0.0
25%	3.5	5.3	12.8	0.0
50%	5.3	10.7	25.7	11.2
75%	21.2	21.4	51.4	38.5
95%	32.1	42.8	102.8	51.4
Maximum	42.8	42.8	128.5	102.8

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: nil.

Age group differences: Spata nil; Melbourne men and women.

Centre differences: men 70-79 and 80+; women 70-79.

vi. Split pea soup (fava)

Results: Average intake of split pea soup was 4.5g/day in Spata and 3g/day in Melbourne. In Spata, gender and age group differences were not significant. In Melbourne, gender differences were not observed, but women aged 80+ consumed less split pea soup than their younger counterparts. Melbourne elderly consumed less split pea soup compared with Spata elderly (see Table 8.2.2.5d).

Table 8.2.2.5d

**Split pea soup (fava) g/day
(+ non-consumers)**

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	6.1 ⁱ	4.4 ^j	4.4 ⁱ	3.1 ^j
SD	8.2	4.0	9.1	7.1
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	1.7	2.3	0.0	0.0
50%	3.5	3.5	0.0	0.0
75%	9.4	7.1	5.3	1.7
95%	14.2	14.2	28.5	14.2
Maximum	42.8	14.2	42.8	32.1
WOMEN				
N	31	22	59	36
Mean	3.4 ^k	3.6 ^l	3.2 ^{hk}	0.6 ^{hl}
SD	4.3	3.5	7.3	2.6
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	1.1	0.0	0.0
50%	2.3	2.9	0.0	0.0
75%	4.7	3.5	3.5	0.0
95%	14.2	9.4	21.4	7.1
Maximum	14.2	14.2	32.1	14.2

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age-group

e,f,g or h within centres - between age-groups for a given gender

i,j,k or l between centres - for a given age-group and gender

Gender differences: nil.

Age group differences: Spata nil; Melbourne women.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

vi. Nuts

Results: Average intake of almonds was 1g/day in Spata and 1.5g/day in Melbourne. Gender, age group and centre differences were not significant. Roasted chickpea consumption was similarly low in Spata and Melbourne (0.6g/day); gender, age group and centre differences were not observed.

8.2.2.6 Soups

i. Fish soup

Results: Average intake of fish soup was 10g/day in Spata and 16g/day in Melbourne. Gender, age group and centre differences were not significant (see Table 8.2.2.6a).

Table 8.2.2.6a

Fish soup (psarosoupa) g/day (+ non-consumers)

	MELBOURNE		SPATA	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	13.2	12.9	18.3	19.6
SD	16.8	13.2	25.6	27.1
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	2.9	4.4	0.0	0.0
50%	7.9	10.0	9.4	11.7
75%	17.6	17.6	23.6	22.6
95%	42.8	57.1	75.4	75.4
Maximum	85.7	57.1	113.1	113.1
WOMEN				
N	31	22	59	36
Mean	7.5	7.4	14.9	11.7
SD	5.5	7.4	19.8	18.6
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	2.9	2.9	0.0	0.0
50%	7.1	5.1	9.4	0.0
75%	11.7	11.7	18.8	18.8
95%	17.6	23.5	70.7	56.5
Maximum	23.5	28.5	75.4	75.4

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: nil. Age group differences: nil. Centre differences: nil.

ii. Chicken soup (kotosoupa)

Results: Average intake of chicken soup was 4g/day in Spata and 30g/day in Melbourne. Gender and age group differences were not significant within centres. Melbourne elderly consumed markedly more chicken soup than Spata elderly (see Table 8.2.2.6b).

Table 8.2.2.6b

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	4.4 ⁱ	3.1 ^j	24.9 ⁱ	32.6 ^j
SD	5.3	3.2	26.1	44.1
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	9.4	9.4
50%	2.9	2.3	18.3	18.8
75%	4.7	4.7	37.7	37.7
95%	17.1	9.4	75.4	150.8
Maximum	18.8	9.4	141.4	188.6
WOMEN				
N	31	22	59	36
Mean	2.7 ^k	5.0 ^l	25.3 ^k	33.9 ^l
SD	3.5	9.7	32.4	48.1
Minimum	0.0	0.0	0.0	0
5%	0.0	0.0	0.0	0
25%	0.0	0.0	9.4	9.4
50%	2.3	2.3	14.1	18.8
75%	4.7	4.7	35.4	37.7
95%	9.4	11.4	75.4	150.8
Maximum	9.4	45.7	169.7	264.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

iii. Meat soup (kreatosoupa)

Results: Meat soup was the least popular of the soups. Spata elderly consumed about 3g/day and Melbourne elderly 10g/day; gender, age group and centre differences were not significant.

8.2.2.7 Vegetables

i. Chicory

Results: Average intake of boiled chicory was 25g/day in Spata and Melbourne. Gender, age group and centre differences were not significant (see Tables 8.2.2.7a).

Table 8.2.2.7a

**Boiled chicory g/day
(+ non-consumers)**

	MELBOURNE		SPATA	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	31.5	27.5	33.5	17.8
SD	30.3	58.6	50.6	25.8
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	6.2	0.0	0.0	0.0
50%	24.8	12.4	20.1	12.4
75%	46.2	24.8	37.2	24.8
95%	100.0	261.0	174.0	62.1
Maximum	111.8	261.0	261.0	124.2
WOMEN				
N	31	22	59	36
Mean	23.7	19.0	25.8	18.8
SD	22.8	20.2	27.5	23.5
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	6.2	6.2	7.1	3.1
50%	14.2	14.2	18.6	10.9
75%	49.7	24.8	37.2	24.8
95%	74.5	49.7	99.4	87.0
Maximum	74.5	87.0	124.2	99.4

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: nil. Age group differences: nil. Centre differences: nil.

ii. Wild greens

Results: Average intake of boiled wild greens was 17g/day in Spata and 6g/day in Melbourne. In Spata, men aged 70-79 consumed more than the women aged 70-79 and the men aged 80+. Spata elderly consumed more wild greens than Melbourne elderly (see Table 8.2.2.7b).

Table 8.2.2.7b

**Boiled wild greens g/day
(+ non-consumers)**

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	31.0 ^{aei}	12.1 ^{ej}	9.6 ⁱ	3.7 ^j
SD	26.9	13.3	19.7	7.6
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	9.8	0.0	0.0	0.0
50%	23.5	9.4	2.3	0.0
75%	47.1	18.8	9.4	2.9
95%	99.0	47.1	42.8	21.4
Maximum	99.0	47.1	100.0	28.2
WOMEN				
N	31	22	59	36
Mean	14.7 ^{agk}	8.8 ^{gl}	6.7 ^k	5.4 ^l
SD	13.5	7.9	11.3	13.0
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	4.7	2.3	0.0	0.0
50%	9.4	9.4	1.1	0.0
75%	28.2	14.1	9.4	4.7
95%	37.7	18.8	28.2	37.7
Maximum	37.7	28.2	66.0	66.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group
e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: Spata 70-79; Melbourne nil.

Age group differences: Spata men; Melbourne men.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

iii. Capsicum

Results: Average intake of capsicum was 2g/day in Spata and 12g/day in Melbourne. Gender, and age group differences were not significant in Spata. In Melbourne, gender differences were not significant, but intake was lower in men and women aged 80+ compared to their younger counterparts. Melbourne elderly consumed more capsicum than Spata elderly (see Table 8.2.2.7c).

Table 8.2.2.7c

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	2.5 ⁱ	1.5 ^j	15.8 ^{if}	5.5 ^{jf}
SD	3.0	1.7	26.9	6.1
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.1	0.0	2.8	0.7
50%	1.4	1.4	6.7	3.5
75%	3.5	2.8	19.8	8.5
95%	9.9	5.6	66.4	19.8
Maximum	11.3	5.6	166.0	19.8
WOMEN				
N	31	22	59	36
Mean	1.8 ^k	0.8 ^l	16.2 ^{kh}	10.2 ^{lh}
SD	2.1	1.3	37.9	33.7
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	2.4	0.7
50%	1.4	0.0	4.9	3.1
75%	2.8	1.4	14.2	5.3
95%	5.6	2.8	99.6	56.5
Maximum	7.4	5.6	225.0	199.1

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: nil.

Age group differences: Spata nil; Melbourne men and women.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

iv. Garlic

Results: Average intake of garlic (includes garlic in cooking) was 2g±5/day in Spata and 1g±1/day in Melbourne. Gender and age group differences were not significant in Melbourne. In Spata, age group differences were not significant, but intake was higher in men aged 70-79 (3.6g/day) compared with the women (0.4g/day). Centre differences were seen in women only - Melbourne women consumed more garlic than Spata women.

v. **Olives**

Results: Average intake of olives was 6g/day in Spata and 9g/day in Melbourne. Gender and age group differences were not significant in Melbourne. In Spata, age group differences were not significant, but intake was higher in men aged 70-79 compared to women. Centre differences were seen only in women aged 70-79 - Melbourne women consumed more olives than Spata women (see Table 8.2.2.7d).

Table 8.2.2.7d

**Olives (with stone) g/day
(+ non-consumers)**

	SPATA		MELBOURNE	
	70 - 79	80+	70 - 79	80+
MEN				
N	32	19	66	28
Mean	10.1 ^a	6.4	13.5	7.8
SD	15.6	10.5	26.8	10.8
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.7	0.0	2.8	0.0
50%	5.7	2.1	5.7	4.3
75%	15.7	8.5	17.1	8.6
95%	30.0	40.0	40.0	28.6
Maximum	80.0	40.0	200.0	40.0
WOMEN				
N	31	22	59	36
Mean	3.6 ^{ak}	3.9	8.5 ^k	4.8
SD	5.6	7.2	11.3	5.3
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	1.4	0.5	4.2	0.3
75%	5.7	2.8	11.4	1.1
95%	20.0	20.0	40.0	5.7
Maximum	22.8	22.8	40.0	8.6

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: Spata 70-79; Melbourne nil.

Age group differences: nil.

Centre differences: women 70-79.

8.2.2.8 Fruit

i. Grapes

Results: Average intake of grapes was 27g/day in Spata and 16g/day in Melbourne. Gender, age group and centre differences were not significant (see Table 8.2.2.8a).

Table 8.2.2.8a

**Grapes g/day
(+ non-consumers)**

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	30.0	29.5	18.7	16.5
SD	32.1	25.4	17.5	11.5
Minimum	0.0	0.0	0.0	1.7
5%	0.0	0.0	0.0	3.5
25%	3.5	3.5	5.3	7.1
50%	25.0	26.7	14.2	14.2
75%	46.4	50.0	25.0	25.0
95%	125.0	87.5	50.0	35.7
Maximum	125.0	87.5	89.2	50.0
WOMEN				
N	31	22	59	36
Mean	23.7	23.3	15.6	12.0
SD	22.5	26.7	19.0	9.7
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	5.3	1.7	3.5	3.5
50%	21.4	15.1	10.7	10.7
75%	28.5	28.5	25.0	16.0
95%	75.0	75.0	50.0	28.5
Maximum	75.0	100.0	125.0	35.7

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: nil. Age group differences: nil. Centre differences: nil.

ii. Figs

Results: Average intake of figs was 27g/day in Spata and 9g/day in Melbourne. Gender and age group differences were not significant within centres. Spata elderly consumed more figs than Melbourne elderly (see Table 8.2.2.8b).

Table 8.2.2.8b

	Figs g/day (+ non-consumers)			
	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	30.3 ⁱ	27.6 ^j	10.2 ⁱ	9.3 ^j
SD	35.3	31.2	12.9	11.0
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	1.3	0.0	0.0	0.0
50%	21.4	21.4	7.0	4.5
75%	50.0	32.1	16.0	16.0
95%	125.0	125.0	35.7	32.0
Maximum	125.0	125.0	50.0	35.7
WOMEN				
N	31	22	59	36
Mean	28.5 ^k	22.0 ^l	9.4 ^k	6.8 ^l
SD	36.8	42.1	14.0	7.3
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	0.0	0.0	0.0	0.0
50%	21.4	14.2	3.5	5.2
75%	50.0	28.5	14.2	12.5
95%	125.0	50.0	35.7	25.0
Maximum	125.0	200.0	80.0	25.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

8.2.2.9 Feta cheese

Results: Average intake of feta cheese was 30g/day in Spata and 16g/day in Melbourne. Gender and age group differences were not significant within centres. Spata elderly consumed more feta cheese than Melbourne elderly. Kaseri cheese averaged only 4g/day in Spata and Melbourne. Gender, age group and centre differences were not significant (see Table 8.2.2.9).

Table 8.2.2.9

Feta cheese g/day (+ non-consumers)

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	33.9 ⁱ	33.5 ^j	18.1 ⁱ	16.0 ^j
SD	21.7	28.3	22.2	18.5
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	17.8	12.8	0.0	0.0
50%	35.7	21.4	8.9	5.3
75%	50.0	50.0	26.0	28.6
95%	70.0	100.0	71.5	50.0
Maximum	100.0	100.0	75.0	51.5
WOMEN				
N	31	22	59	36
Mean	28.4 ^k	31.4 ^l	16.7 ^k	14.5 ^l
SD	28.1	33.5	21.0	15.6
Minimum	0.0	0.0	0.0	0.0
5%	0.0	0.0	0.0	0.0
25%	14.3	12.8	0.0	0.0
50%	21.4	25.0	7.2	13.4
75%	40.0	50.0	21.4	23.2
95%	70.0	70.0	75.0	50.0
Maximum	145.0	150.0	75.0	50.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: nil

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

8.2.2.10 Olive oil

Results: Average intake of olive oil was 30g/day in Spata and 18g/day in Melbourne. In Spata, 80+ men consumed more olive oil than the women and in Melbourne the 70-79 aged men consumed more than the women. Age group differences were not significant. Spata elderly consumed more olive oil than Melbourne elderly (see Table 8.2.2.10).

Table 8.2.2.10
Olive oil g/day (+ non-consumers)

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	34.0 ⁱ	33.9 ^{bj}	21.2 ^{ci}	17.9 ^j
SD	11.9	12.5	14.6	13.0
Minimum	15.0	15.0	0.0	0.0
5%	15.0	15.0	0.0	0.0
25%	25.0	25.0	15.0	8.5
50%	32.5	35.0	20.0	15.0
75%	50.0	50.0	30.0	25.0
95%	50.0	50.0	50.0	50.0
Maximum	50.0	50.0	50.0	50.0
WOMEN				
N	31	22	59	36
Mean	29.4 ^k	24.7 ^{bl}	14.8 ^{ck}	17.6 ^l
SD	11.1	10.8	11.4	13.2
Minimum	15.0	10.0	0.0	0.0
5%	15.0	15.0	0.0	0.0
25%	25.0	15.0	3.0	8.5
50%	25.0	25.0	15.0	15.0
75%	35.0	25.0	25.0	25.0
95%	50.0	50.0	30.0	50.0
Maximum	50.0	50.0	50.0	50.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: Spata 80+; Melbourne 70-79. Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

8.2.2.11 Other

i. Tripe

Results: Average intake of tripe was 1.3g/day in Spata and 0.7g/day in Melbourne. Spata men aged 70-79 consumed more tripe than the Spata women and Melbourne men.

ii. Salted cod

Results: Salted cod was rarely consumed by Greek elderly. Average intake of cod was 0.8g/day in Spata and 0.5g/day in Melbourne. Spata men aged 70-79 consumed more cod than the women. In Melbourne, the men aged 80+ consumed more cod than the women. Age group differences were not seen within centres. Centre differences were significant for the men aged 70-79 - Spata men consumed almost twice as much cod as Melbourne men.

iii. Squid

Results: Squid and octopus were rarely consumed by Greek elderly. Average intake of squid was 1.6 ± 3 g/day in Spata and 1.4 ± 3 g/day in Melbourne. Average intake of octopus was 0.2g/day in Spata and Melbourne. Gender, age group and centre differences were not significant.

8.3 CURRENT FREQUENCY OF INTAKE & DISTANT PAST FOOD INTAKE

Current eating habits are relevant for assessing excess or deficient intake; the level of current consumption may be of interest as an outcome measure, in relation to subject characteristics and environment, or as a predictor of future disease risk. However, food consumption in the past may have had a greater impact on current health status than current diet, especially in the elderly and in migrants.

The dietary changes that have occurred in Greek-Australian migrants can be assessed by :

- a) comparing to the current intake of Greeks in Greece (however there is an assumption here that the diets of Greeks have also not changed) (see also Chapters 9,10)
- b) comparing to the current intake of Australian-born or Anglo-Celtic Australians (see chapters 9,10)
- c) qualitative reports from Greek migrants on how their diet has changed on migration.

