Uppsala HEALTH SUMMIT

Photo: Diego Curvo

Ending Childhood Obesity
Actions through Health and Food Equity

Conclusions from Uppsala Health Summit
11–12 October 2016

#UaHS2016

About Uppsala Health Summit

Uppsala Health Summit is an international arena for frank and challenging dialogue, exploring possibilities and dilemmas associated with advancement in medicine. Uppsala Health Summit stimulates dialogue from various perspectives, such as medical, economic and ethical.

We are an enabler for change, and an arena laying the foundation for long-term relationships and insights that can help you in your work to improve health outcome in your part of the world.

Uppsala Health Summit is arranged in Uppsala, Sweden, by partners with long experience of developing health and healthcare from different perspectives, and who see the potential for improving health and healthcare globally. The effort is run as a collaboration between Uppsala University, the Swedish University of Agricultural Sciences, Uppsala County Council, the City of Uppsala, the Swedish Medical Products Agency, The National Food Administration, The National Veterinary Institute and the network World Class Uppsala.
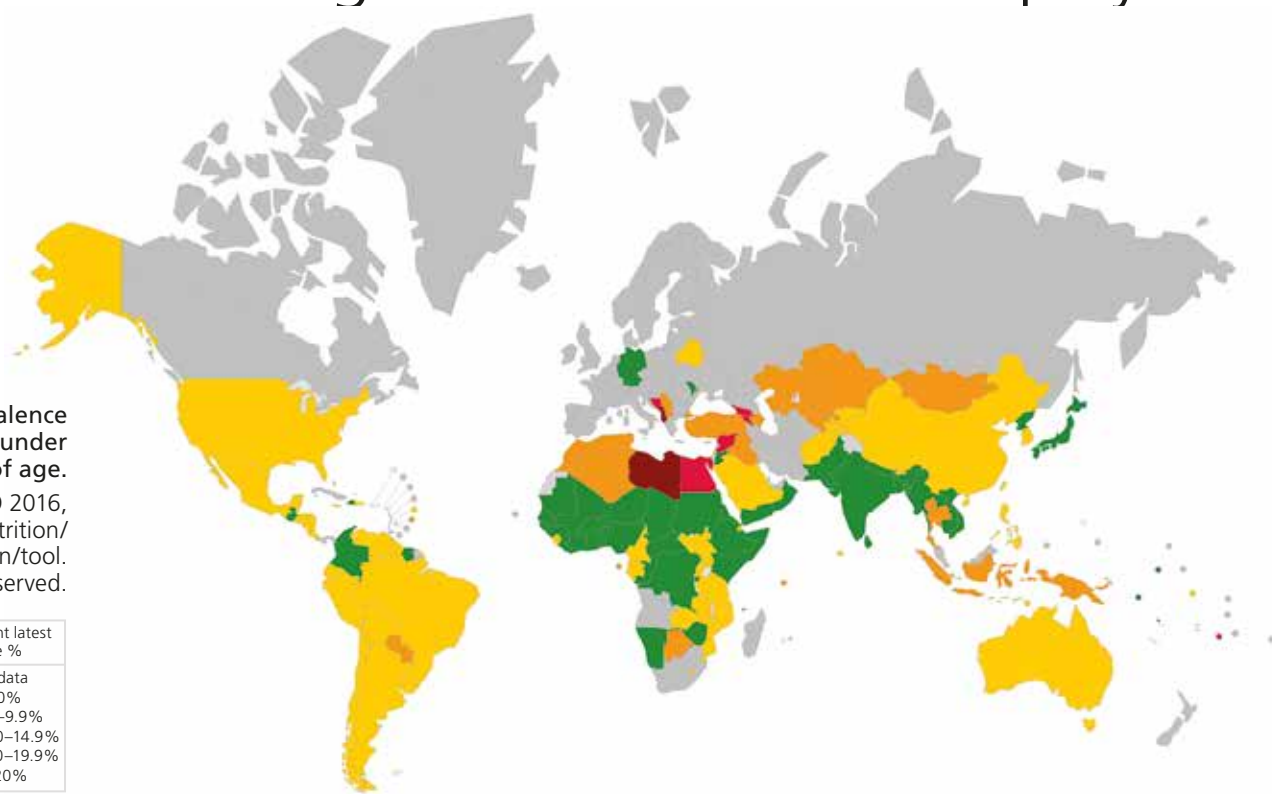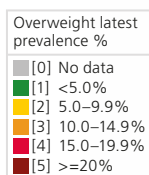
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Overweight prevalence among children under 5 years of age.

Source: WHO 2016, www.who.int/nutrition/trackingtool/en/tool.

Overweight latest prevalence %

- [0] No data
- [1] <5.0%
- [2] 5.0–9.9%
- [3] 10.0–14.9%
- [4] 15.0–19.9%
- [5] >=20%

Introduction

Poor diet and sub-optimal lifestyle choices play a major role in the development of chronic diseases such as type 2 diabetes, cardiovascular diseases and some cancers. Obesity is a major determinant for these diseases.

Globally, over 42 million children under five are obese, and there are no signs of rates abating. On the contrary, as socioeconomic gaps widen in many countries, growing numbers of children are at risk, among socioeconomically vulnerable groups in high-income countries as well as in low- and middle-income countries, where the effects of obesity are compounded by undernutrition and infectious diseases.

There is an urgent need to resolve the situation, or much of the progress made in global health in recent years risks being overturned. For many reasons, efforts to end the obesity epidemic should start with our children. In January 2016 the WHO Commission on Childhood Obesity presented its report, *Ending Childhood Obesity*.

