An interventional approach to increase the intake of fruits and vegetables among parents and their children in Västerbotten, Sweden

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Abstract

Introduction This processing of the intervention was part of the Salut programme with the goal to improve the health and well-being of the population of Västerbotten. The target group were the parents-to-be and the parents. An adequate fruit and vegetable (FV) intake can contribute to a better health and can be influenced by several factors. The FV intake was associated with several characteristics and there were significant differences between the mothers- and fathers-to-be. Open preschool Klossen located in Umeå was target of the intervention. Klossen receives parents with their children in the age of 0-5 years old.

Aims To develop and evaluate a child health promoting intervention programme that builds on and complements current multidisciplinary activities supporting children and their parents, and while doing so considering a life course approach to health.

Method The designing of the intervention was based on the ‘GVO-model’ which is a Dutch model used for methodological research regarding Health Promotion. Behavioural models based on scientific research like ASE-model, stages of change model and I-change model were used to declare the behaviour and the behavioural determinants. Conclusions draw from the study ‘Fruit and vegetable intake in relation to health-related and socio-economic characteristics among parents-to-be in Västerbotten, Sweden’ were used as basis and together with several visits at ‘Klossen’, including an intake interview and conversations with parents, the intervention was designed.

Intervention The intervention exists of three domains. The first is ‘provided vegetables and fruits’. By expanding the assortments of in particular vegetables the parents will be influenced by the healthy assortment. The second is providing breakfast which special focus on fruits and last is vegetables in warm dishes like lunch and dinner. For each month of the year, Klossen can provide a recipe for the parents.

Implementation Two implementation strategies were used, informing and educational. The organisation lies in the hands of Klossen and it is their responsibility to execute the intervention, this means that the teachers of Klossen are intermediaries. The intervention will start from September 2012 and the quality assurance will be done by Klossen and the Salut programme.

Evaluation The evaluation consists of two parts, the process and effect evaluation. Process: the problems and obstacles found in the research are used as the basis of the intervention. The research took more time than initially was planned but this made the research and the thesis stronger which improves the suitability of the intervention. A way to evaluate if the implementation of the intervention went well is to evaluate the sub aims of the intervention. Effect: the main aim is used to evaluate the effect of the intervention. This can be done by giving a questionnaire to the parents with some questions to ask about their opinion of the intervention. The evaluation can be repeated if necessary. Klossen also evaluates if they are satisfied with the results. Finally it should be discussed how to improve the intervention according to the evaluation.
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1. Introduction

The Salut programme is an initiative of the County Council of Västerbotten to promote well-being and health among all children in the county of Västerbotten, and thereby also promote a healthier future adult population (1). The target of Salut is that “by 2020, the health and well-being of the population of Västerbotten will be the best in the world”, according to the vision of the County Council. They try to achieve this by supporting the child and its parents during its entire childhood, starting already during the mother’s pregnancy (2). One of the domains of the programme is to improve good eating habits (1).

It is important to eat enough fruits en vegetables (FV) every day because of the health benefits. FV improve the sodium/potassium balance which is important to keep a healthy blood pressure. Fibres in FV contribute to a good bowel function (3). Eating 600 g FV per day is estimated to result in a decrease of 10-20% of the incidence of cardiovascular disease and eating at least 400 g/d can result in a decrease in the cancer incidence in Sweden (4).

The bachelor thesis ‘Fruit and vegetable intake in relation to health-related and socio-economic characteristics among parents-to-be in Västerbotten, Sweden’ concludes that the majority of the parents-to-be in Västerbotten had an intake of FV below the recommendation (5). The recommendation for FV of the Swedish National Food Agency (SLV) is 500 grams/day (6). For example they say to eat three portions fruits and two portions vegetables each day. Therefore, an amount of five portions (of 100 grams at a time) per day for FV was selected as recommendation. Of the mothers-to-be 30.4% ate according the recommendation for vegetables and 12.1% according the recommendation for vegetables and 12.1% according the recommendation for fruits. The median for vegetables was 5 times/week and 4 times/week for fruits. The mode for both fruits (25.8%) and vegetables (26.8%) was 2 times/day. The recommendation was met by 14.7% for vegetables and 12.9% for fruits by the fathers-to-be. The median for vegetables was 1 time/week and 4 times/week for fruits. The mode for both fruits (19.8%) and vegetables (23.5%) was one time/day. In total, up to 23.5% of the mothers-to-be and 6.9% of the fathers-to-be met the recommendation.