A combination of all three approaches should provide a more accurate picture of how diet has changed on migration. For example, a simple comparison between Greeks in Greece and Greeks in Australia may not highlight the magnitude of dietary change on migration because the diets of the non-immigrants may have also markedly changed. In fact, studies have shown that the diets of Greeks are becoming more and more 'northernised'-ie shifting from a high olive oil and plant food diet to a high animal foods and animal fats diet. Rural communities, such as Spata, appear to have slightly more traditional diets. (Trichopoulou 1993a,b; Kafatos et al., 1991; see Chapter 2).

Practical and reliable methods for obtaining distant past food intake from subjects, are needed. There is a tendency for people to report their current rather than their distant past intakes. This problem has been cited in several reproducibility studies in which the recall of the past diet, using the diet history method or quantitative food frequency questionnaire (FFQ), resembled current intake more closely than the original diet reported several years in the past (van Staveren et al., 1986; Thompson et al., 1987; Rohan & Potter, 1984; Byers et al., 1983; Bakkum et al., 1988; Moller Jensen et al., 1984).

Many investigators have come to the conclusion, that a more valid method of assessing food consumption retrospectively may be found if more attention is paid to *changes* in food consumption occurring over the time period in question (Moller Jensen et al., 1984; van Staveren et al., 1986). This is in contrast to methods where respondents are asked to reconstruct past diets (e.g both frequency and amount eaten). This method would ask for current diet and for the respondent's *perception of the direction and degree of change* in his/her diet over the time period of interest (Metzner et al., 1988).

This approach is intuitively attractive because it makes explicit the way middle-aged and older respondents appear to estimate their past dietary intake (Thompson et al., 1987). However, it does not assess past intake in precise quantities. Qualitative methods which locate individuals on the distribution in broad categories of low, medium, and high intake still permit the examination of nutritional hypotheses. This method has been successfully used by Metzner et al (1988) and Byers et al (1987). These studies showed that respondents can reliably report *direction* of change over time in how often they eat individual food items or food groups. It also appears that respondents can estimate the *magnitude or degree* of change, but less reliably.

The objectives for collecting distant past food intake in this study included the following:

- a) To obtain base line information on the diet of elderly Greeks before migrating to Australia
- b) To detect major shifts in food patterns from early adulthood to later life and upon migration.

Distant past food intake was qualified by asking the subjects whether *frequency* of intake was *more, less or the same in the past*, for each food currently reported to be consumed in the FFQ.

Each subject compared ***current intake with their diet just prior to the 2nd world war***. This period was chosen for the following reasons:

- a) It was a period which the subjects distinctly remembered and it was important to keep the time frame constant when interviewing each subject.
- b) The majority of subjects would have been aged in their late twenties and mid thirties; at these ages food habits begin to stabilize and the potential for chronic disease risk increases.
- c) Melbourne subjects would still have been living in Greece (there was a wave of migration in the 1950's).

Subjects compared current *frequency* of intake of each food item with frequency of intake in the distant past, and not on *quantity or portion sizes*. For some foods, frequency of intake had decreased but portion sizes had actually increased on migration. The tables include the percentage of subjects reporting more in the past, less in the past or the same as current frequency. The grams/day data is also included in the tables to provide a marker or level of current intake.

Current frequency of intake is presented in tables and discussed in the text. *Foods rarely eaten (i.e not eaten by 80% or more of subjects) are not included in the frequency of consumption tables*. Some foods were consumed seasonally in Spata and Melbourne; this information is available in Appendix 4. The intervening period between the 2nd world war and current intake was *generally* enquired about using Rapid Assessment Procedures (Srimshaw and Hurtado, 1987) to detect food intake changes that may have occurred - for example in the first decade after migration (see section 8.3.1). Due to the qualitative nature of the data, it was not possible to express distant past intake in food or nutrient quantities.

8.3.1 BELIEFS ABOUT MIGRATION

The elderly in Melbourne were asked to define how their food intake changed on migration by remembering three major periods:

- 1) *When they were still living in Greece >30 years ago, and aged <40 years.*
- 2) *The first 15 years in Australia, aged 40-60 years.*
- 3) *The last 15 years in Australia, aged >60 years.*

Beliefs regarding the benefits or detrimental effects of these changes to health were also elicited (see Table 8.3.1). The prevalence of a belief is indicated as the percentage of respondents having the same beliefs: >75% (very common=VC), 50-75% (common=C), 25-50% (less common = LC), 1-25% (uncommon=UC). See also table 8.2.2 and Chapter 7, section 7.2.2 for scientific evidence regarding beliefs.

The following foods were reported to have changed markedly ***on arrival to Australia***:
increased intake: meat, chicken, milk, yellow cheese, butter, vegetable oils, fruit;
decreased intake: fish, eggs, yoghurt, legumes, vegetables, wild greens, pickled vegetables, bread, pasta, rice, olives, olive oil, white cheese.

After 15 years, consumption of the following foods had begun to:

increase - pasta, legumes, yoghurt, vegetables, leafy greens, white cheese, olive oil, olives, margarine; ***decrease*** - meat, chicken, eggs, yellow cheese, butter; ***no further change since arrival*** - fish, eggs, pickles, bread, rice

8.3.2 QUALITATIVE REPORTS OF CHANGES TO FOOD INTAKE ON MIGRATION

The data was compared to the limited available data on the frequency of consumption and changes to food intake on migration from the following studies:

- a) Case control studies from Greece in the 1980s, 838 (M 228, F 610) subjects aged 40-79 (Trichopoulou et al., 1993b; Katsouyanni et al., 1986, 1988).
- b) The Levkadian Migrant Health Study (Powles et al., 1991); 846 siblings and their families aged 25-74, who had migrated from the Greek island of Levkada to Melbourne compared to their counterparts who stayed on the island (n=498) in 1983.
- c) The study of Greek migrants in Melbourne aged 30 and over (Kosmidis et al., 1980; Rutishauser & Wahlqvist., 1983), one-day recorded diets of 472 subjects (M 278, F 194) collected in 1979/80.

Table 8.3.1

How has your food intake changed on migration and how do you think this has affected your health? Which foods have been detrimental or good for your health?

Distant Past Food Intake (living in Greece >30 yrs ago, aged <40 yrs)	Past Food Intake (first 15 yrs in Australia aged 40-60)	Current Food Intake (last 15 years in Australia, aged >60)	Belief of Benefit/ Harm of Food to Health	Prevalence VC, C LC, UC
Lamb or goat eaten 1-2 times a month	Eaten almost every day	Eaten less than once a week	Harmful if eaten more than once a week	VC
Beef rarely eaten	Eaten almost every day	Eaten 2-3 times a week	Harmful if eaten more than once a week	VC
Chicken eaten once a week	Eaten more than once a week	Eaten less than once a week	Not as harmful as red meat; eat <2 times /week	VC
Fish eaten 2-3 times a week	Eaten 1-2 times a week	Eaten 1-2 times a week	Beneficial when eaten 2-3 times a week	VC
Eggs eaten almost daily (4/week)	2-4 eggs eaten week	2 eggs eaten per month	Beneficial when were eaten daily	C
Milk not available daily, drunk when sheep/goats had milk in spring	Cow's milk drunk daily	Cow's milk drunk daily	Beneficial when drunk daily, but sheep's milk is better	C
Cheese was eaten , daily, mainly white cheese (feta)	Feta replaced with ripened high fat yellow cheese, more eaten	Ripened cheese replaced with feta, eaten in smaller amounts daily	Feta is the best cheese for health, eaten daily but not too much	VC
Yoghurt eaten in large amounts,made from sheep/goat's milk,2-3 times a week	Not available to buy, home made with cow's milk, less eaten	Less eaten, most bought, made from cow's milk, eaten less less than once a week	Beneficial when eaten in large quantities	VC
Legumes eaten 3-4 times a week	Eaten twice a month	Eaten once a week	Beneficial when eaten 2-3 times a week	VC
Vegetables eaten in large amounts daily in season, especially wild greens	Eaten daily when in season - less eaten; reduced intake of wild greens	Eaten daily in season grown at home, small amounts eaten out of season, overall less eaten, only 1-2 times a week	Beneficial eaten in large amounts in season, especially home grown because contains less pesticides & chemicals	VC
Fruit eaten only in season in large quantities, overall not much fruit eaten, mainly grapes,figs, watermelon, cantaloup.	More fruit eaten on a daily basis	Fruit eaten all year round, more apples & oranges, still eat a lot of seasonal fruit more fruit eaten now	Beneficial when eaten only when in season, eat in moderation, not essential for health.	C

See Chapter 7, section 7.2.2 for scientific evidence regarding belief.

VC = very common,belief held by >75% of subjects

LC = less common 25-50% of subjects

C = common 50-75% of subjects

UC = uncommon 1-25% of subjects

Table 8.3.1 (continued)

How has your food intake changed on migration and how do you think this has affected your health? Which foods have been detrimental or good for your health?

Distant Past Food Intake (living in Greece >30 yrs ago, aged <40 yrs)	Past Food Intake (first 15 yrs in Australia aged 40-60)	Current Food Intake (last 15 years in Australia, aged >60)	Belief of Benefit/Harm of Food to Health	Prevalence VC, C LC, UC
Pickled Vegetables , pickled in salt & vinegar in summer for winter (due to lack of refrigeration), eaten in large amounts	Less eaten	Rarely eaten	Improved refrigeration enabled us to avoid these, salt not good for health	C
Bread (wholemeal) eaten in large amounts every day	Less bread eaten, mainly white	Less bread eaten, white & wholemeal	Beneficial, need >4 slices daily, foundation of life	VC
Pasta eaten 2-3 times a week	Less than once a week	Eaten once a week	Beneficial, need to eat 2-3 times a week	C
Rice eaten 2-3 times a week	Less than once a week	Eaten once a week	Beneficial, need to eat 1-2 times a week	C
Olives eaten in large amounts daily	Less eaten	Eaten 1-2/week (about 20 a week)	Beneficial, eat at least 5 olives daily	VC
Olive oil eaten in large amounts daily; butter, vegetable oils, not eaten	Olive oil replaced with vegetable oils, butter & margarine on bread	Vegetable oils replaced with olive oil, nothing spread on bread	Olive oil is superior to all other oils; margarine not	VC
Cooking methods - foods were stewed/casseroled i.e. foods eaten "wet"	Stew/casserole replaced with barbecues, grills, roasts, more "dry" foods	More casseroles eaten, but barbecues still very popular, as well as grills/roasts.	Barbecues not good for health, best to eat "wet" foods as stews/casseroles	VC
Religious fasts - animal products avoided for 40 days before Easter, Christmas, 15 days in August and June	The duration of the fast reduced	Fasts rarely last more than 7 days	Very beneficial to fast animal foods for as many days as possible	VC

See Chapter 7, section 7.2.2 for scientific evidence regarding belief.

VC = very common, belief held by >75% of subjects

LC = less common 25-50% of subjects

C = common 50-75% of subjects

UC = uncommon 1-25% of subjects

8.3.2.1 Meats

i. Chicken

Results: Melbourne elderly consumed significantly more chicken (45g/day 1-2 times a week) than Spata elderly (20g/day <1 week). About 30% of the Melbourne Greeks consumed chicken twice a week compared with about 10% of Spata elderly. About 60% of the Melbourne elderly reported to have eaten less chicken in the past compared with only 23% of the Spata elderly. In Melbourne, chicken intake had increased significantly on migration in elderly Greeks. In Spata, chicken intake had not changed much over the years (see Table 8.3.2.1a)

Table 8.3.2.1a

Distant past food intake of chicken compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	26.8	28.2	54.5	48.5
past less than current intake	46.8	31.5	63.1	51.9
past more than current intake	31.3	47.4	13.8	18.5
past same as current intake	21.9	21.1	23.1	29.6
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	22.2	17.3	38.0	37.4
past less than current intake	45.1	36.4	63.8	54.2
past more than current intake	32.3	22.7	24.1	22.9
past same as current intake	22.6	40.9	12.1	22.9

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

Comparisons with reported data: In the Levkadian Migrant Health Study, siblings (and their families) who had migrated to Melbourne reported a marked increase in chicken consumption. About 57% of the migrants consumed chicken twice a week or more compared with 19% of their counterparts who stayed on the island. In the study of Greek migrants in Melbourne aged 30 and over, one-day recorded diets of 472 (M 278, F 194) were collected in 1979/80. Chicken was consumed on the day of the survey by 24% of the subjects. In the case control studies from Greece, about 6% of the subjects consumed chicken twice a week compared with 50% once a week. This is in contrast to the frequency reported by Spata elderly (27% once a week). However, similar proportions rarely consumed chicken (14%).

ii. Lamb/Goat

Results: In the distant past, lamb and goat were the most commonly consumed meats, but not on a regular basis. Current mean intake of lamb was similar in both Spata and Melbourne (20g/day). About 35% of subjects no longer consumed lamb. These subjects reported eating more lamb in the past. There was a tendency (not significant) to have lamb more frequently in Melbourne (30% once a week or more) than Spata (30% <1 week). These subjects in Melbourne (40%) reported having eaten less lamb in the past. Lamb consumption appears to have increased on migration, especially in the first 10-15 years and then subsequently decreased due to public health messages regarding fatty

meat and heart disease. In Spata, lamb intake appears to have decreased over the years (8.3.2.1b).

Current intake of goat was low in both Spata and Melbourne (<2g/day); 50% of subjects were non-consumers. The remaining 50% of subjects consumed goat once to twice a month. About 70% of subjects reported consuming more in the distant past. Consumption of goat appears to have decreased in Greece and on migration (see Table 8.3.2.1c).

Comparisons with reported data: Similarly to the Spata elderly, in the case control studies from Greece, subjects consumed lamb less than once a week (24% once a month). However, a greater percentage of subjects reported to be non-consumers (62.5%) compared with Spata Greeks (35%). Similarly to the Melbourne elderly, in the Levkadian Migrant Health Study, siblings (and their families) who had migrated to Melbourne reported a greater frequency of lamb consumption. About 35% of the migrants consumed lamb twice a week or more (mainly chops) compared with 2% of their counterparts who stayed on the island. In the study of 472 Greek migrants in Melbourne aged 30 and over, a large proportion of subjects reported having eaten lamb (30%) on the day of the survey.

In the case control studies from Greece, a similar proportion of subjects reported to be non-consumers of goat (56%) compared to Spata elderly (43%), with the majority of subjects consuming goat about once to twice a month (40%).

Table 8.3.2.1b

Distant past intake of lamb compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	26.0	27.3	25.4	21.6
past less than current intake	21.9	36.8	40.9	46.4
past more than current intake	62.5	52.7	50.0	35.7
past same as current intake	15.6	10.5	9.1	17.9
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	10.9	29.2	18.8	12.6
past less than current intake	9.7	50.0	45.7	27.8
past more than current intake	77.4	36.4	47.5	61.1
past same as current intake	12.9	13.6	6.8	11.1

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: Spata women; Melbourne nil.

Centre differences: men 80+; women 80+.

Table 8.3.2.1c

Distant past intake of goat compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	1.48	1.57	2.54	2.07
past less than current intake	3.1	5.2	4.5	0.0
past more than current intake	68.7	73.7	77.3	78.6
past same as current intake	28.2	21.1	18.2	21.4
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	0.86	0.80	1.45	0.12
past less than current intake	0.0	0.0	3.3	0.0
past more than current intake	87.1	95.5	83.1	75.0
past same as current intake	12.9	4.5	13.6	25.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%. Gender differences: nil. Age group differences: nil. Centre differences: women 80+.

iii. Beef

Results: In the distant past, beef was not widely available in Greece (except maybe in more northern regions) and was rarely consumed. In Spata, 47% of the subjects never consumed beef, compared to only 26% in Melbourne. Current mean intake of beef was significantly greater in Melbourne men (60g/day) compared with Spata men (40g/day). Frequency of consumption was also much greater in Melbourne (47% 1-2 times/week) than Spata (25% 1-2 times/week).

A greater proportion of Melbourne men (67%) reported having eaten less beef in the past compared with Spata men (40%). About 55% of the women in both centres reported having eaten less beef in the past (see Table 8.3.2.1d). It appears that on migration beef intake has increased, especially in elderly men; the women have also increased their intake but to a lesser extent. In the first 10-15 years in Australia, beef consumption was probably much greater (e.g 2-3 times greater) in these subjects. Beef intake has been decreasing over the past 10 years (due to health beliefs regarding meat and food preference changes) approaching the lower levels found in Greece. In Spata, beef intake has also steadily increased over the years, but not to the same degree as in Melbourne elderly.

