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**EVALUATION OF FRUIT PLUS  
INITIATIVE**

**RESEARCH REPORT**

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**Appendix I: Copy of Discussion Guide used – Pupils**

**Appendix II: Copy of Discussion Guide used – Head Teachers**

**Appendix III: Copy of Discussion Guide used – Teachers**

**Appendix IV: Copy of Discussion Guide used – Initial Recipient / Distributor**

**Appendix V: Copy of Discussion Guide used – Catering Manager**

**Appendix VI: Copy of Discussion Guide used – Parents**

## **1. INTRODUCTION AND BACKGROUND**

### **1.1 Introduction**

- Market Research UK was commissioned by Greater Glasgow NHS Board to carry out research in order to assess the impact of Fruit Plus on two schools in the Glasgow area, namely Lochgoin Primary and Bankhead Primary.
- In this report we have outlined the background and objectives of the research, the methodologies used and detailed the research findings.

### **1.2 Background**

- The Fruit Plus Programme was set up by Greater Glasgow NHS Board (GGNHSB), Glasgow City Council (GCC), Direct and Care Services and Education Services.
- Its purpose being to increase fruit consumption amongst children in primary and nursery schools in Glasgow. Each child is supplied with a free piece of fruit three times a week for consumption within the classroom.
- The project is firmly embedded in the curriculum and supported by appropriate materials from Education Services and GGNHSB. There is also an element to the programme of encouraging consumption of fruit.
- A Pilot programme was run in early 2001 involving nine primary schools. All primary (including special education needs primary schools) and nursery schools in Glasgow are currently included in the programme, with the last schools having taken up the programme on 17<sup>th</sup> December 2001.

## **2. RESEARCH OBJECTIVES**

- Three key objectives existed for the research:

### **Objective 1 – Impact of Fruit Plus on Consumption within the School**

- To assess the impact of Fruit Plus on consumption of fruit and vegetables by children within the school, in the classroom, at breaks, and at lunchtime.

### **Objective 2 & 3 – Exploration of Factors Impacting on Fruit Consumption & Implication for Schools**

- To explore the factors which impact on fruit and vegetable consumption by children involved in the programme:-
  - *information about fruit and vegetables*
  - *availability of fruit and vegetables*
  - *competition from the tuck shop*
  - *promotion of fruit and vegetables at lunchtime*
  - *attitude towards fruit and vegetables and any ways in which the programme impacts on attitudes*
  - *the reward schemes*
  - *other programmes within schools (e.g. drama production – “Inspector Pickles”, Breakfast Clubs)*
  - *other Initiatives within the community (e.g. food co-ops, food and health projects etc.)*
- To assess the implications for schools:-
  - *perceived effect on the tuck shop and implications for school funds*
  - *logistics – storage, health and safety, etc.*
  - *implications for staff – use, suitability and quantity of teaching materials, timing of input, etc.*
  - *perceived sustainability of the programme*

### **3. RESEARCH METHODOLOGY**

- A qualitative approach was adopted in order to address the project objectives and provide an in-depth understanding of the views and attitudes held.

#### **3.1 Research Target**

- Given the widespread objectives, research targets were wide and varied, consisting of the following key groups at both Lochgoin and Bankhead Primary:
  - *Pupils*
  - *Head Teachers*
  - *Teachers*
  - *Initial Recipient / Distributor of Fruit*
  - *Catering Manager*
  - *Parents*

#### **3.2 Observation Research**

- An approach of observation was adopted in order to assess the impact of Fruit Plus on fruit and vegetable consumption within the school.
- A Senior Interviewer from Market Research UK visited each school to observe consumption of fruit and other food types during classroom time, break time and lunchtime.
- Observation was carried out over two days at each school, including prior to the launch, six to eight weeks after the launch and five to six months after the launch in order to ascertain any changes or variations in consumption over time.
- In addition to observation techniques, a hand count exercise was adopted in order to obtain an indicative measure of consumption over similar time frames. As such this approach allows for an overview of fruit consumption rather than a statistical or scientific measure.

### **3.3 In-Depth Interview Construction**

- In order to investigate the views of staff at the school, a qualitative approach was adopted. Consideration was given to conducting focus group discussions, however given the possible variation in methods of implementation both across and within schools, we perceived depth interviews to be the most appropriate method.
- To allow for comparison over time, depth interviews were conducted at 6-8 weeks and 5-6 months after the initial launch. This approach permitted both schools to develop views and opinions of Fruit Plus over time.
- It was considered important to conduct research with the individual(s) involved in the actual receipt and possible preparation of the fruit within each of the two schools. We had found in previous research of the Fruit Plus Pilot that their attitudes and opinions can have an impact on the overall success of a project.
- A total of forty in-depth interviews were conducted. The table below illustrates the construction of the interviews.

	LOCHGOIN PRIMARY		BANKHEAD PRIMARY		TOTAL
	6 – 8 Weeks	5 – 6 Months	6 – 8 Weeks	5 – 6 Months	
Head Teacher	1	1	1	1	4
Teacher (one from each year group)	7	7	7	7	28
Catering Manager	1	1	1	1	4
Initial Distributor / Recipient	1	1	1	1	4
<b>TOTAL</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>40</b>

- Discussion guides for each research target group were designed by Market Research UK and received client input and approval prior to fieldwork commencing (copies of all discussion guides used are included as an appendix to this report).
- All interviews were conducted by Market Research UK Executives and Senior Interviewers.

### **3.4 Mini – Focus Groups (Pupils)**

- To investigate the views of pupils, an approach of mini-focus groups was perceived to be most appropriate given the age of respondents. In addition, due to different levels of maturity, we split pupils into two age categories, P1 – P3 and P4 – P7.
- Each mini-group was conducted during class time, within the school setting. Approximately six to seven pupils attended each mini-group, which lasted roughly thirty minutes.
- A total of eight mini-group discussions were conducted (four at each primary school). All mini-group discussions were conducted by a Market Research UK Executive.

- The discussion guide was designed by Market Research UK and approved in advance of fieldwork.
- The table below illustrates the mini-group construction at both schools:

AGE	LOCHGOIN PRIMARY		BANKHEAD PRIMARY		TOTAL
	6-8 weeks	5-6 months	6-8 weeks	5-6 months	
P1 – P3	1	1	1	1	4
P4 – P7	1	1	1	1	4
<b>TOTAL</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>8</b>

### 3.5 PTA Meeting Attendance

- It was considered important to undertake research with parents in order to explore further factors which may or may not impact on fruit and vegetable consumption.
- We have conducted research with parents on a number of occasions and in our experience we have found that an approach of focus groups lends itself to parents in terms of convenience and cost.
- After discussions with GGNHSB and both schools the most appropriate approach was perceived to be MRUK attendance at a PTA meeting.
- A Market Research UK Research Executive attended a PTA meeting at each primary school to allow full investigation of the views and attitudes of parents towards Fruit Plus.
- This exercise was conducted in April 2002 approximately four months after initial introduction of Fruit Plus in order to allow formation of views and opinions and as a result of convenient dates of PTA meetings.
- A loosely structured discussion guide was prepared by Market Research UK and approved in advance of the research. Each discussion lasted approximately thirty minutes.

#### **4. OVERVIEW OF IMPACT OF FRUIT PLUS ON CONSUMPTION**

- Each of the following sections relate to Objective 1 of the research project which investigated the area of consumption and also takes account of the observation exercises conducted with pupils.

*Objective 1: “To assess the impact of Fruit Plus on consumption of fruit and vegetables by children within the school, in the classroom, at breaks and at lunchtime”*

- Where similarities or differences exist between each of the target groups, these have been highlighted where appropriate.

#### **4.1 Impact on Consumption - Within the School**

##### Head Teachers & Teachers

- Head Teachers and Teachers believed that over time, pupils appeared to be more willing to try a greater variety of fruit and vegetables.
- At the 6 – 8 week stage, the majority of Teachers thought there had been a change in consumption at Bankhead, most perceived that the majority of fruit distributed within the class was consumed and pupils appeared aware and encouraged.
- At Lochgoin Primary, Teachers noticed that more pupils were bringing fruit from home and in some cases wanted to “show” the Teacher what they had brought. One Teacher considered consumption was related to the fact that fruit was free to the pupil and therefore relieved any financial pressure on Fruit Plus days. Similar to Bankhead, Teachers at Lochgoin recognised that pupils appeared more aware of the fruit itself and its benefits.
- At the initial phase of research (after 6-8 weeks), Teachers felt pupils enjoyed the fruit and looked forward to it and that most enjoyed the rewards (especially true of younger pupils).
- At Bankhead Primary, it was believed that some pupils had not seen fruit before. It was accepted that some pupils did not like particular fruits, and these pupils were encouraged by the Teacher to try.
- Lochgoin Teachers felt that for many pupils there was a poor diet at home due to financial constraints. This not only re-inforced Teachers belief in Fruit Plus overall, it highlighted the importance of fruit. Teachers considered that many pupils understood that fruit was good for them, but still enjoyed sweets and crisps more.
- Teachers at both schools mentioned at the 6 – 8 week stage that they were concerned the variety of fruit may impact on consumption. It was thought that the lack of variety may threaten the level of interest of pupils.
- When the area of consumption was investigated at the 5 – 6 month stage, almost all Teachers commented that they had seen a positive change in consumption, although for some Teachers, this change was thought to be minimal.

- Evident at both schools was the pupils' enjoyment of the fruit, most appeared to look forward to the fruit. One Teacher at Bankhead remarked that a few pupils had wished they had more fruit at home.
- There was a general consensus that over the months of Fruit Plus pupils' awareness of the important benefits of fruit had increased, and the awareness of the '5 pieces a day' rule was evident at Lochgoin Primary in particular.
- The issue of variety was again mentioned at Lochgoin where it was felt that an injection of variety may encourage more consumption. For example, a 'one-off' introduction of strawberries would create the excitement previously seen at the onset of the Initiative.