The intake of both FV was positively associated with physical activity, level of education and satisfaction with economic situation. Parents-to-be with a higher FV intake were less likely to consider any obstacle when it comes to eating nutritious and healthy foods. The biggest considered obstacles were ‘lack of time’, ‘irregular working hours’, ‘takes too long to cook’ and ‘the price of healthy foods’. These factors can be described as ‘barriers’ according to the ‘I-change-model’ (7). Other obstacles were ‘must give up food I like’, ‘healthy food is dull/less tempting’ (both attitude), ‘family’s or friends’ choices’ (social influences) and ‘not enough cooking skills’ (self efficacy).

In agreement with one of the project leaders of the Salut programme, Magdalena Sundqvist, contact has been made with the open preschool ‘Klossen’ located in Ålidhem, Umeå. ‘Klossen’ receives parents with their children in the age of 0-5 years old (8). They can do different activities during the morning hours of every weekday like singing, playing or handicraft. Parents can bring their own food and use the available kitchen. Fruits, vegetables and other foods like bread are provided by the employees of the open preschool against payment. In an intake interview with two facilitators of ‘Klossen’, Ingela Thyrsén and Brita Jonsson, possibilities for an intervention were discussed. This report describes the theories behind the intervention, which is described in the booklet ‘Fruits and vegetables at open preschool ’Klassen’ in Ålidhem’.
2. Aims

The aim which is applicable to this project is ‘to develop and evaluate a child health promoting intervention programme that builds on and complements current multidisciplinary activities supporting children and their parents, and while doing so considering a life course approach to health’ (1).

3. Method

3.1 Choice of method

The project is based on the ‘GVO-model’ (9). This is a Dutch model used for methodological research regarding Health Promotion. Within the ‘GVO-model’ six phases are distinguished: 1 epidemiological diagnosis, 2 causes of behaviour, 3 description of determinants, 4 design phase: the design of the intervention, 5 implementation phase and 6 evaluation. The first three phases of the GVO-model, which are focused on applied research, are executed in the study ‘Fruit and vegetable intake in relation to health-related and socio-economic characteristics among parents-to-be in Västerbotten, Sweden’. The three last phases are described in this report. Behavioural models based on scientific research like ASE-model (10), stages of change model (11) and I-change model (7) are used to declare the behaviour and the behavioural determinants.

3.2 Procedure

The first phase in the GVO-model describes the public health regarding the fruit and vegetable intake and health. The study started with a literature survey to get an insight of the public health in Sweden focused on the fruit and vegetable intake and the possible risk of developing health problems. Conclusions were drawn of the results of the study and based on those conclusions an intervention will be described. Magdalena Sundqvist, project leader of the Salut programme, suggested an intervention at the open preschool ‘Klossen’ in Ålidhem, Umeå. Based on several visits at ‘Klossen’, including an intake interview and conversations with parents, the intervention was designed.

4. Intervention

The most considered obstacles when it comes to eating healthy foods were ‘lack of time’, ‘irregular working hours’, ‘takes too long to cook’, ‘family’s and friends’ choices’, ‘must give up food I like’, ‘healthy food is dull/less tempting’, ‘the price of healthy foods’ and ‘not enough cooking skills’. These obstacles can be subdivided into different behavioural determinants as shown below (7,10):

<table>
<thead>
<tr>
<th>Barrier</th>
<th>‘lack of time’, ‘irregular working hours’, ‘takes too long to cook’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>‘the price of healthy foods’</td>
</tr>
<tr>
<td>Attitude</td>
<td>‘takes too long to cook’, ‘must give up food I like’, ‘healthy food is dull/less tempting’</td>
</tr>
<tr>
<td>Social influences</td>
<td>‘family’s or friends’ choices’</td>
</tr>
<tr>
<td>Self efficacy</td>
<td>‘not enough cooking skills’</td>
</tr>
</tbody>
</table>

