

SureStart Brunswick

**Fruit For Nurseries
Scheme**

(Oral Health Promotion)

Spotlight Evaluation

Report

Commissioned by:

Sure Start Brunswick
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1: Executive Summary

1.1 Introduction

Sure Start Brunswick funds the Fruit for Nurseries scheme (FFN) which provides free fruit to children aged 0-4 years attending nine nurseries, playgroups, and parent and toddler groups in the Brunswick area. Sure Start Brunswick commissioned this evaluation to help them improve and further develop the FFN scheme.

The main purpose of this evaluation is to investigate what difference FFN is making to children eating more healthily in nurseries and at home. For the evaluation, 15 staff members were interviewed, and 165 local parents took part in a survey, face-to-face interviews and focus group discussions.

1.2 Findings from nursery staff

- All nurseries were highly satisfied with the amount, variety and quality of fruit delivered to them. A few suggested that more exotic fruits could be included more often.
- As a result of FFN children are now eating fruit every day in nurseries and/ or are eating a wider variety of fruit.
- Nurseries estimate that almost all children are eating the fruit. Children who at first refuse fruit soon join in as they get used to the nursery routine. Nursery staff also encourage children to taste fruit and carry out a range of fruit-themed play and learning activities.
- Many nurseries are now providing fruit as the only snack for children and are not allowing any other snacks to be brought into the nursery. As a result children are overall eating fewer, less-healthy snacks such as biscuits.
- Having a regular supply of a variety of fruits has helped nursery staff to promote fruit more actively and teach children more about healthy eating.
- As a result of having a fruit snack time, children are talking and socialising more than before at snack times. Since getting free fruit in nurseries, staff have said they have learnt more about fruit and become more aware of healthy eating.

1.3 Findings from parents

- Most parents knew that nurseries give children fruit but, less than half knew that Sure Start Brunswick provided the fruit to nurseries.

- Up to a third of parents said that since going to nursery, and eating fruit there, their child is asking for fruit more often at home, is eating larger amounts and a wider variety of fruit. The proportion of children eating fruit everyday or most days at home has increased by 10% since children started at their nursery. Most commonly children are eating fruit at home as a snack between meals.
- Most parents are aware that fruit and vegetables are good for health. A fifth of the parents did not know that the government's Department of Health recommends eating five portions of fruit and vegetables a day.
- There was a considerable level of uncertainty among many parents about the size of a child's portion of fruit.
- More than two thirds of the parents did not know that as well as fresh fruit and vegetables, dried, frozen, juiced and tinned fruit can be included in the five portions a day.
- Parents most commonly named three things that discouraged them from buying more fruit: the cost of fruit, poor quality and fruit going off too quickly.
- Parents most commonly shopped for fruit 2-3 times a week, mostly in supermarkets and less than half of the parents shop at market stalls.
- More than two thirds of the parents walk to and from shops, more than a third use their own car and only 15% use supermarket home delivery services.
- A third of the parents regularly find themselves short of money to spend on fruit and, on these occasions, they tend to buy smaller quantities of fruit and less varieties.
- Almost half of the parents said their child ate less-healthy snacks such as biscuits, crisps and chocolate, on a daily basis or most days of the week.
- More than a third of the parents have, in the past, successfully cut down on the amount of less-healthy snacks they offer to their children by giving fresh or dried fruit instead. A third of the parents find it difficult to refuse their children less-healthy snacks.
- Between around a quarter to more than a third of parents have used sweets, chocolate and crisps to reward their children for good behaviour, to stop their tantrums, to get them to do as they say and to keep them quiet when they are busy.
- More than half of the parents have never taken their children to the dentist for regular check-ups and more than a quarter said their children brush their teeth only once a day.
- More than half of the parents who said their children brush twice daily, are not brushing at the recommended times, that is, after breakfast and after the bedtime drink.
- The majority of parents giving squash or cordial drinks to their children are using the sugar-free variety.

1.4 Main areas for improvement

FFN deliveries

The FFN Project should consider the following suggestions for improving the variety of fruits delivered:

- more regular delivery of fruits that are popular with children such as grapes and satsumas
- less frequent delivery of less popular fruits such as pears
- delivery of a wider range of exotic fruits popular in other countries
- Providing extra fruit to nurseries and encourage all nurseries to give out fruit to children to eat on their way home. This may help to increase FFN's impact in the home.
- To ensure that the 2.5 fruits per child target is reached across all nurseries, FFN should ensure monitoring is reviewed to accurately reflect the numbers of children attending each nursery per week

Provision of less-healthy snacks in nurseries

Of the nine FFN scheme nurseries, five are now offering fruit only snacks but four nurseries continue to offer supplementary or alternative snacks, such as biscuits. Sure Start Brunswick should consider working with these nurseries to help them identify ways of further limiting their provision of less-healthy snacks.

Awareness of fruit among parents

- Sure Start Brunswick should consider raising awareness of FFN as a Sure Start Brunswick health initiative for local children. Under half of the parents were aware that Sure Start Brunswick provides the fruit to nurseries.
- Local parents also need further information about five-a-day, in particular the size of a child's portion, and the types of fruit and vegetables that can be included as a portion. More than two thirds of parents could not correctly identify that tinned, frozen, dried and juiced fruit and vegetables can be included in the five-a-day.

Barriers to buying more fruit

- 17% of parents indicated they had difficulties shopping due to heavy bags and dealing with pushchairs. A small proportion of parents used home delivery services (15%). Sure Start Brunswick should investigate access to local home delivery services. However, parents on low income may face barriers to using home delivery services such as a lack of access to the internet and credit cards.
- Parents were most commonly discouraged from buying more fruit because of poor quality, fruit going off too soon and the expense.
- The cost of fruit is a key barrier to buying more fruit for the home. A third of parents regularly find themselves short of money for fruit and as a result buy less fruit or fewer varieties.
- 44% of parents were buying fruit from market stalls which tend to be cheaper and more variable in quality.

Sure Start Brunswick should consider providing specific advice and guidance to parents on:

- where to shop locally for good quality, lower cost fruit.
- how to select good quality fruit
- how best to store it so it will last longer
- different ways of using the fruit as snacks and in cooking.
- how to spread out fruit shopping across the week
- how to minimise fruit being wasted

Advice on Parenting

Sure Start Brunswick should consider offering parents advice on parenting or parenting skills courses. One third of parents find it difficult to refuse their children less-healthy snacks such as sweets, chocolate and crisps. Half of the parents had used these snacks as a reward for their child's good behaviour. More than a third of the parents had used them to keep their child occupied while they were busy. A fifth of the parents had used them to either get their child to comply with their requests, or to stop them crying, or to stop or prevent their child's tantrums.

Dental Health Promotion

Sure Start Brunswick should encourage more parents to take their children to the dentist for regular check-ups. More than half the parents said their child had never been to the dentist. Sure Start Brunswick should increase awareness of tooth brushing and dental health among children in nurseries and among parents. More than a quarter of parents indicated their child brushed their teeth only once a day. Less than half of those brushing twice a day, brush at the recommended times, that is, after breakfast and after the bedtime drink.

2: Introduction and evaluation methods

2.1 Sure Start

Sure Start is the cornerstone of national government policy tackling child poverty and social exclusion. Sure Start aims to improve the health, education, physical and emotional development of children aged 0-4 years so that they can flourish when they start school. Sure Start also supports families by developing childcare, education and employment opportunities for parents and carers.

Nationally, there are over 500 local Sure Start programmes situated in areas of deprivation. All local programmes are developed around the needs of local families and involve them in programme planning and implementation. Local service providers are encouraged to develop more effective ways of working together to meet local needs.

2.2 Fruit for Nurseries Scheme (FFN)

FFN is part of Sure Start Brunswick's programme of initiatives that aim to improve the health of children. Sure Start Brunswick covers the Brunswick ward, and parts of Faraday and Camberwell wards in the London Borough of Southwark. From early 2002, FFN has been delivering a variety of good quality, seasonal fresh fruit to children attending nurseries, playgroups and parent and toddler groups in the Brunswick area. FFN is supported by other aspects of the Sure Start Brunswick programme, particularly through the work of the community dietician and the community oral health promoter.

When this evaluation began in autumn 2003, FFN was one of a relatively few initiatives that provided free fruit to children under the age of 4 years. The National School Fruit Scheme which began in 2000 provides one fruit a day to older children in schools aged between 4 to 6 years.

The National School Fruit Scheme is part of the government's five-a-day programme which aims to improve nutrition and reduce the risks of chronic diseases such as cancer, heart disease and other conditions such as obesity. It recommends an intake of at least five fruit and vegetables a day. Although FFN is not directly a part of these national initiatives it is closely linked to them and shares their aims.

Free fruit in nurseries is due to become more common as the government embarks on its Healthy Start scheme later this year. The Healthy Start scheme reforms the Welfare Food Scheme that supports some of the poorest pregnant women and families through providing milk vouchers. The reforms will introduce weekly vouchers which can be used to purchase fresh fruit as well as milk. The reforms will also mean that children in nurseries, who have been receiving free milk, will now be entitled to a choice of free milk or fruit.

Sure Start Brunswick's FFN scheme is described in detail overleaf.

