Summary of School Fruit Campaign evaluation

1 Background

“Tutti Frutti” is an umbrella campaign that covers the various methods of promoting fruit and vegetable consumption at schools. The “Tutti Frutti” concept has been available to all Flemish junior and primary schools since 2005. A precedent had therefore already been set prior to the introduction of the European subsidies for this method. More than a precedent even, as multiple variants of the system already existed in Flanders. An example was the “Fruit in de boekentas” (“Fruit in the school bag”) campaign, which asked for fruit to be brought from home, thereby increasing the involvement of parents.

1.1 European subsidy

European Commission financing is used in the subsidised “School Fruit Campaign”, in which (decentralised) purchase by schools and distribution of fruit to pupils takes place, using a “fruit subscription”. Primary schools (infant and junior) that register a fruit subscription for at least 30 weeks qualify for a refund. The fruit subscription amounts to at least EUR 6.00 per pupil per school year, of which EUR 4.00 is refunded. Subsidies apply only to infant school and junior school pupils (aged 2.5 - 12 years).

1.2 Support and guidance materials

Support measures include educational materials, visits to businesses, suggestions for integration into the curriculum and promotion of interest in agriculture in general and the “healthy school” concept in particular.

1.3 Objectives of the School Fruit Campaign (from the regional strategy)

The following general and specific objectives were included in the regional strategy at the start of the European School Fruit Campaign.

General objectives:

*Increase fruit consumption of children at school in line with the guidelines and principles of the active nutrition triangle and with a focus on disadvantaged groups.*

This objective will be achieved as follows:

1. Make fruit and vegetables plentifully available as snacks in infant and junior schools (i.e. a frequent, varied and appealing supply, via various channels).
   - Further increase the availability of fruit and vegetables as snacks in primary schools via school fruit projects.
   - Further increase the availability of fruit and vegetables as snacks in primary schools by stimulating pupils to take fruit and vegetables to school.
- Support a regular supply of fruit and vegetables in primary schools with a focus on quality, variation, price and easy accessibility, making use of the resources available to the educational institution.

2. Positively influence knowledge, skills, attitudes and social norms with regard to fruit among children.
   - Further develop and implement educational methods, interventions and materials with regard to balanced nutrition in primary schools, within an integrated nutritional and physical education approach, adjusted to educational level, type and form. These educational methods, interventions and materials are compatible with qualification/developmental objectives and curricula. They take quality management standards and class- and school-specific aspects into account.
   - Further develop and implement awareness campaigns in primary schools to positively influence social norms among children with regard to fruit and vegetables. These campaigns are compatible with the educational system and take quality management criteria and class- and school-specific aspects into account.
   - Further develop and implement promotions and work patterns that involve parents in school activities about fruit and a healthy diet.
   - The drive to synchronise school and home environments increases both the sustainability of the results and the effects of the School Fruit Campaign (SFC), and creates added value for disadvantaged groups.

3. Contribute to an extended nutritional policy in schools.
   - Further implement policy measures to support development of an integrated nutritional and physical education policy in primary schools, in which the School Fruit Campaign and its support measures are placed in and integrated into the broader health policy of schools. The policy measures take into account the existence of varying levels and strategies. They are tailored to the individual school, are a function of pupil needs, enjoy broad involvement of partners and parties involved (school staff, pupils and parents) and take quality management into account.
   - Further stimulate the provision of a balanced range of drinks and snacks in primary schools, with attention to healthy alternatives, price and distribution and limitation of range items that offer poor nutrition.

This action plan assumes an integrated approach. In so doing, Flanders aligns itself with the recommendations of the World Health Organization and the European authorities. Flanders opts for an approach that guarantees the highest chances of success and follows international recommendations.