In October the same year, 180 delegates from 36 different countries, from politics, the public sector, industry, academia and civil society, met in Uppsala, Sweden, in solution-oriented dialogues on how to implement the Commission's recommendations and which stakeholders to involve. This report summarises conclusions from the eight workshops at Uppsala Health Summit 2016, namely:

- Policy tools to drive change – a workshop on how to construct taxes and other policy tools
- Individual and societal responsibilities – ethical dilemmas
- Migration and the food environment
- Healthy eating for school children – today and for life
- Empowering towards healthy behaviours
- The need for food industry actions and innovations
- Innovations needed in retail and in the food value chain
- Initiate, manage and evaluate multi-stakeholder interventions: *ECHO zones*

180 selected decision-makers, opinion-builders and experts met at Uppsala Castle, Sweden, in October 2016 to discuss how to end childhood obesity.

> "
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> I believe we all agree that children have a right to health, and that we, as custodians, have a moral obligation to protect and help them thrive.
>
> Dr. Sania Nishtar,
> Co-Chair WHO Commission on
> Ending childhood obesity

In her address to Uppsala Health Summit, Dr Sania Nishtar, co-chair of the WHO Commission on Childhood Obesity, called upon delegates to use their expertise and creativity to develop new thinking on how to implement the changes we know are dearly needed. "It became very clear that the hope of ending childhood obesity can only be materialised by fundamentally changing how we act and by doing things differently. Sticking to well-trodden paths will not halt the rise in obesity," Dr Nishtar said, referring to the work of the WHO Commission.

General conclusions

As the Summit closed, a summary of the conclusions from the dialogues was shared with WHO as a contribution to their open consultation on the *Implementation Plan for the Recommendations of the Commission on Ending Childhood Obesity*.

Despite the range of topics and perspectives presented in the eight workshops, some themes and ideas recurred as general advice for successful implementation of strategies to reduce childhood obesity.

Multi-sectorial interventions are crucial for success as sustainable strategies cannot merely focus on individual behaviours, but must alter the obe-sogenic environment that an increasing share of our children grow up in. 'Multi-sectorial' should also be understood as 'cross-governmental', i.e. policies and strategies need to involve a bundle of different policy areas: health, education, transport and trade, to mention a few.

Successful coordination requires strong political leaders on all levels. Equally, resources must be set aside for coordination, monitoring and evaluation, even if interventions to end childhood obesity must be considered low-cost investments by any standard.

All forms of intervention must carefully *avoid stigmatisation* of children and their families. Thus, where appropriate, interventions should in general be designed to include all children and their families, not only children who are overweight or obese.

Avoiding stigmatisation was also one reason behind the many suggestions to implement a salutogenic approach in intervention programmes, or simply to *focus on what is healthy*. This approach was also recommended for monitoring and evaluation, though data on children's health status must of course also continue to be collected and gathered.

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Photo: Mikael Wallerstedt

"We have had a lot of reports for a decade or so, all recommending very evidence-based, feasible interventions, which in general don't happen."
Boyd Swinburn, Professor of Population Nutrition and Global Health, University of Auckland.

Uppsala University's deputy Vice-Chancellor, Professor Anders Malmberg, opened Uppsala Health Summit 2016 at Uppsala Castle.

> Only 15 % of children under the age of 2 are consuming what is considered a minimally acceptable diet. This is absolutely abysmal!
> Professor Corinna Hawkes, Director, Centre for Food Policy, City University, London

It was also argued that interventions should be built in such a way that they can be *evaluated* to be able to adjust and improve actions and interventions over time, to continue to develop our knowledge base. But, as many pointed out, it is equally important that we are successful in *communicating the evidence* to policy-makers and other influencers. Too much current policy-making disregards available evidence when designing interventions.

Basing interventions on evidence is also imperative from an ethical point of view. In the workshop on ethical dilemmas, the example of a tax on sugar-sweetened beverages was used to draw up some basic lines for what makes a general policy ethically acceptable. One viewpoint was that to be satisfactory, evidence and efficacy must be established. How to design a tax to make it effective was also one of the topics in the workshop on policy tools, where one conclusion was that taxation should be broad to avoid substitution behaviour.

The potential of *empowerment as a strategy* to change behaviours as well as obesogenic environments was frequently suggested, and some concrete ideas were also developed on 'how'. Several workshops also discussed how to involve children as change agents in building strategies and interventions, concluding that this is not only possible but also highly recommendable.

It is desirable, for effective interventions as well as from a children's rights perspective, to *involve children and their families* when developing and evaluating interventions.

One of the workshops focused on how to meet the need for interventions among *migrant population groups*, whose challenges in coping with new food environments influences the food habits and health outcomes of subsequent generations. However, data on food behaviours and health are fragmentary, and the workshop concluded that there is a serious risk that the needs of migrant population groups are invisible to policy-makers. In the WHO Commission's report,

Vivid dialogue, in plenum, in workshops and breaks, are key ingredients at Uppsala Health Summit. From left Dr Alessandro Demaio, WHO; Alejandro Calvillo, El Poder del Consumidor work on proposals for actions together with Emma Patterson, Karolinska Institutet and Paula Alvarado, UMC WHO Monitoring Centre.

Photo: Mikael Wallerstedt

no reference is made to this growing population group. It was concluded that this is one area where we need more knowledge.

The concept of ECHO zones was launched in connection with preparations for the Summit, and in a dedicated workshop, delegates discussed how to define, initiate, manage and evaluate such efforts. It is clear that having a working framework for local multi-stakeholder interventions fills a need, and that it is a concept that many delegates wanted to develop in their respective contexts. Uppsala Health Summit will follow up on this and on a selection of other proposals for actions, and report back on the experiences.

This post-conference report is a summary of one type of results from two days of intense work at Uppsala Health Summit 2016. A draft report has been circulated to all delegates for comments. The responsibility for the final texts in this report lies however solely with the authors.

To bring about change, collaboration is needed across sectoral boundaries and well-founded proposals are required, at all levels of society. For, as Professor Boyd Swindon put it in his keynote, "The big challenge is not what we are going to do, but how we are to get it implemented. We know what to do, but that is not happening, and that's why we are here."

