

Frédérique Rongen

The impact of providing a healthy school lunch at Dutch primary schools on dietary intake and appreciation

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Background: Since there is a shift at primary schools in eating lunch at home to eating lunch at school, providing a healthy school lunch may be an opportunity to improve dietary intake of Dutch primary school children.

Purpose: To stimulate dietary intake of Dutch primary school children by offering a healthy school lunch based on the Dutch dietary guidelines.

Methods: Three Dutch primary schools received a healthy school lunch for a 6-month period. Lunch consumption data was collected at baseline, at 3- and at 6-months by the use of photos of the lunch. At 6-months, potential compensation effects were measured with a single brief questionnaire among parents at the three intervention and three comparison schools.

Results: Total 250 children participated in the study (58% female, mean age 10.1 years, SD: 1.3). Preliminary results show that 7% of the children consumed vegetables at lunch at baseline, which increased to 51% and 48% at 3-months and 6-months respectively. Parents (n=291) indicated that children with a healthy school lunch consumed more snack vegetables (29%) during lunch and consumed less sweet snacks (7%) outside school hours than children without a healthy school lunch (23% and 19%).

Conclusion: This study showed that introducing a healthy school improved the dietary intake of primary school children, especially with regards to vegetables. Since primary schools are home to children from all socioeconomic backgrounds, improving their dietary intake will consequently decrease socioeconomic inequalities in dietary intake.

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Conference 'Nutrition Disparity and Equity: From differences to Potential'

Friday, 8 November 2019 – WICC Wageningen

Patricia van Assema

An action-oriented and contextual research approach in promoting healthy diet among disadvantaged groups

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Background and purpose

The Center for Health Promotion at Maastricht University is involved in research into the development, implementation and evaluation of interventions promoting a healthy diet with the aim to achieve changes among those who may benefit most. Interventions focus on different stages of life, but especially early life. Common to all intervention initiatives that will be presented is the tuning to personal as well as contextual determinants of lifestyle of disadvantaged groups, such as low health, language and/or nutrition literacy, financial problems, and social norms.

Methodology

The research is marked by co-creation processes, action-oriented research, the understanding of context and underlying processes in effect evaluations, and the use of research techniques that are appropriate for this type of research approach, e.g., photo-voice and (participant) observations.

Results

Results include contributions to the actual delivery of intervention programs, and evaluation results that feed the continued quality improvement and nation-wide use of the programs. Our research involvement includes the *SuperFIT* pre-school intervention at the childcare and home setting, the *Healthy Primary School of the Future*, the *LIKE* study (Lifestyle Innovations based on youth's Knowledge and Experience) for children in the transition from primary to secondary school, the *Krachtvoer* (Power Food) educational program for prevocational students, *Zin in Koken* (Up to Cooking) for low literacy parents, and *Goedkoop Gezonde Voeding* (Cheap Healthy Food) for people with a limited budget.

Conclusion

Our research on healthy diet promotion among disadvantaged groups generates a constant stream of knowledge on, among others, the importance and the implementation of sustainable co-creation processes in target group engaged research, and the influence of contextual factors on the creation, implementation and effects of interventions.

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Amy van der Heijden

Healthy is (not) tasty? Implicit and explicit associations between food healthiness and tastiness in primary school-aged children and parents with a lower socioeconomic position.

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It is known that many adults, consciously or not, believe that unhealthy foods are tastier than healthy alternatives; a so-called 'unhealthy = tasty intuition'. This study explored implicit and explicit associations between healthiness, tastiness and liking of foods in primary school-aged children and parents with a lower socioeconomic position (SEP).

Participants were recruited at food banks in the Netherlands. Implicit association tests and paper-and-pencil questionnaires of 37 parent-child dyads were analysed.

Results indicated that children and parents implicitly associated healthy foods and tastiness more strongly with each other than healthy foods and not tastiness ($D = -0.19$, $p = .03$ and $D = -0.46$, $p < .001$, respectively). On explicit level parents showed similar results, while children's results were mixed; on some measurement instruments children indicated that they found unhealthy foods tastier than healthy foods.