**Operational objectives 2009-2014:**

**School fruit supply:**

- An easily accessible supply of fruit and vegetables (one piece per week for at least 30 weeks from commencement point 1, at least 15 weeks from commencement point 2) for infant and primary school pupils, taking into account:
  - a high quality, varied range of products,
  - appropriate pricing,
  - choice regarding range (composition of fruit basket) and service provision (in line with the requirements and needs of the school),
- A functioning, decentralised, fruit and vegetable distribution system with transparent criteria.
• Worked out procedures for schools to register for the SFC and for refunding the fruit subscription. An active, transparent management system offering a simple administrative process to schools, other stakeholders and audit services is active.
• There is an overview of the opportunities for facilitating further implementation of a daily supply of fresh vegetable and fruit snacks for schools, using the fruit and vegetable production and distribution sector.

Range of support measures:

• **Promotional material** (brochure and posters) for the “Tutti Frutti” SFC is available for all primary schools.
• The SFC includes a suitable range of educational materials about vegetables and fruit for primary schools. The SFC has its own educational material, as well as an online resource of quality materials about vegetables and fruit.
• The educational materials and online resource cover:
  o the exit qualifications and developmental objectives related to educational levels and types,
  o choices on the basis of class and school specifics,
  o practical compatibility with class and school organisation,
  o the health recommendations from the active nutrition triangle information model,
  o vegetables and fruit in relation to agriculture - activities in which pupils come into contact with the agricultural and market gardening sector,
  o the principles of health policy in schools and integration within a broader nutritional policy,
  o the principles of careful management and the ethical code of the health sector.
• The SFC includes a suitable range of awareness-raising promotions for fruit and vegetables in primary schools. Its own school awareness-raising promotion (class competition) and a list of quality school promotions on vegetables and fruit is available online. The educational materials and the online resource cover: (see previous point). In this way the SFC guides schools to the tools that facilitate integration of the school fruit system both with the nutritional and/or health policy of the school and with further development of the integrated nutritional and physical education policy.
• A web portal provides schools and stakeholders with facilities to register and manage the SFC and access support materials. This website contains:
  o information on the structure, progress and procedures of the Tutti Frutti SFC,
  o a transparent overview of the product range available from distributors,
  o a system enabling schools to register for the SFC,
  o refund management (via an e-counter system),
  o Tutti Frutti educational materials,
  o an overview of high-quality educational materials, school promotions and policy tools,
  o a registration system for class competitions,
  o a downloadable PDF containing promotional material.
• Information sessions are organised at the start of the school year. These cover the objective of the campaign, registration procedure and the range of support materials.
Participation in school fruit:

- At least half of all infant and primary schools, including ordinary and special needs education, took part in the Tutti Frutti SFC in the 2009-2010 school year, by means of fruit subscriptions and/or “fruit in the school bag” arrangements. In the 2010-2011 school year participation rose to 2 out of 3 schools and rose further, to 3 out of 4, in the 2011-2012 school year.
- The degree of participation of schools with a high level of disadvantaged groups is equal to those with low levels of these groups.
- In the 2009-2010 school year at least half of children aged 3-11 years were subscribed to the school fruit system. In 2010-2011 this rose to 2 out of 3 children and in the 2011-2012 school year to 3 out of 4 children.
- In the 2009-2010 school year, the entire class participated in the SFC in at least 4 out of 10 of the participating classes, by means of either a fruit subscription or “fruit in the school bag” arrangements. [An important indicator in the case of disadvantaged groups]. This became at least 6 out of 10 of the participating classes in the 2010-2011 school year and at least 7 out of 10 in the 2011-2012 school year.

Use of support materials:

- At least 8 out of 10 of the participating primary schools use the promotional material (posters, instruction manual).
- In the 2010-2011 school year at least 7 out of 10 participating primary schools were familiar with the web portal of the Tutti Frutti SFC.
- At least 6 out of 10 participating primary schools use SFC educational materials or one of the other listed educational material resources.
- At least 1 out of 10 of the participating schools took part in one of the school promotions summarised in the list of online resources.
- In at least 3 out of 10 of the participating schools, classes took part in the SFC class competition.

Effects on behaviour and/or behavioural determinants:

- The SFC has a demonstrably positive effect on:
  - the knowledge, attitudes and social norms in relation to fruit among the participating pupils,
  - the intent, behavioural or otherwise, among participating pupils to take fruit to school and/or eat fruit at school,
  - the consumption of fruit among participating pupils, at least as regards fruit consumption during school hours,
  - the availability of fruit and/or attitudes with regard to fruit in the home environment of participating pupils.

