

Vocational student's intrinsic motivation to purchase healthy foods at school. A focus group study.



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Abstract

Bad nutrition has become a problem, especially among students. As students spend a lot of their time at school, changing the school food environment might help to change their eating habits. The current study focused on how intrinsic motivated the students are to eat healthy in the school canteen, how useful they perceive different interventions techniques and additionally, how students can be tempted to eat healthier in the canteen without losing them to out of school food outlets. Focus group discussions were held with vocational students (N=25 Mage 18,8) from ROC Ede and Velp. They were asked to rank canteens as well as interventions and to answer questions about their ideal canteen and food consumption during school. The discussions were recorded and transcribed verbatim by the researcher. Atlas 6.2 was used to do content analysis. Above all was found that price the most important determinant is for students to buy unhealthy, next to that taste is seen as important. Some nudging tactics could work to get students to eat healthier, on the contrary, educating them about food was seen as less promising. Food outlets near the school are popular, especially the supermarkets. Students find their freedom to choice important and that is, together with price and taste, a reason why students go to out of school food outlets instead of the canteen. The Subway and Bakker Bart were seen as ideal concepts, this because of their perceived autonomy, taste, price and freshness.

Contents

Abstract	2
1. Introduction	4
2. Theoretical Framework	6
Motivation to choose (un)healthy	6
Nudging.....	7
Freedom to choose.....	8
Responsibility	8
3. Method.....	10
3.1 Participants	10
3.2 Design	11
3.3 Procedure.....	11
3.4 Analysis	13
4. Results	14
4.2 Assortment changes towards healthiness.....	18
Autonomy and freedom to choose	19
Temptations through better choice, variation and taste	20
Atmosphere	20
Responsibility	21
5. Discussion	22
References	25
Appendix 1. Discussion script	29
Appendix 2. Questionnaire	32

<https://www.rocvantwente.nl/site/home/overige-paginas/gezondeschool/gezondeschool-home/gezondekantine/imageBinary/2015GEZONDESCHOOL%20detail-%20gezonde%20kantine.png>

1. Introduction

Young people often lack their daily-recommended intake of fruit, vegetables, and fish (CBS, 2015) and have an excessive intake of high-energy dense foods (World Health Organization, 2003). The sugar consumption in the Netherlands is the third highest in the world (Euromonitor, as cited in Ferdman, 2015). 14 % of the Dutch youth, and 48 % of the Dutch population over the age of nineteen is overweight (RIVM, 2016b). It is important to change unhealthy eating habits. This is important as the health effects of students entering adulthood include obesity, high blood pressure, cardiovascular disease, diabetes, several cancers (World Health Organization, 2012), and it could affect psychological wellbeing (Pulgarón, 2013). There has been an increase of eating out of home and for adolescents during school is the most prominent moment to do so (Lachat et al., 2011). It is difficult for Dutch students to eat healthy in school canteens as unhealthy foods are widely available at secondary schools (van den Berg, Mikolajczak & Bemelmans, 2013; Van der Horst et al. 2008). There are differences between education levels; Scholtens et al. (2010) found that the canteens at vocational education schools are unhealthier than at higher education schools. Additionally, vocational educated students have unhealthier eating behaviours than higher educated students in the Netherlands (HBSC, 2010; van der Horst et al., 2008; van der Horst, Oenema, te Velde & Brug, 2009), and are more often obese (CBS, 2016).

Students spend a lot of their time at school, consequently, making the school canteen assortments and looks healthier could probably help in developing healthier habits for students, overcome cravings and contribute to a healthier lifestyle. This has also been seen by other researchers as a new area of studies arise about the importance of the environment from the school on the food consumption (Frerichs et al., 2015; van den Berg, Mikolajczak & Bemelmans, 2013; Gorman, Lackney, Rollings & Huang, 2007).

This study is conducted because The Dutch Ministry of Health, Welfare and Sports has, amongst others, seen the importance of making school canteens healthier and had the target to transform all school canteens to solely healthy in 2015 (van den Berg, Mikolajczak, & Bemelmans, 2013; Zeinstra, Timmers, & van der Velden, 2013). Therefore, they gave the Netherlands Nutrition Centre the task to sharpen their guidelines for school canteens with their Healthier School Canteen programme (Voedingscentrum, 2016). The Healthier School Canteen programme is targeted on secondary schools and schools for vocational education and aims to offer healthy food environments in the schools. This programme is the follow up of The Healthy School Canteen programme, which has less strict measures. The schools that want to participate need to follow these new guidelines by at least 2017. For the new regulations they conducted different levels for a healthy canteen, silver and gold. A gold canteen needs to consist of at least 80 % of basic products. Basic products are broadly similar to the

healthy products in the Dutch national food guideline. Additionally, the lay out in the canteen needs to promote healthy eating, using for example nudging or restricting the promotion for unhealthy food (Voedingcentrum, 2016). They encourage the schools to follow these guidelines and if the schools satisfy the conditions they get awarded. In 2016 a high amount of schools had, or were occupied with, becoming a healthy canteen (De Gezonde Kantine, 2016; RIVM, 2016a). There has been done research about the Healthy School Canteen programme (Mensink, Schwinghammer, & Smeets, 2012; Milder, Mikolajczak, van den Berg, van de Veen-van Hofwegen, & Bemelmans, 2014). Milder et al., (2014) found that participating schools offered more healthy food but that unhealthy food was still widely available. Both studies did not take price into account, which could be an important factor why students do not eat healthy.

As the Dutch government aims for solely healthy school canteens this study will look at different interventions that could help to reach this goal, and investigate if students perceive the interventions as promising. There are plenty interventions to change eating habits in a canteen and they differ in effectiveness. This has, among others, two important causes; the first cause is that interventions differ in intrusiveness. The second cause is that students need to be intrinsically motivated to make an intervention effective. Previous research with vocational educated students showed that students do not find a healthy food choice important in school canteens (Ridder, Heuvelmans, Visscher, Seidell, & Renders, 2010). In our knowledge there has not been a lot of research about the relationship between how intrinsic motivated students are, and the role of different interventions strategies in the canteen environment apart from the research by Bos et al., (2015).

Therefore, we want to fill this gap and investigate how intrinsic motivated vocational educated students are to make healthy choices in a canteen, and what the influences of the lay out, nudges and the assortment are. As students go to out of school food outlets instead of the cafeteria during school time (van der Horst et al., 2008), this study also wants to get insight on how students can be tempted to eat healthier in the canteen without losing them to the out of school food outlets. These questions will be tackled with a small scale qualitative study, namely focus group discussions with vocational educated students.

As this study is the first phase of a bigger research project the main goal is to get insight in the chances and barriers that can be expected in the other experiments of the project. The results of this study will be incorporated into the design of the field experiment and canteen co-creation study, which will be conducted in later phases.