Fruit for Nurseries Scheme Description
<p>Strategic Aim To improve the health of children under the age of four years</p>
<p>Target Group Children aged 0-4 years attending nurseries, playgroups, parent and toddler groups in the Sure Start Brunswick area</p>
<p>Objective</p> <ul style="list-style-type: none"> · To provide a wide variety of high quality, free, fresh fruit. · To deliver the fruit directly to the nurseries <p>Targets:</p> <ul style="list-style-type: none"> · To make 2 deliveries per week per nursery · To provide each child with 0.5 fruit per day or 2.5 fruit per week
<p>Settings Nine nurseries, playgroups, and a parent and toddler group within the Sure Start Brunswick area</p>
<p>Specific Aims</p> <ul style="list-style-type: none"> · To introduce children to a wide variety of fruit · To increase children's consumption of fruit in nurseries · To decrease children's consumption of less-healthy snacks in nurseries · To influence nurseries to promote teaching & learning on fruit & healthy eating · To influence parents to increase children's consumption of fruit at home · To influence parents to reduce children's consumption of less-healthy snacks
<p>Resources</p> <ul style="list-style-type: none"> · Supplier's cost per fruit delivered = £0.22 (inclusive of delivery) · Dental Health Promotion at Kings Healthcare NHS Trust runs the FFN scheme on behalf of Sure Start Brunswick.
<p>Need for the FFN Scheme</p> <ul style="list-style-type: none"> · Eating five portions of fruit and vegetables a day is linked to a reduction of risks associated with conditions such as heart disease, cancer, obesity, childhood respiratory illness, asthma and dental decay. · In children, eating more fruit has been linked to an increase in energy and concentration levels at school and an improved school ethos. · Children from families living on low income, and in areas of deprivation such as Brunswick, are less likely to eat the recommended levels of fruit and vegetables than those living in higher income families.

2.3 Purpose of the evaluation

The impact of Sure Start programmes are being evaluated nationally by the National Evaluation of Sure Start (NESS). However, all Sure Start programmes are expected to evaluate their own work on a local programme level and are also encouraged to evaluate at an individual project level. Sure Start Brunswick selected its FFN Scheme for evaluation as it is their longest standing local initiative. An independent evaluation consultant was commissioned to carry out the evaluation.

Sure Start Brunswick commissioned the evaluation for the purposes of learning more about how FFN is working, and to gather information to assist the future development of the scheme.

2.4 Evaluation aims

The aims of the evaluation are to:

- Describe the FFN scheme's impact on the nursery environment, practices and policies.
- Investigate FFN scheme's impact on children's consumption of fruit both at nursery and at home.
- Explore potential barriers, and facilitators, to healthier diets among children.
- Identify current knowledge and behaviours relevant to the promotion of 'five-a-day' and dental health.

2.5 Involvement of stakeholders

For any Sure Start evaluation, the involvement and participation of key stakeholders is essential. In the evaluation of FFN, stakeholders have participated in the following ways.

- An evaluation sub-group comprising key stakeholders including Sure Start Brunswick Programme staff, local health providers and local parents was set up. The sub-group held meetings and communicated regularly with the evaluator to steer the evaluation.
- Three parents were recruited as volunteer interviewers and they went on to conduct interviews with local parents.
- Nursery staff participated in distributing survey questionnaires to parents.
- Sure Start Brunswick core staff managed the evaluation, guided the methodology and provided essential administration and support.
- The Sure Start Brunswick Programme partners such as the community dietician, community oral health promoter and manager, and a clinical psychologist all assisted in clarifying the purpose of the evaluation and the design of data collection tools.

2.6 Evaluation methods

The evaluation was carried out over a period of seven months from September 2003 to April 2004. The evaluation began with a period of initial meetings with relevant staff to gather background information. This was followed by a half-day workshop with the evaluation sub-group to generate a detailed description of FFN, clarify the evaluation needs of different stakeholders' and agree the methodology. The following research methods were used for data collection:

- focus groups with parents
- face-to-face interviews with nursery staff and parents
- self-complete survey for parents

Focus groups with parents

Sure Start Brunswick invited local parents to participate in two focus groups held in local playgroup venues in November 2003. Both focus group discussions lasted 1.5 to 2 hours and were tape-recorded with consent, transcribed and analysed using basic thematic techniques. All participants were offered gift vouchers to cover their expenses and time.

Ten parents participated, all female, ranging in age from 18 to 44 years. Most were in their mid-30s and two were under the age of 25 years. The majority of participants were unemployed with a third in receipt of unemployment related benefits. Four participants were single parents. Over half the participants were White, three were Black and one was from a mixed ethnic group.

The information gathered was used in a variety of ways to:

- scope the evaluation
- inform the design of questions on the self-complete survey and the interviews with parents
- provide qualitative data for the evaluation report.

Face-to-Face Interviews with Nursery Staff

To gather information on the process and impact of FFN in nurseries, 15 nursery staff from all nine nurseries participating in the scheme were interviewed using a semi-structured interview schedule. Interviews took place in November 2003.

All interviews were tape-recorded with consent. Tape recordings were transcribed and analysed using basic thematic techniques. All staff were assured confidentiality and anonymity.

The nine nurseries participating in the FFN scheme are:

- Brunswick Park School Nursery
- Butterfly Playgroup
- Grove Nursery School
- Kinderella Playgroup
- Ngozi Day Nursery
- Oliver Goldsmith Primary School Nursery
- Our Precious Ones Day Nursery
- Rainbow Playgroup
- Salvation Army Parent and Toddler Group

Face-to-Face Interviews with Parents

During February to March 2004, three volunteer parent interviewers were recruited to carry out semi-structured interviews with parents. Following a half-day training session on interview skills, they carried out 40 interviews with local parents at nursery and playgroup venues in the Brunswick area.

The volunteer interviewers were given certificates of attendance for the training session and were offered gift vouchers to cover their expenses and time.

The interviews were analysed by hand using basic data analysis techniques. Respondents' age range was 24 to 56 years, mean age 34.5 years. The proportion of respondents who were not working or studying was 16%, and 12% were in receipt of unemployment related benefits. The proportion of single parents was 11%. Over half the respondents were White, 29% Black, 8% Asian, and 3% Chinese.

Self-complete survey of parents

During February-March 2004, a structured self-complete survey for parents was distributed to all nine nurseries, along with clearly labelled and secure return boxes. Nursery staff handed the survey to parents dropping off or collecting their child from the nursery. Parents were requested to post completed surveys into the return box that was prominently displayed near the nursery entrance. To stimulate interest in the survey a small prize draw of gift vouchers was offered.

A total of 368 surveys were distributed and 115 completed surveys were returned giving a response rate of 31%. Survey data was entered into a computer database using an up-to-date computer software package specifically designed for social science research data (SPSS windows version 11). The survey data was analysed using basic statistical techniques.

Of the 115 survey respondents most were female and 10% were male. The age range was 18-55 years with a mean age of 34 years. A third (34%) of respondents were single parents. Under half of all respondents (45%) were not working or studying and 28% were in receipt of unemployment related benefits. Over half the respondents were White, 42% Black British, 3% mixed and 2% were Asian.

Survey respondents were asked their child's age and how long they had been attending that

nursery. Children's age ranged from 7 to 53 months. Under half (48%) were between 3 to 4 years old, 6% were one year old or less, 15% between 2 to 3 years, and 13% were over 4 years. Over half the children had been attending nursery for 6 months or more, 28% for 3 to 6 months, 7% for 1 to 2 months and 13% had been attending for less than a month.

2.7 Sample of parents

A total of 165 parents responded to this evaluation by taking part in focus groups, interviews and the self-complete survey. They represent a self-selecting sample. Brunswick was chosen as a Sure Start area as it scores high on all indices for deprivation. This is reflected in the demographic background of the sample.

- Under half the sample were neither working or studying
- Over a quarter were in receipt of unemployment related benefits
- One third were single parents
- Their average age was 34 years with 10% under the age of 25 years.
- Almost half the sample were from minority ethnic backgrounds, mostly Black African and Black Caribbean.

3: Areas for improvement

FFN deliveries

In order to be confident that it is reaching its target of 2.5 fruits per child across all nurseries, FFN should ensure monitoring is reviewed to reflect more accurately the actual numbers of children attending each nursery per week.

FFN should also review its target in light of the government's Healthy Start Scheme that will be introduced at the end of 2004 and which entitles children at nurseries to one fruit a day.

FFN should consider the following suggestions, from a few nurseries, for improving the variety of fruits delivered:

- more regular delivery of fruits that are popular with children such as grapes and satsumas
- less frequent delivery of less popular fruits such as pears
- delivery of a wider range of exotic fruits popular in other countries

FFN should also consider providing extra fruit to nurseries and encourage all nurseries to give out fruit to children to eat on their way home. This may help to increase FFN's impact in the home, and assist parents not to bring alternative snacks when picking up their child from nursery. Parents at the focus groups suggested this as an area for improvement. Taking into account the potential cost implications for Sure Start Brunswick, parents at focus groups also suggested parents be encouraged to take their child shopping to buy a fruit to take into nursery.

"Sometimes when they come out of nursery they give them a fruit to take home. Let that be a continual thing every single day.

"That might be expensive but, maybe every Friday they get a little fruit bag to take home."

"How about getting kids to buy a fruit and take it into nursery. Kids like that and get excited about it."

Provision of less-healthy snacks in nurseries

Of the nine FFN scheme nurseries, five are now offering fruit only snacks but four nurseries continue to offer supplementary or alternative snacks, such as biscuits. Sure Start Brunswick should consider working with these nurseries to help them identify ways of further limiting their provision of less-healthy snacks.

Awareness of fruit among parents

Sure Start Brunswick should consider raising awareness of FFN as a Sure Start Brunswick health initiative for local children. Under half of the parents were aware that Sure Start Brunswick provides the fruit to nurseries.