The different behavioural determinants need their own approach to improve the behaviour of the parents in Västerbotten (12). There must be anticipated on barriers and developing strategies to deal with the barriers which can be accomplished by doing, practice (role play, demonstration) and group discussions about potential problems. To influence the attitude of
the participants the focus must be on risk perception and (dis)advantages. For social influences it is helpful to show the standard, by exerting pressure on the parents, but also support them and to increase their self efficacy. Self efficacy can be improved by demonstrations and practice. There are different strategies to get the parents to change their behaviour like setting goals, agreements, implement into daily life, reward in prospect and to anticipate on failures.

Based on the obstacles which the most participants chose and the possibilities within ‘Klossen’, concluded from the intake-interview, an intervention was designed which exist of the following components:
1. Provided fruits and vegetables
2. Breakfast
3. Recipes for warm dishes

Provided vegetables and fruits
By the employees of ‘Klossen’ groceries are done at ‘Coop Konsum’, a local supermarket. At ‘Klossen’ there are provided different types of fruits and cucumbers. By expanding the assortment of provided vegetables, the visitors of the open preschool have a wider choice. They do not need any cooking skills and the supply of ‘Klossen’ is a good example for a healthy kitchen what impacts the social influence.

Sub aim: within four months ‘Klossen’ provides at least two types of vegetables taking the seasonal vegetables (appendix 1) and required preparation into account.

Breakfast
Breakfast is a good moment to consume fruits (and/or vegetables) which can prevent a high intake of unnatural sugars. Offering different types of breakfast about once a week, till the children recognize all of them, helps them to know new flavours. The recommended amount vary by age, but can be adapted easily (appendix 2). The types of breakfast are not only suitable for the children, but also for the parents. The barriers will be taken away, because having breakfast will be part of the activities in ‘Klossen’. The parents do not need any cooking skills and the norms of breakfast can be shown by ‘Klossen’. Everyone can eat the same and this will have a positive effect on social influences. Because fruit will be part of the breakfast, the intake will be increased. The method ‘demonstration’ shows a healthy breakfast which is a good way to influence the corresponding behavioural determinants (12).

Sub aim: within four months ‘Klossen’ will provide breakfast (low fat milk, bread with margarine and/or keyhole-marked toppings, fruit/berries, vegetables and other cereal products as grains and cereals) at at least three mornings during the week for a fairly price.

Recipes warm dishes
The open preschool supports parents with raising their children. The most common problems among the parents they refer to are sleeping and eating. Therefore, food is an important part of the preschool. The best way to change the behaviour of the parents is to show and/or practice/experience how you can eat enough FV (12). Due to limitations of the location and the method of the open preschool, it was not possible to design an intervention focused on these two ways. The kitchen is too small to cook with more people and the parents have the responsibility for their child during their visit at ‘Klossen’. The solution that most came near demonstrations and workshops was to provide monthly recipes. This gives parents ideas for healthy cooking and the encouraging to practice. The safe and familiar environment of ‘Klossen’ will also support them to actually prepare the recipes. In addition it is also given that if there is a possibility to prepare (parts of) the recipes with a small group.
Sub aim 1: for each parent who visits ‘Klossen’, the monthly recipe (as added in the advisory for ‘Klossen’) is available at the kitchen counter from September 2012.
Sub aim 2: the two teachers of ‘Klossen’ discuss the possibilities of the preparation of (parts of) the recipes before September 2012 based on the twelve provided monthly recipes.
Sub aim 3: if sub aim 2 has a positive outcome: small cooking workshops will be included in the activities of ‘Klossen’ by the teachers from October 2012.

Fruit and vegetable intake of the parents
The research showed that the mothers-to-be ate fruits and vegetables 2 times/day and the fathers-to-be ate fruits and vegetables 1 time/day. This does not meet the recommendation of 5 times/day.
Sub-aim 1: the mothers-to-be eat fruits and vegetables 4 times/day after 4 months.
Sub-aim 2: the fathers-to-be eat fruits and vegetables 2 times/day after 4 months.