Madeleine Neil, MSc in BA and Econ.
Project Manager Uppsala Health Summit,
Uppsala University

Workshop conclusions and suggestions

Workshops
- Policy Tools to Drive Change
- Individual and Societal Responsibilities – ethical dilemmas related to interventions
- Migration and the Food Environment
- Healthy Eating for School Children – today and for life
- The Need for Food Industry Actions and Innovations
- Innovations Needed in Retail and in the Food Value Chain
- Empowering Towards Healthy Behaviours
- Initiate, Manage and Evaluate Multi-stake-holder Interventions: *ECHO zones*

Policy Tools to Drive Change

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Background

To reverse the ongoing trend of increasing obesity among children, policymakers at different levels need to take action. Policies must be effective in achieving their objective – to reduce the consumption of unhealthy food and influence childhood obesity. Furthermore, policymakers need to safeguard against negative unintended consequences.

Taxes on sugar-sweetened beverages are widely proposed as a policy tool to reduce childhood obesity, notably in the WHO Commission's report. The idea of using taxes as a tool to reduce the consumption of unhealthy goods is based on the assumption that consumers will respond sufficiently to price changes.

But policies can also be designed to address the systematic errors that occur in our decision-making. Insights from behavioural economics and decision architecture can be helpful when building health interventions.

The workshop was organised along two themes: *Taxes as a policy tool* and *Decision architecture, or nudging as a policy tool*.

Aim

The workshop "Policy Tools to Promote Change" at Uppsala Health Summit gathered stakeholders to examine taxes and alternative or supplementary policy tools to fight childhood obesity.

Main conclusions

- Fiscal measures are a feasible strategy to reduce the consumption of unhealthy food. But complementary actions are also needed, e.g. regulations and decision architecture.
- Taxes and subsidies that go hand in hand, will make policies more economically neutral for consumers and create stronger incentives.
- Broad taxation is needed to avoid substitution behaviour.
- Context-specific factors are important to consider in implementation, for example the strength of institutions and the tax system.
- Nudging strategies must be based on an understanding of how to motivate different stakeholders to engage.

Fiscal measures for ending childhood obesity

Based on recent economic research on price elasticities for sugar-sweetened beverages (SSB) and fast food, one conclusion is that taxes may function as a means of reducing the consumption of these products. Such taxes will likely be regressive in monetary terms, but may still be progressive in welfare and health since people with lower incomes often consume more of these goods; moreover, price responsiveness is greater among lower socio-economic status groups.

It is important to bear in mind that a tax on unhealthy goods contains a conflict between changing behaviour and raising revenues. For example, in the case of the Finnish candy tax, the goal was

"Comparing the costs related to overweight or obesity in children… you can see a pattern across different countries finding that even in childhood direct medical expenditures are already greater."

Dr. Lisa M. Powell, Distinguished Professor from the School of Public Health at the University of Chicago, on costs related to childhood obesity.

Photo: Mikael Wallerstedt

to increase tax revenues, not to reduce consumption of candy. Inherent conflict must be considered when designing the tax program.

A tax on unhealthy food and beverages needs to be broad to evade potential substitution behaviour. Further, even a broad tax on SSBs may trigger increased consumption of high-sugar products, such as candy given that people derive utility from the consumption of sugar. The general view at the workshop was that implementation must be wide-ranging: a range of suggestions was put forward including that both sugar and fat should be taxed, that taxation should focus on 'ultra-processed food', and a direct tax on calories. However, it was also noted that taxes on a clearly defined product category that offer no nutritional value such as SSBs may be easier to administer.

A tax must also be broad in a geographical sense, so that consumers cannot avoid taxation by shopping in another jurisdiction. The potential effects of cross-border shopping need particular consideration.

It is important that a tax goes hand in hand with simple administrative rules so that taxes can be easily collected from producers, distributors or retailers and shop owners.

In addition, **the tax needs to be transparent,** meaning that the objective of the tax must be communicated to the public in order to secure their support. One group suggested a labelling system where goods with high taxation also have to carry a label stating "this good has been taxed because it is unhealthy".

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Simone Bösch, World Cancer Research Fund International, and Dr. Lina Nordquist, Member of Uppsala County Council, Sweden, discuss the design of sugar taxes and other tools to reduce childhood obesity.

It is important to **consider the institutional background when a tax is implemented**. A well-functioning tax system is necessary and without effective tax collection the public's support for a tax may be eroded.

Many participants highlighted the importance of combining taxation with other fiscal measures. If a tax is implemented, people with lower incomes will be worse off in monetary terms, at least in the short run. Taxation should therefore be **combined with tax breaks or subsidies on goods that are healthy**. Combining taxes on unhealthy goods with subsidies on healthy food items (e.g. fruit and vegetables) would both strengthen the incentives to make changes in behaviour, and make the policy more acceptable to the public by making it more income-neutral for consumers. It was also highlighted that a tax could be combined with initiatives to facilitate regular physical exercise: lower VAT on gym membership was presented as one option.

Implementing a tax on unhealthy food is a measure with broad population reach, and the need for evaluation was highlighted in the discussions. **A tax should therefore be implemented in a way that allows for proper evaluation**. Full-scale implementation should be preceded by a proper trial run. A tax could, for instance, be randomised to different geographical areas in a region to enable the effects to be studied. **Researchers should also be involved in the implementation** of the tax so that its design ensures the possibility of evaluation.

Complementary tools: Regulations and decision architecture, or nudging

Even if the workshop supported the idea of fiscal measures as a tool for ending childhood obesity, there was general agreement that complementary measures based on decision architecture and regulations are also required.

The concept of nudging

A common economics definition of nudging is that it is non-monetary and a small 'push' for voluntary behaviour change from the benchmark option.