2. Theoretical Framework

Motivation to choose (un)healthy

A lot of students choose unhealthy products at school canteens (Ridder, Heuvelmans, Visscher, Seidell, & Renders, 2010) for several reasons. A reason could be that they experience temptations towards them as taste is very important for our food choice (Kourouniotis et al., 2016), and food high in sugar, salt or fat is often tastier (Kessler, Chevat, & Kessler, 2012). As we get pleased by eating them they are harder to resist (Birch, 1999). Cravings are provoked when being in a situation associated with the desired product, like seeing the product real life or in a commercial (Weingarten & Elston, 1990). Another reason why students' choose unhealthy products at school canteens could be that sometimes their food choice is not driven by hunger or nutritional needs but by external cues such as the lay out, assortment, other people, colours, smell, price, promotions and how easy it is to buy (Bahl, Milne, Ross & Chan, 2013; Cohen & Farley, 2008). Furthermore, people mostly eat at the same place and on the same time every day, developing a habit (De Vet, Stok, De Wit & De Ridder, 2015). Habits are unconscious influenced by the environment (Naughton, McCarthy & McCarthy, 2015; Wilson, Buckley, Buckley & Bogomolova, 2016). Changing the food environment might be effective to reduce cravings, temptations, habits and against external cues. Therefore, making the choice architecture of the food environment healthier will likely consist in a more nutritious choice. (Aschemann-Witzel et al., 2013; Kleef, Otten & van Trijp, 2012 ;Neumark-Sztainer et al., 2005;).

Price might also be an important factor why students do not eat healthy, as unhealthy food is mostly cheaper than healthy food (Waterlander et al., 2010). This is not only the case in the Netherlands but in a lot of countries (Rao, Afshin, Singh, & Mozaffarian, 2013). Callaghan et al. (2010) did a research about healthier snacks in vending machines and found that a majority of students wanted the healthier products, but that they did not purchase them because of the higher price.

Another factor why students eat unhealthy is their lack of intrinsic motivation. Intrinsic motivation is necessary to make change sustainable. This is stated in the self-determination theory from Deci & Ryan (2000). This theory explains why people are motivated to act in a specific manner. It implies that the motivation comes out of oneself and is not triggered by external sources such as rewards or punishments. Intrinsic motivation is needed to make the motivation part of the routine. This also means that if students are not motivated intrinsically it is very hard to change their behaviour in the long term. This theory states that external rewards would not be adequate as these undermine the intrinsic motivation, and covert it to extrinsic. Providing choices on the

other hand gives more satisfaction and enhance intrinsic motivation. Central in this theory are the three humans basic needs, as can also be seen in Fig.1; Namely competence (e.g. the ability to make a healthy choice in the canteen), autonomy (e.g. the ability to decide for yourself if you are going to eat healthy or unhealthy) and relatedness (e.g. If this choice fits in with your social group). If these three basic needs are fulfilled you are entirely intrinsic motivated.

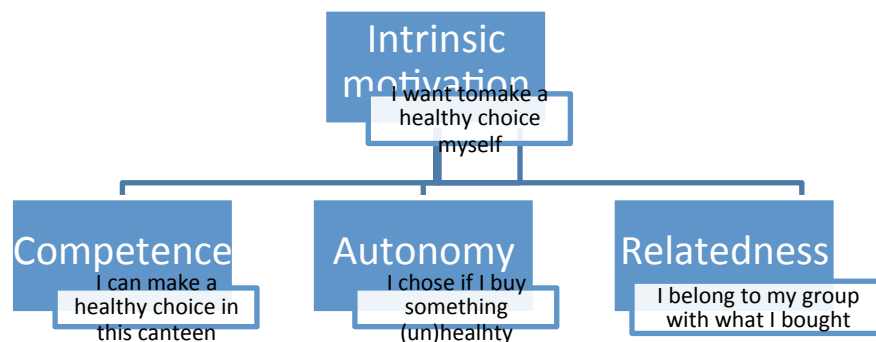


Fig. 1 The three human basic needs from the self-determination theory from Deci & Ryan (2000)

Nudging

There are a lot of interventions to influence food choices in school canteens. Such as educating, restricting, changing the price and nudging. Especially nudging is an important technique for the Healthier School Canteen programme as it is helpful to change the choice architecture and makes it easier to choose healthier products in the canteen (Hanks, Just, Smith, & Wansink, 2012; Wilson, Buckley, Buckley & Bogomolova, 2016). Nudging changes unconscious made choices, are cheap, easy to say no to, transparent and make use of already existent preferences (Thaler & Sunstein, 2008). Nudges influence people's choices without them being aware and are commonly used. For example; Keller, Markert & Bucher (2015) found out that the positioning of products in a supermarket are important. When the lowest calorie snack was assorted in the middle, more people bought it than when assorted on the left. Van Kleef, Otten & Van Trijp (2012) discovered that there will be more healthy snacks sold when they were stored next to the counter. That nudges could work can be explained by Wansink (2004) and Hanks et al., (2012) who found that people mostly choose what is easiest to get. This is logical if you look at Kahneman's (2012) theory of system 1 and 2 thinking. System 1 is your fast, irrational and emotional thinking, while system 2 is your slow, elaborate and rational thinking. As it is time consuming to make all our decisions via system 2 a lot of

decisions are made via system 1. Moreover, as students are overwhelmed with the amount of decisions they need to make every day they get ego depleted (Baumeister, Bratslavsky, Muraven, & Tice, 1998). Ego depletion means that your active self cannot make an unlimited amount of decisions a day and after a while gets depleted which eliminates self-control and makes us choose what is easiest to get.

Freedom to choose

Adolescents find their autonomy very important, as they are finalising it (DiClemente, Hansen, & Ponton, 1996). Therefore, they want to decide for themselves what they eat and don't want to be restricted.

Furthermore, people crave more for something when it is not available, as can be explained by the reactance theory. The reactance theory implies that if your choice is restricted you get to desire the restricted option more (Brehm & Brehm, 2013, Lessne & Venkatesan, 1989). Accordingly, interventions restricting people's choices can cause reactance. Practically, this means that students want more snacks if they cannot buy them in the canteen, and as a result will go to the nearest out of school food outlet (Brehm & Brehm, 2013). Therefore, it is important to look at the level of intrusiveness of interventions. It is important to consider how intrusive the intervention should be, as you do not want to cause reactance. The aim from the Dutch ministry of Health, Welfare and Sports to make all the canteens solely healthy could not be the best idea, as this would probably cause reactance. Besides that, limiting people's choice can also be harmful for intrinsic motivation (Bos et al., 2015). Contrary, the study by Diepeveen et al., (2013) found that less intrusive interventions are easier accepted by the public but are less effective. Similarly, Brambila-Macias et al., (2011) came to the conclusion that educating people about healthy food raises awareness but doesn't let people buy healthier food while more intrusive interventions, which actually change the environment, more likely actually change behaviour. Summarizing, there needs to be a consideration between the level of intrusiveness of interventions as too intrusiveness can cause reactance but not being intrusive enough could be less effective than an intrusive intervention.

Responsibility

It is a difficult question who needs to take responsibility for the unhealthy food intake of students during school. Are the students themselves responsible, their parents, the school, government or food manufacturers? The students themselves could be seen as responsible as they need to get intrinsically motivated and as it is their body. Parents are also sometimes seen as responsible for the food their children eat, (Ridder, Heuvelmans, Visscher, Seidell, & Renders, 2010) but as adolescents often demand freedom from their parents, most do not see the parents as fully responsible (Hill, 2002). The government, schools or food manufactures could also be seen responsible as they make the food available in the school food environment. Moreover, schools in a lot of other European

countries than the Netherlands seem to do more to control the food intake as they have stricter school food policies (European Commission, 2014).

The theories discussed will be taken into account for the design of the focus group. The students need to rank canteens as to discover if they are intrinsic motivated to buy healthy food. Next to that different intervention techniques, which will make use of different nudging techniques, will be evaluated. This will be done to discover if they are intrinsic or extrinsic motivated and to see if interventions could possibly cause reactance. Some intervention techniques will make use of changing the food environment while others will use different pricing tactics.