5. Implementation
To be able to execute the intervention and reach the goals, an implementation plan has been made to know exactly how and when to do certain steps and who is responsible for implementing them.

Implementation strategy and activities
The implementation strategy is to use the results from the research and use them in a way that they fit the target group of the parents from Klossen and also the ideas and wishes of Klossen. This increases the change that the intervention will be successfully implemented.
Two intervention strategies are used. The first one was the ‘informing’ strategy. This will be done personally by presenting the intervention to the preschool teachers to let them know what the ideas are and why these ideas are important to be implemented because of the health benefits. This will increase the support and the change of success. Also the Salut programme will be included by inviting Magdalena Sundqvist.
The other implementation strategy is ‘educational’, done with instruction material. The booklet with the ideas and advices will be used during the presentation, as well as a PowerPoint presentation. The booklet will also be given to the preschool teachers, and Magdalena, in a way that it is understandable for them and that they can easily use the ideas and recipes and copy them (13).

Organisation
The organisation lies in the hands of Klossen. After the presentation they should be able to take care of the responsibility. If the intervention is successful, the Salut programme can choose to use it for other preschools in Umeå or Västerbotten as well. This organisation will be in the hands of Salut.

Division of tasks, responsibilities and authorities
After presenting and handing over the intervention booklet to Klossen, it is their responsibility to use it. They can provide breakfast for the children and the parents when they have the time, they can decide which products they will buy to expand the offerings. They are also in charge of distributing the recipes among the parents that come to Klossen. They should do this monthly because the recipes are made for every month of the year.
If the intervention at Klossen is successful, the Salut programme can decide to take the intervention in their programme and spread it over other preschools, this will be their responsibility.
While using the intervention, the authors should always be mentioned.

**Expertise, communication and progress monitoring**

By giving the presentation and the booklet, it will be attempted to transfer the expertise to the teachers at Klossen so they can be in charge of executing the intervention. A dietician is involved in Klossen, to her could be referred for further questions. The presentation will be used as the way to communicate the intervention to the preschool teachers. In this way, the teachers of Klossen are intermediaries. After that, the project will be finished for the authors so they won’t be involved anymore but they can still be reached for questions and kept informed. It is possible that other nutrition students or dieticians can work with this intervention and possible other locations to expand the intervention. In this way, the progress can be monitored.

**Costs and benefits**

It will cost Klossen more money to provide breakfast and offering other products to the parents and their children but they can ask money from the parents for this, the same way they do with the current supply. Klossen can save money by buying products within the season. Making copies of the recipes will also cost more money, maybe they can spread this digitally, but the health benefits achieved by this will be higher than the costs.

**Timetable**

Because Klossen will close during the summer, the intervention will probably implemented in September 2012 when they open again. What they can do now is already tell the parents about this intervention and what they can expect. This will make them enthusiastic and increases the success of the implementation. What Klossen can already do is make copies of the recipes of the summer months and distribute them so the parents can already cook something easy, healthy and not expensive during the summer.
From September 2012 on, Klossen will distribute the recipe of the month for one year. In September they will also choose which other products they will buy to expand their assortment of fruits and vegetables.
Starting with providing breakfast can be done when they have time for this. Because of the big assortment of fruits during the summer it is recommended to start with providing breakfast in September.
If it is possible, small cooking workshops will be given by the teachers of Klossen starting in October 2012.

**Quality assurance in the future**

Because the intervention will be given to Klossen and the Salut programme, they are now in charge of the intervention and the quality assurance. They can evaluate the intervention with the defined aims and the effect evaluation. If other students, or dieticians, can work with this intervention, they can take this task as their responsibility to assure the quality in the future.