In conclusion, overall the results indicate a 'healthy = tasty intuition'. However, a genuine belief that healthy foods are tastier than unhealthy foods is in contrast with more unhealthy eating habits that often prevail in families with a lower SEP. Therefore, alternative interpretations of the findings are discussed, taking methodological and theoretical considerations into account. It is recommended that future research sheds more light on e.g. daily life practices of, and norms and values held by, low SEP parents and children, to unravel how associations between (un)healthy foods and tastiness are developed and constructed. Brief, preliminary insights in such an in-depth research, that recently started, will be provided.

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Louise Witteman

Is it possible to increase (positive) health of people who are dependent on Food Banks in the Netherlands?

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The burden of social inequalities on health is a widespread problem and seems to increasingly impact people's health. Currently, 140.000 Dutch people annually seek help from Food Banks to supply them with basic food products, and this number is increasing. This study aims to investigate whether healthy food products can contribute to (Positive) health of the Food Bank's customers in the Netherlands. Positive health means empowerment to adapt and take ownership in terms of physical, emotional and social challenges of life. A secondary aim is to investigate how to avoid bad eating habits of the Food Bank's customers' children.

The first phase is a scoping exercise on dietary intake and quality of life using validated questionnaires. These will be obtained from Food Bank customers. We will particularly focus on food: is there a need for other products, healthier products, or for example, a different way of offering the products? What is their view on the impact of a healthy lifestyle on (Positive) health? Is food important in their daily life and in what way?

Next, it will be analysed what the best way is to make sure all Food Banks get access to good and healthy products by minimizing regional differences and optimizing healthy products in the packages. The long term goal is healthier, happier people and children that do not need to suffer from chronic diseases related to unhealthy eating habits. This might be an important step in break through the vicious circle in which many children are trapped.

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Lean Kramer

Dietary Support for Community-dwelling Elderly: Co-designing a Virtual Coach

Nutrition during the senior years is important for sustaining health, preventing disease and disability, and, hence, maintaining independence and quality of life. Factors influencing food choice among community-dwelling older adults differ from the general studied population of adults, and include for example a loss of appetite and mobility limitations. However, most dietary interventions do not consider such factors. Earlier studies show that virtual coaches could be an effective medium for community-dwelling older adults, however, no research has examined their preferences regarding these coaches in the context of nutrition. Hence, in our study we aimed to identify and understand dietary barriers and facilitators, and provide design considerations for a virtual coach. Data was gathered through five co-creation sessions with community-dwelling elderly in the Netherlands (2 groups, total N=13). Participants were asked to fill in a seven-day diary prior to the first session. The first session focused on healthy living and healthy eating, the second session on dietary advice and the last session focused on a virtual dietary coach. A thematic approach was used to guide the analysis. According to the participants, healthy living centered around the following key themes: the social context, lack of physical limitations, a positive mindset, and nature. Healthy eating entailed both balance and mindfulness. Barriers towards healthy eating were reduced autonomy, physical limitations, and loneliness. Although preferences for the design for the virtual coach varied greatly, there were five commonly preferred design characteristics: Friendly, warm, trustworthy, concerned, and competent. To conclude, food choice among community-dwelling elderly is determined by a complex interaction between multiple factors. The desire for autonomy and the desire to connect are central factors influencing their dietary pattern, and reflect preferred design characteristics for a virtual coach which should be considered when designing an intervention for this group.

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Lisanne Mulderij

Effective elements of care-physical activity initiatives for citizens with a low socioeconomic status

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BACKGROUND In care-physical activity (care-PA) initiatives, primary care and sports collaborate to stimulate PA among adults at risk of lifestyle related diseases. Preliminary results of Dutch care-PA initiatives for low socioeconomic status (SES) adults indicate lower participants' body weight and improved quality of life. However, we lack insight into elements that make these initiatives work. This research aimed to unravel the effective elements of care-PA initiatives for low SES adults.