Effects on health policy in primary schools:

- There is stronger progression - in terms of policy and process components - in the development of integrated nutritional policy in primary schools participating in the Tutti Frutti SFC than in those that do not participate.
- This development is visible at both educational levels, (infant and junior) and in both types (ordinary and special needs).
Progress in the development of integrated nutritional policy in participating schools with a high representation of special needs groups is equal to that of schools with low representation of such groups.

Remark: Operational objectives focused on “disadvantaged groups” were not further taken into account in the evaluation, as this information is not available for reasons of privacy.

Roles and responsibilities of local partners:

- **Government of Flanders, Agriculture and Fisheries policy areas**: co-financing, press relations, advice and project follow-up, follow-up evaluation, legislative follow-up, regional strategy, school recognition applications, subsidy applications and payments, commencement point, audits,
- **Government of Flanders, Welfare, Public Health and Family policy areas**: co-financing and budget follow-up, advice and project support, evaluation, role of VIGEZ,
- **Flanders’ Agricultural Marketing Board**: co-financing, advice and project follow-up, additional support incentives,
- **Government of Flanders, Education and Training**: advice and project follow-up, communication with education,
- **Flemish institute for the promotion of health and prevention of disease (Vlaams Instituut voor Gezondheidspromotie en Ziektepreventie - VIGEZ)**: management of website www.fruit-op-school.be, control of registrations via www.fruit-op-school.be, promotional materials management, competition management, advice and project follow-up,
- **Local health coordinators**: local management of registrations, local competition support,
- **Ballon Media**: campaign image supplier, layout materials, press and event support,
- **Flemish Education Council (Vlaamse Onderwijsraad - VLOR)**: project support and follow-up.

## 2 Results of process evaluation, 2009-2010 and 2010-2011 school years

The evaluation was conducted by an independent organisation, Market Probe.

Contact information:

Market Probe  
Veldkant 37  
2550 Kontich, Belgium

The complete report is attached to this summary as an appendix:

- process evaluation, 2009-2010 school year
- process evaluation, 2010-2011 school year
- evaluation of effect
2.1 Key results of process evaluation, 2009-2010 school year

2.1.1 Qualitative results

Qualitative methodology: In-depth interviews (focus discussions) with participants and non-participants

- Reactions to the SFC are positive, according to qualitative exploration (N=24: 11 scores “+”, 12 scores “++”). It is also seen as a useful link with the health policy of the school.
- The SFC is seen as an additional task by the participating schools. The internal organisation task is seen as the most time-consuming, rather than the administrative procedure. The administrative procedures do not determine the decision to take part or not in the SFC. Nevertheless, it was mentioned that administrative procedures could be simpler. This is also a function of project communication with the school emanating from various institutions. Communication task definition could be further optimised according to the Market Probe researchers. Following these results, this aspect will be simplified by the partners, among other things by setting up a “communication” working group. This working group is currently developing a specific campaign communication plan.
- In addition, more targeted communication to parents and “society” is indicated. This is intended to create greater awareness and, therefore, support. According to the schools to which the question was put, schools are too often used to create awareness among parents.

<table>
<thead>
<tr>
<th>Strong points</th>
<th>Points to watch</th>
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<tbody>
<tr>
<td>- Very cheap</td>
<td>- Additional work (especially if vegetables and fruit have to be collected)</td>
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<tr>
<td>- Involves the whole school community</td>
<td>- Debt collection requires extra follow-up by schools</td>
</tr>
<tr>
<td>- Being together, sharing (infants)</td>
<td>- Not always easy to involve less motivated children</td>
</tr>
<tr>
<td>- Discovering new kinds of vegetables and fruit</td>
<td>- Parents must also be sufficiently involved</td>
</tr>
<tr>
<td>- Actual consumption of vegetables and fruit</td>
<td>- Quantities delivered for infants are often too large</td>
</tr>
<tr>
<td>- Discovering educational information about vegetables and fruit</td>
<td>- Variation within range could sometimes be better</td>
</tr>
<tr>
<td>- Workload acceptable provided vegetables and fruit delivered at school</td>
<td>Watch out for vegetable and fruit price increases</td>
</tr>
<tr>
<td>- Fits within broader health policy of schools</td>
<td></td>
</tr>
</tbody>
</table>