Table 8.3.2.1d
Distant past intake of beef compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	35.9	45.6	58.3	61.5
past less than current intake	62.5	21.1	62.1	71.4
more than current intake	0.0	0.0	16.7	14.3
same as current intake	37.5	78.9	21.2	14.3
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	34.0	34.7	41.3	39.6
past less than current intake	71.0	40.9	65.6	48.6
more than current intake	3.2	0.0	17.2	11.4
same as current intake	25.8	59.1	17.2	40.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: Spata men and women; Melbourne women. Centre differences: men 70-79 and 80+.

FREQUENCY (%) OF CONSUMPTION OF MEAT & FISH										
FOOD			0 not eaten	1M once a month	2M 2 times month	3M 3 times month	1W once a week	2W 2 times a week	3W 3 times a week	>=4W >4 times week
CHICKEN	Spata	M	13.7	21.6	17.6	3.9	25.5	11.8	3.9	2.0
		F	18.9	17.0	20.8	1.9	28.3	11.3	1.9	-
	Melb.	M	13.8	2.1	5.3	-	31.9	34.0	10.6	2.1
		F	13.7	1.1	10.5	-	40.0	28.4	5.3	-
LAMB	Spata	M	21.6	11.8	33.3	3.9	7.8	13.7	3.9	3.9
		F	37.7	20.8	9.4	-	13.2	11.3	7.5	-
	Melb.	M	40.4	9.6	8.5	3.2	25.5	12.8	-	-
		F	37.9	10.5	16.8	3.2	21.1	9.5	-	1.1
BEEF	Spata	M	52.9	11.8	5.9	3.9	17.6	7.8	-	-
		F	39.6	7.5	18.9	3.8	17.0	5.7	5.7	-
	Melb.	M	26.6	2.1	9.6	1.1	24.5	21.3	11.7	3.2
		F	25.3	3.2	10.5	1.1	23.2	25.3	8.4	3.2
GOAT	Spata	M	43.1	27.5	25.5	2.0	2.0	-	-	-
		F	58.5	20.8	18.9	1.9	-	-	-	-
TRIPE	Spata	M	56.9	37.3	3.9	2.0	-	-	-	-
		F	84.9	11.3	3.8	-	-	-	-	-
LIVER	Spata	M	62.7	31.4	2.0	-	3.9	-	-	-
		F	77.4	20.8	1.9	-	-	-	-	-
	Melb.	M	72.3	19.1	7.4	-	1.1	-	-	-
		F	68.4	24.2	6.3	-	1.1	-	-	-
PORK	Melb.	M	64.9	17.0	10.6	1.1	6.4	-	-	-
		F	66.3	21.1	8.4	-	4.2	-	-	-

Food not listed if >80% of subjects were not consuming this food. See Appendix 4 for number of months per year eaten for seasonal foods.

Comparisons with reported data: Similarly to Spata elderly, in the case control studies from Greece, only 11% of the subjects consumed beef once a week with 70% reporting to be non-consumers. Similarly to Melbourne elderly, in the Levkadian Migrant Health Study siblings (and their families) who had migrated to Melbourne reported a greater frequency of beef consumption. About 50% of the migrants consumed beef (mainly T-bone steak) twice a week or more compared with 3% of their counterparts who stayed on the island. In the study of 472 Greek migrants in Melbourne aged 30 and over a high proportion of subjects reported to have eaten beef (28%) on the day of the survey.

iv. **Pork**

Results: Current mean intake of pork and ham was <4g/day in both centres; only 5% consumed pork once a week and 65% were non-consumers. However, 70% of Melbourne elderly reported to have eaten more in the past compared to only 10% in Spata. In the past, pork consumption was more common in the colder parts of Greece, mainly in the North. A large proportion of the Greeks sampled in Melbourne came from Northern Greece (see Table 8.3.2.1e). Current mean intake of offal, tripe and rabbit was similarly low in both Spata and Melbourne (<4g/day). More than 70% of subjects reported eating more of these foods in the distant past compared with current intake.

Table 8.3.2.1e

Distant past intake of pork compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	1.04	1.03	4.41	2.45
past less than current intake	9.4	5.3	4.6	3.5
past more than current intake	12.5	15.8	70.8	67.9
past same as current intake	78.1	78.9	24.6	28.6
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	0.69	0.58	2.87	0.55
past less than current intake	9.6	9.1	8.5	5.6
past more than current intake	6.5	4.5	83.1	80.6
past same as current intake	83.9	86.4	8.4	13.8

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

Comparisons with reported data: In the case control studies from Greece, a significantly greater proportion of subjects reported to eat pork once a week (22%) compared with elderly Spata elderly (6%). Also, a greater percentage of subjects in these studies reported to be consumers (41%). This could be related to the fact that the population in Athens includes Greeks that have migrated from the North.

8.3.2.2 Fish

Results: Current mean intake of fish was similar in both Spata and Melbourne (45g/day) as was the frequency (60% 1-2 times/week). However, a significantly greater proportion of Melbourne elderly reported to be non-consumers (20%) compared with Spata elderly (7%). In Melbourne, 75% of subjects reported having eaten more fish in the distant past compared with current intake. In contrast, 50% of Spata elderly reported having eaten more in the past and 35% reported having the same intake. These results suggest that fish consumption has decreased on migration. In Spata, fish consumption has probably decreased only slightly (see Table 8.3.2.2). Current mean intake of squid and octopus was similarly low (<2g/day) in both Spata (50% non-consumers) and Melbourne (70% non-consumers). More than 70% of subjects reported having eaten more of these dishes in the distant past compared with current intake.

Table 8.3.2.2

Distant past intake of fish compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	55.2	44.1	60.4	46.4
past less than current intake	3.2	31.6	16.9	10.7
past more than current intake	53.1	36.8	67.7	78.6
past same as current intake	43.7	31.6	15.4	10.7
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	44.9	37.4	45.7	37.7
past less than current intake	9.7	18.2	16.9	16.7
past more than current intake	51.6	59.1	78.0	72.2
past same as current intake	38.7	22.7	5.1	11.1

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: Spata men; Melbourne nil.

Centre differences: men 70-79 and 80+; women 70-79.

Comparisons with reported data: In contrast to the Melbourne elderly, in the Levkadian Migrant Health Study siblings (and their families) who had migrated to Melbourne reported a lower frequency of fish consumption. About 27% of the migrants consumed

fish twice a week or more compared with 41% of their counterparts who stayed on the island. In the study of 472 Greek migrants in Melbourne aged 30 and over (Kosmidis et al., 1980; Rutishauser & Wahlqvist., 1983), 21% of the subjects reported to have eaten fish on the day of the survey. In the case control studies from Greece, similar proportions of subjects reported to eat fish once to twice a week (70%) compared with Spata Greeks (60%). Similar proportions were non-consumers (6%) compared with Spata elderly (7%).

8.3.2.3 Soups

Results: Melbourne elderly consumed significantly more thin/broth soups (60g/day) than Spata elderly (20g/day). This is related to the increased chicken and meat consumption on migration. The most popular soup in Melbourne was chicken soup which was consumed 1-2 times a month - only 20% of the elderly were non-consumers. In Spata, fish soup was the order of the day, consumed once a week or less - only 12% of elderly never consumed this soup. A greater proportion of Melbourne elderly reported eating less soups (70%) in the past compared with Spata elderly (15%).

8.3.2.4 Milk products and eggs

i. Feta cheese

Results: Spata elderly consumed almost twice as much feta cheese (30g/day; only 14% non-consumers) than Melbourne elderly (15g/day; 40% non-consumers). A greater proportion of Spata elderly reported eating feta cheese three times a week or more (65%) compared with Melbourne elderly (40%). More than 80% of the study subjects reported having eaten more feta cheese in the past compared to current intake. It appears that feta cheese consumption (quantity and frequency) has decreased to a greater degree on migration than it has in Spata (see Table 8.3.2.4a).

Comparisons with reported data: In the Levkadian study, a greater proportion of sedantes reported eating cheese (75%) twice a week or more compared with migrants (23%). In the study of 472 Greek migrants in Melbourne aged 30+, 61% reported having consumed cheese (32% feta, 15% processed) on the day of the survey. In the case control studies from Greece, a greater proportion of subjects reported eating cheese daily (72%) compared with Spata elderly (55%).

FREQUENCY (%) OF CONSUMPTION OF MEAT & FISH										
FOOD			0 not eaten	1M once a month	2M 2 times month	3M 3 times month	1W once a week	2W 2 times a week	3W 3 times a week	>=4W >4 times week
FISH	Spata	M	9.0	7.8	11.8	2.0	31.4	33.3	3.9	-
		F	5.7	9.4	18.9	-	28.3	28.3	7.5	1.9
	Melb.	M	22.3	5.3	12.8	2.1	34.0	20.2	3.2	-
		F	15.8	3.2	14.7	5.3	40.0	20.0	1.1	-
SQUID	Spata	M	43.1	17.6	17.6	9.8	11.8	-	-	-
		F	50.9	11.3	20.8	9.4	7.5	-	-	-
	Melb.	M	73.4	18.1	6.4	-	2.1	-	-	-
		F	63.2	25.3	6.3	-	5.3	-	-	-
FISH SOUP	Spata	M	11.8	29.4	19.6	3.9	25.5	9.8	-	-
		F	13.2	35.8	15.1	1.9	30.2	3.8	-	-
	Melb.	M	43.6	27.7	9.6	3.2	14.9	-	1.1	-
		F	49.5	22.1	13.7	-	12.6	2.1	-	-
FISH ROE DIP	Spata	M	64.7	5.9	2.0	-	9.8	7.8	5.9	3.9
		F	69.8	15.1	5.7	1.9	3.8	-	1.9	1.9
	Melb.	M	79.8	13.8	3.2	-	2.1	-	1.1	-
		F	74.7	11.6	8.4	-	2.1	1.1	1.1	1.1
CHICKEN SOUP	Spata	M	35.3	35.3	15.7	-	7.8	5.9	-	-
		F	43.4	28.3	13.2	-	13.2	1.9	-	-
	Melb.	M	19.1	39.4	21.3	1.1	14.9	2.1	-	2.2
		F	17.9	32.6	22.1	-	18.9	6.3	1.1	1.1
MEAT SOUP	Spata	M	66.7	13.7	9.8	-	9.9	-	-	-
		F	71.7	9.4	13.2	-	5.7	-	-	-
	Melb.	M	64.9	17.1	16.0	1.1	5.3	1.1	-	1.1
		F	57.9	25.3	8.4	-	6.3	1.1	1.1	-

Food not listed if >80% of subjects were not consuming this food. See Appendix 4 for number of months per year eaten for seasonal foods.

Table 8.3.2.4a

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	33.9	33.5	18.1	16.0
past less than current intake	21.9	5.2	4.6	14.3
past more than current intake	75.0	89.5	87.7	82.1
past same as current intake	3.1	5.3	7.7	3.6
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	28.4	31.4	16.7	14.5
past less than current intake	12.9	9.1	8.4	8.3
past more than current intake	80.6	86.4	83.1	88.9
past same as current intake	6.5	4.5	8.5	2.8

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil. Age group differences: nil. entre differences: nil.

ii. Milk

Results: In the distant past, the majority of the milk was used to make cheese or yoghurt due to lack of refrigeration. Little milk was actually drunk as a beverage. The majority of the milk came from sheep and goats and was not available all year round - it was available mainly in the spring when the animals expected offspring. In the northern parts of Greece, limited cows milk was also available.

Melbourne elderly (mainly 80+) drank significantly more milk (170g/day) than Spata elderly (100g/day). However, 50% of study subjects never consumed milk. Of those subjects that reported consuming milk, the majority included milk in their diet in small quantities on a daily basis. About 40% reported consuming less milk in the past, 40% more and 20% reported the same intake in the past. It appears that milk consumption has increased on migration and to a lesser extent in Spata.

Comparisons with reported data: In the Levkadian Migrant Health Study, siblings (and their families) who had migrated to Melbourne reported a greater frequency of milk consumption. About 57% of the migrants consumed milk twice a week or more compared with 4% of their counterparts who stayed on the island (sedantes). In the case control studies from Greece, a similar proportion of subjects reported drinking milk daily (51%) compared with Greek elderly (50%). In the study of 472 Greek migrants in Melbourne aged 30 and over, 82% of the subjects reported having consumed milk on the day of the survey.

iii. Yoghurt & Ice cream

Results: Consumption of yoghurt was similar in both Spata and Melbourne (30g/day). About 50% of subjects never consumed yoghurt. A greater proportion of Melbourne elderly consumed yoghurt once a week or more (40%) compared with Spata elderly (25%). More than 90% of the study subjects reported having consumed more yoghurt in the past compared to current intake. Yoghurt consumption appears to have decreased over the years in both Spata and Melbourne. A greater proportion of Spata elderly were non-consumers of icecream (90%) compared with Melbourne elderly (70%).

Comparisons with reported data: In contrast to the elderly Greeks, in the Levkadian Migrant Health Study, similar proportions of migrant Greeks (20%) and sedantes (13%) consumed yoghurt twice a week or more. A greater proportion of migrants consumed icecream twice a week or more (50%) compared with sedantes (26%). In the case control studies from Greece, 57% of subjects reported to be non-consumers of icecream.

iv. Eggs

Results: Consumption of eggs was similarly low (10g/day) in both Spata (22% non-consumers) and Melbourne (36% non-consumers). Eggs were rarely consumed more than once a week in both centres. More than 85% of subjects reported having eaten more eggs in the past. Egg consumption appears to have decreased over the years in both Spata and Melbourne (see Table 8.3.2.4b).

Comparisons with reported data: In the Levkadian Migrant Health Study, 31% of the sedantes reported eating eggs daily compared with 8% of the migrants.

FREQUENCY (%) OF CONSUMPTION OF MILK PRODUCTS & EGGS										
FOOD			0 not eaten	1M once a month	2M 2 times month	3M 3 times month	1W once a week	2W 2 times a week	3W 3 times a week	>=4W >4 times week
FETA CHEESE	Spata	M	11.8	-	2.0	-	9.8	13.7	9.8	60.8
		F	17.0	-	-	-	5.7	9.4	18.9	49.0
	Melb.	M	40.4	-	3.2	-	6.4	11.7	7.4	30.9
		F	33.7	-	2.1	-	12.6	11.6	13.7	26.4
KASERI CHEESE	Spata	M	66.7	-	3.9	-	13.7	3.9	5.9	5.9
		F	71.7	-	5.7	-	7.5	3.8	5.7	5.7
	Melb.	M	75.5	2.1	1.1	-	5.3	4.3	2.1	9.6
		F	72.6	1.1	2.1	-	9.5	9.5	2.1	3.3
KEFA LOTIRI CHEESE	Spata	M	68.6	-	2.0	-	5.9	9.8	5.9	7.8
		F	75.5	-	1.9	-	13.2	-	7.5	1.9
RICOTTA	Melb.	M	84.0	1.1	3.2	-	3.2	4.3	1.1	3.3
		F	72.6	2.1	4.2	-	10.5	1.1	1.1	8.5
YOGHURT	Spata	M	58.8	5.9	9.8	-	5.9	3.9	5.9	9.8
		F	49.1	1.9	7.5	1.9	9.4	9.4	7.5	13.2
	Melb.	M	43.6	4.3	5.3	-	28.7	5.3	5.3	7.4
		F	47.4	6.3	6.3	-	23.2	3.2	4.2	9.5
YOGHURT GARLIC DIP	Spata	M	68.6	21.6	2.0	-	3.9	-	3.9	-
		F	66.0	24.5	5.7	-	1.9	-	-	1.9
DIP	Melb.	M	84.0	8.5	4.3	-	2.1	1.1	-	-
		F	78.9	12.6	5.3	-	3.2	-	-	-

Food not listed if >80% of subjects were not consuming this food. See Appendix 4 for number of months per year eaten for seasonal foods.