3. Method

3.1 Participants

The participants were students from Roc Ede or Velp. They received an email about the research project and an invitation was put on the intranet of their school. They had to email the researcher if they wanted to participate. Not enough participants were collected through this manner; therefore the students were also approached face to face, via teachers and with flyers throughout the schools. The aim was to have focus group discussions with around 6 people. The group size ranged from 3 till 8 (mean 6).

There were 25 participants, aged between 16-23, 15 females and 10 males from ROC Ede and Velp. It is of importance to have an in depth background profile about the participants, including eating habits during school time, in order to see what kind of students we had in our research group. As can be seen in table 1, they form a varied group.

Table 1. Information about the participants

N =25	
Age (years)	
Mean (range)	18,8 (16-23)
Gender	
Male	10
Female	15
Days a week at school	
Mean	3,85
Education	
Junior producer	2
Security	5
Juridical associate	2
Tourism	1
Media design	1
Allround DTP'er	3
Vavo/ pre university education	2
Care and wellness	2
Teaching assistant	7
Where they get lunch	
partial from school	9
everything from home or somewhere else	16
Where they get drinks	
everything at school	1
partial from school	4
everything from home or somewhere else	19
Where they get their snacks	

Continued table 1. Information about the participants

partial from school	9
everything from home or somewhere else	15
<i>How often they buy from the canteen to use directly</i>	
once a month or less	13
2 till 3 times a month	2
once a week	9
2 till 3 times a week	1
<i>How often they buy from the supermarket to use directly</i>	
once a month or less	8
2 till 3 times a month	4
once a week	5
2 till 3 times a week	8
<i>How often they buy from the snack bar to use directly</i>	
once a month or less	24
2 till 3 times a month	1

3.2 Design

In this qualitative study focus group discussions were used for data collection. Focus group discussions are useful because group interactions generate new data and discussions encourage sharing ideas and experiences (Rabiee, 2004). Four focus group discussions were held at vocational education schools in the Netherlands, two at ROC Ede and two at ROC Velp. The key objective of the focus group discussion was to get insights into the opinions of the students according their school canteen and the possible interventions to make their canteen healthier and more attractive. In both schools the canteens got the Healthy Canteen award from the Healthy School Canteen programme, the predecessor of the Healthier School Canteen programme, mentioned in the introduction. The ROC in Ede has multiple canteens and the ROC in Velp has one canteen. All of the canteens are managed by Cormet catering and operate following the same guidelines.

3.3 Procedure

All focus group discussions were held in a meeting room at one of the schools. The sessions took between 40 to 60 minutes. A semi structured interview guide focussing on the identification of key factors was used to ensure consistency in questions asked across groups, yet allow flexibility. The interview guide can be found in the appendix together with the questionnaire.

Table 2 is a summary of the interview guide, which was separated in six phases. The first two phases functioned as introduction and warming up. Phase three, four and five were most important and took most of the time, phase six was to get more background information, these results are included in Table 1.

Table 2. Focus group interview guide summary

Procedure	Content
Phase 1: introduction	Each focus group discussions started with a round of introduction of the researchers and the participants. Next to that the purpose of the study was explained. The participants had to sign the form of consent and were asked for their permissions of audiotaping the session. After that the students were explicitly told that there are no wrong or wright answers. Drinks and snacks were available.
Phase 2: Associations with food and the school canteen	Question: what comes to mind when thinking about the canteen and food at school in general? This question was mostly used as a starter, to get them confident and talking.
Phase 3: Rank the canteens	Questionnaire 1. In this phase the students had to fill in questionnaire 1. They saw three different canteens assortment descriptions, one canteen selling things, another one selling only unhealthy and the last one selling both products categories. The students were instructed to individually rank the canteens. Afterwards the answered were discussed, making use of the interview guide and other questions.
Phase 4: acceptance intervention strategies to promote healthy eating in the canteen	Questionnaire 2. In this phase they had to fill in questionnaire 2. In this questionnaire they saw 9 different interventions, and on the 10 th question they could fill in their own idea. The interventions can be seen in Table 2. The interventions were inspired by the research of Bos et al., (2013). In their research they chose the interventions on level of perceived fairness, perceived attractiveness and interventions differing in intrusiveness. For each intervention the students had to tick the box underneath the statement to say if they thought that the intervention would be promising, don't know, or not promising. The students were instructed to individually fill in the questionnaire. Afterwards the answers were discussed per intervention. Again the premade questions from the interview guide were used and other questions were asked as well. Questions; 1.Make unhealthy food and drinks more expensive 2.Make healthy food and drinks less expensive 3.Restricting the promotion of unhealthier food and drinks 4.Use traffic light labels or other logos on food and drinks 5.Give students for a few weeks free fruit 6.Make 80 % from the assortment healthy and only 20% unhealthy. 7.Make unhealthy foods and drinks less feasible in the canteen and healthy food and drinks more feasible.

Continued table 2. Focus group interview guide summary

Procedure	Content
	<p>8. Let the students taste healthy foods and drinks in the canteen.</p> <p>9. Develop teaching methods to teach them about healthy foods</p> <p>10. Your own idea...</p> <p>Table 2. Questions from questionnaire 2.</p>
Phase 5: What would you do if you could design your ideal canteen?	<p>Question: E.g. How would you design your ideal canteen? What would the assortment be? If you had limited/ unlimited budget? What is the most important in the canteen?</p> <p>These questions were immediately discussed.</p>
Phase 6: how often do you purchase food and where	<p>Let them fill in questionnaire 3. They had to fill in some questions; how many days a week they went to school, where they mostly get their food and drinks, how often they got it from home, school or somewhere else and personal information. If they had comments they could fill them in on this page.</p>
Wrap up	<p>Thanked them, asked if they had final questions or things to say and gave them the cinema voucher.</p>

3.4 Analysis

The semi-structured focus group discussions were recorded and transcribed verbatim by the researcher. ATLAS.ti 6.2 was used to do content analysis. The answers on the questionnaires were analysed using SPSS statistics 22.0.

4. Results

All the interventions together with quotes and statistics are mentioned in table 3 which will be referred to across the results section to clarify.

4.1 General beliefs & motivation to eat (un)healthy at school

The students named that the unhealthy foods in the canteen are more attractive than the healthy foods, mainly due to the price and taste; but also due to the way they look, where they were assorted, smell, freshness and because they are often more familiar with these products (Quote 31). Some students also thought that unhealthy food was more filling and students mentioned that they got tempted by other students who are eating it. Contrary, if they had to choose between entirely healthy or unhealthy almost all of the students chose the healthy canteen. This conflicted with the fact that most students took their health for granted and did not take actions to stay, or become healthy. Some students got motivated to eat healthy, as they believed that healthy food gives better concentration and more energy. They state that price and freshness are very important to get healthy food more attractive.

How successful the interventions are following the students can be seen graphical in fig.2, and more detailed in Table 3. The intervention 'Making healthy food and drinks cheaper' is seen as most promising as everyone voted in favour. The intervention ' Make unhealthy foods and drinks less feasible in the canteen and healthy food and drinks more feasible' is seen as second most attractive with three-quarter of the students seeing it as promising.