Satisfaction level of schools will increase if:
- Fruit is delivered at the school
- The project is driven by pupils, teachers, parents and school management

(source: process evaluation, 2009-2010, slide 13, Market Probe)

- It also emerged from the depth interviews that non-participating schools may in fact be promoting fruit at school: in this sample of 4 schools, all organised their own promotions. “Complicated-looking procedure” and the fact that their own promotions were “more developed” were mentioned as reasons for not subscribing to the subsidised campaign.
- The example set by teachers (eating more fruit at the same time as pupils) has a positive effect on the feeling of togetherness, according to participating schools (n=20).
- Having to register the quantity and types of fruit (as was required in the first edition) was experienced as a major disadvantage. **As a result of the evaluation, this requirement was discontinued as from the 2nd edition.**

- Originally a single commencement point was provided for pupils - and this at the beginning of the school year. It appears from the process evaluation that insufficient allowance was made for the different entry points of students into the educational system. **As a result of these comments by the schools, a second commencement point was provided. In future a fruit subscription may also be started after the Christmas holiday for a period of 15 weeks, for a subsidisable amount of EUR 2.00 per pupil.**

- The procedure for submission of traders’ invoices was also not positively evaluated. **These remarks lead to an adaptation insofar as the invoices must be kept but no longer submitted to the administration.**

- In the decentralised system, the supplier is selected by the school itself. It follows that it is the school’s own responsibility to arrange this well. In support, examples of a “promotional calendar” were made available.

- According to Market Probe, even more non-participating schools could be convinced to join the SFC if more, practical experiences were to be made available: tips, exchange of experience, FAQs, etc. **As a result of this finding the www.fruit-op-school.be website was adapted.**

- Supporting teaching materials, according to qualitative exploration, are little used in schools. It was indicated that teachers are often unaware that these materials are available on the website. This is mainly the case with non-participating schools but it also applies to participating schools. For this reason there will be more communication of lesson material availability in ensuing school years. At the same time, an “educational folder” was developed to support schools.

### 2.1.2 Quantitative results

**Quantitative methodology:** analysis of questions and complaints and the central issues regarding fruit range arising from a questionnaire applied to a representative sample of participating schools. Sample size (participants and non-participants) was n=584 or 52%.

- **Participation in and organisation of the SFC**
  - 51% of schools participated in the SFC (European SFC and “fruit in the school bag”) in the 2009-2010 school year, thereby achieving the objective of 50%.
  - Of these participants, 98% indicated they would participate again in the next school year. The 2% of schools that indicated they would not do so mentioned “replaced by another fruit initiative” or “complicated administrative procedures” as the most important reasons for discontinuance. 25% of the schools were taking part in the SFC for the first time.
  - The “school contribution” is mainly paid by parents (60%) and the school itself (14%).
  - 54% of the schools have the fruit delivered at the school. In addition to teachers, parents are often involved in peeling and distributing the fruit. Further, parental involvement is stimulated by 89% of the schools handing parents a letter at the start of the school year.
• In general, satisfaction levels regarding the SFC are very high: 88% of respondents score it between 8 and 10 (out of 10).
• Administrative procedures received the least positive evaluation in the quantitative study: 47% give a score of 8-10 (out of 10). In addition, 59% of respondents mentioned that they find the procedure too extensive, complicated and detailed, 13% found it unclear and another 10% experienced technical problems. As mentioned earlier in the qualitative section, a number of these shortcomings have already been corrected.
• 93% of respondents are familiar with the “fruit-op-school.be” website. (The objective here was 70%.)

Product

• In general, the quality of the fruit is good. 76% score quality between 8-10 (out of 10). 54% score variation in the range of vegetables and fruit between 8-10 (out of 10).
• 68% of the schools also initiated other healthy diet measures. This means that the SFC is often not a standalone promotion at a school.
• Analysis of the supplied fruit basket was possible, using the registration data supplied by all schools (98% of participants). From this, apples, pears, citrus fruit, bananas and kiwis appear to be the most distributed types of fruit. Cherry tomatoes and carrots are the most distributed types of vegetable.