METHODS Nineteen Dutch health promotion experts participated in our Concept Mapping process to identify and cluster the effective elements. We used CS Global MAX software for multidimensional scaling and hierarchical cluster analysis, and discussed the results in a group meeting with 11 of the experts.

RESULTS The experts came up with 113 effective elements of care-PA initiatives for low SES adults, grouped into 11 clusters, focusing on: 1) how to approach the participants within the programme, 2) barriers participants experience throughout the programme, 3) ensuring long-term implementation, 4) customising the programme to the target population, 5) social support, 6) structure and guidance, 7) professionals within the programme, 8) accessibility of the programme, 9) targeted behaviour and progression, 10) recruitment and administration, 11) intersectoral collaboration.

CONCLUSIONS We created a valuable overview of effective elements of care-PA initiatives for low SES adults. The results can be used to improve existing care-PA initiatives and to develop new ones targeted at low SES adults at risk of lifestyle related diseases. This may eventually help to reduce health inequalities between low and high SES adults.

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Jantien van Berkel

Responsive evaluation of a stakeholder dialogue to promote health among employees with a lower socioeconomic position

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Background:

The objective of this project is to develop and evaluate a stakeholder dialogue as a worksite health promotion intervention to reduce health inequalities at work (i.e. to improve employees' health in general, and lower SEP employees in particular). The intervention consists of moral case deliberation, a specific form of organized stakeholder dialogue. In dialogue sessions, stakeholders are invited to bring forward a health-related case to discuss, based on their own experience. Participants are challenged to explore their own thinking, and the perspective of others. By confronting different perspectives, this form of stakeholder dialogue creates a learning process.

Methods:

The stakeholder dialogue is evaluated through responsive evaluation: a form of interactive, participatory research, making use of mixed methods. These methods comprise interviews, survey data, recordings of the dialogue sessions, HRM-data, and participatory observations. Qualitative data will be analysed using thematic content analysis.

Expected results:

Effects of the intervention are evaluated on health-related outcomes on an individual level (such as self-regulation), on a team level (such as social support) and on organisational level (such as health registrations). Furthermore, an economic evaluation is performed on both monetary outcomes (budget) from an organisational perspective, and on non-monetary value from a stakeholder perspective (social return on investment).

During the conference, preliminary results will be presented.

Discussion:

This project provides insight in a novel health promotion approach that embraces the complexity of the worksite, by dealing with different stakeholder perspectives, ethical issues, and diversity among employees.

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Lette Hogeling

Interpretations of promoting healthy lifestyles and perceived health among vulnerable families: participatory inventory among 46 projects

Under the umbrella of the Healthy Futures Nearby (HFN) programme, 46 small scale projects have been funded to promote a change in health-related behaviours (smoking, alcohol, diet and exercise) and to improve perceived health among vulnerable families in the Netherlands. Evaluation of such health promotion programmes is often solely based on pre- and funder defined outcomes and requirements. However, health professionals and other (local) stakeholders including communities may have alternative ideas about improving the health of vulnerable families, based on their knowledge and experiences in that specific context. Knowing such interpretations of effective promotion of healthy lifestyles is crucial for policy, practical and scientific relevance in evaluation. This study aims to find out what projects' interpretations of effective promotion of healthy lifestyles and perceived health are and how they translate into relevant input for the overall evaluation of the programme. Based on qualitative analysis of 46 semi-structured group interviews with local project stakeholders, we distinguished five main interpretations of effectively promoting healthy lifestyles and improving perceived health. These interpretations serve as valuable input for the programme's evaluation. Moreover, using these interpretations to guide further study ensures practical relevance of the evaluation.