Nudging is closely related to the theory of behavioural economics, which relaxes some of the assumptions underlying traditional economic theories of rational decision-making by incorpo-

"You can imagine the campaigns and strategies of the big soda companies to stop the reduction in consumption, to say 'Look, the tax is not working' ".

Alejandro Calvillo, General Director of El Poder del Consumidor, Mexico.

rating psychological mechanisms which cause individuals to make short-term decisions that are not consistent with their long-term utility maximisation. Often, these psychological mechanisms lead individuals to be prone to choose the 'default option', even if they have not made a proper evaluation of the benefits and costs, compared with alternative options.

The insight into such mechanisms can be utilised to design health-promoting interventions that assist individuals to make certain desired choices by nudging them in a more healthy direction, e.g. by making the healthy choice the most straightforward choice.

Such mechanisms include:
- *Present-Biased Preferences,* according to which individuals tend to discount future benefits relative to present benefits more heavily than they would more distant future benefits relative to future benefits, in other words, immediate advantages are over-valued relative to future interests;

- *Decision Bracketing*, where individuals can make a series of 'small' decisions – such as smoking one cigarette – which add up to 'large' decisions;
- *Projection Bias,* where individuals may e.g. overestimate their future motivation to undertake the physical exercise needed to compensate for the present intake of a sweet.

Suggested nudging strategies and regulations for ending childhood obesity
Nudging strategies to encourage children towards healthier behaviour were suggested for different decision environments, such as schools, supermarkets, restaurants, food marketing and urban planning.

In *schools*, the suggestions included ensuring easy and free access to drinking water, making water the 'default drink'.

Shelf space management in *supermarkets* may nudge the customer to consider the product at eye level as the default choice. Nudging strat-

Photo: Mikael Wallerstedt

Professor Stefan Swartling Peterson, UNICEF, summarises workshop arguments for taxes and other policy tools.

egies in *restaurants* can include reduced default portion sizes in restaurants with portion servings, while smaller plates, bowls, cups or glasses could be a nudging tool in buffet-style restaurants and school cafeterias. The organisation of buffets – e.g. the positioning and sequence of salads, vegetables, meat, toppings, etc. – may also nudge customers' choices. As the food industry is already an active nudger, it was suggested that they could use the same tools, e.g. the small gifts included in cereal packages, to promote healthy foods.

Using *urban planning* to make walking or cycling the default mode of transportation rather than cars was also mentioned. This might involve ensuring safe pedestrian paths, cycle lanes and parks.

As mentioned earlier, the delegates emphasised that a proper policy mix should also include elements of regulations and other supporting measures.

A ban on *marketing* junk food in schools was suggested as an important measure, as well as restricting access to unhealthy food items in the proximity of schools.

School curricula, which were covered in a separate, parallel workshop, should include healthy food and physical activity. Another suggestion was to initiate a certification system for healthy schools. Such interventions were further discussed in the parallel workshop "Healthy eating in schools". Conclusions from that workshop are reported on pages 26–31.

Engaging stakeholders in nudging

Many raised concerns about how to involve stakeholders (schools, retailers, restaurants, industry, etc.) in nudging strategies. While schools may have an interest in making their children healthy, such incentives may be absent or less viable for other types of stakeholders.

One suggestion to engage restaurants was to introduce a certification scheme, where the enterprises would need to subscribe to certain (measurable) standards regarding e.g. default portion size or plate size, and then be certified based on compliance. Another suggestion, which primarily addresses nudging in schools, was to establish inter-school competitions in the pursuit of health promotion goals.

Policy-level support for nudging

Nudging strategies may need support on the policy level. Such support can include funding of nudging interventions, social marketing of healthy options, awards, 'best practice' models, and well-developed models for monitoring and evaluating the nudging efforts. The need to follow up interventions to accumulate knowledge, including on how to monitor and evaluate effects, was highlighted and underlined.

There was also general agreement among the delegates that we need better knowledge of suitable pathways for nudging initiatives to effectively promote children's health. For example, should the nudges address the children or their parents or teachers?

Furthermore, there is a need for deeper understanding of the food industry's and retailers' motivation and incentives to back up such nudging strategies.

Further reading

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Individual and Societal Responsibilities

Ethical dilemmas related to interventions

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Background

Obesity depends to some extent on choices made concerning, for example, what we eat or how we exercise. However, the choices made are partially your own, partially a consequence of the context and information given and retained. Sometimes the choices are made by others – individuals or groups. When it comes to children and adolescents, they have neither the ability nor the opportunity to make autonomous decisions about their lives or their health. This affects where responsibility can be located. One can only be responsible if one is capable of making autonomous choices.

The WHO's draft implementation plan emphasises that government and society have a moral and legal responsibility to act on behalf of and in the best interest of the child, and the recognition of equity issues and of vulnerable or excluded groups is commendable. But other ethical considerations also deserve attention, for instance regarding liberty and paternalism.
Policies need to be sound from an ethical point of view not just because it is moral, but also because adequate consideration of ethical issues *is a prerequisite for successful implementation*.

Aim

The aim of this workshop was to contribute to a thoughtful, constructive conversation around the ethical issues that may occur in policies and programmes addressing obesity, laying the foundation for a checklist of ethical considerations for evaluating proposals for interventions towards ending childhood obesity.

Main conclusions

The discussions in the workshop focused on concepts such as freedom and liberty; equity; evidence; stigmatisation; accountability; and our view of children and adolescents as 'moral patients' or 'moral agents'. It was suggested that:
- Discussions of liberty for individuals and collectives need to take the complexity of the issue into account. In some cases, *restrictions can be enablers*.
- Before implementation of policies or interventions, we need to make sure that possible dilemmas are discussed. Transparency – in other words, that the *rationale of a policy measure* or an intervention is clearly *understandable* – is essential. This, in turn, requires that interventions are *evidence-based*.
- As input to the WHO's current process for a global implementation plan on ending childhood obesity, it was recommended that a dialogue on possible ethical dilemmas be included as part of developing the plan.