Support

• The “Tutti Frutti”, “Fitte school” (“Fit school”) and “Aan Tafel” (“Eating Time”) materials appear to have the highest awareness and usage. Effectively, virtually all material scored an average 8-10 out of 10 in 75% of the responses.
• Specifically with regard to materials offered within the European SFC; brochures and posters were mainly used, with the class competition also scoring relatively well (at 53%).

2.1.3 In summary

<table>
<thead>
<tr>
<th>Objective</th>
<th>Result</th>
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</thead>
<tbody>
<tr>
<td>Participation in SFC</td>
<td>2009 - 2010</td>
</tr>
<tr>
<td>Participation in SFC + fruit in school bag</td>
<td>2009 - 2010</td>
</tr>
<tr>
<td>Use of support materials</td>
<td>Awareness web PORTAL SFC</td>
</tr>
<tr>
<td></td>
<td>Use of PROMOTIONAL MATERIALS</td>
</tr>
<tr>
<td></td>
<td>Use of EDUCATIONAL MATERIALS</td>
</tr>
<tr>
<td></td>
<td>Participation CLASS COMPETITION</td>
</tr>
<tr>
<td></td>
<td>Participation in a single SCHOOL PROMOTION</td>
</tr>
</tbody>
</table>
2.2 Key results, process evaluation, 2010-2011 school year

- 51% of schools took part in the 2010-2011 “Tutti Frutti” fruit campaign (including “fruit in the school bag”). This number remains stable but is below the objective of 66% set for the 2010-2011 school year.

- 6% of the schools in the sample took part in 2010-2011 for the first time. All schools intend to participate again.

- Pupil participation is reasonably high in participating schools. In other words, once a school decides to take part, it is reasonably easy to convert a large number of its pupils as well.

- The welcome pack, distributed to all participating schools last year, was positively received. Schools found it “interesting and useful”.

- In addition to the EUR 4.00 subsidy, on average EUR 5.00 are contributed in addition, for the fruit subscription. Existing legislation does not stipulate where the additional budget should come from but that it should amount to at least EUR 2.00. The evaluation shows that it comes mainly from the parents (on average EUR 2.72) and the school (EUR 1.50).

- The practical organisation of peeling and distributing fruit is often shared between the school (teachers) and parents. This also increases the involvement of parents with regard to the fruit campaign.

- Teachers are encouraged by the school to set an example by also eating fruit. In 87% of schools at least some teachers take part (unsubsidised) in the SFC. 31% of schools also contribute financially to teacher participation.

2.2.1 Process evaluation specific to participating schools

- In general, schools are very satisfied with the SFC. Nearly 9 out of 10 participating schools score the project at 8 out of 10 or more. This score maintains the status quo with regard to the previous school year.

- The educational support, quality of fruit and the website attain high satisfaction scores. Respondents are less satisfied with the administrative procedures.

- Website - www.fruit-op-school.be:
  
  • The set objective of at least 70% spontaneous awareness of the SFC “Tutti Frutti” web portal was achieved (74%). Aided awareness of the website (after exposure of the URL) is 88%.
  
  • Most important reasons for visiting the website are: searching for general information and registering participation in the fruit promotion.
  
  • The website is positively evaluated.
- The e-counter website (at which schools actually have to register to qualify for the subsidies) is equally as well-known as www.fruit-op-school.be. This website receives a lower evaluation score. It is viewed as complicated.

- The administrative procedures, in general, attained a lower satisfaction score. 27% of the schools score administrative procedures below 7 out of 10. The registration procedure is generally experienced more positively. Nevertheless, 25 to 30% are still not satisfied. These results have led the relevant authorities to make a number of amendments to the regulations: the quantity and types of fruit distributed no longer have to be registered, the contract no longer has to be forwarded, a second commencement point per school year has been provided so that pupils who only start education after new year can still participate in the SFC.