6. Evaluation

The evaluation can be divided into ‘process’ and ‘effect’. Because there are no outcomes yet from the intervention it is not possible to evaluate the effect of the intervention. The effect evaluation is a design of how the intervention can be evaluated.
6.1 Process
Before designing an intervention it is important to know where the problems and obstacles are. Research was done to find out what these obstacles are. This research, both literature and field research, took more time than initially was planned. This was partly because it was necessary to use a lot of SPSS and statistical analyses. Also, much feedback was given by the supervisors that had to be incorporated into the thesis. This was not wasted time because this made the research and the thesis stronger which improves the suitability of the intervention. The downside was that there was less time to set up the intervention. There was enough time to meet with Magdalena, Brita and Ingela to talk about the possibilities and wishes for the intervention to set up an intervention that suits target group and the intermediaries. During these meetings Brita and Ingela were very enthusiastic about the ideas and also the parents were positive about these ideas. After presenting the intervention and booklet to Magdalena, Brita and Ingela they were again very enthusiastic and excited to use this for the parents and children who are visiting Klossen. This gave a strong impressing that the intervention suits the wishes and possibilities at Klossen.

It is not possible to evaluate the entire implementation at this point because implementation has not been completed. Part of the implementation was presenting the intervention, this went well. After this it is important that Brita and Ingela know how to use the booklet. If other people are involved as well, it is important that they also know how to execute their tasks of the intervention as explained in the chapter ‘Implementation’. Those involved with the intervention are enthusiastic and the booklet is written so they can understand and practice it easily, this reduces the risk that problems during implementation will occur. A way to evaluate if the implementation of the intervention went well is to evaluate the sub aims of the intervention. All the aims are formulated SMART so they are measurable in an amount of time. These aims are:

- for each parent who visits ‘Klossen’, the monthly recipe (as added in the advisory for ‘Klossen’) is available at the kitchen counter from September 2012.
- the two teachers of ‘Klossen’ discuss the possibilities of the preparation of (parts of) the recipes before September 2012 based on the twelve provided monthly recipes. If this aim has a positive outcome: small cooking workshops will be included in the activities of ‘Klossen’ by the teachers from October 2012.
- within four months ‘Klossen’ provides at least two types of vegetables taking the seasonal vegetables (appendix 1) and required preparation into count.
- within four months ‘Klossen’ will provide breakfast (light milk, bread with margarine and/or keyhole-marked toppings, fruit/berries, vegetables and other cereal products as grains and cereals) at at least three mornings during the week for a fairly price.

These aims can be evaluated by the preschool teachers themselves. If these aims are not met in the time that was given, the evaluation is needed to find out why these aims are not met yet. Was it because the information needed was not complete of clear enough, was there too less time given to reach the aim, was there too less interest from the parents who visit Klossen or from Klossen itself? There can also be other reasons why an aim was not reached, by evaluation this it can become clear why it was not reached and what should be done about it to do reach the aim.

6.2 Effect
After implementing and executing the intervention it is important to evaluate the effects of the intervention. The main aim is: ‘to develop and evaluate a child health promoting intervention programme that builds on and complements current multidisciplinary activities supporting children and their parents, and while doing so considering a life course approach to health’, as shown in chapter 2 ‘Aims’.
Because the intervention is designed for the parents that visit Klossen, it is important to know what they think about the intervention and if it helped them to eat healthier in a way that appeals to them, fast, easy and cheap. A way of evaluating this is by giving a questionnaire to the parents with some questions to ask about their opinion. The best way in this case is to give a questionnaire on paper and ask the parents if they can fill it in while they are at Klossen. An oral questionnaire would take too long for the preschool teachers to interview all the parents. When the questionnaires are taken home, the changes reduces that many filled in questionnaires will be returned. After four months all the sub aims should be reached, this is also a good time to evaluate the opinion of the parents. This evaluation can be used to improve the intervention that it will match better to the wishes of the parents and that the effects will improve as well to reach the aim. The evaluation can be repeated, for example every 3-4 months. An example of a questionnaire for the parents is in appendix 3.

Besides the parents, it is important that Klossen also evaluates if they are satisfied with the results. They put time and money in executing the intervention so it is important that the intervention meets up to the expectations. They can evaluate their experiences and satisfaction during a meeting with all people concerning the intervention. During this meeting they can also discuss how to improve the intervention according to the evaluation from the parents. It would be wise to also discuss this with professionals (12).