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Sandra Bukman

A healthy life with type 2 diabetes: personas of patients with a low socioeconomic status

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The prevalence of type 2 diabetes (T2D) is relatively high among people with a low socioeconomic status (SES). T2D-patients are advised to live healthy, but it can be easier said than done for them to incorporate lifestyle changes in daily life (Ahlin & Billhult, 2012). How to promote a healthy lifestyle such that the needs of low SES patients are met? A boundary condition is a thorough understanding of the target group. For that purpose, we applied a method commonly used by designers: personas. Personas are fictitious archetypes of a target group, each reflecting a distinct pattern in goals, attitudes and behaviours, that can help to grasp the diversity of the target group (Cooper, 1999; Goodwin, 2009). Ten interviews with T2D-patients with a low SES revealed deep insights about their perceptions and experiences related to what is important in life, a healthy lifestyle, living with diabetes, and lifestyle advice. Following Goodwin's persona development methodology (2009), three groups were qualitatively extracted from the data. In short, the personas are: 1) someone who wants to live healthier, who is susceptible to advice, but incapable of incorporating advices in one's life; caring for others is first priority; 2) someone willing and able to follow up good advice in order to reduce medication use; 3) someone dealing with multiple (health) issues and dedicated to solve it one's own way. Each persona likely responds differently to health promoting strategies. Additional research is needed to validate the set of personas.

Kristel Polhuis

Turning points for healthful eating in people with Type 2 Diabetes Mellitus and Low Social Economic Status

Background It is important for people with Type 2 Diabetes Mellitus (T2DM) to eat healthfully, yet most have difficulties with implementing dietary advice in their daily lives. Examining turning points for (un)healthful eating may provide a better understanding of how historical, personal and social contexts are intertwined, which may open up new opportunities for health promotion.

Purpose To understand how eating practices are developed over the life-course by exploring turning points for (un)healthful eating in adults with T2DM.

Methodology The Salutogenic Model of Health guided the study's objectives, design and interpretation. Narrative inquiry and the creation of timelines were used to investigate the life-course and turning points for (un)healthful eating of 17 Dutch adults with T2DM and low social economic position (9 females; 8 males). The analysis is based on the principles of Interpretative Phenomenological Analysis.

(Preliminary) Findings Turning points for unhealthful eating included: death of loved ones, physical/mental abuse, concomitant diseases, quitting smoking, job loss, and children leaving the house. These turning points induced stress-eating, feeling overwhelmed, depressed and/or unsupported. Turning points for healthful eating included: becoming a (grand)parent, T2DM diagnosis, and retirement. These turning points induced reflectiveness on eating behaviours and how it may influence future goals. To maintain healthful eating, people seem to be in a stress-free state of mind, confident about their own ability to organize healthful eating, and being loved by family/friends.

(Preliminary) Conclusion Analysing turning points shows that nutritional strategies should not only focus on increasing nutritional knowledge/skills, but also on stress-management, social support, and reflective processes to facilitate the experience of an empowering and health-promoting turning point in people with T2DM.

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Josine Stuber

Successfully recruiting adults with a low socioeconomic position for community-based lifestyle intervention programs: Expert opinions

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Background: Although insufficient recruitment of adults with a low socioeconomic position (SEP) in community-based programs is a major issue, limited information is available on effective recruitment strategies for this population. With a qualitative approach, we explored experts' perceived challenges and success factors in the recruitment of Dutch adults with a low SEP for participation in community-based programs aiming to change lifestyle behaviours.

Methods: Through purposive sampling, 11 experts (those involved in ongoing or previously completed community-based lifestyle interventions) were selected to participate in a qualitative interview which was guided by a semi-structured interview protocol. The topic list included current experiences with recruitment and their general view on recruitment strategies based on previous experiences. Results were firstly analysed with a deductive content analysis approach, followed by an inductive grounded theory approach. All individual quotes were critically discussed by two authors until consensus on coding was reached.