"When we discuss evidence and what we really need, I think that we need to accept evidence that we have, accept the world as it is."
Professor Claude Marcus, Head of the division of paediatrics at CLINTEC department, Karolinska Institutet

"Early detection and intervention are often considered yielding better results. But, early interventions have drawbacks too, such as a risk of stigma", warned Professor Signild Vallgårda, Copenhagen University.

- Interventions that are felt to strengthen equity were in general perceived as more ethically acceptable than other interventions.
- Interventions than can be presumed to lead to, or increase, stigmatisation are less acceptable from an ethical point of view.
- The UN Convention on the Rights of the Child is a platform for how to see children as potential agents of change, empowering themselves and their families.

Ethical considerations on early interventions

Professor Signild Vallgårda introduced the workshop by presenting some challenging perspectives on ethical dilemmas in tracing and intervening against childhood obesity. Her starting point was the familiar observation that prevention is better than cure and that early interventions yield better results. The advantage of early detection is to be able to help children

to a better life. But early interventions may also have drawbacks. Among the drawbacks, we find for instance risks of medicalisation, overtreatment and stigma.

Shame and stigma are attached to being obese and to being identified as obese. A child that is identified as overweight or obese risks dissociation and exclusion. Adolescents who consider themselves overweight gain more weight than those who do not, a behaviour associated with stigma.

There are also equity issues. Obesity in high-income countries is more common among socially disadvantaged groups. If intervention is effective, social inequities in health will diminish. But if not, the already disadvantaged will experience negative aspects of the intervention to a higher degree.

The justification needed is proportional to the degree of intervention or of freedoms lost, said Dr. Garrath D. Williams, Lancaster University, while underlining that a law restricting marketing may increase families' freedom.

Dr Garrath Williams picked up the idea of paternalism. He criticised the common framing of public health interventions on a larger scale than family-based as examples of paternalism, or to use a less derogatory term, stewardship. According to this framing, represented by the Nuffield Council's intervention ladder, policies and interventions can range from 'doing nothing' to 'eliminating choice'. The higher the rung on this ladder, the more liberties are restricted, and consequently more powerful justifications are needed than for the less restrictive interventions on lower rungs.

There is a balancing metaphor involved: the desired effect needs to weigh favourably against the loss of liberty. However, choice and liberty are not simple things. We need to ask: what choices, and for whom? Who provides the options setting the terms of the choices? For instance, laws against marketing to children may create freedom for families. The regulation creates a level playing field and gives them capacities they did not have before. Thinking of public health as welfare versus liberty cannot be right, Williams argued. The question is which freedoms we actually value and which choices matter.

Conclusions from workshop discussions
Ethics is a complex subject matter with a considerable amount of disagreement between people. Thus no simple consensus points emerged. However, a number of considerations were brought up by many participants and from different perspectives. We cannot conclude that a policy or an intervention needs to have a 'particular ethical value' to be acceptable. The discussions clearly pointed out perspectives that need to be considered before acting.

To guide the discussion in the workshop, two type questions were prepared.
1. Suppose that a country or group of countries prepare a proposal to introduce a tax on sugar-sweetened beverages (SSBs). What types of characteristics would such a proposal need to have in order to be perceived as ethically acceptable?
2. Discuss potential solutions to how weight-management services can be made sensitive to cultural variation and perceptions of autonomy. What types of characteristics would such solutions need to have in order to be perceived as ethically acceptable?

Freedoms and liberties
The concept of freedom or liberty was deemed important to include in a checklist of ethical considerations. Most policies or interventions will interfere with someone's liberty.

The discussion on what to consider before introducing a tax on sugar-sweetened beverages evolved around the need to clearly define whose freedom we are talking about, and freedom from what or to do what.

A tax on SSB may promote freedom from intrusion by commercial actors. If the 'power of the status quo' leads to individual short-term choices that have long-term negative effects, a tax can change 'the rules of the game' and give incentives for better choices both long and short term and perceptions of autonomy.

A tax will, in some sense, decrease liberty both for individuals and companies, limiting the freedom to consume what you like as well as the freedom of companies to sell at leisure. Some argue that taxing SSBs will limit the freedom of poor people, taking away or limiting the possibility of a treat. However, some argued, a tax is not a prohibition. There is still a choice to consume and to sell.

A tax on SSBs may be perceived as unfair because it only hits the beverage industry. In the workshop on policy tools the day prior to this workshop (see pages 8–13), it was argued that a tax brought in to reduce obesity among children must have a broad base. In that workshop, the argument was effectiveness, not other ethical considerations.

A tax may also increase freedoms, e.g. parents' freedom to not make SSBs available and their freedom to use money no longer spent on SSBs for other goods.

A tax may be felt to increase freedom from companies' intrusions, as well as the freedom to pursue and offer a healthier lifestyle, protecting ourselves and our children from 'silent killers'.

At the societal level, an effective tax can bring freedom from decreased externalities caused by over-consumption of SSBs, and the freedom to use resources indirectly saved in healthcare for other purposes.

There are no clear-cut answers as to which liberties can be reduced, or by how much, for an intervention to be ethically acceptable. However, it is clear that the issue of increased or decreased liberties must be part of a checklist of ethical considerations.

Evidence and transparency
For interventions like a tax to be ethically acceptable, they must be based on available evidence. In the plenary session before the workshop, several examples of the difficulty of gaining policy acceptance for available evidence were presented.

It was argued that for a tax to be ethically acceptable, its efficacy and its causality should be established and communicated. Thus, it must be clear that sugar causes obesity, but also that the tax construction is such that it will result in diminished consumption of sugar.