FREQUENCY (%) OF CONSUMPTION OF MILK PRODUCTS & EGGS (continued)										
FOOD			0	1M	2M	3M	1W	2W	3W	>=4W
			not eaten	once a month	2 times month	3 times month	once a week	2 times a week	3 times a week	>4 times week
ICE	Melb.	M	67.0	6.4	1.1	-	9.6	3.2	4.3	8.6
CREAM		F	75.8	-	2.1	-	9.5	4.2	2.1	6.4
CUSTARD	Spata	M	78.4	7.8	2.0	-	3.9	3.9	2.0	2.0
		F	73.6	3.8	11.3	-	5.7	1.9	1.9	1.9
	Melb.	M	72.3	19.1	6.4	-	-	1.1	1.1	-
		F	69.5	13.7	9.5	-	1.1	2.1	2.1	2.1
CUSTARD & PASTRY	Spata	M	76.5	19.6	-	-	2.0	2.0	-	-
		F	64.2	34.0	1.9	-	-	-	-	-
EGG	Spata	M	29.4	5.9	11.8	-	23.5	7.8	5.9	15.7
		F	43.4	11.3	5.7	1.9	18.9	5.7	5.7	7.6
	Melb.	M	25.5	6.4	21.3	1.1	19.1	9.6	7.4	9.6
		F	20.0	6.3	18.9	1.1	25.3	16.8	5.3	6.5

Food not listed if >80% of subjects were not consuming this food. See Appendix 4 for number of months per year eaten for seasonal foods.

Table 8.3.2.4b
Distant past intake of egg compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	10.96	14.15	11.46	13.75
past less than current intake	3.1	10.5	1.5	3.7
past more than current intake	87.5	89.5	95.4	96.3
past same as current intake	9.4	0.0	3.1	0.0
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	6.02	9.64	9.16	11.13
past less than current intake	0.0	0.0	5.2	5.5
past more than current intake	87.1	95.5	93.1	91.7
past same as current intake	12.9	4.5	1.7	2.8

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil. ge group differences: nil. entre differences: nil.

8.3.2.5 Cereals

i. Rice

Results: Current mean intake of plain rice (as opposed to vegetable & rice dishes) was similar in both centres (24g/day; 16% non-consumers) as was the frequency (33% once a week, 40% 1-2 times a month). However, significantly more Melbourne elderly (95%) reported having eaten rice more frequently in the distant past compared with Spata elderly (67%). This suggests that rice intake has decreased on migration, whilst remaining more or less constant in Spata (see Table 8.3.2.5a).

Comparisons with reported data: In the study of 472 Greek migrants in Melbourne aged 30 and over (Kosmidis et al., 1980; Rutishauser & Wahlqvist., 1983), 14% of the subjects reported having eaten rice on the day of the survey.

Table 8.3.2.5a

Distant past intake of rice compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	18.5	24.3	26.5	25.6
past less than current intake	0.0	5.2	3.0	10.7
past more than current intake	65.6	73.7	90.9	89.3
past same as current intake	34.4	21.1	6.1	0.0
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	19.7	28.6	22.5	26.5
past less than current intake	12.9	4.5	0.0	0.0
past more than current intake	74.2	54.6	100.0	97.2
past same as current intake	12.9	40.9	0.0	2.8

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne nil.

Age group differences: Spata women; Melbourne nil.

Centre differences: men 70-79 and 80; women 70-79 and 80+.

ii. Pasta

Results: Current mean intake of pasta was similar in both centres (50g/day; 7% non-consumers). However, frequency of consumption was significantly different - 50% of Melbourne elderly consumed pasta once a week or less and 50% of Spata elderly consumed it once a week or more. Although eaten less often in Melbourne, portion sizes were greater than Spata. Nevertheless, Melbourne elderly still perceived their intake to be less now than in the past (95%) compared to Spata elderly (60%). On migration, frequency of pasta consumption appears to have decreased. In Spata, pasta consumption appears to have decreased to a lesser extent (35% same intake as in the past)(see Table 8.3.2.5b).

Comparisons with reported data: In the study of 472 Greek migrants in Melbourne aged 30 and over (Kosmidis et al., 1980; Rutishauser & Wahlqvist., 1983), 14% of the subjects reported having eaten pasta on the day of the survey. In the case control studies from Greece, a similar proportion of subjects consumed pasta once a week or more (70%) compared with Spata elderly (50%).

Table 8.3.2.5b
Distant past intake of pasta compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	53.7	62.9	46.6	37.1
past less than current intake	3.1	5.3	1.5	3.6
past more than current intake	59.4	57.9	92.4	96.4
past same as current intake	37.5	36.8	6.1	0.0
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	42.9	56.9	34.7	47.5
past less than current intake	0.0	9.1	0.0	0.0
past more than current intake	83.9	45.4	100.0	97.2
past same as current intake	16.1	45.5	0.0	2.8

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: Spata women; Melbourne nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

iii. Bread & dry biscuits

Results: Consumption of bread was greater in Spata (especially men aged 70-79). Intake averaged about 5-6 slices/day in Spata and 4 slices/day in Melbourne. More than 90% of subjects reported having at least one slice of bread daily. More than 90% of the study subjects reported having consumed more bread in the past compared with current intake. Bread consumption has decreased markedly over the years in both Spata and Melbourne (see Table 8.3.2.5c). Spata elderly consumed significantly more dry biscuits (e.g Elite) (60% non-consumers) than Melbourne elderly (>80% non-consumers). The majority of the Spata elderly reported having eaten less in the past. Melbourne elderly have not changed their intake over the years. Consumption of cakes, biscuits and pastries was similarly low in both Spata and Melbourne. More than 70% of the subjects reported having eaten more in the past. Consumption of cakes/pastries has decreased over the years in both Spata and Melbourne.

Comparisons with reported data: In the study of 472 Greek migrants in Melbourne aged 30 and over, 91% of the subjects reported to have eaten bread, 12% dry biscuits, 15% sweet cakes and pastries on the day of the survey. In the case control studies from Greece, 94% of subjects reported to eat bread daily.

FREQUENCY (%) OF CONSUMPTION OF CEREALS										
FOOD			0	1M	2M	3M	1W	2W	3W	>=4W
			not eaten	once a month	2 times month	3 times month	once a week	2 times a week	3 times a week	>4 times week
RICE	Spata	M	17.6	23.5	27.5	-	29.4	2.0	-	-
		F	9.4	24.5	24.5	-	35.8	-	-	-
	Melb.	M	19.1	14.9	20.2	1.1	34.0	7.4	1.1	2.1
		F	16.8	12.6	20.0	2.1	35.8	7.4	4.2	1.1
PASTA	Spata	M	8.5	14.9	24.5	3.2	38.3	8.5	1.1	1.1
		F	7.4	6.3	28.4	2.1	43.2	9.5	1.1	2.1
	Melb	M	9.8	-	13.7	2.0	35.3	29.4	7.8	2.0
		F	1.9	9.4	9.4	1.9	45.3	24.5	5.7	1.9
PASTICHIO Spata	M	56.4	31.9	8.5	1.1	2.1	-	-	-	-
		F	50.5	40.0	7.4	1.1	1.1	-	-	-
	Melb.	M	60.8	31.4	7.8	-	-	-	-	-
		F	49.1	41.5	7.5	1.9	-	-	-	-
TRAHANA SOUP	Spata	M	45.0	27.5	5.9	-	15.7	3.9	2.0	-
		F	49.1	22.6	11.3	-	11.3	1.9	3.8	-
	Melb.	M	69.1	13.8	7.4	-	5.3	2.1	2.1	-
		F	69.5	14.7	5.3	-	7.4	2.1	-	1.1
CRISP BREAD	Spata	M	74.5	-	-	-	2.0	-	2.0	21.6
		F	56.6	-	-	-	3.8	1.9	3.8	34.0

Food not listed if >80% of subjects were not consuming this food. See Appendix 4 for number of months per year eaten for seasonal foods.

FREQUENCY (%) OF CAKES, BISCUITS AND SUGAR PRODUCTS										
FOOD			0 not eaten	1M once a month	2M 2 times month	3M 3 times month	1W once a week	2W 2 times a week	3W 3 times a week	>=4W >4 times week
KOULOURAKIA	Spata	M	66.0	2.1	-	-	5.3	5.3	4.3	17.0
		F	65.3	-	2.1	-	8.4	5.3	4.2	14.7
	Melb.	M	66.7	-	5.9	-	7.8	3.9	7.8	7.9
		F	60.4	7.5	3.8	-	11.3	3.8	5.7	7.6
PLAIN CAKE	Spata	M	73.4	9.6	3.2	-	8.5	1.1	1.1	3.3
		F	71.6	11.6	3.2	-	8.4	1.1	3.2	1.1
	Melb.	M	72.5	11.8	9.8	-	2.0	-	-	3.9
		F	71.7	13.2	3.8	-	7.5	1.9	-	1.9
KOURAMBIEDES	Spata	M	78.4	13.7	3.9	-	3.9	-	-	-
		F	67.9	28.3	3.8	-	-	-	-	-
BAKLAVA	Spata	M	86.3	11.8	-	-	2.0	-	-	-
		F	67.9	30.2	1.9	-	-	-	-	-
HALVA	Spata	M	74.5	3.9	2.0	-	3.9	7.8	5.9	2.0
		F	64.2	1.9	5.7	-	18.9	9.4	-	-
HONEY	Spata	M	64.7	2.0	-	2.0	11.8	3.9	8.8	-
		F	69.8	1.9	5.7	-	7.5	3.8	11.4	-
	Melb.	M	51.1	-	1.1	-	4.3	1.1	9.6	33.0
		F	51.6	3.2	1.1	-	8.4	4.2	5.3	26.4
SOFT DRINK	Spata	M	64.7	-	-	-	3.9	5.9	25.5	-
		F	67.9	-	-	-	3.8	1.9	3.8	22.7
	Melb.	M	68.1	-	1.1	-	4.3	3.2	3.2	20.3
		F	75.8	-	-	-	5.3	4.2	2.1	12.7

Food not listed if >80% of subjects were not consuming this food. See Appendix 4 for number of months per year eaten for seasonal foods.

Table 8.3.2.4c

Distant past intake of bread compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	219.63	157.47	149.23	125.75
past less than current intake	3.1	0.0	0.0	0.0
past more than current intake	96.9	100.0	98.5	100.0
past same as current intake	0.0	0.0	1.5	0.0
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	135.77	138.09	111.94	115.19
past less than current intake	0.0	0.0	0.0	0.0
past more than current intake	100.0	100.0	100.0	100.0
past same as current intake	0.0	0.0	0.0	0.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil. Age group differences: nil. Centre differences: nil.

8.3.2.6 Legumes

Results: Melbourne elderly consumed significantly more legumes (80g/day) than Spata elderly (60g/day) - mainly due to a larger portion size rather than greater frequency. The most popular soups included lentil soup and haricot beans soup, which were consumed by more than 85% of subjects about 1-2 a month (only 15% of elderly consumed these on a weekly basis).

More than 50% of Melbourne subjects did not eat broad beans, lima beans, chickpea soup, black eye beans and split pea soup. In contrast, less than 30% of Spata subjects did not eat these legumes. More than 90% of the elderly reported having eaten more legumes in the past compared to current intake. In Melbourne, legume intake had decreased significantly on migration, especially broad beans, split peas, lima beans, black eye beans and chick peas. In Spata, total legume intake had also decreased significantly over the years (see Table 8.3.2.6).

FREQUENCY (%) OF CONSUMPTION OF LEGUME DISHES										
FOOD			0	1M	2M	3M	1W	2W	3W	>=4W
			not eaten	once a month	2 times month	3 times month	once a week	2 times a week	3 times a week	>4 times week
BROAD BEANS	Spata	M	23.5	56.9	9.8	-	7.8	2.0	-	-
		F	37.7	52.8	5.7	-	3.8	-	-	-
	Melb.	M	54.3	22.3	7.4	1.1	13.8	-	1.1	-
		F	52.6	28.4	5.3	-	13.7	-	-	-
LIMA BEANS	Spata	M	29.4	66.7	2.0	-	2.0	-	-	-
		F	20.8	75.5	3.8	-	-	-	-	-
	Melb.	M	83.0	11.7	3.2	1.1	1.1	-	-	-
		F	77.9	20.0	1.1	-	1.1	-	-	-
LENTIL SOUP	Spata	M	9.8	47.1	29.4	3.9	9.8	-	-	-
		F	15.1	54.7	17.0	3.8	9.4	-	-	-
	Melb.	M	14.9	37.2	28.7	3.2	12.8	3.2	-	-
		F	24.2	40.0	17.9	1.1	15.8	1.1	-	-
CHICK PEA SOUP	Spata	M	11.8	51.0	25.5	2.0	7.8	2.0	-	-
		F	17.0	62.3	13.2	5.7	1.9	-	-	-
	Melb.	M	52.1	30.9	13.8	-	3.2	-	-	-
		F	54.7	30.5	10.5	1.1	3.2	-	-	-
HARICOT SOUP	Spata	M	7.8	33.3	31.4	7.8	19.6	-	-	-
		F	7.5	47.2	24.5	3.8	17.0	-	-	-
	Melb.	M	10.6	29.8	36.2	4.3	17.0	2.1	-	-
		F	14.7	34.7	28.4	3.2	16.8	2.1	-	-
BLACKEYE BEANS	Spata	M	31.4	62.7	5.9	-	-	-	-	-
		F	41.5	43.4	7.5	1.9	1.0	-	-	-
	Melb.	M	56.4	21.3	11.7	-	9.6	1.1	-	-
		F	55.8	26.3	9.5	1.1	6.3	1.1	-	-

Food not listed if >80% of subjects were not consuming this food. See Appendix 4 for number of months per year eaten for seasonal foods.

Table 8.3.2.6

Distant past intake of legumes compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	60.7	44.6	93.7	79.7
past less than current intake	0.0	0.0	0.0	3.6
past more than current intake	93.8	100.0	92.3	89.3
past same as current intake	6.2	0.0	7.7	7.1
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	38.9	47.8	78.5	55.1
past less than current intake	0.0	0.0	0.0	0.0
past more than current intake	96.8	100.0	89.8	100.0
past same as current intake	3.2	0.0	10.2	0.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil. Age group differences: nil. Centre differences: nil.

Comparisons with reported data: In the Levkadian Migrant Health Study (Powles et al., 1991), siblings (and their families) who had migrated to Melbourne reported a lower frequency of haricot bean consumption. About 2% of the migrants consumed haricot beans twice a week or more compared with 13% of their counterparts who stayed on the island (sedantes). Similar percentages reported eating lentils or chickpeas twice a week or more (4%, 2% respectively). In the study of 472 Greek migrants in Melbourne aged 30 and over, 10% of the subjects reported having eaten legumes on the day of the survey. In the case control studies from Greece, a significantly greater proportion of subjects reported to be non-consumers of lentils (74%) and haricot beans (70%) compared with elderly Greeks (15%, 10% respectively). This discrepancy could be related to the younger subjects surveyed in the case control studies.

8.3.2.7 Vegetable & rice dishes

i. Spinach & rice dish

Results: Current mean intake of spinach and rice (spanakorizo) was significantly greater in Melbourne (11g/day) than Spata (4g/day). About 30% of subjects did not consume this dish and 40% consumed it once a month. Intake of cabbage and rice dish and vine dolmas was <4g/day in both Spata and Melbourne. More than 80% of subjects reported having eaten more of these dishes in the distant past compared with current intake. Consumption of these dishes has decreased on migration, but also by Spata Greeks (see Table 8.3.2.7a).

Table 8.3.2.7a
Distant past intake of spinach & rice dish
compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	4.82	3.22	10.46	13.72
past less than current intake	0.0	5.3	4.5	10.8
past more than current intake	78.1	73.6	87.9	82.1
past same as current intake	21.9	21.1	7.6	7.1
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	3.72	3.40	10.50	8.49
past less than current intake	0.0	0.0	8.5	2.8
past more than current intake	90.3	90.9	88.1	94.4
past same as current intake	9.7	9.1	3.4	2.8

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil. Age group differences: nil. Centre differences: nil.

ii. Leeks & rice dish

Results: Current mean intake of leeks and rice (prasorizo) was significantly greater in Melbourne (3g/day) than Spata (0.7g/day). More than 80% of Melbourne subjects reported having eaten more of this dish in the distant past compared with current intake. In contrast, 50% of Spata subjects reported having consumed more in the past and 50% reported the same in the past. This dish is not a traditional or common dish in Spata.

iii. Cabbage dolmas

Results: Melbourne elderly consumed significantly more cabbage dolmas (11g/day) than Spata elderly (2g/day). About 40% of Melbourne elderly never consumed this dish compared with 60% of Spata elderly. Even though this dish was still quite popular on migration, Melbourne elderly still perceived their intake to be less now than in the past (90%). In contrast, Spata elderly perceived their intake to be the same now as in the past (43%). Consumption of this dish has decreased to a lesser extent on migration than perceived by the study subjects. In Spata, consumption of this dish has decreased only slightly.

iv Stuffed vegetables

Results: Melbourne elderly consumed significantly more stuffed vegetables (gemista) (11g/day) than Spata elderly (8g/day). About 18% of Melbourne elderly consumed it once a week and 60% 1-2/month compared to 10% and 77% respectively in Spata. Even though this dish was still popular on migration, Melbourne elderly perceived their intake to be less now than in the past (87%) (see table 8.3.2.7b).