Table 3. Quotes per theme

Questions from questionnaire 2	Descriptive statistics	Quotes
Make unhealthy food and drinks more expensive	12 students promising 2 students unknown 11 students not promising	Promising: <ul style="list-style-type: none">- Quote 1. 'It's less attractive, so I think that people will buy it less often.' [19 year, girl]- Quote 2. 'I think partly because they already ask way too much for food here, but we are totally discouraged to buy healthy food. ' Not promising: <ul style="list-style-type: none">- Quote 3. '[Giggly] Yes it's just way cheaper [the supermarket red]. If you buy here, let's say, drinks, or something to eat, than you get 10 times as much there, let's say it that way.' [19 year, guy]- Quote 4. ' It's cheaper there anyway, the disadvantage of going to the Coop [supermarket red.] is that you see a lot of other stuff and take that as well, so I think that it will work contrary.' [22 year, girl]

Continued Table 3. Quotes per theme

Questions from questionnaire 2	Descriptive statistics	Quotes
Make healthy food and drinks less expensive	25 students Promising	<p>Promising:</p> <ul style="list-style-type: none"> - Quote 5. 'Yes, because last year they sold very well. The sandwiches needed to be constantly refilled and now you see that it became a lot more expensive and people are buying way less.' [17 year, girl] - Quote 6. 'A broodje gezond [sandwich with ham, cheese and egg, tomato, cucumber and salad red.] is 4,50. And a sandwich frikandel [minced meat hot dog red.] is, yes what is it..., 2,20 or so, with sauce included. Well, than you think 'I will go for the frikandel because I'm not going to pay 4,50 for a broodje gezond while I could, if I would walk to the supermarket, put it all together, because if I buy the ingredients there and put them together it will be cheaper than to buy it in the canteen, so uh yes, and I won't walk all the way to the supermarket so I will just buy a sandwich frikandel, bami schijf [deep fried oriental vegetarian snack red.] or a panini or so.' [18 year, girl] - Quote 7. 'Yes, and they stay here and don't go to the Coop [supermarket red.] If they want something healthy they wouldn't go to the Coop if it would be cheaper here.' [22 year, girl]
Restricting the promotion of unhealthier food and drinks	<p>3 students Promising</p> <p>8 students unknown</p> <p>14 students not promising</p>	<p>Promising:</p> <ul style="list-style-type: none"> - Quote 8. 'I think that it differs per person. If we are watching a movie in our class and there is pizza in the movie, than they directly get pizza themselves'. [19 year, girl] <p>Not promising:</p> <ul style="list-style-type: none"> - Quote 9. 'I don't think that it will work. Because you are at a school and everyone knows that they sell sausage rolls. So yes, if you see it in the canteen, at a poster, or on the shelves, I don't think that that makes a difference.' [18 year, boy] - Quote 10. 'The smell welcomes you when you walk downstairs, that's already advertisement enough.' [19 year, boy] - Quote 11. 'I think that it will also bore you, when everyone is constantly complaining that its 'unhealthy' than I will start doing it.' [19 year, girl]
Use traffic light labels or other logos on food and drinks	<p>12 students promising</p> <p>6 students unknown</p> <p>7 students not promising</p>	<p>Promising:</p> <ul style="list-style-type: none"> - Quote 12. 'Yes, You also hear it from some of them; When you're standing in the queue and you hear them say; 'yes, but that's unhealthy' while looking at the labels.' [18 year, girl] - Quote 13. 'I think that it could work, when your walking in to the canteen and you see the labels while being in doubt between two products. One of the products has a green smiley and the other a red one, well than I will choose the green one. You can see immediately if it's healthy or not, therefore you consider buying it, but only if you're interested in it of course.' [18 year old male]

Continued Table 3. Quotes per theme

Questions from questionnaire 2	Descriptive statistics	Quotes
		<p>Promising:</p> <p>Quote 14. 'I look at it a lot, but I was surprised when I found out that lahmacun a green smiley had, so I start eating them more often. Although, the logos are too small and do not really catch the eye. Personally, I think that they should make them a bit bigger.' [17 year, girl]</p> <p>Not promising:</p> <ul style="list-style-type: none"> - Quote 15. 'They decide for themselves what they do. I mean, I don't think that because it states 'unhealthy' that they think 'I won't eat it'. People think 'I am hungry, I will take it''. [19 year, boy] - Quote 16. 'It's so small, and if they want a kroket [a dutch deep-fried ragout filled snack coated with bread crumbs red.] they will take it even if it has a red smiley. That definitely won't make them think 'oh it has a red smiley, I will not take it''. [22 year old girl]
Give students for a few weeks free fruit	<p>16 students promising</p> <p>5 students unknown</p> <p>4 students not promising</p>	<p>Promising:</p> <ul style="list-style-type: none"> - Quote 17. 'I think that it could help, that they would think faster 'I can take a piece of fruit' [17 year, girl]. - Quote 18. 'I think that it can motivated, I have it sometimes, when I haven't eaten mandarin for a very long time and if they lay there and I get one and think 'Oh yes, they are tasty' and will start eating them more often again. ' [17 year, girl] - Quote 19. 'For example; at my internship you also got free fruit, and those people now take fruit to school themselves, while they didn't do that before' [20 year, girl] <p>Not promising:</p> <ul style="list-style-type: none"> - Quote 20. 'I don't think that it will work, if you give free fruit then people will think 'oh fun, but if I would have wanted it, I would have taken it myself' and it will end in the garbage bin. Because if people go to the canteen, they most often go to get snacks and they won't think of getting fruit, so I don't think that it will work that way. I don't think that students are occupied with their health. Of course they know about health, because you hear about it often, but not that they are conscience occupied with their own health like 'yes, I'm going to eat fruit now because that's more healthy than a frikandel [minced meat hot dog red.]. I think that it's mostly a chose between 'what do I feel like and what do I want to eat.' [16 year, boy] .
Make 80 % from the assortment healthy and only 20% unhealthy	<p>17 students promising</p> <p>4 students unknown</p> <p>4 students</p>	<p>Promising:</p> <ul style="list-style-type: none"> - Quote 21. 'Well than you have mostly healthy and if someone feels like .. then there is a small group to choose from.' [18 year, girl] - Quote 22. 'Yes, I think that if you keep the choice available, that it's still unhealthy but more focused on the healthy, that they will think faster 'oh there is a lot of healthy to choose from' and that they are not limited with,