2.2.2 Process evaluation specific to non-participating schools

- Nearly 4 out of 10 of these schools state that they have already participated in the “previous” Tutti Frutti. In these schools the previous “Tutti Frutti” promotion therefore functioned as the initiator of self-developed schemes. We could therefore assume that a large number of so-called “non-participants” started their own fruit schemes and in fact offer “further developed” methods. This information could possibly lead to the incorrect assumption that the non-participants organise no fruit schemes whatsoever. On the contrary: these schools are far more likely to have organised their own, “more developed” variant, seeing that 7 out of 10 non-participating schools indeed registered this response in the evaluation (see next point).

- The most important reasons to no longer participate:
  - The main reason is the organisation, by 7 out of 10 non-participating schools, of their own form of fruit promotion, 29% of schools having active “fruit in the school bag” schemes.
  - Too much organisational work: peeling, collecting fruit, etc., were reasons for 1 in 5 schools to no longer participate.
  - Too little variation in the fruit supply - and variable quality - were mentioned by 1 in 10 schools.
  - Parental awareness - direct impact on the home situation because fruit has to be purchased.

- Other weaknesses of the SFC that surfaced during the depth interviews:
  - Peeling often uses up playtime - with negative impact on exercise,
  - Waste of fruit and more refuse as the quantities are not adjusted to the appetites of the children,
• no recognition of the considerable extra administrative work involved (allowance of additional hours),
• and the risk of time-intensive audits.

- General satisfaction with the educational materials is lower among non-participants. These schools do, however, agree that the educational materials are attractive and user-friendly, fit within the curriculum and are, in part, a source of inspiration.

- Group discussions reveal that the format of the materials should be fresher and more accessible - by means of a clearer contents list, meaningful headings and attractive use of icons.

3 Results, effect evaluation

Effect evaluation, methodology: quantitative (written questionnaire for schools) and qualitative (focus groups)

From the table below we can conclude that more or less the same number of schools participated in the European SFC in the 2010-2011 school year as in 2009-2010. Strictly speaking, Flanders has not achieved its 2010-2011 school year objective of 66% of schools participating in the European SFC.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Result 2010-2011</th>
<th>Result 2009-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in SFC</td>
<td>2009 - 2010</td>
<td>44%</td>
</tr>
<tr>
<td>Participation in SFC + fruit in school bag</td>
<td>2009 - 2010</td>
<td>66%</td>
</tr>
<tr>
<td>Use of support materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Awareness web PORTAL SFC</td>
<td>70%</td>
<td>74% vs. 44%</td>
</tr>
<tr>
<td>Use of PROMOTIONAL MATERIALS</td>
<td>80%</td>
<td>83% vs. 46%</td>
</tr>
<tr>
<td>Use of EDUCATIONAL MATERIALS</td>
<td>60%</td>
<td>52% vs. 27%</td>
</tr>
<tr>
<td>Participation CLASS COMPETITION</td>
<td>30%</td>
<td>58% vs. 24%</td>
</tr>
<tr>
<td>Participation in a single SCHOOL PROMOTION</td>
<td>10%</td>
<td>25% vs. 9%</td>
</tr>
</tbody>
</table>

The above table shows that there is more awareness of support materials in participating schools than in non-participating schools. This is an expected result, as most support materials specifically reference the European school fruit arrangements.

- The results show that non-participating schools have a more developed healthy diet and snack policy in terms of what is agreed or forbidden and in terms of inclusion thereof in the school house rules:
• 88% of non-participating schools have rules on snacks included in the school rules, as opposed to 76% of participating schools.

• 91% of non-participating schools state that they encourage healthy snacks as opposed to 83% of participating SFC schools.

• 79% of non-participating schools discourage unhealthy snacks vs. 64% of participating schools.

- The supply of healthy snacks, as between participating and non-participating schools, is closely comparable: non-participating schools have a slightly more developed range of yoghurt, quark (fresh cheese), dairy desserts, rice pudding and soya desserts.