Local parents also need further information about five-a-day, in particular the size of a child's portion, and the types of fruit and vegetables that can be included as a portion. More than two thirds of parents could not correctly identify that tinned, frozen, dried and juiced fruit and vegetables can be included in the five-a-day.

Barriers to buying more fruit

Parents were most commonly discouraged from buying more fruit by the poor quality of fruit, fruit going off too quickly and the expense of fruit. A large proportion of parents (44%) were buying fruit from market stalls which tend to be cheaper and more variable in quality. Sure Start Brunswick should consider providing specific advice and guidance to parents on:

- where to shop locally for good quality, lower cost fruit.
- how to select good quality fruit
- how best to store it so it will last longer
- different ways of using the fruit as snacks and in cooking.
- how to spread out fruit shopping across the week
- how to minimise fruit being wasted

Parents at the focus groups have indicated that they would find some of the above useful.

“Sometimes you know things but you don’t do it at home till somebody says. Leaflets or something written down, just to encourage us. Sometimes we need encouragement.”

“Sure start could make a little book on all sorts of recipies, packed lunches, or meal ideas. Proper, simple, quick food with fruit and vegetables. Things that you can stick in the freezer and pull out.”

A sixth of the parents (17%) indicated they had difficulties shopping. Most commonly they cited carrying heavy bags and dealing with push-chairs as the main difficulty. Generally, there was a small proportion of parents that used home delivery services (15%). Sure Start Brunswick should further investigate access to local home delivery services with a view to encouraging more parents to use them regularly. However, parents on low income may face barriers to using home delivery services such as a lack of access to the internet and credit cards.

The cost of fruit is a key barrier to buying more fruit for the home. A third of parents regularly find themselves short of money for fruit and as a result buy less fruit or fewer varieties. The government's Healthy Start scheme, being introduced later this year, will provide low income families with vouchers to purchase fruit. Sure Start Brunswick should investigate other potential options to further assist families on low income. For example, local fruit and vegetable buying syndicates or cooperatives that help parents on low income to save on the cost of fruit.

“When I walk into the supermarket, the first thing my three children do is jump at the fruits, and I find it a bit expensive to buy them all, you know, because they want the same kind they have in schools.”

“I found it a bit expensive to buy a variety so I would stick to just apple.”

“If you’ve got a £25 pound budget and you’ve got to buy shopping for the week you can’t afford to spend £10 on fruit.”

Advice on Parenting

Sure Start Brunswick should consider offering parents advice on parenting or parenting skills courses. One third of parents find it difficult to refuse their children less-healthy snacks such as sweets, chocolate and crisps. Half of the parents had used these snacks as a reward for their child's good behaviour. More than a third of the parents had used them to keep their child occupied while they were busy. A fifth of the parents had used them to either get their child to comply with their requests, or to stop them crying, or to stop or prevent their child's tantrums.

Dental Health Promotion

Sure Start Brunswick should encourage more parents to take their children to the dentist for regular check-ups. More than half the parents said their child had never been to the dentist. Sure Start Brunswick should increase awareness of tooth brushing and dental health among children in nurseries and among parents. More than a quarter of parents indicated their child brushed their teeth only once a day. Less than half of those brushing twice a day, brush at the recommended times, that is, after breakfast and after the bedtime drink.

4: Nurseries' satisfaction with FFN

4.1 Delivery

There was a high level of satisfaction with deliveries with no reports of a missed delivery. Most nurseries were able to recall a rare late delivery or delivery on days when the nursery was closed. However, these occurred when the scheme began and were largely due to the supplier's lack of familiarity with the nursery locations, opening times and term dates.

Eight nurseries receive two deliveries of fruit on Mondays and Wednesdays. One parent and toddler group that is closed on Mondays receives a Wednesday delivery only. The times of the deliveries are appropriate and convenient for the majority of the nurseries. The only slight difficulty is that a few nurseries have to be mindful of keeping back some fruit at the end of the week to ensure they have enough fruit for children attending the Monday morning session or Tuesday morning session if they were closed on a Monday. However, no nurseries suggested they wanted delivery times to be changed.

"It's just a ritual now, on a Friday we keep a certain amount of apples over for the Monday morning. Otherwise the children wouldn't have fruit for that session because we don't get the delivery till late on a Monday."

4.2 Amount of fruit

All nurseries reported a high level satisfaction with the amount of fruit received. They had no difficulties in stretching the fruit across the week. A few nurseries reported never having fruit left over by the end of the week. Others reported that fruit was left over, from time to time, due to drops in numbers of children as they leave the nursery to start school or because of illness related absences. Any left over fruit was given to children to take home as they left the nursery at the end of the day or session.

Nurseries very rarely had difficulties with children wanting more than their fair share. They reported that most children understood well that the fruit was for sharing and that they frequently had enough fruit cut up for children to have more if they wished to. All nurseries wanted the amount of fruit maintained at the current level and the majority felt that if they had more fruit it may get wasted.

Table 1, overleaf illustrates the amount of fruit each nursery receives per week. According to the FFN audit of fruit deliveries 2003, the scheme delivers, on average, 865 whole fruits per week and has a target of delivering 2.5 fruits per child per week. The audit, indicates that this target has been met for most nurseries. However, during this evaluation, two nurseries reported higher numbers of children than indicated in the audit (Oliver Goldsmith 70, and Ngozi 25) and one playgroup indicated they may need to close down in the near future (Rainbow). This suggests a need for FFN to review its targets for amount of fruit delivered.

Table 1: FFN Scheme Nurseries & Amount of Fruit Delivered

Nursery	Type	Funding Sources	Total no.of Paid Staff	Age range (years)	*Total no. of children	*Total Fruit per wk & fruit per child per wk
Grove	Nursery School	Early Years	9	3 to 4.5	90 (daily 30 f/t, 60 p/t)	225 2.5 each
Brunswick Park	Nursery School	Early Years	5	3 to 4.5	75 (daily 50 f/t, 25 p/t)	188 2.5 each
Oliver Goldsmith	Nursery School	Early Years	3	3 to 4.5	60 (daily p/t only)	150 2.5 each
Ngozi	Day Nursery	Private	6	2 to 5	18 -	43 2.4 each
Our Precious Ones	Day Nursery	Private	5	2 to 5	20 (Daily 15 f/t, 5 p/t)	63 3.1 each
Butterfly	Playgroup	Early Years and Private	2	2 to 4.5	15 (Daily p/t only)	48 3.2 each
Rainbow	Playgroup	Early Years and Private	3	2 to 4.5	16 (Daily p/t only)	40 2.5 each
Kinderella	Playgroup	Early Years and Private and voluntary aided	4	2 to 5	24 (Daily p/t only)	60 2.5 each
Salvation Army	Parent and Toddler Group	Parents pay token charge and Voluntary Aided	1	0 to 5	25 per session 4 sessions per week	48 1.9 each

*Figures from FFN Audit 2003

4.3 Quality of fruit

There was a high level of satisfaction with the quality of fruit delivered. Nurseries reported the fruit they received was of very good or excellent quality. Over-ripe fruit was never delivered. Occasionally the odd fruit, particularly pears, arrived bruised, in which case nursery staff tended to cut out the bruise and use the rest.

The nurseries wanted the quality of the fruit to be maintained at the current standard.

4.4 Variety of fruit

There was a high level of satisfaction with the variety of fruits delivered. Nurseries specifically commented on the good variety of fruits they received in the summer months.

A few nurseries suggested changes to the variety including:

- more regular delivery of fruits that are popular with children such as grapes and satsumas
- less frequent delivery of less popular fruits such as pears
- and a wider range of exotic fruits popular in other countries

“I don’t know why but, the children don’t really eat the pears, they don’t like the texture. I think it’s because of the granular bits. But bananas, satsumas and grapes are the favourites.”

“There could be more variety from other countries such as star fruit, custard apples. We’ve got different nationalities here and we’ve got Turkish children that could do with some lychees for example.”

4.5 Storage

The fruit arrives at the nursery, wrapped in paper bags, inside a large lidded plastic storage box or sometimes in a cardboard box. Most of the nurseries tended to store their fruit in these delivery containers, storing some items in a fridge where available. A few nurseries tended to transfer the fruit into their own smaller containers such as trays, plastic bowls or wicker baskets.

The storage containers were most commonly kept in the kitchen area, store room, or staff room as these areas were generally cooler than the main nursery.

One nursery was dissatisfied with the standard of cleanliness of the plastic storage boxes commenting that they were often dirty and needed cleaning before storing in the nursery.

All nurseries washed the fruit just before serving and those that stored some items in the fridge tended to also wash the fruit before storage.

4.6 Serving

All the nurseries cut up and serve at least three different types of fruit at each session. Most nurseries operate a structured snack time when fruit is served to children. These nurseries seated children and staff around a table. Staff, and in some cases children too, pass around the fruit. Children are encouraged to ask for their preferred fruit and also, to at least, taste a piece of each fruit.

Two of the nurseries did not have a structured snack time. Instead, they cut up the fruit at the beginning of each session and left it out on a side table that is fully accessible to the children. Children are encouraged to take pieces of fruit throughout the session. Towards the end of the session a member of staff takes any remaining fruit around the classroom and encourages children to take more. The nurseries tended to place any left over cut fruit on a table by the door so that at the end of each session children can take a piece to eat on their way home.

5: Initial impact in nurseries

5.1 Nurseries viewed FFN positively from the start

The introduction of free fruit was welcomed by the Nurseries and viewed as a positive contribution to promoting healthier diets among children.