Continued Table 3. Quotes per theme

Questions from questionnaire 2	Descriptive statistics	Quotes
		<ul style="list-style-type: none"> - what S3 also said, what was it called, a pre-packaged sandwich with stuffing which you might not like, and what uh, S6 said; from a big box, you can get everything you like, you can compose it how you like and make it healthy. But beside that have something like 'oh we still have something unhealthy if you want some.' I think that this would work; simply more choice, more supply, just more freedom in what you want. Let it be a sandwich with only salad or also tomato on it. I notice that that, yes will help to uh, eat healthier.' [17 year, boy] <p>Not promising:</p> <ul style="list-style-type: none"> - Quote 23. 'Some people want to have a lot of choice, if they don't have enough choice they will get it somewhere else.' [19 year, boy] - Quote 24. ' Yes, I mean if you're in the supermarket and the sweets department get smaller and the rest becomes bigger, than I will still walk to the sweets department, yes..[19 year, boy]
Let the students taste healthy foods and drinks in the canteen	<p>13 students promising</p> <p>7 students unknown</p> <p>5 students not promising</p>	<p>Promising:</p> <ul style="list-style-type: none"> - Quote 25. 'In this way they get to know new flavours, and maybe they will be like 'oh that's tasty, let's get that more often.'" [22 year, girl] - Quote 26. 'Yes, I think that they don't dare to try as they know that, for example, they like a sandwich kroket [a Dutch deep-fried ragout filled snack coated with bread crumbs red.] and I don't think that they want to pay money to try something new which they probably don't like. I think that's the case.' [17 year, girl]
Develop teaching methods to teach them about healthy foods	<p>5 students promising</p> <p>11 students unknown</p> <p>9 students not promising</p>	<p>Promising:</p> <ul style="list-style-type: none"> - Quote 27. 'I think that regarding food you should have lessons with people that are experts in the field and not just a regular teacher with his common knowledge about it. Just a sort of expert or someone that has dealt with the effects of bad nutrition or so.' [19 year, boy] <p>Not promising:</p> <ul style="list-style-type: none"> - Quote 28. 'That they don't care, it's the same as giving a class about smoking and afterwards light up your cigarette.' [19 year, girl] - Quote 29. 'No, I think, well you need to be interested in it, and if I would get healthy food lessons between civil rights and criminal law, I would think 'What do I need to do with this? ' If I'm interested I would look it up myself but I don't find that the school has a responsibility to give students from, for example, law or graphic design or so, to get study material about healthy eating for them, no I don't think so. ' [18 year, boy] - Quote 30. 'You already pay for your education, and if you get a new subject, which you don't want, than you still need to pay for it.' [17 year, girl] - Quote 31. 'Nah, that won't work for us [DTP students red.] as we are way too busy with, uhm, Facebooking on our laptops.' [19 year, girl]

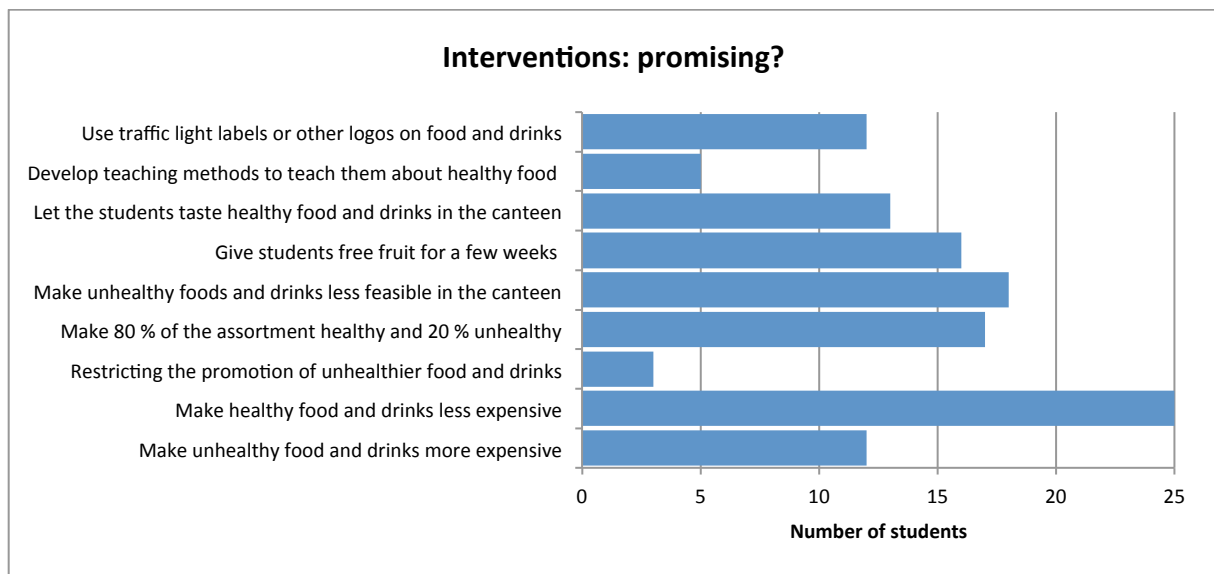


Fig. 2 Interventions: Promising? How many students voted promising per question.

4.2 Assortment changes towards healthiness

Prices of food

The prices in the canteen were constantly named as the most important reason why students did not buy (healthy) food in the canteen and why they go to out of school food outlets to get more and cheaper food (Quote 3&4&7). The students mentioned that before the canteen owner changed to Cormet catering last year it was busy in the canteen. Since Cormet catering arrived, the prices rise, which resulted in almost empty canteens and everyone going to out of school food outlets. Most of the students stated that if the canteen would become cheaper, people would go there again. Besides, healthy food is more expensive than unhealthy food, which causes a barrier (Quote 2 & 6). Some of the students mentioned that they would buy healthy food if they were the same price as unhealthy, and as mentioned, all the students voted promising for the intervention to make healthy food cheaper (Quote 5,6,7). To make unhealthy food more expensive gave more mixed results, mainly because of the popularity and nearness of alternative food outlets surrounding the school (Quote 1 t/m 4). It has also been mentioned that occasionally giving a rebate on healthy products could help to make healthy food more attractive. Some of the students mentioned that the products in the canteen might be cheaper if the students studying hotel and catering at their schools would work in the canteen. Some students understood that the canteen owner wants to make profit, as they are a professional business, but they expected good quality products in return.

Food outlets near the school

Named most often as a reason why an intervention in the school canteen would not work (Quote 3,7, 23) and almost named as often as the price as a reason to eat unhealthy are

the food outlets near the school. They are not only popular because of the price, but also because of their variation, hygiene, perceived quality and autonomy. The most important alternatives from the canteen were definitely the supermarkets. Also concepts as Bakker Bart [a bakery chain in the Netherlands, where you can choose your own sandwich stuffing red.] and Subway were popular and mentioned in every focus group. Some students even take the bus to go there. Additionally, French fries and pizza were ordered and delivered at the schools and some of the students said that if kebab would have been sold nearby everyone would go there. Some of the students mentioned that if the supermarket would not be near their school they would buy their food and drinks in the canteen. Moreover, a lot of students take their food from home because it is cheaper, next to that some student's take it from home as it makes them ascertained that their food is healthy.

'During the break our class goes often to Presikhaaf [shoppingcentre red.], they just take the bus to the subway ' - 17 year old girl

'It happens weekly that people order pizza or French fries' – 19 year old girl

'Well, before I did security at Rijn Ijssel [another vocational education school red.] there you have a canteen and I got somethings from it sometimes. That canteen had normal prices but very nearby you had a kebab store so uh, that's where I was often.' – 19 year old boy

'I often take it from home, I try to spend as less money as possible here, because I can take it for free from home, so I can better take it from home, and I will also have healthy food as I won't take a frikandel [minced meat hot dog red.]' from home but a normal sandwich.' – 18 year old boy

The eating behaviours seemed to differ per person but also per study field as for example the two boys studying Vavo (study to go to higher education red.) told that in their class almost all students eat healthy while at security and DTP the opposite happened.

As described above the competition for the canteen is big. This can also be seen as you look at table 1; more than half of the participants got their lunches, drinks and snacks from home or somewhere else, and more than half of the students goes to the supermarket at least once a week to buy things to consume during school time.