### Catering Managers

- Catering Manager's perceived they had limited involvement with Fruit Plus, taking delivery of fruit, washing the fruit and encouraging pupils at lunchtime to try the fruit and vegetables.
- When we asked Catering Managers about the amount of fruit they perceived was being consumed, minimal change was noticed. At the 5-6 week stage, both Catering Managers perceived their to be more desire for fruit. Over time the fruit and vegetables order for both school remained the same and there has been no need to order more.
- At Bankhead Primary, the Catering Manager estimated that forty packed lunches (with fruit) were consumed on a daily basis, roughly three hundred on a weekly basis. Vegetables were provided with Fuel Zone meal and were not perceived to be as popular as fruit.
- Whereas at Lochgoin Primary, approximately fifteen to twenty packed lunches with fruit were consumed on a daily basis, roughly seventy five to one hundred on a weekly basis.
- A wide variety of fruit was offered at lunchtime, such as, bananas, satsuma's, fruit salad, apples, grapes, fruit drinks such as Capri and pears.
- A wide variety of vegetables were also offered with the Fuel Zone meals, such broccoli, turnip, baked potatoes, sweetcorn and peas. The most popular vegetables were perceived to be carrots and baked beans.
- Catering Managers held the perception that many pupils were set in their ways with regard to fruit and vegetables. Both Catering Managers expressed difficulty trying to encourage pupils to try fruit and vegetables.
- In order to encourage consumption, Catering Managers tried to incorporate fruit or vegetables with "popular meals", such as cheeseburger and pie and chips.

### Pupils

- Through group discussions with pupils, little change was apparent over time with regard to consumption within the school. When consumption of fruit was investigated within the school a minority of pupils thought they ate fruit at lunchtime and breaktime.

- A number of pupils perceived they ate both fruit and crisps or sweets on Fruit Plus days. For a small number of pupils at both Lochgoin and Bankhead, the fruit provided was in addition to other refreshments at breaktime rather than an alternative to them. A few pupils claimed they brought fruit from home for consumption at breaktime within the school.
- At Lochgoin Primary a couple of pupils said the only time they ate fruit was on Fruit Plus days at school.
- Pupils at Bankhead perceived fruit to be available at both the canteen and the Tuck Shop, however, when we spoke with the Head Teacher, we discovered fresh fruit was not available at the Tuck Shop.

#### **4.2 Impact on Consumption – Outwith the School**

- Both Head Teachers and Teachers perceived that parents had a vital role to play to encourage fruit consumption amongst pupils outwith school hours.
- When we spoke with parents at both schools there was a high awareness of the Initiative. The majority of parents at both schools were aware that fruit was provided to pupils three times a week.
- The key aims of Fruit Plus were perceived by parents to be to encourage pupils to eat fruit and develop a healthier eating approach to meal times. These aims were considered appropriate, however a few parents at Bankhead expressed concern that their children would be forced to eat fruit. This concern had quickly been alleviated after feedback from pupils that this wasn't the case.
- Many parents had not seen a major change in consumption at home. These parents considered their children to be quite set in their ways about the fruit and vegetables they like or dislike.
- However, a number of parents at each school considered they had seen a change in their children's overall consumption of fruit and vegetables since the start of Fruit Plus. Parents had observed their children being more willing to try both fruit and vegetables at home, where before these had simply been refused. Changes had been experienced with children of a variety of ages at both schools. These parents felt they were purchasing more fruit than previously.
- In comparison to parents, most pupils considered they ate a variety of fruit outwith school, such as; strawberries, kiwi, raspberries, melon, mango and plums. Interestingly, most of the fruit mentioned was not types of fruit provided via Fruit Plus. In terms of the key fruits which pupils disliked, these included cherry tomatoes, pineapple, pears and for a minority apples.

### **4.3 Pupil Observation – Research Findings**

- This section explores the results obtained from the initial observation exercise at both schools.
- One of the objectives of the project was to assess the impact of Fruit Plus on consumption of fruit by pupils within the school, in the classroom, at breaks and at lunchtime.
- This phase of observation involved indicative measure of a baseline prior to the introduction of Fruit Plus, of the consumption of fruit by children within the school.
- It is important to note that this methodology incorporates observation, which is subjective in nature. The figures contained within the observation sections are general estimates to be used as a guide only.
- A representative of MRUK visited the two case study schools and undertook three exercises on each day, these are detailed below.

#### **Hand Count In Class**

- Prior to morning break, each class was asked 'How many of you have fruit or vegetables with you today?'
- The results were recorded and percentages were later calculated.

#### **Observation at Interval / Breaktime**

- A MRUK Senior Interviewer was placed in the playground to observe from a distance what pupils were eating, in order to give an overview of actual consumption observed.
- This involved interpretation on the part of the Interviewer in order to take a 'snap shot' of what was happening and as such, must only be used as a guide:  
e.g. - most of the pupils were eating a packet of crisps

#### **Observation at Lunchtime**

- A similar observation exercise was undertaken at lunchtime in each of the schools, with the Senior Interviewer observing pupils who had a packed lunch with them. A hand count was again conducted, with the Interviewer observing the number of pupils who had fruit as an approximate proportion of the total number of pupils present.

#### 4.4 Overview of Observation

- Prior to the Fruit Plus launch (December 17<sup>th</sup> 2001) at each of the two schools a representative of Market Research UK visited each school to observe consumption of fruit and other food types during classroom time, break times and lunch time.
- This process was repeated, 6-8 weeks after the initial implementation of Fruit Plus in order to ascertain any changes or variations.
- It should be noted that the following sections are subjective in nature and do not provide statistical or scientific measure, but provide an overview of what was observed.
- Pupils were observed at each school within the classroom, at breaktime and in the canteen also.
- Tables of the Handcount analysis for each school can be found in Appendix VII.

#### 4.5 Lochgoin Primary

##### 4.5.1 Wave 1 – Lochgoin Primary

- The Handcount exercise on Day 1 at Lochgoin, indicated that pupils in the younger classes predominately claimed to have had more fruit or vegetables. No pupils in P4 or P7 had any fruit or vegetables on either of the days observed.
- Looking at the Day 1 handcount collectively, almost one in every five pupils (19%) claimed to have had fruit or vegetables with them.
- On Day 2 the overall number of pupils claiming to have fruit or vegetables decreased to around one in every eight (13%).
- Across all other classes the number of pupils who indicated they had fruit decreased from Day 1 to Day 2, with the exception of P4.
- Pupils were also observed at morning break time. The observations took place in the infant (P1, 2, 3) and senior (P4, 5, 6, 7) playgrounds on two separate days. Results were very similar for both groups across both days and are summarised below;
  - *the majority of pupils were eating crisps (80-90%)*
  - *a small number of students were seen eating sweets (5-10%). This was made up of such things as chocolate biscuits, fudge bars and jaffa cakes*
  - *most pupils were drinking fizzy drinks (approx 70%)*
  - *no fruit was seen being eaten, and there was no skins or cores left in the playground*
- When we observed in the canteen, about 10% of pupils taking lunch in school brought a packed lunch, and of these around a third had and ate fruit, most commonly oranges, bananas and cherry tomatoes.

- There were two types of school lunches, Fuel Zone bags that had apples, and tray lunches, where there was an option for fruit, yoghurt or a cake bar.
- The Interviewer observed a large uptake of fruit with the school lunches, with around 75% of those who were in the canteen purchasing a packed lunch eating the fruit.

#### 4.5.2 Wave 2 – Lochgoin Primary

- Both days of observation at Lochgoin Primary were Fruit Plus days.
- On Day 1 of the handcount around one in every seven pupils (13%) claimed to have fruit, most commonly P1 and P2.
- Just under one in every five pupils (17%) on Day 2 indicated they had fruit, although no pupils in P3, P6 and P7 had no fruit on the second day.
- Results were very similar to the initial observation in December for the breaktime observation, in that the majority of students were eating crisps, most had either fizzy drinks or soft drink cartons. During this observation, a few were seen eating fruit on each day, compared to the last observation where no fruit was viewed being consumed, but very little.
- In terms of fruit consumption, on Day One some children were seen finishing oranges in the playground, whereas on Day Two more fruit was noticed being eaten in both infant and senior play areas. At the second wave, more sweets were noticed in the senior playground.
- Compared to the initial observation in December, around the same proportions took packed lunches (10-15%), Fuel Zone (25%) and tray lunches (around 60%). About half of packed lunches viewed contained fruit.
- Fuel Zone lunches contained apples, with these children eating either some or all of the apple.
- Tray lunches had options of coleslaw, beans, apples or oranges, most trays had at least one of these options.
- On Day Two an option for the tray lunch was chocolate cake, therefore less fruit was taken with tray lunches.

#### 4.5.3 Wave 3 – Lochgoin Primary

- On Day 1, around one in every ten pupils (11%) claimed to have brought fruit to school (P1 and P2 in particular), with this being at its lowest trend when compared to the waves 1 and 2.
- This decreased to slightly one in every ten pupils (10%) on Day 2, which was also a Fruit Plus day. Again this was driven mainly by P1 and P2. This pattern is consistent with the findings of the pupil focus groups, where fruit appeared to be in some cases most popular with the younger age groups.

- When observing at breaktime, as with the two previous observation exercises, in both playgrounds, most pupils had crisps and fizzy drinks, a small number had sweets, sometimes in addition to crisps. There was also a small number who had cartons of fruit juice and some flavoured water.
- Little fruit was seen being consumed at morning break time on both Day one and Day two (Fruit Plus days).
- In the senior playground, there were some cans and large bottles of fizzy drinks being consumed, and also a significant number of sweets on day one.
- During the lunchtime observation at Lochgoin, there were some changes in the types of lunches being consumed by children. On this occasion, the number of children with packed lunches decreased slightly, while there was a small increase in Fuel Zone bags.
- Almost half of all packed lunches had a piece of fruit in them, although some also had sweets, cakes or biscuits.
- All Fuel Zone bags contained a piece of fruit of some kind.
- Tray lunches had the options of fruit and vegetables on day one, and fruit or yoghurt and/or beans on day two.

#### **4.6 Bankhead Primary**

##### **4.6.1 Wave 1 – Bankhead Primary**

- With regard to the handcount exercise at Bankhead, P4 and P5 had the highest level of pupils who claimed to have fruit over both days of observation, in comparison to P2 with no pupils claiming to have brought fruit or vegetables.
- On Day 1 of the handcount overall around one in every 8 pupils (13%) indicated they had fruit with them. This increased to just over one in every five (21%) respondents on Day 2 of the handcount observation.
- Pupils were also observed at morning break time. The observations took place in the infant (P1,2,3) and senior (P 4,5,6,7) playgrounds, where results are different this has been noted.
  - *the majority of most pupils were eating crisps (80-90%)*
  - *in the infant playground, about 50% of those seen, had fizzy drinks*
  - *in the senior playground around 60% of those observed had fizzy drinks*
  - *a few students had sweets (infant playground 5%, senior playground 20% - 40%)*
  - *some fruit was seen being eaten: On Day One in the infant playground 4 pieces (2 apples and 2 bananas) and in the senior playground 2 pieces (1 orange and 1 banana)*
- Whereas on Day Two in the infant playground no fruit was observed, in the senior playground there was 2 pieces (1 apple, 1 pear).