- Non-participating schools have more healthy diet initiatives: These include cooking with vegetables, healthy treats at events and birthdays, healthy lunch and school trips, etc. Schools participating in “fruit in the school bag” still score (significantly) better in terms of an extra fruit day and arrangements about healthy treats.

- Also, 69% of non-participating schools call on external partners to assist them, compared to 56% of participating schools. This type of support includes local initiatives and cooperation (farm visits, fruit growers, etc.).

First and foremost, the nuances in the above results should be interpreted carefully. As indicated earlier, the “non-participants” sample was, from the start, not sufficiently segmented into “non-participants that effectively conduct no fruit-at-school activities” and “non-participants that do organise their own activities”. In considering the results this segmentation was applied as much as possible. We must exercise caution in interpreting results on this basis due to the somewhat limited sample size after this segmentation. This further segmentation is, in any event, a point for consideration at the next effect evaluation.

The above results do provide us, as the Flemish Region, with an argument for a more intensive approach to schools that, as yet, have implemented absolutely no form of school fruit scheme. It is not, per definition, a negative situation when schools do not register for the subsidised European campaign, provided that they organise their own scheme, according to a method that is often more “advanced” than the subsidised campaign on offer.

3.1.1 Measuring effect on children

Drinking habits

- 85% of all grade two and three pupils drank water the previous day. About half drank milk and fruit juice, followed by cola (+/- 36%) and lemonade (+/- 25%).

- There are hardly any differences between the drinking habits of grade two and grade three pupils in non-participating schools and in schools that do participate in the SFC, with the exception of fruit juice consumption.

- Consumption of fruit juice is higher at non-participating schools.
• More fruit juice is consumed in schools that do not participate in the subsidised SFC. This is mainly due to the 70% of fruit juice consumption that takes place in non-participating schools that use the “fruit in the school bag” scheme. Consumption by pupils at non-participating SFC schools that also have no “fruit in the school bag” initiative is not significantly higher.

• 4 out of 10 pupils at non-participating schools take fruit juice to school at least weekly in comparison with 2 out of 10 pupils at participating schools.

  - On average 3 different drinks have been had by a pupil on the previous day.

  - Pupils are convinced that water is a drink for every day and, to a lesser extent, also milk and fruit juice (freshly squeezed or otherwise).

We can conclude from the above results that efforts may be necessary to not stimulate fruit juice consumption further. Fresh fruit in any event enjoys preference. This applies particularly to schools that participate in the “fruit in the school bag” promotion.

Eating habits

- Top 4 foods consumed previous day:

<table>
<thead>
<tr>
<th>Participating school</th>
<th>Non-participating school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bread (73%)</td>
<td>Fruit (71%)</td>
</tr>
<tr>
<td>Fruit (63%)</td>
<td>Bread (65%)</td>
</tr>
<tr>
<td>Potatoes (54%)</td>
<td>Vegetables (54%)</td>
</tr>
<tr>
<td>Vegetables (53%)</td>
<td>Potatoes (43%)</td>
</tr>
</tbody>
</table>

- Food consumed in schools that do not participate in the subsidised fruit scheme but do participate in the “fruit in the school bag” scheme is consistently healthier: more fruit, plain biscuits and natural yoghurt.

- Fruit is clearly a snack for every day according to the pupils (in second and third grade). Other, preferably healthy, snacks are also seen as a snack that can be enjoyed frequently - such as yoghurt (natural), gingerbread (and similar) and fruit yoghurt. Sweets and biscuits containing chocolate are seen rather as occasional treats.

Unhealthy snacks are not often taken to school.

Behaviour and knowledge regarding healthy diet

- There are no differences between pupils from participating and non-participating schools with respect to their behaviour and knowledge regarding fruit.

  • Nearly 4 out of 10 pupils eat fruit every day of the week. On average they eat 1 to 2 pieces of fruit per day.
• A quarter of the pupils think that one should eat more than two pieces of fruit per day in order to stay healthy. One third thinks that 2 pieces of fruit per day are sufficient and one third thinks that one piece a day is enough.

• Fruit is mostly eaten at home or at both home and school. About 1 in 5 pupils eat fruit only at school.