“As staff we knew that children should be eating fruit but it wasn’t in place to promote. Now we can promote it. Which is a big thing that the whole school wanted to do for a long, long time.”

“We had children that had rotten teeth and we felt we need to do something about it. So, when the free fruit came in, we thought yes this is in line with what we were talking about.”

5.2 Children initially reluctant to eat fruit

On the whole the nurseries indicated that the transition to free fruit was not a difficult change. They found that although children were reluctant at first to eat the fruit, they got used to it quickly and looked forward to it.

“At first it was a slow start. Some children did miss the routine of biscuits because there were lots of fruits that children hadn’t seen before.”

“It’s been easier than we thought it would be, with the kids in my group they love it and would eat more and more and it’s so good to see. They’ve really got used to it quickly”

“They were a bit dubious at first to actually taste it but after a few weeks they could see their friends eating it and were actually trying it”

5.3 Parents were supportive

Those nurseries that previously relied on parent donations of fruit also found that it took some time for parents to get used to the idea that the fruit was free. On the whole nurseries reported that parents have been very supportive of the free fruit provision.

“Parents are overwhelmed to know that free fruit is provided because some parents can’t afford fruit and the children are able to get it here.”

“A lot of parents were bringing in bags of apples when it first started and we had to remind them this is all provided free. It settled down and it’s normal now.”

5.4 Nursery staff initially anxious

Although some staff initially felt anxious about the added staff-time and responsibility that free fruit represented they later found that it was manageable and acceptable.

“Some of us did at first think at the beginning ‘oh my god more responsibility’, but no. It’s alright. It does work so we’re happy.”

“Initially we saw it as a bit of a burden because you can’t envisage how its going to fit in to the rest of your day. Now it’s designated to the staff that is ‘person social’ and its just part of what that person does that day.”

Some nurseries were concerned, at first, about how they were going to serve the fruit to children and how they were going to ensure that every child got fruit without it interfering with the existing nursery routine. They tried out different ways before settling on an approach that worked best for them.

“We did try different ways of doing it because we weren’t sure how it would all work, how everyone would be included in getting their share. We tried doing it in a group time but that took away from the group time, we tried chopping it up in different ways, sending it home, we tried quite a few different things.”

5.5 Issue of fruit allergies

The transition to free fruit also meant nurseries had to learn to deal with the potential issue of fruit allergies. Parents, who knew their child had a fruit allergy, informed staff when the free fruit was being introduced. However, a few parents found out their children were allergic after eating the fruit in the nursery. Staff commented that parents were positive about discovering their child’s fruit allergy because it meant they could take steps to avoid the fruit in future. Nurseries now tend to discuss children’s fruit preferences and allergies at the point of first interviews with parents when children are registered for a place at the nursery.

“When it started we had parents coming in telling us what fruits their child couldn’t eat because they were allergic to it. But now we have it written up on the wall which child is allergic to what.”

“We put each fruit in separate bowls because some children are allergic. We also get parental permission, I mean we don’t just hand the fruit to children, we ask the parents first if they are allowed it.”

6: Further impact in nurseries

6.1 Impact on provision of snacks

Table 2, overleaf illustrates what snack items nurseries provided prior to FFN and also after FFN was introduced. Before FFN, only one nursery was providing only fruit snacks but after FFN five nurseries have moved towards providing only fruit snacks. Prior to FFN, seven nurseries provided biscuits or toast as an alternative snack but after FFN, the number of nurseries doing this has fallen to four. These results are discussed on subsequent pages.

6.2 More children eat fruit daily

As a result of FFN providing a regular and free supply of a wide variety of fruit to nurseries, children are now eating fruit at nurseries on a daily basis. Nursery staff estimated that 90 to 100% of children were eating the fruit.

Compared with the cost of other snacks commonly given to children in nurseries, such as biscuits, the cost of fruit is relatively high. Before FFN, most nurseries could not afford to provide fruit. Those that did provide fruit often found it difficult to maintain a sufficient daily supply over time. Some nurseries relied on parents donating fruit or money to buy fruit and often these donations were not sufficient.

“...if we didn’t have enough fruit one day (from parents) then we didn’t give it out that day. We’d wait till the next day when there was enough.”

FFN’s cost free and regular supply now means that children eat fruit daily.

6.3 Children now eat a wider variety of fruit

Nurseries reported that as a result of FFN children are now eating a wider variety of fruit, many of which children had not previously tasted. Those nurseries that were providing fruit prior to FFN agreed that the variety of fruit children get to eat is much greater than before. Due to the cost implications, many nurseries would not previously have been able to maintain such a varied provision of fruits.

“There is so much variety now. We get things that we were unable to buy before. So now the children are able to taste things like pineapple, mango and melons.”

“Before the free fruit we bought our own fruit. So the snacks we offer are basically the same but the variety of fruit children get is much better.”

Table 2 : Impact of free fruit on Provision of Snacks in Nurseries

Nursery	Before FFN	After FFN
Grove Nursery School	No food items given Milk & water	<i>Fruit only same drinks</i>
Brunswick Park Nursery School	Fruit only (parent donations) Milk	<i>Fruit only same drink</i>
Butterfly Playgroup	Fruit & biscuits (parent donations) Water, milk & fresh juice	<i>Fruit only same drinks</i>
Rainbow Playgroup	Fruit & biscuits (parent donations) Water, milk & fresh juice	<i>Fruit only same drinks</i>
Oliver Goldsmith Nursery School	Biscuits (donated by parents) Milk & water & fresh juice (donated by parents)	<i>Fruit only Milk & water no fresh juice</i>
Kinderella Playgroup	Biscuits, cake or toast Sugar free squash	<i>Fruit given first then biscuits same drinks</i>
Salvation Army Parent & Toddler Group	Biscuits & savory crackers Sugar-free squash & water	<i>Fruit given first & then biscuits same drinks</i>
Our Precious Ones Day Nursery	Fruit given on set days with morning cereal, or toast Fruit given on set days with afternoon cake or sandwiches or cheese toast or beans on toast. Sugar free squash/ fresh juice or milk (Nursery bought own fruit)	<i>Same snacks & drinks</i>
Ngozi Day Nursery	Fruit with breakfast cereal or toast Fruit with afternoon cake or crisps Milk and sugar free squash (Nursery bought own fruit)	<i>Same snacks & drinks</i>

6.4 Children eat fewer less-healthy snacks

As shown in Table 2, FFN has had a positive influence on reducing the provision of less-healthy snacks in nurseries. Prior to FFN, 7 out of 9 nurseries relied on cheaper and less-healthy snacks such as biscuits or toast as the main snack or supplementary or alternative snack to fruit. However, after FFN, 4 out of 9 nurseries rely on these snacks as a supplement, with two of these four nurseries indicating that free fruit allowed them to reduce the amount of biscuits they gave to children.

Table 2 also illustrates that prior to FFN just one nursery gave fruit only snacks to children but after FFN, 5 out of 9 nurseries are giving fruit as the only snack with no alternatives offered. Most of these five nurseries were also actively discouraging parents, through policies and practices, from bringing in any other snacks into the nursery environment.

“Our policy now is that they are not allowed to have anything else but fruit in the nursery. If they bring anything else with them, it is kept and it goes back home with them.”

“We give out fruit at the end of the session and parents would come in to pick up their children with chocolate, sweets, cans of cola, or doughnut or something. And it was a bit of a conflict in message really. We’re giving them something healthy. So we put a letter out, and it really has reduced the amount to almost none now.”

“When the fruit came in the biscuits stopped. We were building up to it. The teacher told the children that next week there will be no biscuits and we were writing letters to parents telling them they didn’t have to bring in biscuits anymore because there was going to be fruit instead.”

Of the 4 nurseries that continued to rely on biscuits as a supplementary snack, 2 nurseries were making efforts to reduce the amount of biscuits by encouraging children to eat the fruit first.

“We always give the fruit first and they can have a biscuit if they are still hungry but only after they’ve eaten the fruit.”

“Sometimes I hide the biscuit tin. If the biscuit tin is not there, they’ll eat the fruit. If the biscuits are there on display then they’ll take one. I try and get the fruit in first and if they are still hungry I say you can have a biscuit.”

The high cost of fruit also explains why many nurseries serving fruit to children before FFN were serving it on rotation with or alongside other less healthy, and cheaper, snacks. Whilst 2 nurseries were making efforts to limit the amount of biscuits given to children and promote the fruit, for another 2 nurseries FFN made little difference to their provision of snacks. These 2 private day nurseries continued to provide fruit alongside or in rotation with other less-healthy snacks. Both these nurseries have many full-time children that attend from as early as 7.45am till as late as 6pm while parents are at work. These private nurseries took the view that provision of a wide variety of food that included items that were familiar to children helped them to feel comfortable and settle into the nursery routine.

“It is important to give children some things they are used to having at home. It helps them to settle in to have familiar things. But we don’t give too much of these things like crisps. Fruit is healthier and more important to eat and children get this idea as time goes on and they get used to the fruit being part of the day.”

6.5 Influence on promotion of fruit and healthy eating

Most nursery staff felt the free fruit equipped them to more actively promote healthy eating. Many nurseries have resourcefully exploited the regular availability of fruit as a snack and put it to multiple uses, as a health promotion tool, a teaching tool, and a tool for play and learning. Many nurseries have expanded their use of, and range of, fruit-themed activities to teach children about fruit and health. Staff have also used these activities to normalise fruit as an aspect of daily life at nursery.