- Around a third of those observed at lunchtime in the canteen, at Bankhead Primary School had brought a packed lunch. Almost 40% of the packed lunches contained fruit, some packed lunches had two pieces of fruit.
- Tray lunches were more popular than Fuel Zone (set meals), of the school lunches taken, only around 10% were Fuel Zone. Again, the Fuel Zone packed lunch bags contained a piece of fruit and all ate some of the apple, but only a few were observed to have finished it.
- On day one in the canteen coleslaw, sweetcorn and baked potatoes appeared to have a high uptake with the tray lunch.
- One of the days observed was a Christmas Lunch Day – and there was no fruit available with the lunch tray – however there was two portions of vegetables, but most was left on the plate.

#### 4.6.2 Wave 2 – Bankhead Primary

- Day One at Bankhead Primary was a Non Fruit Plus day, with Day Two being a Fruit Plus day.
- Similar results to Lochgoin on Day 1, with just under one in every five pupils (17%) at Bankhead claiming to have fruit with them. Most commonly P5, P3 and P1 had fruit with them on Day 1.
- Around one in every 6 pupils (15%) on Day 2 indicated they had fruit with them, this was particularly true of P1 and P5.
- There was similar results across both days of the handcount with the exception of P2/3 who had no fruit with them on the Fruit Plus day.
- Food consumed at morning break was again, quite similar to the initial observation in December, where most pupils were eating crisps, fizzy drinks and soft drinks cartons. Only a few had sweets and chocolate biscuits, with only a few actually with fruit.
- The first day of observation was a Non Fruit Plus day, a few pupils were eating fruit brought from home, however those consuming fruit were mainly finishing Fruit Plus tangerines.
- On Day Two, more pupils were eating fruit in the infant playground, with only a few seen eating fruit in the senior playground.
- At Bankhead, slightly more children brought packed lunches, about half compared to a third in December. Again, around half of the packed lunches contained fruit, sometimes two pieces.
- Fuel Zone bags were taken by around 10% of pupils eating at school, all of these bags contained fruit.
- Tray lunches were taken by about a third of pupils. These contained a choice of beans, coleslaw, grapes, apples and tangerines, most pupils took one of these.

- It was noted that older children mainly ate sandwiches, crisps and fizzy drinks, and at this age level, more girls than boys ate fruit.

#### 4.6.3 Wave 3 – Bankhead Primary

- At the Wave 3 handcount exercise, around one in ten pupils on Day 1 (11%) and Day 2 (13%) had fruit with them.
- On Day 1 of the observation pupils in P5, P6 and P7 most commonly claimed to have had fruit when the handcount exercise was conducted, whereas on Day 2 those with fruit was more evenly spread across age groups.
- In Wave 3, the results were fairly similar to the two previous breaktime observations at Bankhead, as most pupils were eating crisps and consuming fizzy drinks. A small amount had sweets and chocolate but importantly more pupils had fruit.
- In this case, the number of pupils eating fruit was quite close to the number who brought fruit from home.
- On day one, more senior pupils than infants were eating fruit whereas on day two the numbers appeared to be similar.
- The number of infants eating fruit was more on day two (Fruit Plus) than on day one (Non Fruit Plus day).
- In the canteen at Bankhead, there was a slight decrease in the number of pupils taking Fuel Zone bags (around 5%, compared to 10% in Wave 1 & 2), and a slight increase those eating tray lunches (from around 1/3 in Wave 2, to 3/5 in Wave 3). There was still almost half of the pupils observed bringing a packed lunch.
- Packed lunches consisted mainly of sandwiches, crisps and fizzy drinks, although some had cakes, biscuits and sweets. About a third contained fruit on day one, and nearer half on day two.
- All Fuel Zone bags contained a piece of fruit which most children ate.
- Tray lunches had a variety of fruit and vegetables, and most children had either one or the other or both. In addition, some of the older girls packed lunchboxes contained salad.

#### **4.7 Overview of Observation**

- Although a minority of pupils claimed to have fruit to eat at morning break in Wave 1, almost none of them were actually observed by the Interviewer eating any.
- Most pupils in Wave 1 had crisps to eat, the majority had fizzy drinks, a minority had sweets such as cake bars, biscuits and chocolate bars.
- Some fruit was being consumed at lunchtime by a minority at both schools, both fruit brought from home and fruit contained in the school lunches. Fuel Zone bags which were "set bags" provided by the canteen were less popular than tray lunches, but all contained fruit that was seen being consumed.
- In wave 2, a small increase was observed in the amount of fruit being eaten at morning break time.
- Lunchtime appeared to be when most fruit was consumed, either from packed lunches, or in Fuel Zone bags or tray lunches. This had not changed since the initial observation in December.
- Over the three waves of observation, most fruit was seen being consumed at lunchtime, (including fruit that had been brought from home) with only a small amount being consumed in the morning break.
- In summary, there were no major changes observed in the number of children bringing fruit from home or consuming fruit in the school breaktimes, across each wave of observation at both schools.

## **5. EXPLORATION OF FACTORS IMPACTING ON FRUIT CONSUMPTION**

- The next sections investigate the factors which impact upon fruit and vegetable consumption.

*Objective 2: "To explore the factors which impact on fruit and vegetable consumption by children involved in the programme"*

### **5.1 Information About Fruit and Vegetables**

#### Head Teachers & Teachers

- Head Teachers initially received information regarding the Fruit Plus scheme from a meeting they attended, this information was then filtered down to the Teachers at each school when a system for Fruit Plus was developed. Head Teachers were also responsible for arming the Catering Manager and the Initial Distributor / Recipient with the necessary information regarding Fruit Plus.
- Head Teachers did not consider their role would significantly change in the future as they believed a routine had now developed.
- Teachers considered it to be their responsibility to encourage consumption and discuss the benefits of fruit. At both schools over time, Teachers co-ordinated the distribution of fruit within the class, discussed the benefits of fruit with the pupils, gave classroom talks on fruit and promoted healthy eating to pupils. At Lochgoin, the number of discussions on the benefits of fruit consumption was thought to have increased over time.
- Other involvement considered by Teachers was the overall promotion of healthy eating, provision of information on eating properly and distribution of rewards. At Bankhead a few Teachers mentioned making posters and badges at the 5-6 month stage. At Lochgoin, at the 6-8 week stage, many Teachers mentioned the need to raise awareness regarding the disposal of litter and hygiene issues.
- The majority of Teachers felt that over time their role would not change, they saw themselves as the information providers to pupils. It was felt that Fruit Plus would become almost routine, like milk was previously and by the 5-6 month stage many Teachers perceived this to be true.
- A minority at both schools felt their role would change and they envisaged more input from Teachers on fruit, in particular incorporating more worksheets and lessons within the class, with one Teacher at Bankhead actually believing there would be less Teacher involvement over time as it becomes more of a routine.

#### Pupils

- The majority of pupils felt they received information about fruit from their Teacher. No pupils at either school mentioned their parents when asked where they found out about fruit. In addition, no pupils mentioned receiving any information on vegetables.

- In terms of the information given to pupils about fruit, it was the perception of pupils that they received such food at school for a number of reasons. The main reasons perceived included:
  - *gives you energy*
  - *healthy eating*
  - *improves overall health*
  - *protects body & repairs damage*
  - *improves concentration*
  - *good for health*
  - *keeps you strong*
- Most pupils were aware of the start date of Fruit Plus and this awareness appeared to increase with age.

## **5.2 Availability of Fruit and Vegetables**

- Overall availability was a factor contributing to fruit consumption.
- In exploring the availability of fruit and vegetables within the schools there was a general consensus amongst Teachers and the Head Teacher at Lochgoin that there was not enough fruit for all pupils. This was due to the fact that Lochgoin Primary enjoyed a low absentee rate and as such they often had to share the fruit amongst pupils.
- At Bankhead Primary it was also thought that there were limited fruit and vegetables on occasions and the Initial Distributor had to divide particular fruits between classes.
- At both schools there was a Tuck Shop, although no fresh fruit was sold. However, on Fruit Plus Days, Teachers perceived there was no Tuck Shop, thus further promoting the consumption of fruit at break time on Fruit Plus days.
- At both primary schools, fruit and vegetables were available at lunchtime and on the Fruit Plus days. Although both schools had a tuck shop there was no fresh fruit or vegetables on offer. Bankhead Primary had attempted to introduce this in the past, however lack of demand for perishable goods and the subsequent wastage led to this approach being unviable. There was minority mention of raisins being made available at the Tuck Shop.
- Both schools at lunchtime followed a scheme called Fuel Zone and this involved three set choices of meals available to pupils. Within these meals a choice of fruit and vegetables was available.
- In addition pupils were able to purchase a packed lunch within the school canteen and this too contained a selection of fruit.

## **5.3 Promotion of Fruit and Vegetables**

- Due to the Fuel Zone System there was limited promotion overall of particular fruit and vegetables, and was limited to pictures of the meals on the wall, which were available with Fuel Zone, some of which did contain fruit.
- When speaking to both Catering Managers it was thought that the posters within the school canteen and also fruit bowls positioned where pupils can see them also added to promotion.

- Teachers themselves considered that they promoted the benefits of healthy eating to pupils and in doing so promoted the fruit and vegetables. Teachers were also aware of Fuel Zone and the posters on the wall. A number of teachers mentioned that the focus of promotion appeared to be driven by fruit consumption rather than fruit and vegetables.
- Teachers considered there to be no problems with the promotion of fruit and vegetables. However, it was felt that fruit was more popular than vegetables, which were considered more difficult to promote.

#### **5.4 Overview of Attitudes Towards Fruit and Vegetables**

- This section investigates the key target audiences attitude towards the fruit and vegetables available overall. This includes investigating their perceptions of choice, satisfaction and quality and its impact on consumption.

##### Head Teachers

- Head Teachers were initially satisfied with the choice of fruit available to pupils. At the 5 – 6 month stage it was felt that a greater variety of fruit would increase the interest of pupils.
- Similar to previous research undertaken by Market Research UK, it was expressed by Head Teachers that pupils were disappointed on 'cherry tomatoe' days, and that this choice of fruit would not be missed if it was to be replaced.
- Overall, Head Teachers appeared satisfied with the quality of fruit provided, however there was a couple of ongoing problems with the ripeness of fruit, in particular pears. This led to pears having to be stored longer within the school before the pupils could eat them.