Communicating the purpose of a tax, transparency, was one of the points for tax effectiveness raised in the Policy Tools workshop on the first day of Uppsala Health Summit. Thus, once more, effectiveness and ethical concerns are mutually supportive perspectives.

In relation to transparency, the problem of conflicting messages, or even erroneous messages, was brought to the table. The cause-effect link between e.g. consumption of SSBs or other unhealthy foods and obesity is not as immediate as, for example, the link between falling off your bike without a helmet and hurting your head. This may complicate communications on causality.

"You can blame governments. You can despair of governments. Or you can demand that governments do something. What is common to all three reactions, however, is a belief in what Thomas Jefferson called the first and only object of good government: the care of human life and happiness."

Gabriel Wikström, Swedish Minister for Public Health, Healthcare and Sports

Efforts for transparency must, of course, be in line with cultural and religious norms and traditions.

Equity
In most regions, the prevalence of childhood obesity is higher in low-income or socioeconomically vulnerable groups. Thus, interventions will often be targeted towards these groups.

It was generally perceived that interventions that reduce socioeconomic gaps are more often ethically acceptable than those that do not. There were examples of how this can be achieved. Revenues from a sugar tax can be used for measures that increase health and equity. Such measures could be directed primarily towards vulnerable or low-income groups. To be acceptable, interventions must also be affordable.

The equity perspective was deemed particularly important for making a tax on SSBs ethically acceptable. Thus, it is important to consider that a price increase on SSBs will leave less room for other expenses, and reduce access to what has been considered an affordable treat. However, a sugar tax or other interventions may have counteracting equity benefits since health benefits

from decreased consumption should be higher in lower socioeconomic groups. It was also argued that interventions should focus on underlying causes, not merely symptoms.

Risk of stigmatisation
Interventions that risk causing or increasing stigmatisation of the child, or the child's family, should be avoided. The fact that a tax on SSBs or other unhealthy products does not stigmatise anyone was one of the arguments raised in favour of a tax.

Focusing on the family and on underlying causes, not on the individual child and its symptoms, was another recommendation to limit stigmatisation. Likewise, a salutogenic approach was recommended, i.e. a focus on general healthy lifestyle approaches, rather than focusing on obesity.

Empower families and children
For the discussion on which role children and families can take, two terms from moral philosophy were introduced: the moral patient and the moral agent.

The moral patient is someone that can be benefited or harmed by what we do or do not do. Obviously the child is a moral patient, and the way the child is affected affects how we assess the action. Harming a child is *prima facie* wrong. The moral agent is someone whose actions can be evaluated morally.

In general, we do not see children as moral agents, but adults are. Becoming a moral agent is a gradual process. We gain capacities for decision-making as we go along. This is also reflected in law systems where we have different maturity ages for different matters.

But even if there is an important distinction between agent and patient, the border is not static. Children have voices and can be involved in constructive solutions, and agency can be altered.

Interventions that seek to be collaborative and to empower children and their families can therefore be perceived as ethically acceptable.

It was suggested that we fully accept the child as the agent of change. To focus on children's possibilities can be an ethically solid way forward.

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Workshop

Migration and the Food Environment

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Background

Moving from one place to another, whether from a rural area to an urban area or over larger distances to a new country, means encountering new situations, food environments and diets. Studies that explore the understanding of food and ethnicity underscore the importance of comprehending the deep connection between ethnic identity and belonging for all. Central to this is apprehending how food preparation and consumption can develop and preserve identity. Food can also provide a sense of belonging and serve a nostalgic role for migrants. In some instances, certain types of foods may be perceived to be 'bad foods' and strongly associated with certain types of population groups or certain health outcomes.

Migration was discussed on the individual level, as changes in the physical location, locally, at the regional level or at an international scale. Such physical relocation effects on food environments and health outcomes can be exacerbated by the genetic make-up that the migrant bears with them, or by or a cultural and dietary tradition that is often distinct from that of the host environment. Rising overweight and obesity prevalence among migrant groups is made more complex by research findings which suggest that an individual that was exposed to insufficient food or a poor nutritional balance during their foetal life will have metabolic adaptations that predispose them to a higher risk of non-communicable disease in later life.

Many African countries today are experiencing the double burden of undernutrition and over-nutrition. Of the world's children under five years of age and overweight, 25 % live in Africa. Stunted children are at higher risk of becoming overweight and obese in later adult life. Meanwhile, in areas where undernutrition and stunting occur, there are school feeding programmes that sometimes indiscriminately feed all children. These feeding programmes are energy-dense and, as yet unrecognised, a public health issue.

Immigrants who recently have moved to rich countries are less likely to exhibit poor health parameters such as smoking, diabetes, hypertension, overweight and obesity than the native population. However, recent reviews, such as the NCD Risk Factor Collaboration from 2016, acknowledge that this is changing. Dietary acculturation – the process by which migrant populations adopt the dietary practices of the host environment – has been identified as one of the key mediating factors in the loss of the 'healthy immigrant effect'.

It is important to recognise that migration is a natural process which has been prevalent throughout the history of humankind. Migration patterns, however, have shifted in recent decades and, although it is not a new phenomenon, the sheer numbers on the move today are unprecedented. Who is moving where and why? What food environment and dietary practices do they

Photo: Mikael Wallerstedt

Focus on healthy behaviours, and remember to use the cultural roots, like dance and music, when designing interventions! This was one message from the workshop on Migration and the Food Environment, which also tried its own prescription.

bring with them? What food environment do they meet?

Migration may bring about a change in food habits and socioeconomic status, and a general change in lifestyle, which in turn might influence migrants' weight and health status. While length of stay in a new country is correlated with higher overweight and obesity rates, little is known about the pathways underlying the increase in weight. First and second-generation immigrant have specific needs that are underestimated or even neglected. Policies and strategies which address these groups must be tailored to their needs, specifically strategies addressing childhood obesity among migrants.