“Now we have the fruit, we can actually promote the healthy side of eating fruit now and how it relates to our body and teeth and how if we eat lots of things with sugar then we have to brush our teeth. It’s been a good teaching tool.”

“The children know what’s healthy for them. If I was to show them a cake and a fruit they know that the fruit is better for them than the cake, which is great because they are really young. It helps a great deal to have the fruit there.”

Many nursery staff commented that they used the free fruit not only to teach about fruit and healthy eating but in a much wider way, for example to teach early mathematics; counting fruit, whole, halves and quarters. For many nurseries, the free fruit has become an important everyday educational tool.

“I think since the free fruit became available, in bulk, we use it now in activities more than we used to. We base our play around it everyday.”

Listed below are the variety of ways in which fruit was used in learning activities.

- Fruit colours and textures
- Counting fruit and teaching whole, halves and quarters
- Fruit smells & tasting games
- Observational drawings/ painting
- Cutting, cooking and serving fruit
- Role play grocer shops or cook
- Growing fruit
- Fruit printing
- Displays on healthy eating and about your body
- Fruit-themed songs
- Fruit puzzles
- Handa’s surprise (story book)
- Collages

Some nurseries were specifically prompted by non-fruit eating children to develop themed activities that would encourage these children to taste fruit they had not seen or eaten before. One nursery used a blind tasting game to encourage children to taste a variety of fruit. A couple of nurseries also involved children in growing small fruits in the nursery garden to expand their understanding of how different fruits grow.

“We realized that some children weren’t having fruit so we started to think of how we can get these children to be educated and try a piece of fruit. So we started thinking about fruit themes. We had fruit displays and we do tasting and smelling. We have a bag and children have to put their hand in, close their eyes and try to see if they can tell what they

are smelling or tasting.”

“Fruits that they’re not familiar with we will use them in our daily activities on the table, in the home corner, getting them to cut them and have a look what it’s like inside, even just explaining to them the names. It really has helped to educate the children.”

“We also grow tomatoes and strawberries in the garden so they can experience not only eating it but what happens to it before they actually get it and get an understanding of the environment that it needs to be grown.”

6.6 More social interaction

Many nurseries commented that the free fruit introduced a more social element to snack times. The children talked more with other children and staff. This social element helped children’s education and learning about fruit and healthy eating. Many staff involved children in the peeling, cutting and serving of the fruit, and nursery staff used this opportunity to engage the children in learning fruit names, how fruit is grown, the country of origin, the different colours, textures, smells and tastes.

“It’s like a social thing for them. When they see the fruit, some children will know the colour, and we’d say do you know what fruit this is or what it tastes like, we’d say oh this is a bit sweet, or what is this texture and they’ll say it’s really hard or it’s smooth. They really gain from it.”

“They’ll develop an end result, cutting up the fruit, making the fruit salad with apple juice and eat it at the end of it. Then they’ll say, well I like this one but I don’t like that one. So, we have good communication coming out it.”

“We bring the fruits together and we cut them and we tell the children the names of the fruits. We ask whether they think it grows on the tree or if you have to dig it and they’ll say this one is from a tree you have to pick it. And we’ll say how do potatoes grow then and they’ll say underneath you have to dig it out. So they gain knowledge and understanding.”

6.7 More awareness and fruit eating among staff

In the process of actively promoting fruit to children, many staff themselves have become more aware of different fruit and healthier diets. Some staff have increased the amount and variety of their own fruit consumption as a result. A few staff members reported that it had also helped them to question the quality of school dinners and packed lunches provided for children that attend full-time.

“I think we are more aware because we are more fruit eaters now. Because we used to have biscuits, we do still have biscuits in the staff room but we eat more fruit in our staff breaks and at home.”

“Things like kiwis and melons, some of the staff didn’t even know what they were like so it’s been an eye opener for staff as well. The variety has made staff a bit more adventurous with fruit.”

“It has helped us to look at our school dinners a lot more. From time to time we have had problems with the school dinners. We feel it’s not enough or it’s not healthy, you know, it’s covered in breadcrumbs or there’s not enough vegetables. It has helped us in that

way to be more forceful in demanding what we feel should be healthy dinners for our children.”

6.8 Factors facilitating fruit consumption among children

The majority of nursery staff recalled having had, from time to time, a few children who did not eat fruit when they first started at the nursery. One staff member suggested that up to 50% all the newcomers at her nursery go through an initial phase of refusing to eat fruit. Most staff identified one or a combination of the following factors as helping these children to become accustomed to eating fruit on a daily basis.

- Presenting children with a choice of different varieties of fruit.
- A lack of availability of alternative snacks.
- Children observing others routinely eating fruit.
- Encouragement from staff.
- Encouragement from parents at home.

Many nurseries gave little or no alternative snacks to fruit. Nurseries commented that the wide variety of fruits available through FFN meant they could present children with a such a selection of fruits that usually a reluctant child would be able to identify one fruit that they liked. Once they became used to eating a fruit they liked staff would encourage them to taste different fruits.

As reluctant newcomers settle into the nursery they begin to see fruit as a normal part of their daily routine. Seeing other children eating fruit encourages them to join in. Many staff commented this helps non-fruit eaters to quickly become accustomed to eating fruit at the nursery.

“It’s part of the nursery routine. As new children come in they see other children eating it and they soon follow through.”

Nursery staff encourage children to taste different fruits through structured activities and less formally. Many staff recognised that adults and particularly nursery staff are role models and that an aspect of encouraging children is for them to see adults eating and enjoying fruit themselves. Some staff members made a deliberate effort to taste fruits with the children and to eat their own fruit for lunch in front of children.

“I think the staff have played a good role in actually encouraging children by tasting the fruit themselves.”

“We are ourselves the role models. I’ll sit down with my lunch and everybody will see me eating a banana or an apple and they’ll say ‘oh that looks nice’ and I’ll say yes and when you get your snack time you should eat up yours too.”

Many staff were also prompting parents to encourage their children to eat fruit at home through one or a combination of the following:

- by highlighting the nursery provision and promotion of fruit to parents visiting the nursery
- by informally telling parents what fruits their child had or not eaten at the nursery
- by encouraging parents to take left over cut fruit for their children to eat on the way

- home from the nursery
- by informally telling parents what they should do to further encourage their child's fruit eating

Some nursery staff commented that they often informally advised parents to eat fruit in front of their children, to buy fruit for them to eat at home, and to take their child shopping for fruit so that they can gain further knowledge and awareness and at the same time select fruits that they like or want to taste.

“A parent came in and saw me cutting up the fruit in front of her child and she said ‘Oh he won’t eat fruit.’ I said, encourage him by taking a piece. Let him see you eating it. Then that is what she would do and it was encouragement for him.”

“I say to parents, take your child shopping and let them buy a fruit so they know how we obtain fruit and she can share that knowledge at the nursery.”

“One little girl used to throw the fruit under the table, and I found out they don’t eat fruit at home and I said to the parent buy her some apples for home, and she does now.”

Some staff also commented they were aware that they were having some influence on parents. Parents would tell staff that their children were now asking for more fruit and eating more fruit at home, or that they were now buying different varieties of fruit for their children to eat at home.

“Parents are now having to expand their variety, its not just apples and oranges they are now having to buy strawberries, kiwis and pineapple and mangos.”

6.9 Need for further in-classroom support

Most nursery staff generally felt that what they had in place was well established and working well. A few nurseries had received in-classroom support from Sure Start Brunswick’s community dietician and dental health promoter on planning and carrying out fruit and vegetable themed activities. Staff were very appreciative of the support which they found useful and stimulating. They recognised that they needed to incorporate this learning across the nursery as a whole but did not identify any further support needs.

However, most nursery staff felt strongly that parents needed further support from Sure Start Brunswick. They felt some parents awareness of healthy eating and children’s dental health was lacking. They also felt that some parents needed encouragement to replicate at home the good fruit-eating habits their children were establishing in the nursery.

Some staff highly commended the recent events that the Sure Start Brunswick’s community oral health promoter and community dietician had held for staff and parents on vegetables, tooth brushing and sugar contents of different drinks. They commented that these events were enjoyable and informative. The involvement of parents at these events was highly valued and staff indicated that more events of this nature were needed to raise awareness among parents and motivate parents towards healthier diets for their children.

7: Impact on children’s fruit consumption at home

7.1 Children eat fruit more often

The self-complete survey asked 115 parents to indicate whether their child ate fruit at home on a daily or less frequent basis **before** starting nursery and **since** attending nursery. The results below illustrate an overall increase in children eating fruit at home.

The proportion of children eating fruit everyday at home increased by 7% since they attended nursery. This is a statistically significant change ($\chi^2 = 73.600$, $df=1$, $p < .001$). Statistically significant means that this change is unlikely to have occurred purely by chance.