##### Teachers

- Most Teachers at the 6 – 8 week stage were satisfied with the fruit overall. There appeared to be a good choice at the initial stages. A few Teachers, in particular at Lochgoin expressed an early desire for more choice for the pupils in order to boost interest. The financial implications of this were recognised and Teachers did not expect an array of exotic fruits. However, the choice of fruit was perceived by some to be repetitive and the occasional introduction of seasonal fruits was desired.
- By the 5 – 6 month stage, views of choice were mixed. Earlier perceptions of poor choice were re-inforced with what had now turned into an element of dissatisfaction with the choice by many Teachers at both schools.
- A few Teachers remained satisfied with the variety of fruit, although it was thought the order in which fruit was delivered could provide more variation.

- By the 5-6 month stage, Teachers considered the quality of fruit to be acceptable in most cases. It was mentioned that the ripeness of some fruit, mainly pears, had an effect on their overall perception of quality. However, it was also recognised that with pears in particular it was difficult to satisfy all, as individual preferences differed so greatly amongst pupils. As such, the quality was considered to vary.
- Most Teachers perceived that the pupils were satisfied with the fruit overall and this was consistent over both waves of interviews.
- At Bankhead Primary, it was thought that pupils viewed the fruit as an enjoyable treat. At Lochgoin, pupils were thought to have enjoyed the fruit more over time. What had started as the occasional moan and groan to the introduction of fruit had turned into what was thought to be genuine excitement and a willingness to try.
- Teachers considered there to be key likes and dislikes which were consistent at both schools. In particular pupils appeared to enjoy grapes the most and cherry tomatoes the least.
- Most pupils appeared to like the fruit and enjoy it. At the 5-6 month stage it is important to note that most pupils claimed they would miss the fruit if it wasn't there as it now formed part of their school routine.
- Again, disappointment was evident amongst pupils if the fruit provided was cherry tomatoes as the majority disliked this fruit. In addition, it was mentioned that if the apples or pears were hard, or bananas over-ripe, pupils did not enjoy the fruit as much, this re-inforces the views expressed by Head Teachers and Teachers regarding the ripeness of fruit.
- The most commonly preferred fruits remained constant for most pupils with grapes, apples and bananas being clear favourites as a result of them being "tasty and juicy". There was spontaneous desire for more grapes amongst a number of pupils.
- Pupils mentioned a number of reasons for why they didn't like particular fruits. Namely, the ripeness of the fruit, whether fruit has been bashed and fruit that looks unclean were key reasons why some fruit was disliked.

### **5.5 Perceived Impact of Programme on Attitudes**

- Head Teachers perceived the overall impact of Fruit Plus on attitudes would be clearer in years to come. It was thought that pupils would benefit from the routine of Fruit Plus and this would form future habits regarding the consumption of fruit.
- All Teachers at Lochgoin perceived that Fruit Plus would change the attitudes of pupils. It was felt that Fruit Plus encouraged the formation of routine and positively re-inforced the benefits of eating fruit given the frequency with which it was provided. These Teachers felt that in the longer term, it will be easier for pupils to understand the benefits.
- Most Teachers at Bankhead shared the view that Fruit Plus would positively change attitudes. A few Teachers believed that parental influence, encouragement and involvement in the promotion of fruit was necessary in order to change attitudes in the longer term.

- It was hoped by Teachers at both schools that pupils would understand the benefits of fruit more, rather than purely consume the fruit. Teachers believed an awareness and understanding of the benefits was vitally important and should be re-inforced with the consumption of fruit.
- A number of parents from both schools considered they had seen a change in the attitude of their children. Parents felt that their children were more open-minded about not only fruit but vegetables also. These parents also felt their children were more willing to try the fruit, which re-inforces the opinion of Teachers who also felt pupils were more willing to try.

## **5.6 Perception of Reward Schemes**

- There was a mixed reaction expressed towards the reward scheme of sticker incentives.
- Head Teachers believed it was necessary to entice pupils to initially start eating the fruit and a good way to do this was with the collection of stickers. However, both Head Teachers and most Teachers agreed that surely the aim was to reach a position where pupils wanted to eat the fruit for the health benefits rather than a material benefit provided to them.
- Teachers commented that a variety of rewards were given to pupils, such as, badges, stickers, bookmarks, praise and encouragement. At both schools, Teachers awarded a sticker if fruit was consumed on a Fruit Plus Day and this was shown on a chart.
- If fruit was consumed on all three Fruit Plus days, a sticker would be placed on a chart outside the classroom. At the end of the year it was envisaged there would be a prize for the pupil with the most stickers.
- The majority of Teachers at Lochgoin perceived incentives had an impact on consumption, in particular for younger pupils. The stickers were viewed as a short term goal to entice initial consumption and to this effect, it was thought that rewards had encouraged consumption.
- At Bankhead Primary, a mixed view of the rewards was expressed. A few Teachers felt if no rewards had been given, pupils would not have been as keen to try initially. However, a number of Teachers at both waves of interviewing felt that consumption had not been effected solely by the rewards. These Teachers viewed the rewards as a novelty which quickly lost impact, especially with the older children.
- A number of improvements to rewards were suggested. At both schools it was considered important to tailor rewards to specific age groups. For example, for older pupils there could be different certificates or stickers. It was considered important to have an 'end goal', a prize at the end of term, over and above the regular provision of stickers. It was also mentioned that a reward for pupils who brought fruit from home on Non Fruit Plus days could also encourage consumption.
- Most Teachers did consider rewards to be important in order to entice consumption in the initial stages, however the focus for many should be one of education rather than reward.

- There was limited awareness of the incentives amongst the parents spoken to. A minority were aware that a sticker was provided if fruit was consumed on a Fruit Plus day. When the method was explained, most parents considered rewards appropriate, particularly in initial stages in order to encourage consumption.
- Most pupils considered the incentives to be appealing, in particular those in P1 to P3. A few, older pupils especially felt that they would eat the fruit regardless and they didn't feel particularly encouraged by the stickers.

## **5.7 Other Programmes within the School**

- There were no other programmes currently being undertaken by Head Teachers within the schools. Head Teachers expressed an awareness of Food Co-op, Inspector Pickles, and Breakfast Club although neither had personal involvement in any of these initiatives.
- A number of other initiatives had been used by Teachers within the classroom. Health Studies and Healthy Eating was recognised by Teachers as forming part of the set curriculum. However, it was considered difficult to compare these activities to Fruit Plus as they formed 'one off' lessons within other subject areas such as alcohol, health or environmental studies. As such they were not perceived to have the routine or re-inforcement over time that Fruit Plus was thought to offer.
- With regard to other specific programmes within the school, most Teachers were not aware of any. A minority at Lochgoin had heard of Inspector Pickles but it had not been introduced within the school. One Teacher at Bankhead had heard of 'Breakfast Club' but again not through personal implementation or experience.
- For Teachers, there was a limited awareness of Initiatives within their local community. One Teacher at both Bankhead and Lochgoin were aware of a Food Co-op, but could give no other details.
- Despite this lack of awareness of other initiatives, the Fruit Plus Initiative was thought to compare favourably to other Initiatives, and most perceived it to be better on account of Fruit Plus being simplistic and conducted over time. A number of Teachers perceived Fruit Plus offered good resources also.
- There was little awareness amongst pupils of other fruit projects within the school. At Bankhead a couple of pupils mentioned they learned about where fruit comes from and how the body works. This mirrors the view of the minority of Teachers who felt they had built Fruit Plus into the classroom by looking at the country of origin and Health related topics.
- A minority of pupils at both schools at the 5-6 month stage mentioned health topics within the class, drawing or spelling fruit, fruit anagrams and an overview of foods that are "good" or "bad" for you.

## **6. IMPLICATIONS FOR SCHOOLS**

- The following sections assess the implications Fruit Plus has had on both of the primary schools.

*Objective 3: "To assess the implications for schools"*

### **6.1 Perceived Effect on Tuck Shop & Implications on School Funds**

- There were similar experiences shared by Lochgoin Primary and Bankhead Primary regarding the effect on the tuck shop and implications on school funds.
- Bankhead Primary, the larger of the two schools, did currently have a tuck shop which they tried to operate on days which were non Fruit Plus. It was thought that Fruit Plus has impacted on the Tuck Shop in terms of a loss of school funds due to its closure on Fruit Plus days. However, Bankhead Primary had undertaken a number of fund raising events to ensure that this had no implication on the pupils themselves.
- Lochgoin Primary also offered a Tuck Shop which offered a limited variety of sweets and fizzy drinks. Teachers at Lochgoin considered Fruit Plus may have impact upon school funds available, however, some uncertainty was evident.
- When Teachers at Lochgoin were asked at the 6 – 8 week stage, some felt there had been no effect on the Tuck Shop, whereas others perceived sales to have reduced. At the 5 – 6 month stage it was felt by most that Fruit Plus had not resulted in any major impact on the Tuck Shop, with only a minority perceiving there to be less sales.
- In terms of the products which were available at the Tuck Shops, no Tuck Shops were providing fresh fruit and vegetables. However it was considered appropriate to perhaps provide dried fruit such as apricots or raisins in order to try and increase pupils choice of fruit and vegetables within the schools.
- There was a general consensus that the Tuck Shop was not in direct competition with Fruit Plus as no fresh fruit was offered at either of the schools, although it was recognised that fizzy drinks, sweets and crisps provided on unhealthy alternative for pupils to choose.

## 6.2 Overview of Logistics

### Initial Distributor

- Through discussions with the Initial Distributor, daily activities on a Fruit Plus Day included collecting washed fruit from the kitchen and dividing fruit into class portions. At Lochgoin Primary a parent was helping to divide fruit into class portions at the 5-6 month stage.
- The Initial Distributors' confirmed the Teachers perception that P7 Buddies at Bankhead collected the fruit crates and delivered them to the Auxiliary Room to start the process again.

### Head Teachers

- Head Teachers expressed high awareness and understanding of the logistics detailed in Section 6.2.1. It was considered by both Head Teachers that a system for each school had been developed by all parties involved and in doing so, a routine was created which was not only sustainable, but shared responsibility.
- In both schools the initial planning and development had allowed the logistics to remain consistent over time and form a manageable routine, taking into account the number of pupils, the size and the layout of each school.
- The Head Teachers involvement in the logistics had become one of initial information provision, overall management, and monitoring within the school whilst solving any problems should they arise.
- Head Teachers and Teachers perceived that the fruit arrived on the same three days. For Bankhead the three Fruit Plus days were Monday, Wednesday and Friday. At Lochgoin the three Fruit Plus days were Thursday, Friday and Monday.