Table 8.3.2.7b

Distant past intake of stuffed vegetable & rice dish compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	9.2	5.4	14.5	10.7
past less than current intake	3.1	15.8	10.6	3.6
past more than current intake	71.9	57.9	89.4	96.4
past same as current intake	25.0	26.3	0.0	0.0
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	7.8	8.3	10.7	9.6
past less than current intake	12.9	31.8	8.5	2.8
past more than current intake	67.7	50.0	91.5	97.2
past same as current intake	19.4	18.2	0.0	0.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

FREQUENCY (%) OF CONSUMPTION OF VEGETABLE DISHES										
FOOD			0	1M	2M	3M	1W	2W	3W	>=4W
			not eaten	once a month	2 times month	3 times month	once a week	2 times a week	3 times a week	>4 times week
SPINACH & RICE	Spata	M	27.5	45.1	15.7	2.0	9.8	-	-	-
		F	30.2	37.7	24.5	-	7.5	-	-	-
	Melb.	M	34.0	43.6	14.9	-	7.4	-	-	-
		F	35.8	40.0	18.9	-	5.3	-	-	-
CABBAGE & RICE	Spata	M	31.4	49.0	13.7	-	5.9	-	-	-
		F	24.5	50.0	17.0	-	7.5	-	-	-
	Melb.	M	75.5	16.0	6.4	-	2.1	-	-	-
		F	73.7	21.1	4.2	-	1.1	-	-	-
CABBAGE DOLMA	Spata	M	66.7	29.4	3.9	-	-	-	-	-
		F	58.5	35.9	3.8	-	1.9	-	-	-
	Melb.	M	46.8	33.0	9.6	1.1	8.5	1.1	-	-
		F	35.8	47.4	10.5	-	6.3	-	-	-
VINE LEAF DOLMA	Spata	M	29.4	27.5	19.6	2.0	13.7	3.9	2.0	2.0
		F	34.0	35.8	15.1	-	13.2	1.9	-	-
	Melb.	M	56.4	17.0	10.6	1.1	12.8	2.1	-	-
		F	56.8	16.8	8.4	2.1	15.8	-	-	-
ARTICHOKE CASSEROLE	Spata	M	7.8	17.6	23.5	7.8	21.6	19.6	2.0	-
		F	7.5	15.1	32.1	3.8	28.3	9.4	3.8	-
	Melb.	M	45.7	28.7	9.6	-	14.9	1.1	-	-
		F	41.1	30.5	4.2	-	18.9	4.2	-	1.1
STUFFED VEGETABLES	Spata	M	2.0	47.1	31.4	3.9	11.8	2.0	2.0	-
		F	5.7	35.8	39.6	7.5	9.4	1.9	-	-
	Melb.	M	17.0	35.1	24.5	2.1	21.3	-	-	-
		F	17.9	40.0	25.3	2.1	14.7	-	-	-

Food not listed if >80% of subjects were not consuming this food. See Appendix 4 for number of months per year eaten for seasonal foods.

FREQUENCY (%) OF CONSUMPTION OF VEGETABLE DISHES										
FOOD			0 not eaten	1M once a month	2M 2 times month	3M 3 times month	1W once a week	2W 2 times a week	3W 3 times a week	>=4W >4 times week
MOUSAKA	Spata	M	72.5	21.6	5.9	-	-	-	-	-
		F	64.2	30.2	3.8	1.9	-	-	-	-
	Melb.	M	79.8	19.1	1.1	-	-	-	-	-
		F	78.9	16.8	3.2	-	1.1	-	-	-
MIXED VEGETABLE CASSEROLE	Spata	M	11.8	43.1	27.5	3.9	9.8	3.9	-	-
		F	17.0	30.2	39.6	-	11.3	1.9	-	-
	Melb.	M	35.1	35.1	19.1	1.1	7.4	1.1	1.1	-
		F	31.6	36.8	20.0	1.1	8.4	1.1	1.1	-
GREEN BEAN CASSEROLE	Spata	M	5.9	33.3	33.3	5.9	19.6	-	-	2.0
		F	3.8	30.2	35.8	1.9	22.6	5.7	-	-
	Melb.	M	8.5	16.0	30.9	3.2	36.2	4.3	1.1	-
		F	7.4	18.9	31.6	2.1	34.7	5.3	-	-
EGG PLANT CASSEROLE	Spata	M	13.7	25.5	39.2	5.9	11.8	3.9	-	-
		F	18.9	30.2	24.5	9.4	17.0	-	-	-
	Melb.	M	31.9	35.1	21.3	-	11.7	-	-	-
		F	29.5	33.7	20.0	2.1	14.7	-	-	-
OKRA CASSEROLE	Spata	M	17.6	41.2	29.4	5.9	5.9	-	-	-
		F	13.2	35.8	37.7	1.9	11.3	-	-	-
	Melb.	M	50.0	30.9	11.7	1.1	5.3	1.1	-	-
		F	40.0	38.9	9.5	2.1	8.4	1.1	-	-
SPLIT PEA SOUP	Spata	M	17.6	62.7	13.7	2.0	3.9	-	-	-
		F	30.2	56.6	9.4	1.9	1.9	-	-	-
	Melb.	M	71.3	17.0	6.4	-	5.3	-	-	-
		F	78.9	15.8	2.1	-	3.2	-	-	-

Food not listed if >80% of subjects were not consuming this food. See Appendix 4 for number of months per year eaten for seasonal foods.

8.3.2.8 Mixed vegetable dishes

i. Green bean casserole

Results: Melbourne elderly consumed significantly more green bean casserole (22g/day; non-consumers 7%) than Spata elderly (13g/day; non-consumers 5%). About 35% of Melbourne elderly consumed it once a week and 50% 1-2/month compared to 22% and 65% respectively in Spata. Even though this dish was still popular on migration, Melbourne elderly perceived their intake to be less now than in the past (94%). In contrast, Spata elderly perceived their intake to be the same now as is in the past (22%). Consumption of this dish has decreased to a lesser extent on migration than perceived by the study subjects. In Spata, consumption of this dish has decreased only slightly (see Table 8.3.2.8a).

Table 8.3.2.8a

Distant past intake green bean casserole compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	13.1	12.2	23.2	21.9
past less than current intake	9.4	10.5	15.1	10.7
past more than current intake	59.3	57.9	78.8	89.3
past same as current intake	31.3	31.6	6.1	0.0
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	12.5	14.3	21.9	20.7
past less than current intake	16.1	22.8	6.8	8.3
past more than current intake	61.3	54.5	91.5	88.9
past same as current intake	22.6	22.7	1.7	2.8

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

ii. Egg plant casserole

Results: Spata elderly consumed more egg plant casserole than Melbourne elderly (mainly men 70-79). About 30% of Melbourne subjects never consumed this dish compared with 15% of Spata elderly. Significantly more Melbourne elderly (95%) reported having eaten more of this dish in the past compared to Spata elderly (68%). It appears that consumption of this dish has decreased on migration. In Spata, consumption has decreased to a lesser extent (see Table 8.3.2.8b).

Table 8.3.2.8b
Distant past intake of egg plant casserole compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	10.2	6.1	6.2	5.2
past less than current intake	0.0	5.2	4.5	3.6
past more than current intake	75.0	63.2	90.9	96.4
past same as current intake	25.0	31.6	4.6	0.0
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	7.9	8.3	6.1	5.6
past less than current intake	9.7	13.6	5.1	0.0
past more than current intake	74.2	59.1	94.9	100.0
past same as current intake	16.1	27.3	0.0	0.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

iii. Okra casserole

Results: Spata elderly consumed more okra casserole than Melbourne elderly. About 45% of Melbourne subjects never consumed this dish compared with 15% of Spata elderly. Significantly more Melbourne elderly (90%) reported to have eaten more of this dish in the past compared to Spata elderly (65%). It appears that consumption of this dish has decreased significantly on migration. In Spata, consumption has decreased to a lesser extent (see Table 8.3.2.8c).

iv. Artichoke casserole

Results: Spata elderly consumed more artichoke casserole than Melbourne elderly (mainly men 70-79). About 43% of Melbourne subjects never consumed this dish compared with 7% of Spata elderly. Significantly more Melbourne elderly (90%) reported having eaten more of this dish in the past compared to Spata elderly (64%). It appears that consumption of this dish has decreased significantly on migration. In Spata, consumption has decreased to a lesser extent over the years (see Table 8.3.2.8d).

Table 8.3.2.8c

Distant past intake of okra casserole compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	6.59	5.51	6.88	4.23
past less than current intake	3.1	10.5	6.0	7.2
past more than current intake	71.9	57.9	87.9	85.7
past same as current intake	25.0	31.6	6.1	7.1
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	7.63	5.47	5.56	6.85
past less than current intake	9.6	13.6	10.2	2.8
past more than current intake	71.0	59.1	86.4	97.2
past same as current intake	19.4	27.3	3.4	0.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79; women 70-79 and 80+.

Table 8.3.2.8d

Distant past intake of artichoke casserole compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
N	32	19	66	28
Current intake (mean g/day)	11.58	7.27	5.05	5.34
past less than current intake	0.0	10.5	4.5	3.6
past more than current intake	71.9	57.9	87.9	85.7
past same as current intake	28.1	31.6	7.6	10.7
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	8.69	6.70	6.61	5.31
past less than current intake	6.5	18.2	5.1	0.0
past more than current intake	67.7	59.1	86.4	94.3
past same as current intake	25.8	22.7	8.5	5.7

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79; women 80+.

v. **Mixed vegetable casserole**

Results: About 33% of Melbourne subjects never consumed mixed vegetable casserole (briam) compared with 15% of Spata elderly. Significantly more Melbourne elderly (90%) reported having eaten more of this dish in the past compared to Spata elderly (60%). It appears that consumption of this dish has decreased significantly on migration. In Spata, consumption has decreased to a lesser extent over the years (see Table 8.3.2.7e).

Table 8.3.2.8e

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	12.1	7.8	11.9	9.0
past less than current intake	9.4	10.5	3.1	0.0
past more than current intake	68.7	68.4	84.8	89.3
past same as current intake	21.9	21.1	12.1	10.7
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	13.6	10.9	10.5	9.5
past less than current intake	22.5	31.8	1.7	2.8
past more than current intake	58.1	40.9	94.9	97.2
past same as current intake	19.4	27.3	3.4	0.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil. Age group differences: nil. Centre differences: men nil; women 70-79&80+.

8.3.2.9 Pies

Results: Current mean intake of spaghetti pie (<10g/day; pastichio) and egg plant pie (<3g/day; mousaka) was similarly low in both Spata and Melbourne. More elderly reported eating pastichio (55% non-consumers) compared to mousaka (75% non-consumers). More than 70% of subjects reported having eaten more of these dishes in the distant past compared with current intake. Consumption of these dishes have decreased in Melbourne but also in Greece. Current mean intake of spinach pie and cheese pie was significantly greater in Melbourne (10g/day) than Spata (2g/day), even though the frequency of consumption was similar 50% once a month). This suggests that the portion size has increased on migration. About 30% of subjects reported not eating these pies. More than 80% of subjects reported having eaten more of these traditional pies in the distant past compared with current intake.

FREQUENCY (%) OF CONSUMPTION OF VEGETABLES										
FOOD			0	1M	2M	3M	1W	2W	3W	>=4W
			not eaten	once a month	2 times month	3 times month	once a week	2 times a week	3 times a week	>4 times week
MUSHROOM	Spata	M	64.7	17.6	7.8	2.0	5.9	2.0	-	-
		F	83.0	11.3	1.9	-	1.9	-	-	1.9
	Melb.	M	75.5	16.0	5.3	-	2.1	1.1	-	-
		F	70.5	13.7	8.4	-	7.4	-	-	-
BEETROOT	Spata	M	33.3	27.5	23.5	2.0	9.8	3.9	-	-
		F	28.3	49.1	9.4	-	13.2	-	-	-
	Melb.	M	51.1	26.6	14.9	1.1	6.4	-	-	-
		F	46.3	36.8	9.5	-	6.3	1.1	-	-
CORN	Melb.	M	63.8	17.0	11.7	-	6.4	-	-	1.1
		F	49.5	20.0	14.7	-	12.6	3.2	-	-
PUMPKIN	Melb.	M	41.5	23.4	11.7	1.1	18.1	1.1	2.1	1.1
		F	44.2	26.3	15.8	-	12.6	1.1	-	-
BRUSSEL SPROUTS	Melb.	M	78.7	13.8	5.3	-	1.1	1.1	-	-
		F	82.1	12.6	4.2	-	1.1	-	-	-
BROCCOLI	Melb.	M	39.4	22.3	13.8	1.1	19.1	2.1	1.1	1.1
		F	32.6	34.7	15.8	1.1	13.7	1.1	1.1	-
SPINACH PIE	Spata	M	25.5	58.8	13.7	-	-	2.0	-	-
		F	37.7	54.7	3.8	1.9	1.9	-	-	-
	Melb.	M	31.9	46.8	14.9	-	5.3	1.1	-	-
		F	33.7	45.3	10.5	-	10.5	-	-	-
LEEK & RICE	Melb.	M	59.6	24.5	8.5	-	6.4	1.1	-	-
		F	60.0	26.3	10.5	-	3.2	-	-	-

Food not listed if >80% of subjects were not consuming this food. See Appendix 4 for number of months per year eaten for seasonal foods.

8.3.2.10 Vegetables

i. Potato

Results: Spata elderly (mainly women 70-79) consumed significantly more potatoes (especially fried chips) than Melbourne elderly. About 30% of Spata elderly reported having potatoes more than 4 times a week (only 20% non-consumers), compared to only 6% of Melbourne elderly (50% non-consumers). Significantly more Melbourne elderly reported eating more potatoes in the past (95%) compared to Spata elderly (69%). It appears that potato intake has decreased on migration. In Spata, potato intake has not changed much over the years (see Table 8.3.2.10a).

Comparisons with reported data: In the case control studies from Greece, a greater proportion of subjects reported to eat potatoes twice a week or more (70%) compared with Spata elderly (40%) and a smaller proportion reported to be non-consumers (2%) compared with Spata (30%). In the study of 472 Greek migrants in Melbourne aged 30 and over, 40% of the subjects reported having eaten potatoes on the day of the survey.

Table 8.3.2.10a
Distant past intake of potato compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	73.9	65.4	62.7	64.2
past less than current intake	9.4	21.0	0.0	0.0
past more than current intake	68.7	57.9	92.2	96.4
past same as current intake	21.9	21.1	7.8	3.6
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	73.9	52.7	44.1	43.5
past less than current intake	12.9	9.6	0.0	0.0
past more than current intake	80.6	71.4	100.0	94.4
past same as current intake	6.5	19.0	0.0	5.6

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

ii. Pumpkin

Results: Melbourne elderly consumed more pumpkin than Spata elderly. Significantly more Melbourne elderly reported eating more pumpkin in the past (>90%) compared to Spata elderly (0%). Pumpkin has never been consumed in Spata - past and present. Pumpkin was more popular in Northern Greece where it would be stored and consumed over winter and baked into sweet tasting pies. It appears that pumpkin intake has decreased on migration. Pumpkin has not been introduced into diets of elderly Greeks in Spata.

iii. Carrot

Results: In the traditional Greek cuisine, carrot is consumed mainly in soups and casseroles and rarely uncooked in salads. Melbourne elderly consumed more carrot than Spata elderly. More than 70% of Spata elderly indicated that their carrot intake had not changed over the years. In contrast, a greater proportion of Melbourne elderly reported eating less carrot in the past (44%) compared to current intake. It appears that carrot intake has increased on migration. In Spata, carrot intake has remained unchanged (see Table 8.3.2.10b).

Comparisons with reported data: In the study of 472 Greek migrants in Melbourne aged 30 and over (Kosmidis et al., 1980; Rutishauser & Wahlqvist., 1983), 7% of the subjects reported having eaten carrot on the day of the survey.