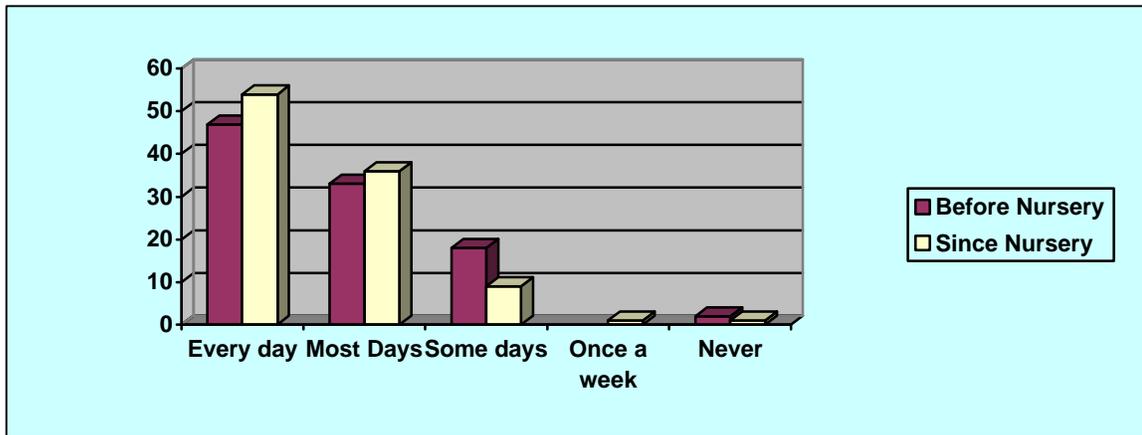
The results also show that the proportion of children eating fruit most days has also increased by 3%.

Overall, this means that an additional 10% of children are now eating fruit on a daily basis or most days of the week. Table 3 shows there was a high baseline consumption with 80% of the children eating fruit at home on a daily basis or most days of the week before starting at their nursery. After attending nursery, this proportion has increased to 90%.

This increase may well have been as a result of FFN but within the confines of this retrospective project-level evaluation this causal relationship cannot be demonstrated. However, it is clear that a significant behaviour change has occurred. Other evidence from the self-complete survey (see 6.2 overleaf) and evidence from parents at the focus groups (see 6.3 overleaf) demonstrates that FFN is linked to this behaviour change.

Table 3: How Often Children Eat Fruit (N=115)

	Before Nursery	Since Nursery
Every day of the week	47%	54%
Most days	33%	36%
Some days	18%	9%
One day a week	-	<1%
Never	2%	<1%



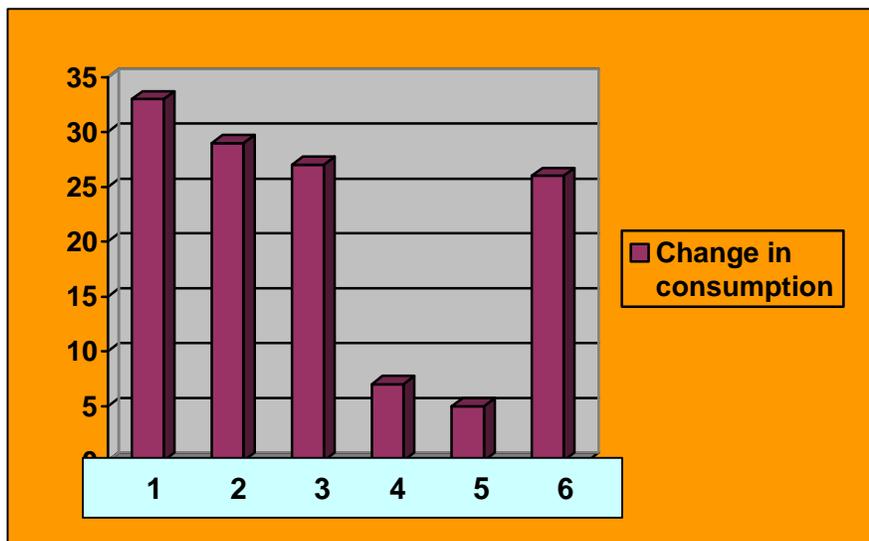
7.2 Types of change in consumption

Parents were asked to indicate what changes they had noticed in their child's fruit eating at home since their child started nursery. Almost three-quarters of parents noticed at least one change, and over a quarter noticed no changes at all.

Table 4 below shows that the most notable changes are, children asking for more fruit more often, children generally eating more fruit and more varieties. Only 7% of parents noticed their child was eating fruit instead of less-healthy snacks.

Table 4: Types of Change in Consumption (N=115)

1	My child asks for fruit more often than before	33%
2	My child generally eats more fruit now	29%
3	My child eats fruit that she/he had not tasted before or didn't like before	27%
4	My child now eats fruit instead of snacks like crisps/ biscuits/ sweets & chocolate	7%
5	My child has started eating fruit again after a phase of not eating it	5%
6	None of the above changes	26%



7.3 Children are driving the change

The above evidence suggests that FFN has had some influence on increasing children's consumption of fruit at home. Children themselves appear to be driving this change. As they get used to eating fruit as part of their daily routine at the nursery, they begin to expect and demand fruit at home. These quotes from parents at focus groups illustrate it is the children's demand for fruit at home that is a key factor motivating parents to buy larger amounts and varieties of fruit for their children.

"It's the children that get us to do it because that's what they want. They want chocolate you buy chocolate, they want fruit you'll buy fruit."

“I don’t eat fruit. I probably wouldn’t have any fruit in my house if nursery hadn’t got my children to eat it.”

“Everything they teach him in nursery he tries to do the same thing at home. He wants to have fruit. He wants to make it normal at home too.”

“I never really used to buy much fruit. But now, since mine started on the fruit in nursery, I’m buying pears, plums, apples the lot. And that’s because she eats the fruit now she loves it.”

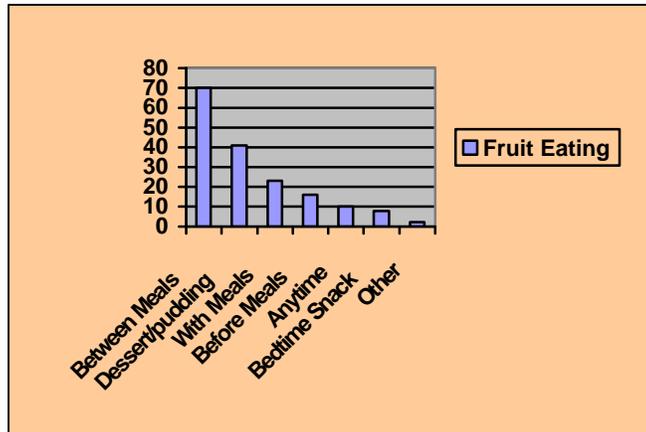
7.4 Situations children are most likely to eat fruit

Parents responding to the self-complete survey were asked when their child usually eats fruit. As Table 5 shows, children most commonly eat fruit as a snack between meals with 70% indicating their child snacks on fruit. The next most common ways children eat fruit are as a dessert and with main meals.

Interestingly, 22% of the 40 parents interviewed also specifically mentioned that their child is most likely to eat fruit at school, nursery or playgroup.

Table 5: When Children Usually Eat Fruit (n=115)

As a snack between meals	70%
As a dessert/ pudding	41%
With meals	23%
Just before meals	16%
Anytime	10%
As a bedtime snack	8%
Other (for breakfast, as a meal)	2%



7.5 Situations children are least likely to eat fruit

Half of the 40 parents interviewed identified situations in which their child was least likely to eat fruit. Most commonly these were situations where their child could see other children, or adults, eating sweets and chocolate or situations where their child was offered sweets and chocolate by relatives or by other parents. These same situations were also identified by parents at the focus groups.

“I know with mine he’ll be absolutely fine but, if someone is sat round the table with crisps, lolly or a biscuit, he’ll put the fruit down.”

“We’ll go and see my mum on a Saturday and she’ll have a big bag of sweets and she’ll empty them out on the bed and say here have some sweets.”

“When you go to children’s parties you just have to forget about fruit.”

8: Barriers to fruit consumption at home

8.1 Awareness of FFN

Of the 115 parents surveyed, 92% know their child gets fruit to eat at the nursery but 48% did not know that Sure Start Brunswick provided the fruit. This suggests awareness of FFN as a Sure Start Brunswick health initiative for children needs to be raised among local parents.

8.2 Awareness of five-a-day

Of the 40 parents interviewed, most were aware of the government’s five-a-day health campaign but 20% did not know. However, when asked why we were being encouraged to eat five portions of fruit and vegetables a day, nearly all the parents correctly said it was because fruit and vegetables are good for health and, less commonly, because it helps to prevent diseases such as heart disease and obesity. A quarter of the 40 parents interviewed said that their child eats five or more portions of fruit and vegetables a day. Most commonly, parents identified that their child eats three portions daily.

8.3 Knowledge of portion sizes

There are no official guidelines quantifying portion sizes for children but there is a general consensus among professionals that children’s portions can be less than adult portions. Parents were asked ‘How much apple do you think counts as one portion for adults, and for children?’ Most of the 40 parents interviewed correctly identified children’s portions as less than adult’s. However, a third identified child’s portions as the same size as adults and curiously one parent said a child’s portion was larger than the adult portion.

The focus group discussions also indicated that there was considerable uncertainty in parents’ understanding of a child’s portion with some suggesting two slices of carrot were a portion and others saying it was a tablespoonful. This indicates that local parents need more guidance on portion sizes for children.

Table 6: Size of One Portion of an Apple as perceived by local parents/carers (n=40)

Portion size	For Adults	For Children
Whole apple	82%	25%
Three-quarters	-	10%
Half	15%	45%
A quarter	2%	20%

8.4 Awareness of types of fruit and vegetables included in five-a-day

In the five-a-day, fresh, tinned, dried, juice and frozen fruit and vegetables can all be included. However, of the 40 parents interviewed less than a third (n=12) correctly identified that all these types can be included.

More than two-thirds of parents (n=28) did not know all types can be included. This indicates that parents are in need of further information on types of fruit and vegetables included in the five-a-day.