### Teachers

- The differing logistics at both schools was reflected in the views of Teachers and all expressed a high awareness of the logistics within each school.
- At Bankhead, the fruit was thought to be initially washed by the kitchen staff before being collected by the Janitor and taken to the Auxiliary Room. The Auxiliary then divided the fruit into crates for each class and placed on a trolley. It was then the responsibility of the Janitor to deliver fruit to each class. Once consumed P7 'buddies' then took the crate back to the Auxiliary room whilst disposing of any waste in the bags provided in a specific bin.
- At Lochgoin Primary, Teachers believed the fruit was delivered to the kitchen and washed by the Catering Staff. It was then collected by the Auxiliary then delivered and collected the crates, whilst disposing of any waste. Given the size of Lochgoin (one class per year group) this was considered a manageable task.

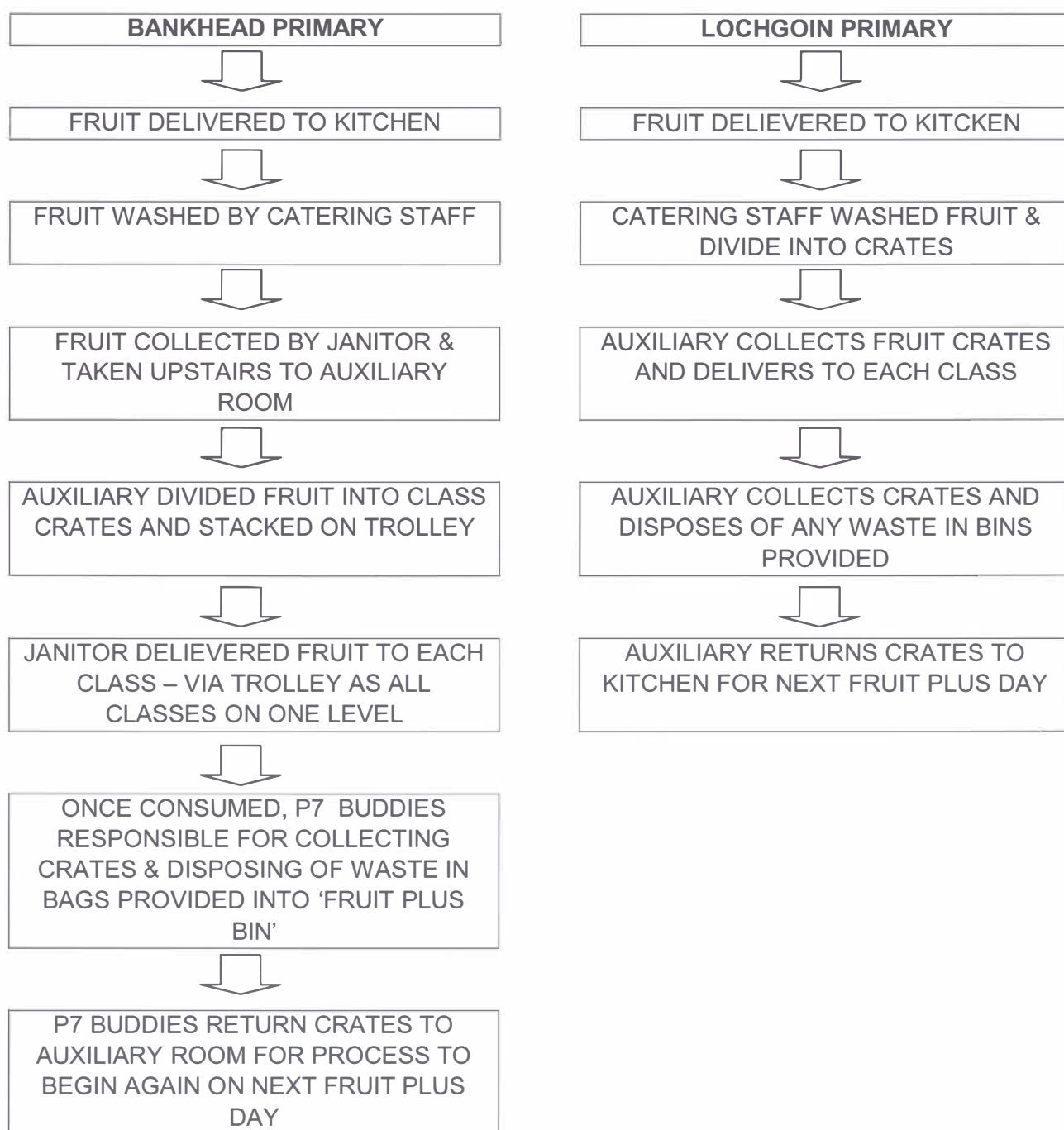
## Pupils

- Pupils expressed a high awareness, particularly at the 5-6 month stage of the logistics within each of the schools detailed within 6.2.1. The majority of pupils at each school were aware of the three Fruit Plus days at each school.

## Parents

- There was limited awareness of the actual process amongst parents of the logistics of the fruit within the school. Most were aware that it was delivered to each class three times a week and that the fruit was washed prior to consumption. There was little understanding expressed of the roles within each school, however it was expected by parents that the catering staff, janitor and auxiliary would be involved in some way.

### 6.2.1 Overview of Perceived Logistics at Each School



- Both schools expressed satisfaction with the system adopted and considered it now to be routine.
- The distribution of fruit to the classes was not considered to impact heavily on time commitments and was thought to make effective use of time.
- Both Initial Distributors stated they were satisfied with their current role and also felt the initial planning beforehand had allowed the distribution to run smoothly.

- There was some mention of delivery days and times being inconsistent in the initial stages of the project, however, this was no longer perceived as a problem.
- Initial Distributors also highlighted the fact that there was not always enough fruit for all pupils, although this was mentioned at both Waves of interviewers, this perception was particularly strong at the 5-6 month stage.

### 6.2.2 Storage of Fruit

- There were no significant problems experienced with the storage of fruit for any of the respondents. At Bankhead Primary fruit was stored in the Auxiliary room whereas in Lochgoin Primary fruit was stored within the kitchen.
- On occasions where fruit was not ripe enough (in particular pears), this fruit had to be stored until the next Fruit Plus day which was viewed as being an inconvenience rather than a barrier to the system operating as originally planned.

### 6.2.3 Health & Safety Regulations

- Head Teachers expressed awareness of a number of perceived health and safety regulations. These included that when preparing and washing fruit hands should be washed and hair should be tied back. This preparation should be carried out in a place which should be hygienically cleaned.
- The majority of Teachers also expressed an awareness of the importance of ensuring hands are washed prior to consuming the fruit and prior to the fruit being handled. These perceptions remained consistent over both waves of interviewing for Teachers. A few teachers at Lochgoin mentioned the importance of effective disposal of any waste at the 5-6 month stage.

## 6.3 Overview of Implications for Staff

- Head Teachers perceived their role to be one of overall management and problem solving. Both Head Teachers had initially provided information on Fruit Plus to Teachers and with the views of those involved, a system for each school, had been developed.
- Head Teachers did not consider their role would change in time and they would continue to monitor and oversee the logistics within the school to ensure the smooth running of the initiative.
- Teachers at both schools considered the key implication for staff to be one of time pressures. At the 6-8 week stage both schools raised the issue that time had to be sacrificed from other lessons, such as Maths and English in order to distribute the fruit within the classroom, in particular with younger pupils.

- By the 5 – 6 month stage, time pressures were still viewed as the key implication for staff, however the positive benefits of the fruit for the pupils appeared to alleviate any perceived negativity this may have caused. There was a general consensus amongst Teachers that Fruit Plus was a positive and stimulating exercise, as such they were supportive of it, despite the time implications all had experienced.

### 6.3.1 Use of Fruit Plus Materials

- In exploring the materials which Teachers had received, the majority spontaneously mentioned an Information Pack on Healthy eating. This was thought to include worksheets, video's and information on fruit and healthy eating. In addition, Teachers mentioned badges, bookmarks, word puzzles, posters, charts and ideas for Teachers to build into lessons.
- Almost all Teachers had experienced some difficulty in building all the materials into the classroom as a result of time constraints. A minority of Teachers at both Lochgoin and Bankhead had not used any of the materials provided by the 5 – 6 month stage, with only a small number having used any.
- For those Teachers who had used some of the materials, such resources tended to be used in conjunction with the 'Health' topic, already included in the curriculum.
- A minority of Bankhead Teachers at the 5 – 6 month stage had managed to incorporate the Fruit Plus materials into Maths. For example, using graphs, division and addition using fruit. These Teachers had also incorporated materials into Science, by looking at seeds and also with Geography when looking at the country or origin of particular fruits.
- All Teachers at Bankhead perceived they had received enough materials at both stages of interviewing. Materials were considered to be a good starting point, although most felt there was little time left in their day to incorporate it.
- At Lochgoin, most Teachers felt they had received enough materials and in some cases felt there was too much material to use. A number of Teachers mentioned at the 5 – 6 month stage that more posters and visual materials were desired.
- Both Head Teachers expressed that feedback from Teachers had highlighted the time pressures for Teachers within the classroom.
- Parents expressed no awareness of educational input within the class. It was expected that the Teacher would encourage the consumption of fruit and promote the benefits of healthy eating.

### 6.3.2 Perceived Suitability of Materials

- At both schools there was a mixed response regarding the perceived suitability of materials.
- A number of Teachers at both schools considered the materials could be more tailored to different age groups, simpler for younger pupils and more challenging for older pupils. Conversely, many Teachers felt that materials were easily adaptable and flexible to different age groups.
- A few Teachers at Bankhead mentioned at this stage that they did not consider stickers to be suitable and a preference for bookmarks was expressed.
- In the main, the materials were considered to be bright and good quality, for most it was the constraint of time which had limited use rather than perceived unsuitability.

### 6.3.3 Time Spent on Fruit Plus Within Classroom

- Most Teachers spent five to fifteen minutes on the distribution of fruit within the classroom on each Fruit Plus day, this remained consistent over both waves of interviewing.
- The time spent on distribution was influenced in both schools by the type of fruit to be distributed and the age group of pupils.
- The time Teachers spent on the teaching materials varied for individual Teachers. A few Teachers had spent no time with the teaching materials. The time varied between ten minutes per week to one hour per week depending upon how the Teacher built the materials into the classroom.
- The majority of Teachers did not consider that Fruit Plus had caused a problem with the curriculum as they had incorporated Fruit Plus as and when they could. There was a desire expressed by both Teachers at Bankhead and Lochgoin to build Fruit Plus more into the foundations of the school curriculum as this would allow this subject to be covered in full without sacrificing time from other subjects.