7. Acknowledgements

Thanks to Magdalena Sundqvist from the Salut programme for her help of finding a place to make the intervention for. Thanks to Brita Jonsson and Ingela Thysén from preschool Klossen at Ålidhem for making time for us and giving us the chance to use their preschool for the intervention. We would like to thank the three of them for the warm welcome, good help and nice meetings. Thanks to Sofia Johansson en Sofia Sköldestam for helping us with translating and checking the Swedish language.
References

Appendix 1: Säsongens frukt och grönt (14)

Vinter (januari till mars)
- **Svenska grönsaker**: Brysselkål, grönkål, jordärtskocka, kålrot lök, morötter, palsternacka, potatis, rötselleri, rödbetor, rödkål, vitkål.
- **Europeiska grönsaker (frilandsodlade)**: Aubergine, blomkål, broccoli, fämkål, mangold, paprika, spenat.
- **Svensk frukt**: Äpple
- **Europeisk frukt**: Apelsin, citron, kiwi

Kom ihåg att det finns frysta bär och torkad frukt när det färska utbudet sinner.

Vår (april till juni)
- **Svenska grönsaker**: Isbergssallad, kålrot, lök, morrötter, palsternacka, potatis, purjolök, rötselleri, rödbeta, salladskål, sparris, vitkål.
- **Europeiska grönsaker (frilandsodlade)**: Blomkål, broccoli, fämkål, mangold.
- **Svensk frukt**: Rabarber.
- **Europeisk frukt**: Citroner, persika.

Sommar (juli till augusti)
- **Svenska grönsaker**: Blomkål, broccoli, färsk bönor, fämkål, gurka, isbergssallad, kronärtskocka, kärlabbi, kålrot, lök, mangold, majs, morot, palsternacka, paprika, potatis, purjolök, rötselleri, rådisor, rödbetor, salladskål, sockeråter, sparris, spenat, stjälkselleri, tomater, vitkål, zucchini.
- **Europeiska grönsaker (frilandsodlade)**: Mangold, paprika.
- **Svensk frukt**: Rabarber, vinbär, nätmelon, körsbär, krusbär, jordgubbar, hallon, blåbär, plommon, päron.
- **Europeisk frukt**: Melon, nektarin, persika.

Höst (oktober till december)
- **Svenska grönsaker**: Blomkål, broccoli, brysselkål, grönkål, jordärtskocka, kålrot, lök, morötter, palsternacka, persiljerot, potatis, purjolök, rötselleri, rödbetor, rödkål, salladskål, savojkål, vitkål, stjälkselleri.
- **Europeiskt grönsaker (frilandsodlade)**: Aubergine, blomkål, broccoli, paprika, spenat
- **Svensk frukt**: Äpple
- **Europeisk frukt**: Apelsin, citron, kiwi.
### Appendix 2 Praktiska råd för planering av måltider (15)

**Tabell 1. Frukost. Frekvenser under fyra veckor**

| Grönt, lättmjölk, bär/mos/sylt, smörgås med nyckelhålsmärkt pålägg och grönsak | 12 ggr |
| Lättfrukost/müsli, bär/mos/sylt, smörgås med nyckelhålsmärkt pålägg och grönsak | 4 ggr |
| Drickchoklad/ juice, frukt/grönsak, smörgås med nyckelhålsmärkt pålägg och grönsak | 4 ggr |