Aim

- To identify current knowledge gaps and data needs in order to better understand childhood and adolescent obesity problems among first and second generation migrants
- To increase the primary healthcare system's awareness of migrants as a specific obesity risk group, and to help identify appropriate preventive strategies
- To discuss the need for tailor-made public health nutrition messages that target first and second generation adolescent children of migrants

Main Conclusions from the workshop

Discussions focused primarily on the knowledge gaps and how to bridge them, and considered what strategies may be relevant to inhibit excessive weight gain among first and second generation migrant populations and their children. The lack of knowledge on interactions between migration and the food environment, the processes, value-changes, challenges and opportunities was felt to be of principal concern. Policies are not likely to be effective without this more detailed, and context-specific, understanding. In summary:

- It is important to work to reduce feelings of victimisation or stigmatisation. Any investigative or ameliorative strategies aiming to end childhood obesity within migrant populations should focus on health first and foremost, not on body size or BMI alone. There is even a need to start prior to this with the very concept of what a 'healthy' body actually is. This is not necessarily shared across cultures, and may not be aligned with the research community's ideas of health.
- Most countries and regions currently lack awareness of the specific challenges posed by migration and lack expert competency. In addition, many also lack relevant and disaggregated data upon which to base meaningful investigations and decisions.

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- Ethnicity/origin, gender and context matter regarding the specificities of a migrant population and the new food environments and socio-economic contexts they encounter. These vary from place to place, and over time. Such specificities must be well-understood prior to designing strategies to address childhood obesity within migrant populations.
- Promotional campaigns, policies and programmes need to be developed, supported and enforced that break down structural barriers, such as psychosocial, cultural or gender inequities, to ending childhood obesity.
- Peer-to-peer educators have been shown to be more effective, along with tailored nutrition, diet and wellness materials.
- We cannot address childhood obesity without understanding the role that values, culture/religion, family, role models, identity, and inequalities have in shaping a child's food environment, opportunity for physical activity, and attitude to bodies and wellness.
- More research is required to deepen understanding, to design interventions and to involve relevant sectors and stakeholders.
- Government health plans should consider the specificities of their migrant populations.

Our history influences our relation to food

People of migrant origin do not only bring with them their food habits, but also other features of their culture such as dance, music, theatre or storytelling. Nevertheless, traditional dance, music or theatre are seldom identified as possible strategies to mitigate childhood obesity in migrant populations. How can we identify 'natural', fun, culturally acceptable and enjoyable means of being physically active, especially for children of migrants?

The lived experience of a child's parents and grandparents (ancestors), including colonial experiences, in relation to food and lifestyle may influence a child and adolescent's own life, and their attitudes towards certain foods or particular activities. Looking beyond the individual child or family to the history of migration to which they are related may, therefore, offer an opportunity for effective interventions to combat childhood obesity in migrant families.

Such a historical analysis could bring an awareness of some of the connotations that certain foods may have for migrant populations. Childhood experiences may affect our later life food environment, no matter where and how our childhood is spent. Religion, class, intergenerational history, and geography, will shape our view of what constitutes 'a proper meal'.

Cultural, socioeconomic and geographic contexts will also influence how we perceive physical exercise. Girls in many contexts are actively dissuaded from physical activity. In high-income countries, higher socioeconomic groups tend to exercise more, while in lower-income countries it is often lower socioeconomic groups who get more physical activity, mainly via their employment. In some sub-Saharan African countries, school uniform for children is a must and some only possess one. Parents and teachers thus may discourage physically active play during school break in order to keep uniforms clean and undamaged.

Rural-urban migration and rising childhood obesity

When moves are made from rural to urban areas, lifestyle changes occur. Factors such as transportation, physical activity and security affect interactions between the new food environment and health outcomes. Rural-urban migration changes food and dietary patterns, where a shift from grains and vegetables to more highly processed and refined, less nutrient-dense, foods occurs. Studies from Botswana, Malawi and South Africa revealed that children in higher socioeconomic environments had significantly higher daily servings of snack foods and fewer servings of traditional diet foods, compared to lower socioeconomic groups.

Effects are highly gendered: research has shown that rural females who migrated to urban centres were more likely to be obese than counterpart males. What is it that causes these differences? What are the barriers to changing such patterns? Effective intervention requires answering such questions.

Associate Professor Leapetswe Malete, Michigan State University, has studied internal migration in Botswana and its consequences for food behaviours and child obesity.

Photo: Mikael Wallerstedt

In addition, how can children, whether rural or urban, continue to be physically active? Spontaneous cultural activities like dance, music and theatre can be a solution. Dance and music are activities that can include all ages, and both genders, whether in a rural or an urban area.

Food values and peer effects

The food values that an individual holds remain important throughout life, and are likely to remain, or even be clung to, after migration, though a migrant family's socio-economic status may interfere with their ability to uphold those values. In addition migrant families may lack an awareness of the content of food products in their new environment. In this respect raising migrant children's awareness of healthy food can be a strategy for curbing obesity.

When it comes to food consumption by children of immigrants, it generally mirrors that of their parents, though some research suggests this is changing and that adolescents in particular quickly adopt host community food habits. An important question is whether food attributes and values differ between population groups?

An ongoing study by the University of Arkansas investigating the relationship between food values and weight outcomes, compared food values in the USA and Norway. The study found that food safety was considered to be the most important variable in both countries. Price was seen as more important in the USA than in Norway. The Norwegians ranked ethical values such as fairness and animal welfare as more important than the Americans. The study also studied food values among migrant population groups within the USA. Findings suggested that those born outside the USA, or having one or both parents born outside the USA, ranked 'natural' food, i.e. food made without modern food technologies like genetic engineering, hormone treatment and food irradiation, higher than US-born groups. They also ranked price and taste lower. Such value differences among population groups may hold some keys to reversing rising obesity rates among immigrant communities.