### 6.4 Perceived Sustainability of Fruit Plus

- Both Head Teachers considered the sustainability of Fruit Plus to be important and achievable. The Initiative was perceived to run smoothly within the school and be easy to organise and manage. It was thought that Fruit Plus had fallen into the same routine as milk distribution and as such had become part of the school week.
- It was the view of Head Teachers that rewards were important and welcomed in the initial stages, however they were not considered to be key to the longer term sustainability.
- The introduction of a greater variety of fruit was considered by Head Teachers to maintain the interest of pupils, whilst the formation of a routine or habit was thought to help sustainability.

- At the 6 – 8 week stage, Teachers felt it was important to talk about healthy eating and remind pupils of the benefits of fruit and keep the concept top of mind. This was referred to as the “drip drip effect” (Lochgoin Teacher). By the 5 – 6 month stage, most Teachers perceived that the novelty of Fruit Plus had now developed into a routine within the class. It was thought that the occasional introduction of different varieties of fruit would help sustain interest.
- The majority of Teachers perceived Fruit Plus was sustainable in the longer term provided a routine was developed. A few Teachers at Bankhead had initially expressed some doubts regarding the time management of Fruit Plus. These Teachers now held a more positive view and considered the routine of Fruit Plus allowed the scheme to be more sustainable for both Teachers and Pupils.
- Teachers at both schools perceived parental support and awareness was vital in order to enjoy the longer term benefits of Fruit Plus.
- Head Teachers and Teachers looked upon Fruit Plus as an exercise that was here to stay. Even though for almost all Teachers, time problems were experienced, the perceived benefits to pupils was a key driver which promoted the co-operation of Teachers and acceptance of Fruit Plus.
- All parents considered the sustainability of Fruit Plus to be important given the benefits to children throughout Glasgow. A few parents also mentioned that in some areas of Glasgow, they perceived some children would not be provided fruit at home, thus making the sustainability of Fruit Plus vitally important.
- Catering Managers suggested that more variety of fruit would help to keep up interest.

### **6.5 Suggested Improvements to Fruit Plus**

- Head Teachers both considered the introduction of seasonal / exotic fruit would improve Fruit Plus. In addition, it was also mentioned that more posters and visual aids would be beneficial for Teachers.
- One Head Teacher suggested that more promotion of vegetables at lunchtime via an Initiative would be welcomed. In doing so, not only fruit, but vegetables also could be targeted in the school setting.
- A variety of improvements were suggested by Teachers at both schools.
- At Bankhead Primary, it was perceived that more variety of fruit (particularly at 5 – 6 month stage) and targeting parents would increase the effectiveness of Fruit Plus. It was suggested that substituting cherry tomatoes with another fruit would aid the variety provided to pupils.
- At Lochgoin Primary, all Teachers felt greater variety of fruit would increase effectiveness of Fruit Plus, for example, seasonal fruits such as strawberries, raspberries, melon and kiwi. There was also minority mention of matching stickers to fruit provided and experiments in the classroom with fruit.

- Many Teachers from both schools expressed that Fruit Plus had worked better than they initially expected. Most were satisfied with Fruit Plus and all considered the project to be worthwhile and valuable.
- Parents had a number of suggestions as to how to improve Fruit Plus. The majority of parents perceived it important to back up fruit consumption with the knowledge behind an approach of healthy eating. In order to achieve this a number of parents suggested the provision of information on vitamins, nutrition and the benefits from different fruit.
- A minority of parents also suggested the introduction of dried fruits, for example raisins. A few parents at Lochgoin Primary suggested that the position of a Fruit Co-ordinator would alleviate anticipated pressure on Teachers.
- Many pupils spontaneously mentioned that an increase in the amount of grapes provided would improve Fruit Plus for them.
- Initial Distributors felt two key improvements would be an increase in the amount of fruit and an increased selection of fruit, for example, strawberries, raspberries or kiwi.

## 7. KEY FINDINGS

### 7.1 Key Research Objectives

- Three key objectives existed for the research. This section summarises key findings under each principle objective.
  - ***Objective 1 “To assess the impact of Fruit Plus on consumption of fruit and vegetables by children within the classroom at breaks and at lunchtime.”***
- The observation exercises indicated that there was no significant changes over time when pupils were observed within the classroom, breaks and lunchtime.
- Predominantly pupils at both schools were observed to be eating mainly sweets and drinking fizzy drinks, such as Coke and Irn Bru.
- The majority of Head Teachers and Teachers perceived that pupils were more willing to try the fruit. A number of parents also perceived that their children were more open to trying fruit and in some cases vegetables.
- Catering Managers had initially noticed fruit being more popular after the introduction of Fruit Plus. However, over time no significant changes in consumption were perceived.
  - ***Objective 2 “To explore factors which impact on fruit and vegetable consumption by children involved in the programme.”***
- On a positive note, respondents perceived they had received sufficient information on Fruit Plus. In terms of availability, all pupils who stayed for school lunches had a choice of three set meals which contained fruit and vegetables.
- The majority of respondents expressed that cherry tomatoes and pears were consistently the least preferred fruits and as such have an impact on the consumption of fruit within the classroom.
- There was limited promotion of fruit and vegetables. For both schools this consisted of visual posters of the Fuel Zone meals (which contained fruit and vegetables) and a fruit bowl on display in the canteen.
- There was evidence to suggest that Fruit Plus has had an impact on attitudes, as the majority of respondents mentioned that pupils appeared more willing to try fruit and vegetables.
- It was the view of almost all of respondents that Fruit Plus would change attitudes over time, and the true value of Fruit Plus may not be seen for years to come.

- The reward scheme of stickers was considered appropriate in order to entice pupils initially in the future. However, it was hoped that pupils would eat the fruit for health rewards rather than material reward.
- No other initiatives were being run within either of the schools, however, limited awareness was expressed of Inspector Pickles and Breakfast Club.

- **Objective 3 “To assess the implications for schools.”**

- Fruit Plus had impacted on the Tuck Shop and subsequent school funds at Bankhead Primary, less so at Lochgoin. It was perceived that any loss of funds had been overcome by sponsored events.
- Both schools had developed a logistical system of which all parties involved were satisfied with. To a great extent the methods adopted were formed as a result of the size and layout of each school.
- No problems had been experienced with the storage of fruit. There was a high awareness of the need to wash hands and abide by health and safety regulations when preparing or distributing fruit.
- There was limited use of the Fruit Plus materials by Teachers and this was due mainly to a perceived lack of time in incorporating into curriculum.
- With regard to the sustainability of Fruit Plus, most respondents considered a greater variety of fruit would increase pupils level of interest. Overall, Fruit Plus was perceived to be sustainable as a result of the routine now established. A number of Teachers considered parental involvement and encouragement was vital if the health benefits of Fruit Plus were to be enjoyed in the future.

## **7.1 Key Findings – Observation**

- At wave 1 of the observation, prior to the launch of Fruit Plus, a minority of pupils claimed to have fruit to eat at breaktime, however no pupils were actually observed consuming the fruit.
- Most pupils in wave 1, appeared to have fizzy drinks and a variety of sweets, cake bars, biscuits and chocolate bars.
- At lunchtime observation in wave 1 some fruit was seen being consumed and this was thought to include fruit brought from home and fruit contained in school lunches.
- By wave 2 observation, 6-8 weeks after the launch, a small increase was observed in the amount of fruit being consumed at morning break time.
- It was perceived that most fruit was seen being consumed at lunch time via a packed lunch, Fuel Zone bag or tray lunch.
- By wave 3, there were no major changes observed in the number of children bringing fruit from home. More pupils appeared to be opting for Fuel Zone bags at lunchtime, particularly at Lochgoin Primary.
- Overall, there appeared to be a limited amount of fruit consumption with no real change evident over time, although some fruit was seen being consumed on non Fruit Plus days.

## **7.2 Key Findings – Head Teachers & Teachers**

- Both Head Teachers and Teachers perceived they had seen a change in the attitude of pupils, they appeared to be more willing to try different fruits.
- Both Head Teachers and Teachers perceived that Fruit Plus had the ability to change attitudes towards fruit. Namely, the fact that Fruit Plus was conducted over time and would re-inforce the benefits of fruit.
- The key implications for Teachers had been time pressures, however these were considered manageable given the overall positive benefits of Fruit Plus. There was limited use of the Fruit Plus materials and this was mainly due to the time pressures experienced.
- It was perceived that the routine of Fruit Plus and an increase in the variety of fruit would improve the sustainability of Fruit Plus. It was suggested by a number of Teachers that parental involvement was vital in ensuring the sustainability of the benefits of the Initiative.
- Overall, the rewards were thought to serve a purpose, being to entice consumption in the initial stages of Fruit Plus. The majority perceived the rewards had increased consumption although a desire was expressed for pupils to eat fruit for health benefits rather than material reward.
- Fruit Plus was perceived to have impacted upon the Tuck Shop, particularly at Bankhead. It was thought that any loss in sales had been overcome by fund raising events and there had been no negative impact for pupils.

- Fruit and vegetables were thought to be available at lunchtime to pupils. Although there was minority mention of dried fruit (raisins) being available at the Tuck Shop.
- There was a high awareness and understanding of the logistics of the fruit and most expressed satisfaction with them.
- There was considered to be enough information provided regarding fruit by all respondents at Lochgoin and Bankhead.
- Promotion of fruit and vegetables was believed to consist of visual posters of the Fuel Zone set meals and a bowl of fruit on display.
- Both Head Teachers and a number of Teachers expressed awareness of Inspector Pickles, Breakfast Club and Food Co-op although no respondents had personal involvement.

### **7.3 Key Findings – Initial Recipient**

- Daily activities for Fruit Plus were thought to include collecting the fruit from the kitchens and dividing into class portions.
- At Bankhead, the Initial Distributor used a trolley to distribute fruit, whereas at Lochgoin the fruit was delivered by hand. The system adopted was very much dependent upon the layout and size of the school.
- Both Initial Distributors were satisfied with their current roles. It was thought that initial planning prior to the start of Fruit Plus had allowed the development of a manageable process.
- Few problems were perceived by the Initial Distributors. At both schools delivery day and time was initially inconsistent, however this was now perceived to be more regular.
- Initial distributors suggested an increase in the selection of fruit and in the amount of fruit would improve Fruit Plus.
- Both respondents expressed desire for Fruit Plus to continue as it was thought to offer great benefits to pupils.

### **7.4 Key Findings – Catering Managers**

- Both Catering Managers perceived they had limited involvement with Fruit Plus. They were thought to take delivery of the fruit, wash and store the fruit and encourage pupils to try fruit and vegetables.
- At both schools pupils were offered three choices of meal per day, in a scheme referred to as Fuel Zone. Each meal was perceived to have a choice of either fruit or vegetables.
- Both Catering Managers offered a wide selection of fruit and vegetables, and it was their view that more fruit was consumed than vegetables.