Of those parents that did not know all types can be included (n=28) :

- 46% did not know that **tinned** can be included
- 36% did not know that **dried** can be included
- 32% did not know that **juices** can be included
- 25% did not know that **frozen** can be included

8.5 Barriers to buying more fruit

The 40 parents interviewed were asked to identify things that put them off from buying more fruit. Most parents said that nothing was off-putting but 15 parents identified poor quality (14), expense (11), and fruit going off too quickly (10) as factors that discouraged them from buying more fruit for the home. Less commonly, two parents said that carrying fruit home in heavy shopping bags was off-putting.

8.6 Where parents shop for fruit

The survey of 115 parents asked parents where they shopped for most of their fruit. Parents most commonly shopped at supermarkets (90%) and market stalls (44%). Less commonly parents shop for fruit at small grocery shops (17%) and at mini-markets or petrol station shops (14%).

Although under half the parents shop for fruit at market stalls, some parents at the focus groups felt fruit sold at markets was generally of a poorer quality and did not last as long as fruit bought from supermarkets. This helps to explain why poor quality of fruit was commonly cited as factor discouraging parents from buying more fruit.

“The market ones seem to go off quicker than the ones you buy in the supermarket. Although you do get them cheaper they don’t last long.”

“You want something that will last coming on to a week. If you like buy the market ones then they start to smell.”

8.7 Frequency of shopping

Parents seem to shop frequently for fruit which suggests that most parents are buying smaller quantities of fruit rather than bulk buying. Half of the 40 parents interviewed shopped 2-3 times a week. More than a quarter shopped 4 times or more. Less than a quarter of the parents shopped only once a week.

Those that shop once a week (n=10), and probably bulk buying fruit, were more likely to cite poor quality of fruit and fruit going off too quickly as a factor discouraging them from buying more fruit. Half of those parents that shop once a week cited poor quality of fruit as discouraging compared with a third of those that shopped more than once a week (n=29). This suggests that some parents may need guidance on how to spread shopping for fruit across the week, select fruit of good quality that will last, and therefore limiting the likelihood of fruit going off and being wasted.

8.8 Transport used for shopping and difficulties

Most of the 40 parents interviewed walk (67%) to and from shops when buying fruit. Two fifths (40%) of parents use their own car and under a fifth use buses (17%).

Whilst the majority of parents shop at supermarkets, only 15% use a home delivery service such as Tesco's, Sainsburys', and Iceland's.

Of the 40 parents interviewed, 17% said they had difficulties in getting to and from shops. The most common difficulties included dealing with heavy shopping bags and/ or push-chairs and carrying shopping up lots of stairs.

Considered together this evidence suggests that more local parents may benefit from being encouraged to use home delivery services.

8.9 Cost of fruit and low income as a barrier

The relatively high cost of fruit was commonly identified as a barrier to buying more fruit by the parents interviewed. Of the 40 parents interviewed, almost a third (n=12) find they regularly have little money to spend on fruit either on a monthly or weekly basis. One parent indicated there was little money for fruit most days.

The 115 parents surveyed were asked what they did when they found themselves with little money to spend on fruit. More than a third (36%) of parents said they always had money to buy the fruit they wanted.

Most commonly parents said they buy smaller quantities of fruits (41%) or only buy basic fruits like apples (26%) on the occasions that they have less money to spend. Only 5% said they bought no fruit at all on those occasions, and 2% said they never buy fruit anyway.

This evidence suggests that low income, together with the higher cost of fruit, is an important barrier to increasing fruit consumption at home for a significant proportion of local parents.

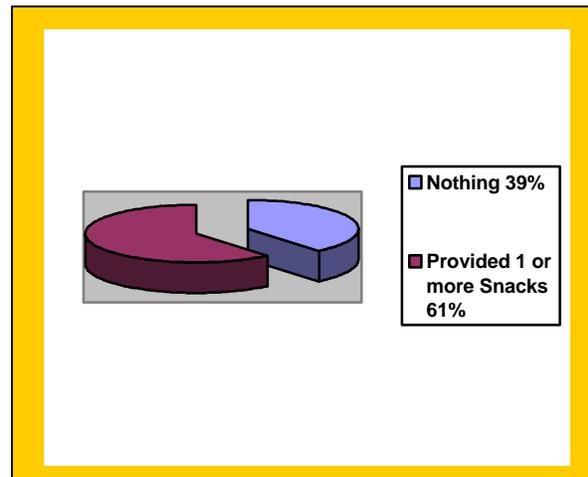
9: Barriers to reducing consumption of less-healthy snacks

9.1 Consumption of less-healthy snacks

The self complete survey asked 115 parents what snacks they brought to the nursery for their child to eat on the way home. Less than two thirds of parents said they usually brought at least one snack with them and, 39% indicated they usually brought nothing to nursery. The most common snacks parents brought with them, to nursery, were fresh or dried fruit, crisps, biscuits, and less commonly, sweets and chocolate.

Table 7: Snacks Parents Bring to Nursery (n=115)

Nothing	39%
Fruit	32%
Crisps	22%
Biscuits	16%
Sweets/ chocolate	10%
Rice cakes/ crackers/ bread sticks	9%
Sandwiches	9%
Cakes/ sweet pastries	7%
Yogurts	5%



9.2 Frequency of consumption

The 40 parents interviewed were asked 'Over the last week, how often did your child eat the following snacks: sweets or lollipops, chocolate, crisps, cakes or sweet pastries, and biscuits.

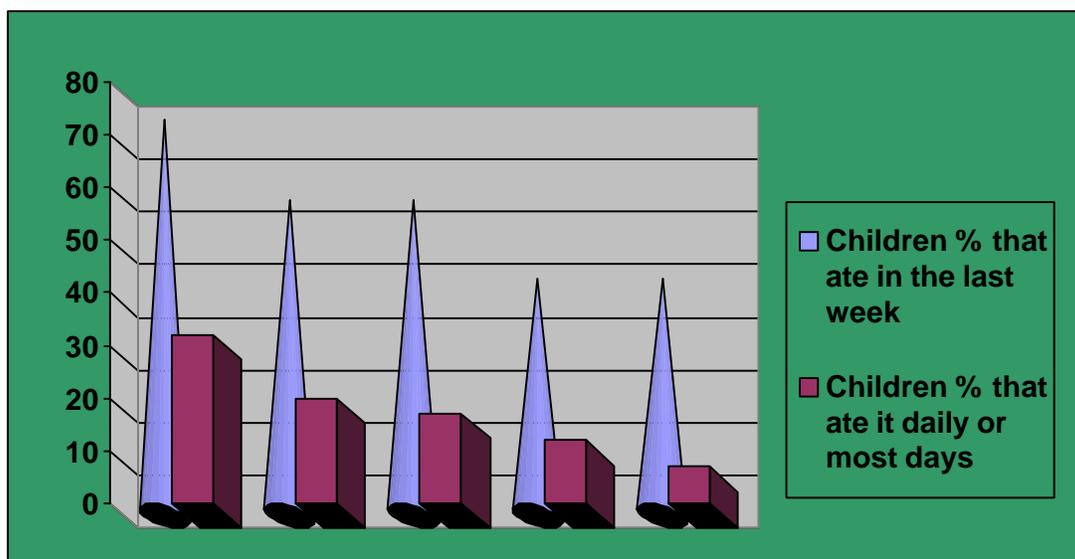
The majority of parents (90%) indicated their child had eaten at least one of these snacks in the previous week. Only four parents (10%) said their child had not eaten any of these snacks in the last week.

Table 8 below shows that the less-healthy snacks most commonly eaten by children, at least once in the last week, are biscuits (75%), chocolate (60%) and crisps (60%). Less than half the children (45%) had eaten sweets or cakes at least once in the last week.

Table 8 also illustrates that almost a third of children (32%) ate biscuits everyday or most days in the last week. A fifth of the children ate chocolate daily or most days, and almost a fifth (17%) ate crisps daily or most days in the last week.

Table 8: Less-Healthy Snacks Eaten in the Last Week

Snack	No. of children that ate it in the last week (n=40) %		No. of children that ate it daily or most days (n=40) %	
Biscuits	30	75%	13	32%
Chocolate	24	60%	8	20%
Crisps	24	60%	7	17%
Sweets	18	45%	5	12%
Cakes/pastries	18	45%	3	7%



Overall, almost half of the 40 parents (47%) said their child had eaten at least one of these snacks daily or most days over the last week. Almost all of these parents also said that their child eats fruit everyday or most days. This indicates that a significant proportion of children are eating fruit frequently and at the same time are eating less-healthy snacks frequently, on a daily basis or most days of the week.

9.3 Offering children fruit instead

More than two-fifths of the 40 parents interviewed said they had previously tried to cut down on the amount of less-healthy snacks they offered to their children and, most of these parents said they had successfully offered fresh or dried fruit instead. A few parents at the focus groups had also been successful in offering fruit instead.

“I’d say, if you eat up your dinner you can have a treat, a chocolate bar or whatever. She used to eat it and I used to give her whatever but now she’ll opt for a bit of fruit after her dinner.”

“If I want to avoid McDonalds, I slice apples and put it in my bag. Because when he asks for anything I tell him-here have an apple, and he is quite pleased. When he has the fruit, there will be no McDonalds that day and we just come home quietly.”

“When she comes to me and, mum why can’t I have sweets, I’m like well you think about it. You want to have them all the time and what will happen to your teeth. You have to look after your teeth and you know eating grapes won’t do that to your teeth.”