Table 8.3.2.10b
Distant past intake of carrot compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	0.8	1.5	6.7	9.3
past less than current intake	18.7	15.8	45.5	53.6
past more than current intake	9.4	10.5	22.7	32.1
past same as current intake	71.9	73.7	31.8	14.3
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	0.5	0.9	7.5	5.2
past less than current intake	9.7	18.2	49.1	27.7
past more than current intake	12.9	9.1	35.6	41.7
past same as current intake	77.4	72.7	15.3	30.6

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

iv. Broccoli

Results: Broccoli was rarely consumed in the distant past by Greeks in Greece due to limited availability. Melbourne elderly consumed more broccoli (1-2 times a month, 35% non-consumers) than Spata elderly. Broccoli has never been consumed in Spata - past and present. Almost all the Spata elderly indicated that their broccoli intake had not changed over the years. In contrast, significantly more Melbourne elderly reported eating less broccoli in the past (57%) compared to current intake. It appears that broccoli intake has increased on migration. Broccoli has not been introduced into diets of elderly Greeks in Spata.

FREQUENCY (%) OF CONSUMPTION OF VEGETABLES										
FOOD			0	1M	2M	3M	1W	2W	3W	>=4W
			not eaten	once a month	2 times month	3 times month	once a week	2 times a week	3 times a week	>4 times week
POTATO										
BOIL/BAKE	Spata	M	35.3	3.9	3.9	-	23.5	13.7	7.8	11.8
		F	20.8	1.9	3.8	1.9	30.2	20.8	7.5	13.2
	Melb.	M	27.7	1.1	8.5	-	37.2	25.5	4.3	7.5
		F	24.2	1.1	10.5	-	44.2	16.8	6.3	2.2
FRIED	Spata	M	23.5	3.9	7.8	-	21.6	15.7	7.8	19.6
		F	17.0	5.7	3.8	-	22.6	24.5	11.3	15.1
	Melb.	M	56.4	1.1	2.1	-	29.8	7.4	1.1	2.1
		F	60.0	-	5.3	-	23.2	6.3	4.2	1.1
POTATO	Spata	M	52.9	31.4	3.9	2.0	5.9	3.9	-	-
DIP		F	56.6	34.0	7.5	-	1.9	-	-	-
	Melb.	M	75.5	12.8	6.4	1.1	4.3	-	-	-
		F	64.2	28.4	4.2	-	2.1	-	-	1.1
CARROT	Spata	M	54.9	5.9	3.9	-	23.5	3.9	5.9	2.0
		F	60.4	1.9	7.5	1.9	22.6	1.9	-	3.8
		M	38.3	-	4.3	-	38.3	8.5	4.3	6.4
		F	35.8	1.1	4.2	-	47.4	4.2	1.1	6.4
CAULIFLOWER	Spata	M	13.7	35.3	31.4	5.9	13.7	-	-	-
		F	15.1	43.4	28.3	1.9	11.3	-	-	-
	Melb.	M	19.1	33.0	23.4	2.1	17.0	4.3	1.1	-
		F	22.1	35.8	22.1	1.1	16.8	1.1	1.1	-
CABBAGE	Spata	M	11.8	3.9	13.7	-	17.6	21.6	17.6	13.8
		F	24.5	3.8	7.5	-	20.8	18.9	13.2	11.3
	Melb.	M	27.7	13.8	14.9	2.1	23.4	13.8	3.2	1.1
		F	29.5	16.8	13.7	2.1	21.1	7.4	6.3	3.2

Food not listed if >80% of subjects were not consuming this food. See Appendix 4 for number of months per year eaten for seasonal foods.

v. **Cauliflower**

Results: Cauliflower is not a popular vegetable in the Greek cuisine. About 80% of the subjects consumed cauliflower 1-2 times a month. Melbourne elderly consumed more cauliflower than Spata elderly. Significantly more Melbourne elderly reported having eaten less cauliflower in the past (40%) compared to Spata elderly (10%). It appears that cauliflower intake has increased on migration and has remained unchanged in Spata (see Table 8.3.2.10c).

Table 8.3.2.10c

Distant past intake of cauliflower compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	3.9	2.9	10.5	9.0
past less than current intake	6.3	15.8	36.4	28.6
past more than current intake	28.1	36.8	54.5	71.4
past same as current intake	65.6	47.4	9.1	0.0
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	2.8	2.9	9.2	8.0
past less than current intake	9.7	9.5	47.4	44.4
past more than current intake	41.9	47.6	47.5	55.6
past same as current intake	48.4	42.9	5.1	0.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

vi. **Cabbage**

Results: Current mean intake and frequency of cabbage consumption was greater in Spata (mainly men aged 70-79) (18% non-consumers) than Melbourne (30% non-consumers). Spata elderly consumed cabbage more than once a week (especially in winter) and Melbourne elderly about 1-2 a month. However, 80% of Melbourne elderly reported having eaten more in the past compared to only 14% in Spata. The majority of Spata elderly reported having eaten less cabbage in the past (see Table 8.3.2.10d). Cabbage consumption was more common in the colder parts of Northern Greece in the distant past. A large proportion of the Greeks sampled in Melbourne came from Northern Greece. Cabbage was not as popular or available in the warmer parts of Southern Greece, such as Spata. It appears that cabbage intake has decreased on migration and increased in Spata elderly.

Table 8.3.2.10d
Distant past intake of cabbage compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	11.4	6.9	7.0	6.9
past less than current intake	84.4	83.3	13.6	10.7
past more than current intake	9.4	5.6	80.3	85.7
past same as current intake	6.2	11.1	6.1	3.6
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	9.0	4.4	7.5	4.3
past less than current intake	67.7	61.9	16.9	5.6
past more than current intake	22.6	19.1	81.4	94.4
past same as current intake	9.7	19.0	1.7	0.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

vii. Lettuce

Results: Current mean intake and frequency of lettuce consumption was significantly greater in Melbourne (60% >2 times a week) compared to Spata (40% >2 times a week). A greater proportion of Melbourne elderly reported having eaten less in the past (70%) compared with Spata elderly (20%). It appears that lettuce intake has increased on migration (see Table 8.3.2.10e).

Comparisons with reported data: In the case control studies from Greece, a greater proportion of subjects (60%) reported to eat lettuce twice a week or more compared with Spata elderly (40%). This could be related to the age of the subjects. In the study of 472 Greek migrants in Melbourne aged 30 and over, 35% of the subjects reported to have eaten lettuce on the day of the survey.

Table 8.3.2.10e

Distant past intake of lettuce compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	8.8	6.7	30.8	30.0
past less than current intake	27.3	17.8	78.1	78.9
past more than current intake	69.7	78.6	9.4	5.3
past same as current intake	3.0	3.6	12.5	15.8
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	10.5	5.0	30.4	23.0
past less than current intake	20.3	19.4	67.7	61.9
past more than current intake	78.0	80.6	19.4	23.8
past same as current intake	1.7	0.0	12.9	14.3

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

viii. Silverbeet

Results: Current mean intake frequency of silverbeet consumption was significantly greater in Melbourne (only 35% non-consumers; eaten 2 times a month) compared to Spata (>80% non-consumers). Significantly more Melbourne elderly reported to have eaten less in the past (15%) compared to Spata elderly (0%). However, the majority of the elderly (>70%) indicated that they consumed more in the past. It appears that silverbeet intake has decreased only slightly on migration and to a greater extent in Spata.

FREQUENCY (%) OF CONSUMPTION OF VEGETABLES										
FOOD			0 not eaten	1M once a month	2M 2 times month	3M 3 times month	1W once a week	2W 2 times a week	3W 3 times a week	>=4W >4 times week
LETTUCE	Spata	M	19.6	3.9	7.8	-	23.5	19.6	9.8	15.7
		F	20.8	9.4	9.4	-	15.1	20.8	5.7	18.9
	Melb.	M	5.3	2.1	3.2	-	24.5	21.3	16.0	27.7
		F	7.4	1.1	7.4	-	21.1	14.7	16.8	31.6
WILD GREENS	Spata	M	15.7	7.8	5.9	-	9.8	27.5	5.9	27.5
		F	20.8	3.8	15.1	1.9	11.3	30.2	7.5	13.9
	Melb.	M	53.2	18.1	3.2	-	13.8	7.4	1.1	3.3
		F	51.6	13.7	5.3	1.1	18.9	3.2	3.2	3.2
CHICORY	Spata	M	21.6	11.8	9.8	2.0	19.6	23.5	7.8	3.9
		F	15.1	13.2	15.1	-	30.2	18.9	5.7	1.9
	Melb.	M	28.7	7.4	11.7	1.1	31.9	6.4	4.3	8.5
		F	18.9	10.5	13.7	2.1	30.5	12.6	2.1	9.5
GARLIC	Spata	M	52.9	5.9	2.0	2.0	13.7	2.0	7.8	13.7
		F	79.2	3.8	1.9	-	5.7	1.9	3.8	3.8
	Melb.	M	50.0	2.1	-	-	16.0	4.3	3.2	24.5
		F	52.6	-	-	-	17.9	5.3	4.2	20.0
OLIVES	Spata	M	27.5	5.9	3.9	-	21.6	15.7	3.9	21.5
		F	45.3	1.9	9.4	-	18.9	9.4	5.7	9.5
	Melb.	M	23.4	-	2.1	-	40.4	9.6	3.2	21.3
		F	29.5	1.1	3.2	-	37.9	8.4	2.1	17.9
TOMATO	Spata	M	5.9	-	-	-	3.9	9.8	5.9	74.5
		F	3.8	1.9	1.9	-	11.3	1.9	13.2	66.1
	Melb.	M	2.1	-	-	-	7.4	4.3	10.6	75.6
		F	3.2	-	1.1	-	8.4	6.3	8.4	72.7

Food not listed if >80% of subjects were not consuming this food. See Appendix for number of months per year eaten for seasonal foods.

ix. Chicory & wild greens

Results: Current mean intake and frequency of chicory/endive consumption was similar in both centres (20% non-consumers, once a week). However, Spata elderly consumed significantly more wild greens (20% non-consumers, 1/week) than Melbourne elderly (50% non-consumers, <1/week). More than 90% of the elderly reported having eaten more wild greens in the past. In contrast, about 70% of the elderly reported having eaten less chicory/endives in the past.

Wild greens (e.g wild dandelion leaves) are only available in winter for about 3 months and need to be located and pulled from the ground (i.e requires a fair bit of effort to consume). In the distant past, chicory and endives were only available in the winter for a few months; they are now available all year round at the local supermarket or grocer. It appears that wild green intake has decreased to a greater extent on migration than in Spata. Chicory/endive consumption has probably increased in both centres (see Table 8.3.2.10f).

Table 8.3.2.10f**Distant past intake of wildgreens compared to current intake**

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	31.00	12.16	9.64	3.71
past less than current intake	0.0	0.0	1.5	0.0
past more than current intake	93.8	100.0	95.5	100.0
past same as current intake	6.2	0.0	3.0	0.0
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	14.75	8.89	6.76	5.44
past less than current intake	0.0	0.0	0.0	0.0
past more than current intake	90.3	100.0	98.3	97.2
past same as current intake	9.7	0.0	1.7	2.8

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

Comparisons with reported data: In the Levkadian Migrant Health Study (Powles et al., 1991), siblings (and their families) who had migrated to Melbourne reported a lower frequency of wild green consumption. About 66% of the migrants consumed wild greens twice a week or more compared with 80% of their counterparts who stayed on the island.

In the study of 472 Greek migrants in Melbourne aged 30 and over, 13% of the subjects reported having eaten wild greens on the day of the survey.

x. **Capsicum**

Results: Current mean intake and frequency of capsicum consumption was significantly greater in Melbourne (60% >1/week, 16% non-consumers) than Spata (40% >1/week, 40% non-consumers). Capsicum was very popular in the colder parts of Northern Greece in the distant past; it was roasted in the fire, the skin removed and then drenched in olive oil and garlic (see Table 8.3.2.10g). Compared to Spata elderly, it appears that capsicum intake has increased on migration. However, the majority of the Melbourne elderly indicated that their consumption had decreased since migration - suggesting that intake had actually decreased on migration because the majority of the elderly came from areas of Greece where intake was very high.

Table 8.3.2.10g

Distant past intake of capsicum compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	2.6	1.5	15.9	5.6
past less than current intake	31.3	31.6	4.6	3.6
past more than current intake	53.1	42.1	92.4	96.4
past same as current intake	15.6	26.3	3.0	0.0
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	1.8	0.8	16.2	10.3
past less than current intake	19.3	22.7	5.1	2.8
past more than current intake	61.3	77.3	93.2	97.2
past same as current intake	19.4	0.0	1.7	0.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil. Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

A large proportion of the Greeks sampled in Melbourne came from Northern Greece. Capsicum was also consumed in Southern Greece (e.g Spata), but not to the same extent as in the Northern parts. More than 90% of the Melbourne Greeks indicated that their consumption was greater in the past compared to only 60% of Spata elderly. It appears that capsicum consumption has decreased to a greater extent in Melbourne. In Spata, intake has probably decreased only slightly.

xi. Other vegetables and olives

Results: For the remaining vegetables (tomatoes, onions, garlic, cucumber and zucchini) including olives, more the 80% of subjects indicated that consumption was greater in the past compared to current intake. However, current intake and frequency of consumption of these vegetables was similar in both Spata and Melbourne. Tomatoes were consumed about 3-4 times/week by about 80% of subjects (only 5% non-consumers), cucumbers about 2 times/week or more by 60% of subjects (15% non-consumers) and zucchini 2 times/week or more by 45% of subjects (10% non-consumers). Mean intake of olives was greater in Melbourne (9g/day) than Spata (6g/day) in women only. A greater proportion of Melbourne subjects (70%) consumed olives >1/week compared with Spata elderly (45%).

Comparisons with reported data: In the study of 472 Greek migrants in Melbourne aged 30 and over, 55% of the subjects reported having eaten tomatoes, 25% olives and 21% cucumber on the day of the survey. In the case control studies from Greece, a similar proportion of subjects consumed tomatoes daily (87%) compared with Spata elderly (70%). In contrast, a greater proportion of subjects consumed olives once a week or more (70%) and cucumber twice a week or more (80%) compared with Spata elderly (50% and 60% respectively).

xii. Pickled vegetables

Results: In the distant past, selected vegetables (capsicum, eggplant, onion, cabbage) were pickled in salt and vinegar so that they could be preserved and consumed when out of season. With the advent of refrigeration and wider availability of vegetables, pickled food is no longer as popular. Spata elderly consumed pickled vegetables more frequently than Melbourne elderly. The majority of the Melbourne elderly (88%) reported that they consumed more pickles in the past. In contrast, 43% of Spata elderly indicated their intake had not changed over the years. It appears that consumption of pickled vegetables has decreased significantly on migration. In Spata, consumption has changed slightly.

Comparisons with reported data: In the study of 472 Greek migrants in Melbourne aged 30 and over, 55% of the subjects reported having eaten tomatoes, 25% olives and 21% cucumber on the day of the survey.

FREQUENCY (%) OF CONSUMPTION OF VEGETABLES										
FOOD			0	1M	2M	3M	1W	2W	3W	>=4W
			not eaten	once a month	2 times month	3 times month	once a week	2 times a week	3 times a week	>4 times week
ONION	Spata	M	29.4	2.0	-	-	11.8	15.7	15.7	25.4
		F	49.1	3.8	-	20.8	5.7	7.5	13.2	-
	Melb.	M	28.7	-	1.1	-	30.9	8.5	7.4	23.4
		F	37.9	-	1.1	-	28.4	2.1	14.7	15.8
CUCUMBER	Spata	M	17.6	-	7.8	-	23.5	15.7	17.6	17.6
		F	24.5	-	13.2	-	13.2	13.2	13.2	22.6
	Melb.	M	11.7	-	3.2	-	12.8	17.0	20.2	35.1
		F	9.5	1.1	2.1	1.1	15.8	10.5	15.8	44.2
PEAS	Spata	M	19.6	51.0	17.6	2.0	7.8	2.0	-	-
		F	22.6	58.5	7.5	1.9	5.7	3.8	-	-
	Melb.	M	24.5	43.6	11.7	-	17.0	3.2	-	-
		F	31.6	38.9	10.5	2.1	13.7	3.2	-	-
SILVERBEET	Melb.	M	33.0	29.8	14.9	1.1	17.0	4.3	-	-
		F	36.8	23.2	18.9	2.1	15.8	3.2	-	-
ZUCCHINI	Spata	M	7.8	17.6	19.6	2.0	37.3	9.8	3.9	2.0
		F	11.3	18.9	15.1	-	37.7	7.5	5.7	3.8
	Melb.	M	10.6	11.7	30.9	4.3	33.0	6.4	2.1	1.1
		F	10.5	18.9	23.2	3.2	38.9	4.2	1.1	-
CAPSICUM Spata	M	31.4	3.9	5.9	-	27.5	13.7	11.8	5.9	
		F	50.9	-	5.7	1.9	15.1	9.4	9.4	7.6
	Melb.	M	14.9	4.3	11.7	1.1	29.8	8.5	7.4	22.4
		F	17.9	5.3	15.8	1.1	33.7	6.3	6.3	13.8

Food not listed if >80% of subjects were not consuming this food. See Appendix 4 for number of months per year eaten for seasonal foods.