- These respondents did hold the view that many pupils were set in their ways and it was difficult to encourage consumption. As a result respondents tried to incorporate fruit or vegetables into what was considered to be favourite meals.
- With regard to consumption minimal change was noticed by Catering Managers. At the 6-8 week stage there appeared to be more desire for fruit. Although over time, the order for fruit and vegetables had remained the same.
- Catering Managers suggested that a greater variety of fruit may increase and sustain pupils interest.

### **7.5 Key Findings - Pupils**

- Pupils expressed a high awareness of when the fruit was given out and the logistics of the fruit.
- Most pupils claimed to eat fruit at home, although there was limited mention by parents of this being the case.
- The majority of pupils appeared to enjoy the fruit and would miss it if it was taken away.
- There were key likes and dislikes expressed at both schools, with the most preferred fruit being grapes and the least preferred being cherry tomatoes.
- A variety of reasons were put forward as to why pupils thought they received fruit at school. Namely, to enjoy the benefits of healthy eating, to give you energy, improve concentration, keep you strong and protect your body.
- Most pupils found the idea of rewards appealing, younger children in particular. A minority of older pupils felt they would have ate the fruit regardless of the rewards.

### **7.6 Key Findings - Parents**

- The majority of parents expressed a high awareness of Fruit Plus and perceived the key aim to be to promote healthy eating.
- There was limited awareness conveyed of the educational input or logistics of the fruit within the school.
- Rewards were perceived as necessary in order to entice the consumption, however, rewards were not considered to be the best long term strategy. This was thought to be to increase pupils awareness and understanding of the benefits overall.
- All parents considered Fruit Plus to offer value and benefits to pupils.

- None of the parents we spoke with had any personal involvement with Fruit Plus. It was thought that some parents may be able to help washing or preparing fruit. A few parents at Bankhead suggested that if three of four parents were involved this would share the responsibility.
- A number of parents had noticed that their children appeared more open-minded towards fruit and vegetables. A few considered that consumption of fruit had increased since the Fruit Plus launch.
- Suggested improvements included to increase the variety of fruit available to pupils.

**Appendix I:**  
**Copy of Discussion Guide Used - Pupils**

**GU1515 – FRUIT PLUS EVALUATION**  
**TOPIC GUIDE**  
**PUPILS MINI - GROUPS**

**Introduction**

- Explanation of process (i.e. no right or wrong answers, not a test)
- Confidentiality
- Tape
- Introduction of pupils

**General Fruit Consumption / Perception Of Fruit**

- What are your favourite fruits?
- Are there any fruits that you don't like?
- How do you learn about fruit in school? (e.g. School Canteen?, teachers?)
- Do you get fruit at school?
  - how does this work?
  - what days of the week do you get fruit?
- Do you like the fruit at school?
- Do any of you not like it?
- Do you look forward to getting your fruit at school?
- What is your favourite fruit to eat in general? **Probe if necessary**
- What fruit don't you like? **Probe if necessary**
- What is your favourite fruit to eat at school?
- Why do you like the fruit?
  - *how important are the incentives?*
  - *If not mentioned probe on : collecting stickers*
- What fruit do you not like at school?
- Do you know why you get fruit at school?
- Do you know when you get the fruit?
  - what days?
  - is it always the same fruit on the same days?
- Do you eat fruit at playtime?
  - do you bring the fruit from home or buy it at school?
- Do you eat fruit at lunchtime?
  - do you buy it at school lunches or bring from home?
- Do you eat fruit at home?
- Does anyone else at home eat fruit?
  
- Have you been doing any projects at school about fruit? **EXPLORE FULLY**
  - are there any fruit exercises at school you like?
  - are there any fruit exercises at school you don't like?

**THANK PUPILS AND CLOSE**

**Appendix II:**

**Copy of Discussion Guide used – Head Teachers**

**GU1515 – FRUIT PLUS EVALUATION**  
**TOPIC GUIDE**  
**HEAD TEACHERS**

**Introduction**

- Explanation of the process
- Confidentiality
- Tape
- Recap (briefly) on other aspects of the research (and future aspects)

**Involvement with Initiative**

- In what ways have you personally been involved with Fruit Plus at the school?
- Do you perceive your role will change with time?
- Have you been involved with any other Initiatives at the school?
  - If yes, how have they compared with Fruit Plus?
- Are there any other programmes going on within the school? Probe on:
  - Inspector Pickles
  - Breakfast club
  - drama production
- Do you know if there are any other Initiatives going on related to food or healthy eating within the community? If not mentioned, probe on:
  - *food co-ops*
  - *food and health projects*

**Evaluation of Fruit Consumption/ Fruit Logistics**

- How satisfied are you with the selection of fruit and vegetables?
- How satisfied do you think children are with the selection of fruit and vegetables?
- Prior to the Fruit Plus programme, do you think many pupils were consuming fruit and vegetables?
- In your opinion, do you think there has been any change in pupils' consumption of fruit and vegetables since the project launch?
- How do you think pupils feel about fruit and vegetables?
- In your opinion, do you feel that Fruit Plus may change the views of pupils? **EXPLORE FULLY**, why / why not?
  - If yes, in what way do you think it will change the views of pupils?
- What happens to the fruit when it arrives at the school?
- How is it distributed and stored?
- Have you experienced any problems with distribution or storage of the fruit?
  - Are you happy with this approach?
- Are there any health and safety regulations you have to abide by

**Evaluation of Teaching Materials**

- What kind of implications has Fruit Plus had on the school and staff to date?
- What teaching/curriculum material have you received for Fruit Plus?
- Do you think that you have received enough materials? why? / why not?

- Have you developed your own materials?
- Do you think the materials are suitable? **EXPLORE FULLY**
- Do you know how much time is spent on Fruit Plus within the classroom, in terms of:
  - *fruit distribution*
  - *fruit teaching material*
- Do you know if there have been any difficulties with any of the teaching curriculum?
- Have you or any of the staff experienced any problems with time issues as a result of Fruit Plus?
- Can you think of any ways the teaching curriculum can be improved?
- What incentives are given to pupils? suggested improvements?
- In your opinion, do you feel that the incentives have an affect on pupils' consumption (of fruit)?

### Promotion of Fruit and Vegetables

- In what ways have fruit and vegetables been promoted at lunchtime? **EXPLORE FULLY**
- Has there been any problems experienced with the promotion of fruit and vegetables?
- Is there a Tuck Shop at the school?
- If so, does the Tuck Shop at the school sell fruit and vegetables?
- Has Fruit Plus had any implications on the Tuck Shop? If so, what implications? If not mentioned probe on:
  - *competition*
  - *turnover*
  - *request for fruit and vegetables from Tuck Shop*
  - *does level of sales differ on 'Fruit days'*
  - *if there are any differences in sales, does this have any impact on pupils' themselves?*
- Has Fruit Plus impacted at all on school funds as a result?

### Improvements to Fruit Plus

- How do you envisage keeping up interest in Fruit Plus?
- How important are the incentives?
  - *in what way are they important?*
  - *any other comments on incentives?*
- How sustainable do you consider the Fruit Plus project to be in the school setting? **EXPLORE FULLY** why / why not?
- Are there any particular improvements or changes, which you think, might improve the effectiveness of the project?
- Are there any other comments that you would like to make regarding Fruit Plus?

**THANK RESPONDENT FOR THEIR TIME**

**Appendix III:**

**Copy of Discussion Guide used - Teachers**

**GU1515 – FRUIT PLUS EVALUATION**  
**FINAL TOPIC GUIDE**  
**TEACHERS**

**Introduction**

- Explanation of the process
- Confidentiality
- Tape
- Recap (briefly) on other aspects of the research (and future aspects)

**Involvement with Initiative**

- In what ways have you personally been involved with Fruit Plus at the school?
- Do you perceive your role will change with time?
- Have you been involved with any other Initiatives at the school?
  - If yes, how have they compared with Fruit Plus?
- Are there any other programmes going on within the school? Probe on:
  - Inspector Pickles
  - breakfast club
  - drama production
- Do you know if there are any other Initiatives going on related to food or healthy eating within the community? If not mentioned, probe on:
  - *food co-ops*
  - *food and health projects*

**Evaluation of Fruit Consumption / Fruit Logistics**

- How satisfied are you with the selection of fruit and vegetables?
- How satisfied do you think children are with the selection of fruit and vegetables?
- Prior to the Fruit Plus programme, do you think many pupils were consuming fruit and vegetables?
- In your opinion, do you think there has been any change in pupils' consumption of fruit and vegetables since the project launch?
- How do you think pupils feel about fruit and vegetables?
- In your opinion, do you feel that Fruit Plus may change the views of pupils? **EXPLORE FULLY** why / why not?
  - If yes, in what way do you think it will change the views of pupils?
- What happens to the fruit when it arrives at the school?
- How is it distributed and stored?
- Have you experienced any problems with distribution or storage of the fruit?
  - Are you happy with this approach?
- Are there any health and safety regulations you have to abide by?

**Evaluation of Teaching Materials**

- What kind of implications has Fruit Plus had on the school and staff to date?
- What teaching/curriculum material have you received for Fruit Plus?
- How do you build the teaching curriculum in the classroom?

- Do you think that you have received enough materials? why? / why not?
- Do you think the materials are suitable? **EXPLORE FULLY**
- Have you developed your own materials? **EXPLORE FULLY**
- How much time is spent on Fruit Plus within the classroom, in terms of:
  - *fruit distribution*
  - *fruit teaching material*
- Have you experienced any difficulties or problems with any of the teaching curriculum?
- Can you think of any ways the teaching curriculum can be improved?
- Have you or any of the staff experienced any problems with time issues as a result of Fruit Plus?
- What incentives are given to pupils? suggested improvements?
- In your opinion, do you feel that the incentives have an affect on pupils consumption (of fruit)?