Autonomy and freedom to choose

Freedom to choice is a very important reason for the students to eat (un) healthy. This can be seen as almost all students said that the most attractive canteen was the canteen with both products. This shows that students want to be able to make their own choice (Quote 22). It can also be seen as a lot of students go to out of school food outlets as

that gives them more freedom to choose what they want. That students find their freedom of choice important can also be seen as in every focus group the students talked about the Subway and Bakker Bart. In these concepts they make sandwiches and salads under the eyes of customers, is the bread baked on site and have the customers the freedom to choose ingredients. Next to these aspects the students also named good price quality value and good hygiene as advantages of these concepts.

'And you can, as a customer, see what is happening [in the kitchen]. Because maybe the staff works hygienic here, but we just don't see it.' – 22 year old girl

That it can cause reactance if they do not have freedom of choice was also mentioned by students, for example quote 11.

Temptations through better choice, variation and taste

Taste is more important for the students than nutrition value or healthiness. Freshness is also seen as very important.

'Yes, like the frikandel, they are all freshly prepared, maybe they should also prepare more healthy food fresh.' - 17 year old girl

Variation is very important for the autonomy. A majority of the students thought that they would more often buy healthy food in the canteen if they would have more choice in healthy food (Quote 21,22). Most students saw 'taste or giving away free fruit' as good ideas as some of the students sometimes forget that healthy food can also be tasty and these methods help students to get familiar with the products (Quote 17,18,19,25,26). Students thought that it would be helpful to use some nudging tactics as most of them answered that they found 'make unhealthy foods and drinks less feasible in the canteen and healthy food and drinks more feasible' promising (Quote 8 & 21,22). The same for making 80 % of the assortment healthy, although a lot of students preferred 60/40 or 50/50 over 80/20. But not all nudging tactics were seen as useful; for 'tasting food' and 'making use of traffic lights' the opinions varied largely. As already mentioned, restricting the promotion of unhealthier food and drinks was not seen as promising by nearly all students. This could be due to the fact that there is not much advertisement of unhealthy food products in their schools at the moment moreover, quote 8 implies that it might be useful.

Atmosphere

Overall they were happy with the atmosphere in the canteens, although the students in Velp think that a canteen through which you can walk, would work better than a counter canteen, they already have a canteen like this in Ede. Next to that students talked about better Wi-Fi, music, and enough light. Also the attitude of the staff was an important

subject in the discussions, as a lot of students, mostly from Ede, concluded that the staff is not very friendly at the moment which makes it less attractive to go to the canteen. Next to the Healthy School Canteen project the schools were also occupied with a big 'healthy school' project. Following the student's observations there has not really changed much.

'And then you walk to the counter, and at your left you have noodles and you have a wall with mars and snickers and lollypops...' – 16 year old boy

'That the staff needs to become friendlier, yes that's very important for me' - 21 year old boy

Responsibility

Some students say that it is their own responsibility, and if they want to eat healthy, they can always bring it from home. Other students replied that it is difficult to bring everything from home as a lot of food products need to be cooled or warmed up. Additionally, it takes a lot of space in their bags.

Most of the students did not see educating them about healthy food as responsibility of the school (Quote 8 & 9) they compared it with an against smoking lessons were after class everyone puts on his cigarette (Quote 7). Contrary, some students consider the schools of having an exemplary role as they are there five days a week. As the students are adolescents and therefore contrast with their parents, they buy unhealthy food themselves as they need to eat healthy at home.

'Because I feel like it. At home I eat healthy as much as possible and when I'm at school I don't feel like it, I want something simple at school.' – 22 year old girl

At a high school opposite one of the schools they are not allowed to go away from the school during breaks. Consequently, they buy only in the canteen or take from home. The students did not find this a good option for them, as they are grown-ups.

5. Discussion

The first aim of this research was to find how intrinsic motivated students are and what the influences of nudging, the lay out and assortment are. The second aim was to see how we could tempt students to eat healthier without losing them to out of school food outlets. Our results suggest that there can be a lot done to get students more intrinsically motivated.

A lot of students complained about the canteens in the schools due to poor value for money, bad taste, products not being fresh enough and not enough variation. Therefore they preferred out of school food outlets. That the out of school food environment serves better to the interest of the students has also been found in a study in Scotland by Wills et al., (2015).

Another reason why they prefer out of school food outlets is that they find autonomy important. This can be seen as most of the students prefer a mixed canteen to an (un) healthy canteen, as they want to decide for themselves if they buy healthy or not. They also prefer to decide themselves what stuffing is on their sandwich instead of a ready made sandwich.

The most important reason for the students to not buy (healthy) food in the canteen is because they find it too expensive. When the students had to choose between an entirely healthy or unhealthy canteen almost all students chose for the healthy canteen.

Contrary, most students do not often buy healthy food in the canteen and their main reason was that healthy food is more expensive in the canteen than unhealthy food. Making healthy food cheaper will probably result in more students buying it and more people in the canteen, as the canteen used to be busy before the caterer changed and the prices rose. This is interesting as the previous studies concerning the Healthy School Canteen program didn't take price into account (Mensink, Schwinghammer, & Smeets, 2012; Milder, Mikolajczak, van den Berg, van de Veen-van Hofwegen, & Bemelmans, 2014), while this study discovered the importance of price for their food choice.

Taste is also important for the students. That price and taste are perceived as more important than calories can also be found in the research by Evans et al., (2015). A lot of the students are not concerned about their health and are not that interested in healthy eating, as has also been found in an other research on vocational education students by Ridder et al., (2010).

It can be concluded that the students in this research find autonomy very important as most of the students prefer a mixed canteen to an (un) healthy canteen and want to decide for themselves what they buy.

Another reason why students do not buy healthy food in the canteen is the way it is presented. Therefore, students thought that some interventions, and thereby nudging tactics, could be useful to make people buy healthier products. Of the nine different interventions students in all focus group found the intervention 'making healthy food cheaper' promising and 'banning advertisement of unhealthy food' least promising in consistent with the research by Stok et al., (2015). Next to making healthy food cheaper, making unhealthy food less feasible was by most seen as a good idea.

Most students did not see it as a responsibility of the school to educate them about healthy food. Next to that it can be seen that intrusive interventions are not per definition perceived as less promising, as was expected by the reactance theory and by the article from Diepeveen et al., (2013). Following the students it will be likely more helpful if there are more healthy products to choose from, this because of the perceived autonomy and competence. Contrary, when the canteen would be too healthy this could cause reactance and thereby consumers to choose an alternative. Therefore our advice would be to not make the canteen solely healthy, but use nudging tactics to get people to eat healthier. The students thought that a canteen through which you can walk instead of a counter offers more opportunities to promote healthy eating.

At the moment the out of school food outlets, and mostly the supermarkets, are popular and one needs to keep in mind that the out of school food outlets likely will stay popular. This because students are not only going there for the price, but also because of variation and their feeling of autonomy. That students still go to food outlets after the implementation of health policies in the school is also found by Beaulieu & Godin (2012). Striking is that Wills, Danes & Kapetanaki (2015) even found that school food outlets will become more popular if the canteen becomes healthier as people want their autonomy. Ideal concepts following the students were Subway and Bakker Bart. They mentioned good price value quality, taste, variation, perceived autonomy and hygiene as reasons. That these concepts, which give a lot of autonomy, are popular is no surprise if you look at the research of Wills, Danes & Kapetanaki (2015), they also found that students preferred to tailor their sandwich themselves. Next to the out of school food outlets, a lot of students take their food from home because it is cheaper.