Results: We identified a hierarchy of factors for successful recruitment. A prerequisite for effective recruitment is favourable researcher (e.g., having a non-judgemental attitude towards the target group) and project (e.g., sufficient (financial) resources allocated to recruitment strategies) factors. These conditions being met, achieving (reasonable) interest to participate is a next necessary condition for sufficient recruitment. Having achieved interest for participation, enabling opportunities to participate enhancing motivation via incentives become relevant final steps in an effective recruitment strategy.

Conclusion: The results highlight the importance of designing a layered recruitment strategy, using a personal approach and identifying the personal benefit and expectations towards program participation.

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Jeanine Ahishakiye

Qualitative, longitudinal exploration of factors influencing infant feeding practices among the socioeconomically disadvantaged mothers in rural Muhanga District, Rwanda

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Background

Optimal infant and young child feeding practices are critical to child's survival, health, nutrition and development. Little is known about what influences socioeconomically disadvantaged mothers' infant feeding practices in Rwanda. This study aimed to explore the factors that facilitate breastfeeding and complementary feeding practices over the first year of a child's life in Muhanga district, Rwanda.

Methods

A qualitative, longitudinal cohort study was conducted between December 2016 - April 2018. A purposive sample of 39 mothers attending prenatal consultations was recruited into the study during their last trimester of pregnancy. They were interviewed within the first week, at four, six, nine and twelve months postpartum to explore actual practices and the factors that facilitate breastfeeding and complementary feeding practices. Interviews were recorded, transcribed verbatim and thematically analyzed using Atlas.ti software.

Results

Despite mothers encountered challenges along the way, factors that enabled mothers to adhere to the recommended practices included: maternal self-efficacy, persistency in overcoming barriers, behaving in an anticipating way, balancing work and child feeding, knowledge about the benefits of breastmilk, infant satiety cues, belief in God, social support and advice from health and social professionals.

Conclusion

A number of factors from individual to group and societal level enabled mothers to adhere to the recommended infant feeding practices. Tapping into the strengths of mothers who follow the recommended practices and creating supportive environments may be helpful in supporting the socioeconomically disadvantaged mothers to adopt recommended practices and surmount breastfeeding and complementary feeding challenges.

Keywords: Rwanda, Infant and young child feeding practices, Exclusive breastfeeding, Complementary feeding, qualitative.

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Laura van der Velde

Needs and perceptions regarding healthy eating among people at risk of food insecurity: a qualitative analysis

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Background

The concept of food insecurity is closely related to lower socioeconomic status (SES), although this is a complex relationship and people with lower SES do not always experience food insecurity and vice versa. However, it is evident that food insecurity is more common among people with lower SES and therefore people with lower SES have an increased risk of experiencing food insecurity. Although healthy eating behaviour is an essential determinant of overall health, people at risk of experiencing food insecurity generally exhibit poor eating behaviour. This may be caused by many factors, but it is unclear how these factors influence eating behaviour in this target group. We therefore aimed to gain a better understanding of their needs and perceptions regarding healthy eating.

Methods

We conducted a qualitative open interview study with 10 participants at risk of experiencing food insecurity. The analysis using an inductive approach identified four core factors influencing eating behaviour: Health related topics; Social and cultural influences; Influences by the physical environment; and Financial influences.

Results

Overall, participants showed adequate nutrition knowledge. However, eating behaviour was strongly influenced by both social factors (e.g. child food preferences and cultural food habits), and physical environmental factors (e.g. temptations in the local food environment). Perceived barriers for healthy eating behaviour included poor mental health, financial stress, and high food prices. Food insecurity was mostly mentioned in reference to the past or to others. Participants were familiar with several existing resources to reduce food-related financial strain. Proposed interventions included distributing free meals, facilitating social contacts, increasing healthy food supply in the neighbourhood, and lowering prices of healthy foods.

Conclusion

The insights from this study increase understanding of factors influencing eating behaviour of people at risk of food insecurity. Therefore, this study could inform future development of potential interventions aiming at helping people experiencing food insecurity to improve healthy eating, thereby decreasing the risk of diet-related diseases.