### Promotion of Fruit and Vegetables

- In what ways have fruit and vegetables been promoted at lunch time? **EXPLORE FULLY**
- Has there been any problems experienced with the promotion of fruit and vegetables?
- Is there a Tuck Shop at the school?
- If so, does the Tuck Shop at the school sell fruit and vegetables?
- Has Fruit Plus had any implications on the Tuck Shop? If so, what implications? If not mentioned probe on:
  - *competition (between Fruit Plus and Tuck Shop)*
  - *turnover*
  - *request for fruit and vegetables from Tuck Shop*
  - *does level of sales differ on 'Fruit days'*
  - *if there are any differences in sales, does this have any impact on pupils' themselves?*

### Improvements to Fruit Plus

- How do you envisage keeping up interest in Fruit Plus?
- How important are the incentives?
  - *in what way are they important?*
  - *any other comments on incentives?*
- How sustainable do you consider the Fruit Plus project to be in the school setting? **EXPLORE FULLY**
  - *why/ why not?*
- Are there any particular improvements or changes which you think might improve the effectiveness of the project?
- Are there any other comments that you would like to make regarding Fruit Plus?

**THANK RESPONDENT FOR THEIR TIME**

**Appendix IV:**

**Copy of Discussion Guide used – Initial Recipient / Distributor**

**GU1515 – FRUIT PLUS EVALUATION**  
**TOPIC GUIDE**  
**RECIPIENT / DISTRIBUTOR OF FRUIT**

**Introduction**

- Explanation of process
- Confidentiality
- Tape
- Recap on other aspects of research

**Involvement With Fruit Plus**

- In what way have you been involved with the Fruit Plus programme?
- What daily activities does your involvement consist of?
- When does the fruit normally arrive?
- Is this the same every week?
- Do you have a 'Fruit Plus contact' you can get in touch with if you have any queries or problems?
- When the fruit arrives, is there ever any fruit, which cannot be used and is wasted?
- Where is the fruit stored at the school? **EXPLORE FULLY**
  - have there been any problems with storage of fruit at the school?
- What happens to the fruit after it arrives at the school? – What journey does it take?
- Do you know if there are any fruits, which are particularly liked or disliked?
- Are there any health and safety requirements you have to abide by? If yes, what are they?
- How is the fruit moved around within the school?
- Do you have to use particular bins for the fruit?
- Do you have any idea how much wastage there is of the fruit after it has been delivered to the classroom?
- Do you see your role changing in time – if so, in what way?
- Are you happy with your role at the moment? Why/ why not?

**Problems Experienced**

- Have you experienced any problems or difficulties with Fruit Plus since it was launched?  
Probe on:
  - *delivery of fruit*
  - *movement of fruit within the school*
  - *storage of fruit*
- What do you do if you have a problem with any of the above?
- Do you feel that you have received enough information on Fruit Plus?
  - *if not, what other information would you like?*
  - *has there been any information which was particularly useful?*

**Improvements to Fruit Plus**

- Can you think of any ways the system could be improved? **PROBE FULLY**
- Are there any other comments you would like to make regarding the project?

**THANK RESPONDENT AND CLOSE**

**Appendix V:**

**Copy of Discussion Guide used – Catering Manager**

**GU1515 – FRUIT PLUS EVALUATION**  
**TOPIC GUIDE**  
**CATERING STAFF**

**Introduction**

- Explanation of process
- Confidentiality
- Tape
- Recap (briefly) on other aspects of the research

**Involvement With Fruit Plus**

- In what way have you been involved with the Fruit Plus project?
- Are there any other programmes / initiatives going on within the school canteen?
- How much fruit would you estimate is consumed by pupils at the canteen:-
  - *on a daily basis*
  - *on a weekly basis*
- How many vegetables would you estimate is consumed by pupils:-
  - *on a daily basis*
  - *on a weekly basis*
- Do you have any records of the fruit and / or vegetables which are ordered in / or received by the canteen?
  - *If yes, it is possible to take a copy?*
- What kinds of fruit are offered at the school canteen at lunchtime, **Probe on:-**
  - *types of fruit?*
  - *fruit salad?*
  - *fruit yoghurt?*
  - *fruit smoothies / drinks?*
- Are there any particular type of fruits detailed above which are more popular than others? **PROBE FULLY**
- What kinds of vegetables are offered at the school canteen? **Probe on:**
  - *types of vegetables?*
  - *vegetarian options?*
  - *baked potatoes?*
- Are there any particular vegetables, which are more popular than others? **EXPLORE FULLY**
- How many vegetable options do pupils have at lunchtime?

**Promotion of Fruit**

- In general, how do you think that you could promote fruit and vegetables for an initiative like Fruit Plus?
- How do you promote fruit and vegetables at the moment?

### **Attitudes Towards Fruit Plus**

- Have you experienced any problems or difficulties since Fruit Plus started at the school?  
**PROBE FULLY**
- (If involved specifically with Fruit Plus) Do you see your involvement with Fruit Plus changing? If so, in what way?
- Have you noticed any changes since the launch of Fruit Plus in:
  - *pupils' fruit consumption*
  - *pupils' vegetable consumption*
- Has the fruit or vegetables ordered changed since the launch of Fruit Plus? If so, in what way?
- Do you envisage the fruit and vegetable order to change in the future?

### **Other Comments**

- Do you have any other comments you'd like to make regarding Fruit Plus?

**THANK RESPONDENT AND CLOSE**

**Appendix VI:**

**Copy of Discussion Guide used - Parents**

**GU1515 – FRUIT PLUS EVALUATION**  
**AREAS FOR DISCUSSION -PARENTS**

**Introduction**

- Explanation of process
- Confidentiality
- Recap on other aspects of research

**Main Areas Of Discussion**

- Understanding of Fruit Plus Initiative **PROBE FULLY**
  - what do you know about the initiative?
  - explore awareness of incentives?
  - explore awareness of educational input?
- Perception of Fruit Plus aims – perceived appropriateness?
- Feedback from pupils / school staff
  - logistics within the school
  - process of fruit distribution within the school
  - selection of fruit and vegetables
  - understanding of roles within the school
- Perceived value of Fruit Plus
  - pupils
  - staff
  - parents
- Any involvement with Fruit Plus – if yes, in what way?
  - If not involved would they like to be involved?
  - what involvement, if any do you think parents could offer?
- Has Fruit Plus had any impact on family life?
  - purchasing more fruit?
  - children eating more fruit? Has this changed since project launch (Dec 2001)?
- Noticed any differences in fruit or vegetable consumption of children at home?
- Suggested improvements to Fruit Plus project?
- Any other comments regarding project

**THANK RESPONDENT AND CLOSE**

**Appendix VII:**  
**Summary Tables from Observation Exercises**

## **Bankhead Primary**

### Handcount Exercise – Wave 1

CLASS	DAY 1			DAY 2		
	Total No. in Class	Total No. with fruit	Total % with fruit	Total No. in Class	Total No. with fruit	Total % with fruit
P1	49	6	12%	45	8	18%
P2	49	-	-	54	1	2%
P2/3	21	4	19%	20	3	15%
P3	43	3	7%	45	10	22%
P4	57	15	26%	53	25	47%
P5	62	17	27%	61	24	39%
P6	54	2	4%	57	2	4%
P7	60	6	10%	59	8	14%
<b>TOTAL</b>	<b>395</b>	<b>53</b>	<b>13%</b>	<b>394</b>	<b>81</b>	<b>21%</b>

(There are 2 classes per primary level, except at P2-3, the results for both classes have been combined).

### Handcount Exercise – Wave 2

CLASS	DAY 1 (NON FRUIT PLUS DAY)			DAY 2 (FRUIT PLUS DAY)		
	Total No. in Class	Total No. with fruit	Total % with fruit	Total No. in Class	Total No. with fruit	Total % with fruit
P1	51	13	25%	51	9	18%
P2	55	3	5%	54	8	15%
P2/3	21	4	19%	21	-	-
P3	49	12	24%	50	7	14%
P4	62	7	11%	62	9	15%
P5	64	21	33%	64	19	30%
P6	57	3	5%	57	5	9%
P7	64	7	11%	64	6	9%
<b>TOTAL</b>	<b>423</b>	<b>70</b>	<b>17%</b>	<b>423</b>	<b>63</b>	<b>15%</b>

Handcount Exercise – Wave 3

CLASS	DAY ONE (NON FRUIT PLUS DAY)			DAY TWO (FRUIT PLUS DAY)		
	No. in Class	Total No. with fruit	% with fruit	No. in Class	No. with fruit	% with fruit
P1	52	4	8%	50	8	16%
P2	48	2	4%	42	3	7%
P2/3	19	1	5%	25	5	20%
P3	48	5	10%	49	11	22%
P4	59	4	7%	50	8	16%
P5	64	12	19%	64	11	17%
P6	54	7	13%	51	8	16%
P7	60	9	15%	62	8	13%
<b>TOTAL</b>	<b>404</b>	<b>44</b>	<b>11%</b>	<b>393</b>	<b>51</b>	<b>13%</b>

## Lochgoin Primary

### Handout Exercise – Wave 1

CLASS	DAY 1			DAY 2		
	Total No. in Class	Total No. with fruit	Total % with fruit	Total No. in class	Total No. with fruit	Total % with fruit
P1	20	9	45%	25	5	20%
P1/2	20	3	15%	19	2	10%
P3	17	4	24%	17	4	12%
P4	18	-	-	19	2	10%
P5	18	5	28%	19	3	16%
P6	16	3	19%	16	1	6%
P7	15	-	-	15	-	-
<b>TOTAL</b>	<b>124</b>	<b>24</b>	<b>19%</b>	<b>130</b>	<b>17</b>	<b>13%</b>

### Handout Exercise – Wave 2

CLASS	DAY 1 (FRUIT PLUS DAY)			DAY 2 (FRUIT PLUS DAY)		
	Total No. in Class	Total No. with fruit	Total % with fruit	Total No. in Class	Total No. with fruit	Total % with fruit
P1	25	8	32%	25	10	40%
P1/2	20	4	20%	19	8	42%
P3	20	-	-	19	-	-
P4	17	2	12%	17	3	18%
P5	19	1	5%	18	1	6%
P6	17	1	6%	15	-	-
P7	14	1	7%	16	-	-
<b>TOTAL</b>	<b>132</b>	<b>17</b>	<b>13%</b>	<b>129</b>	<b>22</b>	<b>17%</b>

### Handout Exercise – Wave 3

CLASS	DAY ONE (FRUIT PLUS DAY)			DAY TWO (FRUIT PLUS DAY)		
	No. in Class	Total No. with fruit	% with fruit	No. in Class	No. with fruit	% with fruit
P1	16	3	19%	16	4	25%
P1/2	16	4	25%	15	5	33%
P3	18	1	6%	17	-	-
P4	16	2	13%	17	1	6%
P5	14	2	14%	14	-	-
P6	17	-	-	17	1	6%
P7	16	-	-	16	-	-
<b>TOTAL</b>	<b>113</b>	<b>12</b>	<b>11%</b>	<b>112</b>	<b>11</b>	<b>10%</b>