Social interaction is important for a lot of people's food choice, even more if they are insecure or the same age (Cruwys, Bevelander, & Hermans, 2015). In the research by Wills, Danes & Kapetanaki (2015) they found that the main priority of the lunchtime was socializing with friends. As the canteen was not a popular place to buy food and drinks one could feel like an outsider when buying something in the canteen, but this depends on the group you want to belong to. That explains the difference between for example, the security students saying that they and their classmates order pizza often, and the

students from VAVO that no one in their class orders pizza and that almost all of them eat healthy. Next to that, the students find the social interaction with the staff important and at the moment a lot of students say that there could be made improvements in the attitudes of the staff. The students mentioned that they didn't feel invited to buy commodities in the canteen. In the study of Wills, Danes & Kapetanaki (2015) the students also mentioned that the canteen staff was not friendly, and therefore the canteen was not seen as welcoming to have lunch.

Responding to the wishes, discussed before, will help to get people buy (healthy) in the school canteen instead of out of school food outlets. At the moment the students are not very intrinsic motivated to eat healthy in the canteen as the three human basic needs; autonomy, competence and relatedness are not fulfilled.

As with all studies, this study has its limitations. As often with qualitative research the sample size was small, limiting the generalizability. As we asked the students to write down if the interventions would be promising, but did not put the interventions in practice, we do not know if its representable. Besides, there are more interventions possible to change the canteen than we asked them to rate. Accordingly, an intervention not mentioned in this study might be perceived as most effective; for example giving a rebate, as some students mentioned this in the focus group.

Focus group participants tended to be students who were interested in the topic as most of them emailed the researcher to participate in the discussion. Consequently, their views may not represent the views of their classmates. Another issue is that the students are talking about different canteens. In Ede they have multiple 'walk through' canteens and in Velp they only have one counter canteen. It would have been interesting to ask if the students live with their family or by themselves, and what their family members occupations are, as socio economic status and autonomy often influences the decision of purchase (Hulshof, Brussaard, Kruizinga, Telman, & Löwik, 2003).

Both schools had the Healthy Canteen award, the precursor of the Healthier School Canteen. As most students mentioned that the schools are not healthy and not promoting healthy eating it might be useful to look how effective the programs are in getting students to eat healthier. It would for example be useful if they also take prices into account to stimulate healthy eating more. As we can see in this research price is very important and if healthy food stays expensive it is unlikely that the programme will reach its goal. In the research of Mensink et al., (2012) was found that schools in the Healthy School Canteen programme with an internal caterer instead of external more often have an almost completely healthy canteen, this could also be interesting for further research and implementations. In light of the health risks associated with unhealthy eating, more research will be welcomed.

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Appendix 1. Discussion script

Vorbereiding groepsdiscussie

Neem mee:

- Twee werkende audio recorders, reserve batterijen en hebben ze nog genoeg geheugen?!
- Genoeg pennen voor elke deelnemer. Naamkaartjes en stiften
- Uitgeprinte materialen (3 vragenlijsten per persoon en informed consent formulier)
- Cadeaubonnen en handtekeningenlijst voor ontvangst
- Laptop voor de notulist en verlengsnoer

Verwelkomen van deelnemers (5 minuten)

Heet mensen welkom wanneer ze binnenkomen. Zodra iedereen er is:

Allereerst wil ik jullie graag welkom heten en bedanken voor je komst. Mijn naam is Ellen van Kleef, ik ben een onderzoeker en ik zal vandaag met jullie praten over eten op school en in de kantine. Mijn collega maakt aantekeningen. Vandaag gaan jullie:

- in de groep praten over dit onderwerp,
- Reageer ook op wat andere mensen zeggen, ik ben geïnteresseerd in alle meningen en er zijn geen goede of foute antwoorden,
- af en toe zal ik doorvragen om nog meer te weten te komen over bepaalde onderwerpen,
- als er vragen zijn waar je geen antwoord op wilt geven dan hoef je dat niet te doen.

Heeft iemand nog vragen of opmerkingen hierover?

De discussie van vandaag zal opgenomen worden met een audio recorder omdat we geen enkele opmerking die wordt gemaakt willen missen. Al jullie antwoorden zullen verder anoniem zijn, want we zullen geen namen of andere persoonlijke informatie bekend maken.

Vindt iedereen het oké dat er geluidsopnames gemaakt zullen worden?

Deelnemers die het niet prettig vinden mogen de discussie verlaten.

De discussie zal ongeveer 1 uur duren. Omdat we maar weinig tijd hebben zal ik misschien zo nu en dan een discussie moeten onderbreken om alle onderwerpen binnen de tijd te kunnen bespreken. Je mag op elk moment stoppen met dit onderzoek zonder opgaaf van reden.

Heeft iemand nog vragen of opmerkingen voordat we beginnen?

Start de twee audio recorders en leg ze neer op verschillende plaatsen in de kamer.

Als begin zou ik graag een rondje willen maken waarin iedereen zichzelf even heel kort voorstelt. Vertel ons alsjeblieft je voornaam en wat voor opleiding je doet?

Okee, dit was een kleine opwarming om elkaar wat te leren kennen. Nu wil ik graag een eerste echte opdracht met jullie gaan doen.

Gespreksfase 1: Vrije associaties over eten op school (10 minuten)

Discussie associaties

- Denk even na, en vertel dan waar je aan denkt bij de woorden “eten op school”. (Noem eventueel een voorbeeld als deelnemers het lastig vinden)
- Dan wil ik graag nu wat van jullie antwoorden opschrijven, om te overleggen of iedereen ongeveer hetzelfde idee heeft over “eten op school”.

Schrijf sleutelwoorden die genoemd worden op de flipover onder de term.

Bespreek een voor een de genoemde steekwoorden. Waarom denken mensen hieraan?

Mogelijk te gebruiken activerende vragen:

- Hebben jullie nog andere ideeën over eten op school die niet op de flipover staan?
- Wat eet je meestal op school?
- Haal je wat uit de kantine?
- Hoe belangrijk vinden jullie eten op school?
- Waar denk je aan als je het hebt over gezond eten op school?

Ik denk dat we nu wel klaar zijn. Heeft iemand nog een laatste opmerking of vraag?
Dan gaan we door naar het volgende onderwerp.

Gespreksfase 2: *Intrinsieke motivatie tot gezond eten op school (15 minuten)*

- Ik wil het nu graag met jullie verder praten over gezond eten en kantines waar gezonde producten te koop zijn. Op de vragenlijst die voor je ligt zie je drie type kantines. Die kantines verschillen in hoeveel gezonde producten er te koop zijn. In kantine A zijn er alleen maar gezonde producten te koop en in kantine C geen enkele.

Vul vragenlijst 1 in die voor je ligt

Wie heeft kantine A als meest aantrekkelijk? Waarom?

Wat zou je doen als jouw meest onaantrekkelijke kantine het zou worden?

Waar wil je het liefst je lunch, snacks en dranken kopen? Waarom? Is gezond eten op school belangrijk?
Wie moet bepalen welke kantine het wordt? Wat vind je ervan dat er niks 'ongezonds' meer te vinden is in kantine A? Wat zou je doen als de kantine A wordt geopend in jouw gebouw. Waarom?

Wat denken je medestudenten hiervan? Wat vind je van hun mening?