**Tabell 2. Frukost. Mängder**

<table>
<thead>
<tr>
<th>Barn 1-2 år</th>
<th>Barn 2-5 år</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bröd, matfett och pålägg*</td>
<td>1 liten smörgås</td>
</tr>
<tr>
<td>Grönt</td>
<td>Havregryn 1 dl = 35 gram</td>
</tr>
<tr>
<td></td>
<td>Mannegräns 1 dl = 70 gram</td>
</tr>
<tr>
<td>Flingor/müsli</td>
<td>Majflingor 1 dl = 13 gram</td>
</tr>
<tr>
<td></td>
<td>Müsli 1 dl = 38 gram</td>
</tr>
<tr>
<td>Mjölk och fil</td>
<td>Till grönt ½-¾ dl</td>
</tr>
<tr>
<td></td>
<td>För att laga grönt ¾-1 dl</td>
</tr>
<tr>
<td></td>
<td>Till choklad 1-1½ dl</td>
</tr>
<tr>
<td></td>
<td>Fil 1-1½ dl</td>
</tr>
<tr>
<td>Frukt/grönsak</td>
<td>Äppelsmör 1 tsk = 6 g</td>
</tr>
<tr>
<td></td>
<td>Lingesylt 1 tsk = 6 g</td>
</tr>
<tr>
<td></td>
<td>Russin 1 tsk = 3 g</td>
</tr>
<tr>
<td></td>
<td>Frukt 1 st = 105 g</td>
</tr>
<tr>
<td></td>
<td>Grönsak 1 st = 10 g</td>
</tr>
<tr>
<td>Bär</td>
<td>25 g</td>
</tr>
<tr>
<td>Juice</td>
<td>1 dl</td>
</tr>
</tbody>
</table>

* Se tabell 9

**Tabell 9. Smörgås. Mängder bröd, matfett och pålägg**

<table>
<thead>
<tr>
<th>Barn 1-2 år</th>
<th>Barn 2-5 år</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bröd</td>
<td>Knäckebröd 1 st = 12 g</td>
</tr>
<tr>
<td></td>
<td>Vitt bröd 1 skiva = 25 g</td>
</tr>
<tr>
<td></td>
<td>Rågsötsbröd, limpa 1 skiva = 20 g</td>
</tr>
<tr>
<td></td>
<td>Grovt bröd 1 skiva = 30 g</td>
</tr>
<tr>
<td>Matfett</td>
<td>Till en skiva bröd 1 tsk = 5 g</td>
</tr>
<tr>
<td>Nyckelhålsmärkta pålägg</td>
<td>Grönsak 10 g</td>
</tr>
<tr>
<td></td>
<td>Leverpastej 1 tsk = 4 g</td>
</tr>
<tr>
<td></td>
<td>Korg 1 skiva = 8 g</td>
</tr>
<tr>
<td></td>
<td>Skinka 1 skiva = 10 g</td>
</tr>
<tr>
<td></td>
<td>Makrilli tomatås 1 tsk = 5 g</td>
</tr>
<tr>
<td></td>
<td>Ost 1 skiva = 10 g</td>
</tr>
<tr>
<td>Pålägg</td>
<td>Kaviar 1 tsk = 5 g</td>
</tr>
<tr>
<td></td>
<td>Messmör 1 tsk = 4 g</td>
</tr>
</tbody>
</table>
Appendix 3 Effect evaluation for the parents

1. Have you been to the breakfast provided by Klossen?
   - Yes, twice or more per week
   - Yes, once per week
   - Yes, 3 times per month
   - Yes, 1-2 times per month
   - Yes, 1 or less times per month
   - No, never

2. Did the breakfast meet up to your expectations?
   - Yes,
   - No, because………………………………………………………………

3. Have you used ideas for breakfast you had at Klossen also at home?
   - Yes
   - No, because………………………………………………………………

4. Did you buy fruits or vegetables of the new assortment of Klossen?
   - Yes
   - No

5. What do you think about this assortment and the prizes?
   ………………………………………………………………………………………

6. Did you make recipes provided by Klossen at home?
   - Yes, every month
   - Yes, every two months
   - Yes, every three months of less
   - No, never

7. What do you think about this recipes? (more options are possible)
   - Easy to make
   - Not much preparation time needed
   - Healthy
   - Suitable for children, could eat this easily with the entire family
   - Cheap
   - Children can help cooking
   - ,…………………………………………………………………………….

8. Do you think that your eating habits have changed?
   - Yes,...........................................................................................................
   - No,...........................................................................................................

9. Will you continue with these eating habits, the recipes and activities provided by Klossen?
   - Yes,...........................................................................................................
   - No,...........................................................................................................
10. How often do you eat fruits? *(please circle the right answer)*

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<tr>
<th>Times per month</th>
<th>Times per week</th>
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11. How often do you eat vegetables? *(please circle the right answer)*

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