Table 8.3.2.10h

**Distant past intake of pickled vegetables
compared to current intake**

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
past less than current intake	3.1	0.0	0.0	0.0
past more than current intake	50.0	63.2	86.4	89.3
past same as current intake	46.9	36.8	13.6	10.7
WOMEN				
N	31	22	59	36
past less than current intake	0.0	0.0	0.0	0.0
past more than current intake	58.1	54.5	93.1	86.1
past same as current intake	41.9	45.5	6.9	13.9

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

8.3.2.11 Fruit

i. Oranges

Results: Citrus fruits (mainly oranges and mandarins), were not widely available in the distant past, especially in the South of Greece. Elderly reported these fruits to be very expensive in the past and available for only a few months. In Australia, oranges are now available all year round. In Greece, availability is mainly limited to winter months. Melbourne elderly consumed significantly more oranges than Spata elderly because of the increased availability (i.e all year round). Overall, 60% of subjects consumed oranges >2 times/week when available (25% non-consumers).

The majority of the elderly (60-70%) indicated that they consumed less oranges in the past compared to current intake. It appears that consumption of oranges has increased on migration. In Spata, consumption of oranges has also increased but not to the same extent as in Melbourne elderly (see Table 8.3.2.11a).

Comparisons with reported data: In the case control studies from Greece, a similar proportion of subjects (67.5%) reported to eat oranges twice a week or more compared to elderly Greeks (60%).

Table 8.3.2.11a

Distant past intake of oranges and mandarines compared to current intake

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	12.0	22.0	55.4	54.5
past less than current intake	71.9	94.7	62.1	67.8
past more than current intake	3.1	0.0	21.2	28.6
past same as current intake	25.0	5.3	16.7	3.6
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	13.3	22.1	45.7	45.2
past less than current intake	71.0	59.1	59.3	55.6
past more than current intake	3.2	4.5	33.9	22.2
past same as current intake	25.8	36.4	6.8	22.2

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 80+; Melbourne nil.

Age group differences: nil.

Centre differences: men 80+; women 70-79.

ii. Apples

Results: Melbourne elderly (mainly men) consumed significantly more apples than Spata elderly, mainly because of increased availability in Australia. Overall, 40% of the subjects consumed apples about 4 times/week (20% non-consumers). In the past, apples were not available all year round, as they are today. Therefore, the majority of the elderly (60-70%) indicated that they consumed less apples in the past compared to current intake. It appears that consumption of apples has increased on migration. In Spata, consumption of apples has also increased but not to the same extent as in Melbourne elderly.

Comparisons with reported data: In the case control studies from Greece, a greater proportion of subjects consumed apples almost daily (60%) compared with elderly Greeks (40%).

iii. Pears

Results: Pears were not as popular as apples in either centre (20% >3 times/week; 25% non-consumers). More than 80% of the subjects indicated that they consumed more pears in the past. This suggests that pear consumption has decreased over the years in Spata and on migration.

Comparisons with reported data: In the case control studies from Greece, a greater proportion of subjects consumed pears almost daily (50%) compared with elderly Greeks (20%).

iv. Stone fruit

Results: Spata elderly consumed stone fruit more frequently (4/week) (mainly peaches and apricots) compared to Melbourne elderly (<3/7). However, 30% of elderly were non-consumers in both centres. About 78% of Spata elderly reported having eaten less in the past and 90% of Melbourne elderly reported having eaten more in the past. It appears that consumption of stone fruit has decreased on migration. In Spata, intake has probably slightly increased due to extended availability of these fruits (see Table 8.3.2.11b).

Table 7.3.2.11b
Distant past intake of stone fruit compared to current intake

	MELBOURNE		SPATA	
	70 - 79	80 +	70 - 79	80 +
	%	%	%	%
MEN				
N	32	19	66	28
Current intake (mean g/day)	32.7	25.6	20.0	16.9
past less than current intake	65.7	94.7	3.0	3.6
past more than current intake	6.2	0.0	86.4	89.3
past same as current intake	28.1	5.3	10.6	7.1
WOMEN				
N	31	22	59	36
Current intake (mean g/day)	24.9	19.2	17.1	16.6
past less than current intake	87.0	63.7	0.0	0.0
past more than current intake	6.5	13.6	93.2	97.2
past same as current intake	6.5	22.7	6.8	2.8

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: nil.

Centre differences: men 70-79 and 80+; women 70-79 and 80+.

FREQUENCY (%) OF CONSUMPTION OF FRUITS										
FOOD			0	1M	2M	3M	1W	2W	3W	>=4W
			not eaten	once a month	2 times month	3 times month	once a week	2 times a week	3 times a week	>4 times week
ORANGES	Spata	M	17.6	-	2.0	-	2.0	7.8	13.7	56.9
		F	30.2	-	-	-	7.5	1.9	11.3	49.2
	Melb.	M	26.6	-	3.2	-	8.5	6.4	8.5	46.8
		F	28.4	-	4.2	-	12.6	7.4	6.3	41.1
MANDARIN	Spata	M	41.2	3.9	2.0	-	11.8	17.6	5.9	17.7
		F	30.2	-	7.5	-	11.3	9.4	13.2	28.3
	Melb.	M	26.6	-	2.1	1.1	8.5	14.9	10.6	36.2
		F	22.1	-	2.1	1.1	7.4	12.6	10.5	44.3
APPLE	Spata	M	15.7	-	2.0	-	9.8	11.8	21.6	39.2
		F	26.4	-	-	-	5.7	7.5	15.1	45.3
	Melb.	M	17.0	1.1	2.1	-	12.8	6.4	12.8	47.9
		F	22.1	-	1.1	-	10.5	14.7	10.5	41.1
PEARS	Spata	M	23.5	-	3.9	-	17.6	11.8	13.7	29.4
		F	20.8	-	3.8	1.9	26.4	9.4	17.0	20.8
	Melb.	M	31.9	3.2	4.3	-	12.8	20.2	8.5	19.1
		F	31.6	3.2	5.3	-	11.6	16.8	12.6	18.9
BANANA	Melb.	M	39.4	3.2	11.7	-	16.0	6.4	9.6	13.8
		F	37.9	5.3	7.4	2.1	15.8	10.5	2.1	19.0
CANTALOUPE	Spata	M	25.5	2.0	5.9	2.0	37.3	9.8	9.8	7.8
		F	20.8	-	18.9	-	34.0	1.9	15.1	9.5
	Melb.	M	13.8	1.1	13.8	2.1	31.9	24.5	5.3	7.5
		F	17.9	3.2	8.4	1.1	37.9	22.1	5.3	4.3
POMEGRANATE	Spata	M	49.0	-	3.9	-	7.8	13.7	11.8	13.7
		F	50.9	-	9.4	-	9.4	5.7	13.2	11.3

v. Grapes, figs, watermelon, canteloup

Results: Grapes, figs, watermelon and cantaloup are the beloved fruits of most Greeks. Spata Greeks consumed significantly more figs (28% non-consumers; 4 times/week) than Melbourne elderly (40% non-consumers; 4 times/week). Consumption of the other fruits was similarly high in both centres. Grapes were consumed >4 times/week when available (only 15% non-consumers). Cantaloupe was consumed about once a week in both centres (20% non-consumers). Watermelon was more popular than cantaloupe; it was consumed more than twice a week in Spata (20% non-consumers) and about twice a week in Melbourne (10% non-consumers).

More than 80% of the study subjects reported having eaten more of these fruits in the past compared to current intake. This suggests that consumption of these fruits has decreased on migration (especially figs) and in Spata. Melbourne elderly consumed significantly more bananas and tropical fruit than Spata elderly. In Greece, these fruit are expensive and have limited availability. It appears that intake of bananas and tropical fruit has increased on migration.

Consumption of dried fruit (mainly sultanas and dried figs) and nuts was very low in both Spata and Melbourne. More than 80% of subjects reported to having eaten more dried fruits and nuts in the past compared to current intake.

Comparisons with reported data: In the study of 472 Greek migrants in Melbourne aged 30 and over (Kosmidis et al., 1980; Rutishauser & Wahlqvist., 1983), 35% of the subjects reported having eaten apples, 29% oranges/mandarines, 19% stone fruit/pear/banana and 11% grapes/watermelon on the day of the survey.

8.3.2.12 Sugar, beverages, fats

i. Sugar

Results: Consumption of sugar was similarly low (2-3 teaspoons/day) in both Spata and Melbourne. The majority of the elderly reported having either not changed their intake over the years or to have eaten less sugar in the past. It appears that sugar intake per se has not changed much on migration or in Spata.

Comparisons with reported data: In the case control studies from Greece, about 90% of subjects reported to consume sugar daily.

FREQUENCY (%) OF CONSUMPTION OF FRUITS										
FOOD			0	1M	2M	3M	1W	2W	3W	>=4W
			not eaten	once a month	2 times month	3 times month	once a week	2 times a week	3 times a week	>4 times week
WATERMELON	Spata	M	15.7	3.9	2.0	5.9	7.8	11.8	27.5	25.4
		F	22.6	-	7.5	1.9	5.7	7.5	32.1	22.6
	Melb.	M	7.4	1.1	5.3	1.1	25.5	21.3	18.1	20.2
		F	12.6	1.1	7.4	1.1	26.3	25.3	9.5	16.9
PEACH	Spata	M	21.6	-	5.9	3.9	5.9	21.6	9.8	31.3
		F	17.0	3.8	7.5	3.8	9.4	9.4	22.6	26.4
	Melb.	M	29.8	-	5.3	-	16.0	16.0	14.9	18.1
		F	27.4	3.2	8.4	-	16.8	17.9	11.6	14.9
GRAPES	Spata	M	19.6	-	-	2.0	9.8	3.9	5.9	58.9
		F	18.9	-	3.8	-	3.8	5.7	17.0	50.9
	Melb.	M	4.3	1.1	5.3	1.1	12.8	7.4	11.7	56.3
		F	13.7	1.1	3.2	2.1	12.6	10.5	9.5	47.4
FIGS	Spata	M	25.5	-	-	2.0	11.8	2.0	17.6	41.1
		F	32.1	-	3.8	-	7.5	9.4	17.0	30.2
	Melb.	M	39.4	-	2.1	-	8.5	6.4	3.2	40.5
		F	36.8	-	4.2	1.1	10.5	9.5	7.4	30.5
APRICOT	Spata	M	37.3	-	-	2.0	3.9	11.8	45.1	-
		F	34.0	-	-	-	15.1	5.7	18.9	26.4
	Melb.	M	38.3	-	1.1	-	16.0	16.0	7.4	21.2
		F	30.5	1.1	2.1	-	18.9	18.9	10.5	18.0
CHERRY	Melb.	M	51.1	1.1	6.4	1.1	22.3	11.7	4.3	2.1
		F	46.3	3.2	4.2	1.1	29.5	6.3	4.2	5.4
PLUM	Melb.	M	54.3	1.1	3.2	-	12.8	6.4	4.3	18.1
		F	55.8	2.1	2.1	-	12.6	11.6	5.3	10.6

ii. Fruit juice & Soft drinks

Results: In contrast, fruit juice intake has increased significantly on migration. However, less than 20% of Melbourne subjects consumed fruit juice; Spata elderly never consumed juice. Soft drink consumption was similarly low in both centres, with less than 30% of subjects reporting consumption. The majority of the elderly reported consuming less of these beverages in the past. There appears to be a trend emerging with increased fruit juice and soft drink consumption on migration.

Comparisons with reported data: In the study of 472 Greek migrants in Melbourne aged 30 and over (Kosmidis et al., 1980; Rutishauser & Wahlqvist., 1983), 27% of the subjects reported having consumed soft drinks on the day of the survey.

iii. Coffee

Results: Consumption of Greek coffee was similarly low (1-2 cups/day) in both Spata and Melbourne (except Spata women 70-79 consumed more). About 40% of the subjects reported having drunk more coffee in the past and 40% reported the same intake. Greek coffee intake has not changed much over the years in Spata and Melbourne. In contrast, consumption of instant coffee has increased significantly on migration. In Spata, instant coffee was never drunk. In Melbourne, 30% of subjects reported drinking 1-2 cups daily.

Comparisons with reported data: In the study of 472 Greek migrants in Melbourne aged 30 and over (Kosmidis et al., 1980; Rutishauser & Wahlqvist., 1983), 75% of the subjects reported having consumed coffee on the day of the survey, of which 44% reported drinking Greek coffee.

iv. Tea

Results: Consumption of tea has also increased significantly on migration. In Spata, only 10% of elderly consumed tea. In Melbourne, 50% of subjects reported drinking 2-4 cups of tea daily. Significantly more Melbourne elderly (45%) reported having drunk less tea in the past compared to Spata elderly (15%). In contrast, consumption of herb tea has decreased significantly on migration. In Spata, 50% of the elderly still drank herb tea regularly compared to only 10% of Melbourne elderly. More than 70% of the elderly reported having drunk more herb tea in the past.

Comparisons with reported data: In the study of 472 Greek migrants in Melbourne aged 30 and over (Kosmidis et al., 1980; Rutishauser & Wahlqvist., 1983), 40% of the subjects reported having consumed tea on the day of the survey.

v. **Wine & Beer**

Results: Consumption of wine has decreased significantly on migration (men only); Spata men consumed twice as much wine as Melbourne men. More than 80% of the men reported having drunk more wine in the past where as the majority of the women reported having the same intake. It appears that wine intake has decreased to a greater extent on migration than in Spata (men only). In contrast, Melbourne men consumed significantly more beer than Spata men. The majority of Spata elderly reported that their beer intake had not changed much over the years. In Melbourne, 40% of men reported drinking beer regularly. A greater proportion of Melbourne men indicated that beer consumption was less in the past than Spata men.

Comparisons with reported data: In the study of 472 Greek migrants in Melbourne aged 30 and over (Kosmidis et al., 1980; Rutishauser & Wahlqvist., 1983), 22% of the subjects reported having consumed beer and 24% wine on the day of the survey.

vi. **Oils & margarine**

Results: Olive oil consumption has also decreased significantly on migration. Only 70% of Melbourne elderly consumed olive oil daily compared with 99% of Spata elderly. In contrast, seed oils had increased on migration - 20% of subjects reported to consume seed oils daily. The majority of the Spata elderly reported that their oil intake had not changed much over the years. A greater proportion of Melbourne elderly reported consuming more olive oil in the past.

In contrast, margarine intake had increased in Melbourne elderly (10% used margarine daily) whereas it was never consumed in Spata. Significantly more Melbourne elderly reported having eaten less margarine in the past than Spata elderly. Butter consumption was also greater in Melbourne elderly (3.5% used butter daily) compared with Spata (0.3%). More than 70% of subjects reported having eaten more butter in the past.

Comparisons with reported data: Similarly to Melbourne elderly, in the Levkadian Migrant Health Study, siblings (and their families) who had migrated to Melbourne reported a lower frequency of olive oil consumption. About 13% of the migrants added

olive oil to food at the table compared with 46% of their counterparts who stayed on the island (sedantes). Similarly, 98% of sedantes used olive oil for cooking and salads compared with 70% of the migrants. Furthermore, sedantes never used margarine compared with 25% of migrants using margarine daily. In the case control studies from Greece, a similarly high proportion of subjects consumed olive oil daily (95%) compared with Spata elderly (99%). However, a greater percentage of subjects used seed oils (20%), margarine (10%) and/or butter daily (1.7%) compared with Spata elderly (<1%).

8.3.3 RECONSTRUCTION OF THE MEDITERRANEAN DIET CIRCA 1960'S

If one was to reconstruct the typical Mediterranean diet (of the South) circa 1960's, from the accounts given by elderly Greeks, it would look like this:

Meat: eaten about once a month (or even less), mainly lamb or goat, rarely beef.