Ik denk dat we nu wel klaar zijn. Heeft iemand nog een laatste opmerking of vraag? Dan gaan we door naar een volgende opdracht.

Gespreksfase 3: *Interventies om gezond eten in kantines te bevorderen (20 minuten)*

Deskundigen vinden een gezond aanbod in kantines steeds belangrijk. Toch lukt het niet iedereen om gezond te kopen of te eten op school.

Er zijn ideeën bedacht om jongeren aan te moedigen gezonder te kiezen in een kantine. Wat vind je van die ideeën? Is het kansrijk of niet? Kruis het aan op vragenlijst 2 en dan wil ik graag weten waarom je er zo over denkt.

Mogelijk te gebruiken activerende vragen:

- Ik zie dat # van jullie manier X wel/niet geschikt vonden. Wat vonden jullie er wel/niet geschikt aan en waarom?
- Wil iemand hier iets aan toevoegen of hierop reageren?
- Ontbreken er nog manieren die misschien beter zijn?

Ik denk dat we nu wel klaar zijn met deze discussie. Heeft iemand nog een laatste opmerking of vraag?

Gespreksfase 4: *Ontwerp je ideale kantine (20 minuten)*

Deskundigen vinden een gezond aanbod in kantines steeds belangrijk. Toch lukt het niet iedereen om gezond te kopen of te eten op school.

- Wat zou je doen met een onbeperkt budget? Waarom?
- Welke elementen van de huidige kantines moeten zeker bewaard blijven?
- Kun je voorbeelden noemen van restaurants, cafés of andere horeca die als inspiratie kunnen dienen voor een schoolkantine?

- Maar stel dat je budget beperkt is. Wat zou je dan willen doen? Wat is echt essentieel? Waarom?

Afronding (5 minuten)

Laatste individuele vragenlijst invullen

Tenslotte zou ik jullie graag nog een individuele opdracht willen laten doen. Dat is vragenlijst 3. De antwoorden hiervan gaan we niet bediscussiëren.

Is iedereen klaar?

Afsluiting groepsdiscussie

Dit was de laatste opdracht. Ik wil jullie graag hartelijk bedanken voor jullie komst en voor het delen van jullie meningen met mij. Ik hoop dat jullie de discussie prettig hebben gevonden, voor mij was hij in ieder geval erg waardevol. Mochten jullie eenmaal thuis nog vragen hebben over het onderzoek dan kunnen jullie me een e-mail sturen.

Haal vragenlijsten op en geef de deelnemers hun beloning. Deelnemers moeten voor ontvangst tekenen.

Maak foto's van alle bladen van de flipover.*Afronding (5 minuten)*

Appendix 2. Questionnaire

Vragenlijst 1

Je voornaam:

Stel je voor, er komt een nieuwe kantine op school. Hieronder staan drie verschillende type kantines. Geef aan in welke kantine jij het liefst je eten, snacks en drinken zou kopen.

- 1) Kantine en automaten (meest aantrekkelijk)
- 2) Kantine en automaten
- 3) Kantine en automaten (minst aantrekkelijk)

Kantine en automaten A

Deze kantine en automaten verkopen alleen gezond eten en drinken, zoals belegde bruine en volkoren broodjes, (fruit) salades, belegde wraps, soep, waterijs, popcorn, groentesnacks, light dranken zoals cola light, halfvolle of magere zuivel zonder toegevoegde suiker en fruit. Je vindt er **geen** gefrituurde snacks, witbrood, chips of chocoladesnacks, koek of frisdrank of zuivel met suiker.

Kantine B

Deze kantine en automaten verkopen zowel gezond als ongezond eten en drinken. Je vindt er bijvoorbeeld: belegde bruine en volkoren broodjes, (fruit) salades, belegde wraps, soep, waterijs, popcorn, groentesnacks, light dranken zoals cola light, halfvolle of magere zuivel zonder toegevoegde suiker en fruit. Je vindt er **ook** gefrituurde snacks, witbrood, chips of chocoladesnacks, koek of frisdrank of zuivel met suiker.

Kantine C

Deze kantine en automaten verkopen alleen ongezond eten en drinken. Je vindt er bijvoorbeeld: gefrituurde snacks, witbrood, chips of chocoladesnacks, koek of frisdrank of zuivel met suiker. Je vindt er **geen** belegde bruine en volkoren broodjes, (fruit) salades, belegde wraps, soep, waterijs, popcorn, groentesnacks, light dranken zoals cola light, halfvolle of magere zuivel zonder toegevoegde suiker en fruit.



Vragenlijst 2

Je voornaam:

Kruis aan of je het idee kansrijk vindt of niet.

1. <i>Maak kroket en ander ongezond eten en drinken duurder in de kantine</i>			2. <i>Maak volkorenbrood, fruit en andere gezond eten en drinken goedkoper</i>		
Kansrijk	Onbekend	Niet kansrijk	Kansrijk	Onbekend	Niet kansrijk

3. <i>Verbied reclame over ongezond eten en drinken</i>			4. <i>Maak gebruik van een stoplicht- of ander logo op eten en drinken</i>		
Kansrijk	Onbekend	Niet kansrijk	Kansrijk	Onbekend	Niet kansrijk

5. <i>Geef gedurende een paar weken gratis fruit aan studenten</i>			6. <i>Zorg dat 80% van het assortiment gezond is en 20% ongezond</i>		
Kansrijk	Onbekend	Niet kansrijk	Kansrijk	Onbekend	Niet kansrijk

7. <i>Zorg dat ongezond eten en drinken minder opvalt in de kantine en gezond eten en drinken juist wel (promotie, plek op schap etc.)</i>			8. <i>Laat studenten in kantines gratis gezonder eten of drinken proeven</i>		
Kansrijk	Onbekend	Niet kansrijk	Kansrijk	Onbekend	Niet kansrijk

9. <i>Ontwikkel lesmateriaal om studenten te leren over gezonde voeding</i>			Ander idee.....		
Kansrijk	Onbekend	Niet kansrijk	Kansrijk	Onbekend	Niet kansrijk

Vragenlijst 3 aan einde discussiegroep

Je voornaam:

Hoeveel dagen van de week ben je op school? _____ dagen

Kruis aan waar je je lunch, dranken en snacks vandaan haalt.

	Volledig op school gekocht (in kantine of uit automaten)	Gedeeltelijk op school gekocht (in kantine of uit automaten)	Volledig van thuis meegenomen of ergens anders gekocht
Mijn lunch (zoals brood, soep, kroket, melk)			
Mijn dranken (zoals koffie, thee, frisdrank)			
Mijn snacks (zoals koek, fruit, snoep, chips)			

Kruis aan hoe vaak je iets te eten of drinken koopt om direct te gebruiken als je op school bent.

	1 keer per maand of minder	2 tot 3 keer per maand	1 keer per week	2 tot 3 keer per week	elke dag
In deze <i>kantine</i>					
Uit de <i>snackautomaten</i> hier op school					
In een <i>snackbar</i> dichtbij school					
In een <i>supermarkt</i> dichtbij school					
Op een andere plaats, namelijk: _____					

Wat is je geslacht?

- ☐ Vrouw
☐ Man

Wat is je leeftijd? _____ jaar

Welke opleiding volg je? _____

Als je verder nog opmerkingen hebt voor de onderzoekers, schrijf ze dan hieronder.

Dit is het einde van de vragenlijst. Hartelijk dank voor je deelname!