• 50 to 60% of all pupils (participants and non-participants) take fruit to school at least once a week. In non-participating schools that do use the “fruit in the school bag” scheme, there are more pupils taking fruit to school at least once a week (81%).

• Tastiest fruits: strawberries, apples, grapes and bananas. Pupils from non-participating schools enjoy cherries, kiwis and satsumas more than pupils in participating schools do. Thus the idea that pupils learn to eat more different varieties of fruit through the SFC is not confirmed by this research.

• Pupils from the non-participating schools seem somewhat more familiar with the active nutrition triangle and can place the correct food in the corresponding cell more easily.

3.1.2 Parents
- Parents from SFC participating schools generally feel more involved in the nutritional policy of the school: this is above all with regard to involvement in practical matters as 32% (every now and then) help with peeling on fruit days.

- 93% of parents are aware of the school’s participation in the “Tutti Frutti” SFC. In non-participating schools 30% of parents talk of “Tutti Frutti” – this name is also used by a number of non-participating schools.

- The consumption of healthy snacks is encouraged according to 69% of parents at non-participating schools. At participating schools this is the case according to 52% of those parents. Discouragement of consumption of unhealthy snacks is slightly more prevalent at non-participating schools.

- As regards the initiatives taken by schools with regard to healthier drinks and snacks, there are no differences between participating and non-participating schools according to parents (of infant school and first grade children). The only exception to this is that there are more non-participating schools with agreements about healthy birthday treats, namely 49% vs. 36% at participating schools.

- 97% of parents at non-participating schools say that they give their children (fresh) fruit to take to school: for 89% (of all parents) this is with a frequency of at least 1-3 x week or daily. At participating schools 74% (of all parents) give their children fruit to take with them, at least 1-3 x per week or daily.

- There is no difference in fruit consumption at home between pupils of participating and non-participating schools. However, there is a difference in vegetable consumption: 82% of pupils from non-participating schools eat vegetables daily, on more than one occasion, vs. 74% of pupils from participating schools.
3.2 Summary of effect measurement

The research enables a number of interesting insights and, at first sight, does not display the expected result of a higher impact of the SFC at participating schools. This could nevertheless be the result of a too-limited sample size of non-participating schools, certainly after the requested segmentation of “schools that effectively do no fruit at school promotion” and “schools that do not participate in the subsidised scheme but do conduct their own scheme”.

In brief summary:

• Non-participating schools consistently display a more definite and developed policy regarding healthy diet and snacks. They develop more specific initiatives regarding healthy diet and make more use of external partners. It is necessary to treat this statement with some care, given the remarks made above with regard to the research.

• While there is nearly no measurable difference in impact in terms of drinking habits, we see more fruit juice being consumed by pupils at non-participating schools. This higher share of consumption is explained by reference to the “fruit in the school bag” schools. If we isolate this group, the share of fruit consumption is not (significantly) different between participating and non-participating schools.

• In terms of general eating habits there are no (significant) differences between participating schools and non-participating schools as regards second and third grade pupils. In fact, the diet at “fruit in the school bag” schools is more healthy: more fruit, plain biscuits and natural yoghurt are consumed. 81% of the “fruit in the school bag” pupils say that they eat fruit weekly as opposed to an average (weekly share) of 55%.

• Knowledge of the active nutrition triangle, measured via an interactive play exercise, is higher in pupils at non-participating schools.

• Parents confirm the picture of a more active encouragement policy at non-participating schools and say that they more often give their children fruit to take to school.

• It is not possible to show the effect of higher fruit consumption in the home situation. However, a higher frequency of fruit consumption can be seen at non-participating schools.

• Non-participating schools are not per definition “bad pupils”! On the contrary, the “fruit in the school bag” schools are best-in-class in terms of knowledge of the active nutrition triangle and the impact on effective behaviour as regards fruit juice and fruit consumption. The involvement of and educational effect on parents also appears to be an important argument for the “fruit in the school bag” scheme.
• The indirect effect of the SFC must not be underestimated: in many cases the initial participation in the SFC resulted in a school developing its own initiative and policy. At the same time, a negative impulse in terms of practical and organisational issues with the SFC cannot be denied.