Chicken: eaten more often than meat, a few times a month

Fish: about twice a week

Shellfish: about twice a month, mainly octopus, squid

Feta cheese: eaten almost daily

Milk: rarely drunk by adults

Yoghurt: about twice a week

Eggs: about twice a week

Pasta and rice: pasta was eaten more often than rice; pasta eaten at least once a week, rice less than once a week.

Bread: about 8 slices daily

Biscuits, cakes, pastries: biscuits (e.g. koulourakia) eaten more frequently than other pastries, few times a month. Cakes and pastries were mainly eaten on special occasions.

Sweets, sugar: sweets such as halva and spoon sweets were eaten on special occasions and sugar only a couple of teaspoons daily.

Legumes: twice a week (mainly in winter)

Nuts and dried fruit: mainly almonds, walnuts, roasted chickpeas, pumpkin seeds, sultanas, dried figs very often on weekly basis.

Mixed vegetable dishes and rice dishes: about twice a week, mainly in summer (replace legume dishes)

Pies with filo pastry: eaten about twice a month

Potatoes: a few times a week

Carrot, pumpkin, broccoli, cauliflower, silverbeet: about once a month

Lettuce/Cabbage: at least once a week (in season)

Wild greens (wild chicory, endives, and others): few times a week

Capsicum/Zucchini/cucumber: few times a week

Tomato: daily (fresh in summer, paste in winter)

Onions: daily

Olives: daily

Citrus fruits: mainly lemons, rarely oranges

Figs, grapes, watermelon, canteloupe: almost daily (in season)

Apples, pears: less often than other fruits

Stone fruit: almost daily (in season)

Greek coffee: 1-2 cups daily

Herb tea: few times a week (mainly in winter)

Olive oil: few tablespoons daily

Wine: about 4 glasses daily

This dietary pattern is consistent with the 'Optimal Traditional Mediterranean Diet Pyramid' circa 1960's presented at the 1993 International conference on the diets of the mediterranean, Harvard School of Public Health (see section 8.1.2).

8.4 DISCUSSION

The heart of the traditional Mediterranean diet (i.e before the 1960s) can be defined as vegetarian - foods from plant sources formed the core of the diet, while foods from animal sources formed the fringe of the diet. Vegetables were used as an integral part of meals, not served on the side and meat was used as a condiment (Spiller, 1993). A similar historical account was given by elderly Greeks in the current study and recently at a conference organised by the Harvard School of Public Health on Mediterranean diets. Meat was eaten once a month or less, chicken a few times a month, fish a couple of times a week and the rest of the days of the month comprised a variety of legume, vegetable and cereal based dishes.

Studies in Greece have shown a progressive 'westernisation' of the Mediterranean diet over the past 20 years. The two most important changes observed have been the marked increase in meat and decrease in legume consumption (Trichopoulou 1993a,b; Kafatos et al., 1991). The significance of these dietary changes to health require further investigation. Until we understand all the protective factors of any dietary pattern, it may be advisable to promote the whole eating pattern rather than only one aspect of that diet.

Compared to Greeks in Greece, studies on Greek migrants (not elderly) in Australia have generally reported a *decreased* intake of fish, legumes, bread, pasta, vegetables (especially leafy greens), fruit, eggs, cheese, olive oil and wine and an *increased* intake of beef, lamb, chicken, milk, yoghurt, margarine, soft drinks, ice-cream, yellow cheese, beer, sugar products and tea (Loftus Hills 1968; Kosmidis et al., 1980; Rutishauser and Wahlqvist, 1983; Armstrong et al., 1983; Powles et al., 1980). Most of these changes have been reported to occur in the first year of migration (Powles et al., 1988a,b).

In this study, migrant elderly also had a lower intake of fish, pasta, bread, olive oil, feta cheese, water, herb tea and wine, compared to Spata elderly. However, egg, fruit, legume and vegetable intakes were not lower in migrant elderly. Similarly, consumption of beef, chicken, milk, yellow cheese, margarine, soft drinks, ice cream, sugar products, tea, instant coffee were greater in Melbourne Greeks but yoghurt, rice and lamb intakes were similar to Spata elderly.

These differences with other studies could be related to the age group of the migrants studied or to the possibility that the diets of Greeks (in Greece and Australia) may have changed since these studies were conducted more than 10 years ago. Substantial changes in the food consumption patterns of the Greek population have been reported over the past 10-20 years. The major changes include an increased intake of meat, milk products, sugar products, animal fats, margarines and polyunsaturated fats and decreased intake of cereals, legumes, vegetables, fruits, eggs and olive oil. Fish intake has remained stable (Trichopoulou and Efstathiadis, 1989; FAO, 1985; Kafatos et al., 1991).

Consumption of 70 traditional foods/dishes, of which 70% were plant foods, were scored to give an index of adherence to the traditional Mediterranean diet. It appears that 'westernization' of the Greek diet has occurred not only on migration but also, to a lesser extent, in rural Greece. Although Spata elderly had a significantly higher mean traditional score than Melbourne Greeks, their score was still only 50% of the maximum achievable score (in Melbourne it was only 38%). Traditional foods, mainly legume, vegetable dishes, and bread appeared to have been replaced by non-traditional meat dishes in Spata. In Melbourne, meat dishes replaced wild greens, bread, certain mixed vegetable dishes, olive oil and wine.

According to the accounts given by the elderly Greeks in Melbourne, the most drastic changes to their diet occurred in the first 15 years in Australia. These changes were associated with the lack of familiar foods in the new environment and more importantly,

the status ascribed to meat as a sign of affluence and legumes as a sign of poverty. Meat was introduced into their diets on a daily basis. The most consistent description from all study subjects was the recall of the smell of meat being barbecued on most days in suburbs where Greeks were located. Meat was relatively cheap in Australia and was a sign that they were doing well in the 'new country'. The foods which were replaced by meat were mainly legumes and bread.

However, the elderly subjects were quick to point out that they continued to eat most of their traditional dishes (not as frequently), including legumes and that serving sizes were much larger. Even though they ate markedly more meat, they also appeared to continue eating large serves of vegetables and salads (dressed in a lot of olive oil). Resulting in a plant to animal ratio that was still relatively high (including total calories), but lower than what it was in Greece (see chapter 9). Which is in contrast to the typical Australian meal where a slab of meat is served with a few tablespoons of vegetables. This may have been the key to the continued health advantages of Greeks. But, such large food servings would ultimately lead to obesity, in an environment where exercise was no longer part of their work pattern (see chapter 11).

In the past 10-20 years it appears that this first generation of migrants began to return or to prefer their traditional mediterranean diet into old age. Meat and butter intake appears to have decreased (but not to pre-migration levels) and traditional foods, such as fish, legumes, leafy greens, pasta, yoghurt, olives and olive oil, to have increased. Unfortunately, bread intake has remained low and new foods have been introduced such as margarine, vegetable oils, fruit juices and soft drinks. Fortunately, the intake of pickled/salted/cured foods have also remained low (possibly explaining the reduced stroke and stomach cancer rates on migration) (Young, 1986).

The majority of participants in Greece and Australia also reported that their children and particularly their grandchildren were determining the type of foods served in the home. These foods tended to be non-traditional, rarely legumes and almost always meat based dishes. They expressed grave concern for the health of their family and that this was a major barrier affecting their intake of traditional foods. This explains the phenomenon of food intakes that are not compatible with the food beliefs (Kouris et al., 1991).

8.5 SUMMARY

The **traditional Mediterranean diet** (i.e before the 1960s) was **reconstructed** from the accounts given by elderly Greeks to comprise:

- a) plentiful fruits, vegetables, legumes (twice a week), bread (about 8 slices daily), pasta/rice (once a week) and nuts (weekly)
- b) red meat (lamb) once a month and white meat (chicken) once a week
- c) fish once or twice a week
- d) white cheese (daily), milk (rarely), yoghurt and eggs few times a week
- e) sweets on special occasions
- f) wine 2-4 glasses daily
- g) olive oil as principal fat, 2-4 tablespoons daily, rarely butter
- h) Greek coffee 1-2 daily (rarely instant coffee) & herb tea daily (rarely other tea)

Intake of the following foods were reported to have changed **on arrival to Australia** (1950's):

increased intake: lamb, beef, chicken, milk, yellow cheese, butter, vegetable oils;

decreased intake: fish, eggs, yoghurt, legumes, vegetables, wild greens, pickled vegetables, bread, pasta, rice, olives, olive oil, white cheese.

After 15-20 years, consumption of the following foods had begun to change again (1970s):

increased intake: pasta, legumes, yoghurt, vegetables, leafy greens, white cheese, olive oil, olives, margarine;

decreased intake: meat, chicken, eggs, yellow cheese, butter;

no further change: pickles, bread.

Consumption of traditional foods was low in both Spata and Melbourne. The mean score in Spata (35) represented 50% of the maximum achievable score compared with only 38% (27) for the Melbourne Greeks. Spata elderly consumed significantly more traditional foods than Melbourne elderly. Furthermore, a significantly greater proportion of total food variety in Spata was obtained from traditional foods (80%) compared with Melbourne Greeks (50%). It appears that the variety of traditional foods consumed has decreased on migration. However, for certain traditional foods, Melbourne elderly consumed a greater quantity e.g legumes

Differences in **absolute intake** of foods between Spata and Melbourne can be summarised as follows:

a lower intake on migration **a greater intake on migration** **the same intake**

*fish, goat, pasta,
bread, feta cheese,
potatoes, cabbage,
egg plant, artichokes,
figs, stone fruit,
okra, wild greens,
water, wine, pickles
olive oil, herb tea
Greek coffee
mixed vegetable dishes**

*beef, chicken, milk,
breakfast cereals,
yellow cheese, lettuce,
cauliflower, broccoli,
carrot, capsicum, garlic
onions, green beans,
spinach, silverbeet
pumpkin, olives*,
legumes* (lentils, haricot)
vegetable & rice dishes*
pies* (spinach/cheese/pasta)
bananas, tropical fruit,
apples, citrus fruit,
sugar products, beer,
fruit juice, icecream,
instant coffee, tea,
margarine, poly. oils,*

*lamb, rabbit, yoghurt,
egg*, rice, chicory,
watermelon*
cucumber*,
zucchini*, grapes*
tomatoes*,
cantaloupe**

* The differences in absolute intake between Melbourne and Spata correspond closely to the qualitative assessments made by Melbourne Greeks on changes to food intake that had occurred on migration. The only exceptions being for those foods marked with an "*" which were reported to have decreased on migration when compared with intake prior to the 2nd World War or premigration years i.e eggs, legumes, cereals, vegetarian dishes, tomatoes, cucumber, zucchini, watermelon, canteloupe, grapes, olives.

Frequency of consumption was described as follows:

Melbourne Greeks consumed chicken 1-2 times a week compared with <1 week in Spata (overall 15% non-consumers). Lamb consumption was similar in both centres (<1 week, 40% non-consumers). Lamb consumption was reported to have decreased in recent years in Australia. Current intake of goat was low in both Spata (50% non-consumers) and Melbourne (80% non-consumers). In Melbourne, only 25% of the elderly were did not consume beef and about 50% consumed beef 1-2/week. In Spata, the majority of subjects consumed beef less than once a week and about 50% were non-consumers.

Although the current frequency and mean quantity of fish intake was similar in both Spata and Melbourne (60% 1-2 times/week), a greater proportion of Melbourne elderly were non-consumers (20%) compared with Spata elderly (7%). A greater proportion of

Melbourne elderly never consumed squid/octopus (70%), compared to Spata elderly (50%). A significantly greater proportion of Melbourne elderly were non-consumers (40%) of feta cheese compared with Spata elderly (14%). About 50% of Greek elderly were currently non-consumers of milk. However, mean intake of milk was significantly greater in Melbourne. In contrast, yoghurt was very popular in the past, but intake appears to have dropped markedly in both Spata and Melbourne - 50% of subjects were non-consumers. Currently, about 30% of subjects did not consume eggs and consumers reported a frequency of less than once a week.

Although current mean intake of pasta was similar in both centres including the percentage of non-consumers (7%). However, frequency of consumption was significantly different; 50% of Melbourne elderly consumed pasta once a week or less and 50% of Spata elderly consumed it once a week or more. The portion sizes were greater in Melbourne. Consumption of cakes, biscuits and pastries was similarly low in both Spata and Melbourne (70% non-consumers). Elderly reported eating legumes at least twice a week in the distant past. Melbourne elderly consumed significantly more legumes than Spata elderly - mainly due to a larger portion size rather than greater frequency (87% of all subjects consumed legumes 1-2/month). Overall, intake of vegetable & rice dishes appears to have decreased significantly in both centres, but to a lesser extent in Melbourne. Melbourne elderly reported a greater frequency (twice/month) and larger portions than Spata elderly (once a month). In contrast, intake of traditional mixed vegetable dishes appear to have decreased more in Melbourne, especially eggplant, okra and artichoke dishes (30-50% non-consumers) compared to Spata (10-20% non-consumers). Frequency of consumption was about 1-2 times a month in both centres.

Subjects reported having eaten more traditional spinach and cheese pies in the past. Melbourne elderly consumed more of these pies than Spata elderly, mainly due to larger portions rather than greater frequency (once a month). About 30% of subjects were non-consumers. Mousaka (eggplant pie) (75% non-consumers) and pastichio (spaghetti pie) (55% non-consumers) were eaten less than once a month by the elderly in both centres. Spata elderly consumed potato more than twice a week (20% non-consumers) and Melbourne elderly less than once a week (50% non-consumers). Broccoli was consumed 1-2/month (35% non-consumers) in Melbourne compared to 100% non-consumers in Spata.

Cauliflower was also consumed 1-2/month by Greeks in both centres (20% non-consumers). Lettuce was more frequently consumed in Melbourne (>3/week, 6% non-consumers) compared to Spata (<3/week, 20% non-consumers). Silverbeet was also

more frequently consumed by Melbourne elderly (2 times/month, 35% non-consumers) compared with Spata elderly (>80% non-consumers). Capsicum was consumed >1/week in Melbourne (16% non-consumers) compared to 1/week in Spata (40% non-consumers). In Melbourne, cabbage was consumed 1-2/month (30% non-consumers) compared with 1/week in Spata (18% non-consumers). Wild greens were eaten more frequently by Spata elderly (1/week, 20% non-consumers) than Melbourne elderly (<1/week, 50% non-consumers). Pickled vegetables were more frequently consumed by Spata elderly. Chicory/endive intake appeared to have increased in both Spata and Melbourne (20% non-consumers, 1/week) due to increased availability. Mean intake was similar in both centres. Mean intake of zucchini, tomato and cucumber were similar in both centres. However, 80% of elderly indicated that their intake has decreased over the years. Olives were currently consumed >1/week (30% non-consumers), tomatoes 3-4 times/week (5% non-consumers), cucumbers about 2/week (15% non-consumers) and zucchini 1/week (10% non-consumers).

Citrus fruits were eaten >3 times/week (25% non-consumers) and apples 4/week (20% non-consumers) by Melbourne elderly. Also, about 40% of the elderly in Melbourne never consumed bananas compared with >80% of Spata elderly. Melbourne elderly consumed stone fruit <3/week compared with >4/week for Spata elderly (overall 30% non-consumers). Figs were consumed >4/week but significantly more Melbourne elderly were non-consumers (40%) compared with Spata elderly (28%). Pears were not as popular as apples (<3/week, 25% non-consumers). Intake of watermelon, cantaloupe and grapes was not significantly different between centres. Grapes were eaten >4/week (only 15% non-consumers), and cantaloupe about once a week (20% non-consumers). Watermelon was consumed >2/week in Spata (20% non-consumers) and 2/week in Melbourne (10% non-consumers).

Consumption of sugar was similarly low (2-3 teaspoons/day) in both Spata and Melbourne. Less than 20% of Melbourne subjects consumed fruit juice; Spata elderly never consumed juice. Soft drink consumption was similarly low in both centres, with less than 30% of subjects reporting consumption. Consumption of Greek coffee was similarly low (1-2 cups/day) in both Spata and Melbourne (except Spata women 70-79 consumed more). Greek coffee intake has not changed much over the years in Spata and Melbourne. In contrast, consumption of instant coffee has increased significantly on migration. In Spata, instant coffee was never drunk. In Melbourne, 30% of subjects reported drinking 1-2 cups daily. In Spata, only 10% of elderly consumed tea, but 50% drank herb tea. In Melbourne, 50% of subjects reported drinking 2-4 cups of tea daily and only 10% drank herb tea.