9.4 Barriers to offering fruit instead

Of the 40 parents interviewed, 13 indicated that they found it difficult to refuse their child snacks such as sweets, chocolate, biscuits, crisps and cakes. They were asked to name the things that make it difficult and most commonly they identified situations where their child could see others eating these snacks or situations where their child is offered these snacks by other parents or relatives. Less commonly, they identified their child's tantrums, their child going into cupboards where these snacks are kept at home, and shops that display these snacks.

The focus group discussions also indicated that many parents find it difficult to offer fruit instead of less-healthy snacks for a variety of reasons.

1. Parents can find it useful to use less-healthy snacks as an incentive to eat fruit...

“If he wanted something else, I’d say okay but you have to have a fruit first. At first, he’ll be like-ugggh don’t like that. But then, he’d actually start having the fruit first and the treat, the chocolate or crisps after.”

2. Parents can find they do not always have the money to buy fruit...

“Every day after school I bring a little something, because she’s hungry at the end of the day. When I can’t afford the sandwich or the plums or whatever, then this is the time I’ll buy a chocolate. It always happens once or twice a week when I’m completely broke and have about 70 pence left.”

“If Safeway is doing Kit-Kats on offer for 39 pence, you think oh, I can get three packets! You never find bananas reduced.”

3. Parents can find it easier to buy less-healthy snacks as they are available in most shops...

“When your child wants a snack, you know, it’s not so easy to just go and buy a banana or buy an orange. It’s easy to go into any shop and get chocolate or a packet of crisps.”

4. Parents can find they just forget to think about buying fruit instead...

“You just don’t think of fruit. You think, I’ll shut them up and give them a packet of smarties. That’s when you should really give them fruit. But I’m awful for that, I’ll go and buy a chocolate and say there you go.”

5. Parents can find they give in to their children’s persistence...

“Well I have to say if he really, really wants it, I will let him have it.”

6. Parents may feel they care for their children's teeth so do not need to worry...

"As long as their teeth are cared for, I'm happy for them to have chocolate and sweets."

7. Parents may find refusing children sweets or chocolate conflicts with their own upbringing...

"I grew up being given sweets by my parents. But knowing it's not good for teeth and then they're asking for it and then I'm denying them. It makes me feel guilty. When you see them upset, you think, oh dear. I try not to carry the guilt for long because I know I'm doing them good for the long run."

9.5 Use of less-healthy snacks as a parenting tool

Of the 40 parents interviewed, a significant proportion said they had used unhealthy snacks, such as sweets, chocolate, biscuits and crisps, to reward their child for good behaviour (42%) and to keep their child occupied or quiet when they are busy (35%). A quarter of the parents had used these snacks to get their child to comply and do as they say (25%). More than a quarter of the parents had used these snacks to stop their child from being upset and crying (27%). More than a fifth of the parents had used them to stop or prevent their child's tantrums (22%).

These results suggest that some parents may need guidance on alternative parenting techniques to deal with their child's tantrums, encourage good behaviour and compliance.

Parents at the focus groups were asked whether they had ever used fruit to reward their child for good behaviour. The majority of parents at the focus groups indicated they did not view fruit as reward nor did they use fruit as a reward.

"If you're hungry have a banana. Bananas fill you up. It's not a reward. I can't even explain it, it's there, it's food."

10: Dental health

10.1 Visits to the dentist

Children visiting the dentist for regular check-ups is viewed by many professionals as a predictor for oral health among children. Regular dental check-ups helps early diagnosis and treatment of oral health problems and helps to prevent tooth decay more than brushing alone.

Of the 115 parents surveyed, more than half said their child had never been to the dentist, and 44% had been for regular check-ups. This indicates that local parents may need further encouragement to register their child with a dentist for regular check-ups.

In the survey, 99 parents identified when they last visited the dentist. Parents' last visit ranged from 1 month ago to 81 months ago. The average length of time since the last visit was 12 months ago (statistical mean). More than half the parents had been to the dentist in the last 6 months, 71% had been in the last year, and 29% had not been for one year or more.

There was no significant relationship between parent's last visit to the dentist and children's visit to the dentist.

10.2 Brushing teeth

Of the 115 parents surveyed, 111 responded to the question 'When does your child usually brush his/her teeth? The majority of parents indicated their children brush their teeth twice daily (n=82). However, more than a quarter of parents (n=29) indicated their children brush their teeth only once a day.

Table 9: Daily Tooth Brushing Patterns

N=111 (%)	Before breakfast	After breakfast	Before bedtime drink	After bedtime drink
12 (11%)	v	-	-	-
7 (6%)	-	v	-	-
2 (2%)	-	-	v	-
8 (7%)	-	-	-	v
36 (32%)	-	v	-	v
24 (22%)	v	-	-	v
13 (12%)	-	v	v	-
9 (8%)	v	-	v	-

Of those that brush their teeth once a day only (n=29), the most common time is before breakfast. Of those that brush twice a day (n=82), less than half are brushing at the recommended times, that is, after breakfast and after the bedtime drink. More than half of those that brush twice daily are brushing at other times.

There was no relationship between patterns of brushing teeth and the age of children.

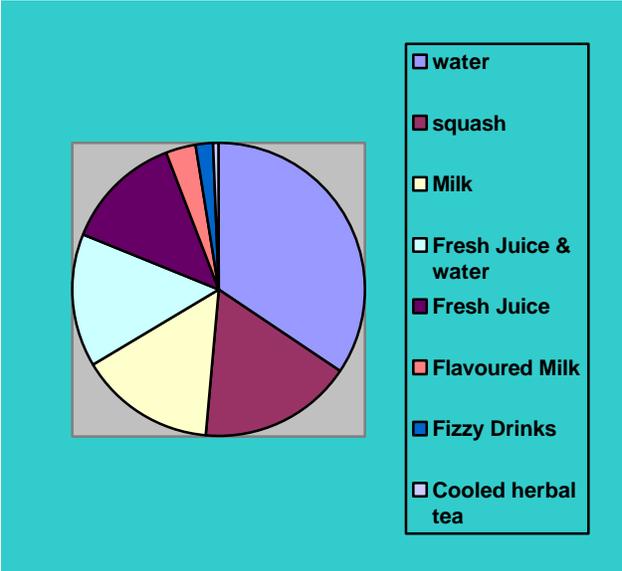
The above evidence suggests that local parents are in need of further advice and guidance on brushing their children’s teeth.

10.3 Children’s consumption of drinks

Water, squash, milk and fresh juice were the most common drinks parents identified their children drink when thirsty.

Table 10: What Children Drink When Thirsty (n=115)

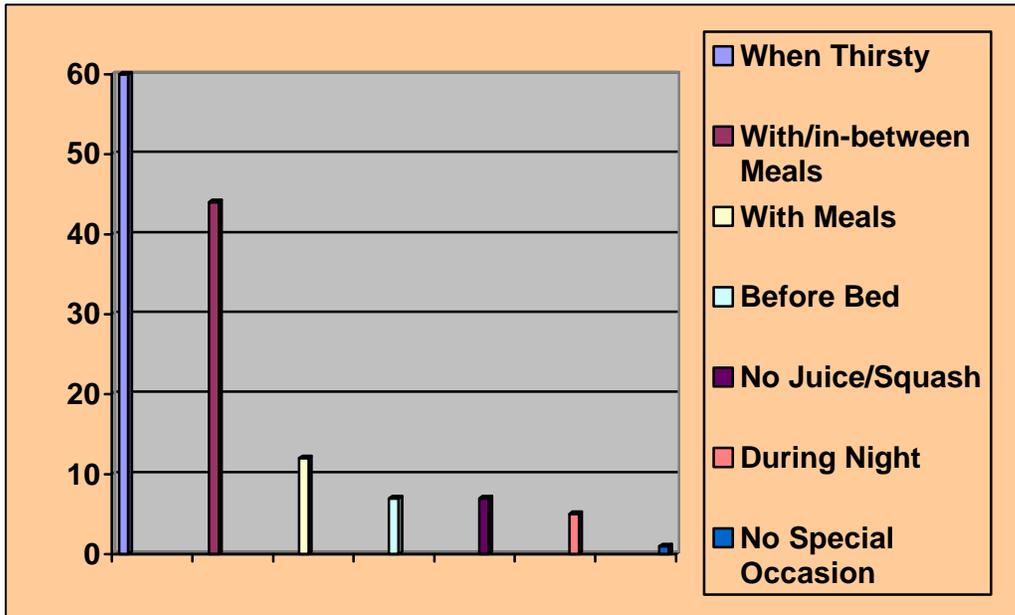
66%	Water
32%	Squash/ cordial
29%	Milk
28%	Fresh juice mixed with water
25%	Fresh juice
6%	Flavoured milk or milkshakes
4%	Fizzy drinks
<1%	Cooled herbal tea



Most commonly, parents gave children squash or juice whenever their child was thirsty during the day. Only 5% of parents said they gave it when their child woke up during the night.

Table 11: When Child Drinks Juice or Squash (n=115)

60%	Whenever child is thirsty during the day
44%	With meals and in-between meals
12%	With meals only
7%	Before going to bed
7%	No juice or squash given to child
5%	When child wakes up during the night
<1%	on special occasions



Of those parents that gave their children squash, (n=88) more than two thirds (68%) gave the sugar free variety and 17% gave the low or reduced sugar variety. Only 15% gave the normal sugared squash.

Of the 107 parents that gave juice or squash to their child, 58% used ordinary cups and 38% used cups with a lid. Just 2% of parents gave their child juices in a baby bottle, and 2% used beakers with straws.

There was no relationship between the above consumption of drinks variables and age of the children.