Similarly, another ongoing study also by the University of Arkansas investigated peer effects among population groups. They found that the effect of adolescent peers within a grade, in terms of values and attitudes to overweight and obesity, was much larger than that of peers in other grades in the school. The influence of peers of one's own ethnic background was about six times that of the effect of peers perceived to be of other ethnicities.

Dr. Evelyn Crayton, past president of the Academy of Nutrition and Dietetics, shared data on how food insecurity in different population groups influences food habits and the prevalence of obesity.

These findings suggest that it may be important to explore peer-to-peer education between people of similar identities to a target migrant community. Moreover, children are the best marketers to their parents. Thus raising migrant children's awareness of healthy food and a healthy lifestyle is one possible strategy for curbing the rising rates of obesity.

A Holistic Approach is Essential
Investigating just such complex and contextual linkages between the food environment, cultural perceptions, historic experience, the socio-economic and the political environment, as outlined here, will be necessary to design appropriate and effective materials and intervention strategies to combat childhood obesity within first and second generation immigrant groups. The need for convenience and practicality in our foods amidst the daily grind of everyday life, must be understood for any intervention strategy to have a chance of success. We will not succeed if we try to advocate a return to labour-intensive food preparation practices, or one-size-fits-all prescriptions.

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Workshop

Healthy Eating for School Children
Today and for life

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Background

As highlighted in the WHO report "Ending Childhood Obesity", the role of schools in promoting healthy dietary habits and physical activity to combat childhood obesity cannot be emphasised enough. School reaches almost all children regardless of social and economic background and therefore has an important role in reducing health inequalities.

As children spend a large part of their days at school, it may seem obvious that schools should provide a healthy environment for children where they have access to healthy foods and are encouraged to be physically active. However, in many places this is not the case. Schools face many challenges and there are many competing interests. Resources are often limited and guidelines and policies may be far from optimal or even non-existent. A lot of pressure is also put on teachers and school staff who may not have the appropriate training in nutrition and health education to be able to provide a healthy school environment. In addition the WHO report also highlights the role of schools in promoting health and nutrition literacy, which would involve new school routines and new ways of teaching.

In this workshop delegates from different parts of the world, representing predominantly the school and public health sectors, met to identify, discuss and prioritise what schools can do to promote healthy eating and physical activity for school children.

To set the scene for the discussions, Karin Hjälmeskog, Uppsala University, Sweden, presented some thoughts and challenges from the WHO report "Ending Childhood Obesity". One obvious challenge is that preventing child obesity is a complex and multisectoral question, which makes collaboration between different stakeholders essential. Another challenge when dealing with school as a health promotion arena is the fact that today health issues are often seen as competing with school's educational mission, as tested in international knowledge evaluations.

Aim

To identify priorities and propose actions that can be taken in and around schools to promote healthy dietary and physical activity habits in children.

Main conclusions
Assess what schools do to promote health
One challenge is the fact that health promotion is often regarded as competing with the mission of education, as tested in international knowledge evaluations. One of the most provocative ideas discussed during the workshop is the possibility of including health promotion and health literacy in the judgements of school success in such international assessments. Such a reform

Dr. Iveta Pudule, Centre for Disease Prevention and Control of Latvia, introduced the workshop on healthy eating for school children, relating experiences from Latvia.

would challenge the current view of knowledge and highlight what is considered important in order to live healthily in society, today and tomorrow.

Leadership and collaboration
Leadership was discussed as a fundamental factor for success. Leadership is needed at different levels: teachers as leaders and role models in the classroom, principals as leaders in schools, politicians as leaders in society. On all levels, the knowledge, interest, desire and determination of these leaders are needed. Another fundamental factor is collaboration between countries and between different sectors and stakeholders within a country.

School curricula
The school subjects Home Economics and Physical Education are of great importance when it comes to promoting health. One key to success is that education must be both theoretical and practical. In these subjects children learn about health, but most of all they do this via cooking and being physically active. So these subjects need to be enhanced and strengthened. In addition, diet, nutrition, physical activity, health and sustainability need to be integrated in all school subjects.

Inspiration and experiences
To further inspire the workshop discussions and broaden the perspective, examples were presented of how to promote healthy eating for school children. The first speaker, Dr. Hanna Sepp from Kristianstad University College, Sweden, underlined the importance of starting with young children in preschool. She presented some practical examples of how meals can be used as an educational tool and can be integrated in everyday activities. Dr. Iveta Pudule, Centre for Disease Prevention and Control in Latvia, provided examples from Latvia where government ministries (Education and Science, Health,

Dr. Anna Karin Lindroos, the National Food Agency, summarised conclusions from the workshop in plenum around three main themes: healthy zones, leadership and collaboration, and school curricula.

Photo: Mikael Wallerstedt

Agriculture, Finance) and non-state actors (e.g. NGOs, civil society, industry) collaborate to promote healthy nutrition at schools in a health-in-all-policies approach. Latvia has adopted standards for healthy school meals and regulations to restrict soft drinks, sweets and salty snacks in educational institutions. Dr. Kristiina Janhonen from Helsinki University in Finland gave examples of food education in Finland and discussed how students can be fully involved and how to bridge the knowledge-action gap in health education. Finally, Professsor Sidiga Washi from Ahfad University for Women in Sudan focused on the situation in African countries and the double burden of under- and over-nourishment. Professor Washi confirmed that schools play an important role also in these settings, to convey skills and knowledge for healthy behaviour. She also pointed out that working with school children is a way of reaching all members of their families.

Discussion format

In the group discussions participants were encouraged to come up with visions and ideas according to the following model:

- Stop – What should we stop doing or reduce?
- Keep – What should we keep doing? Good examples?
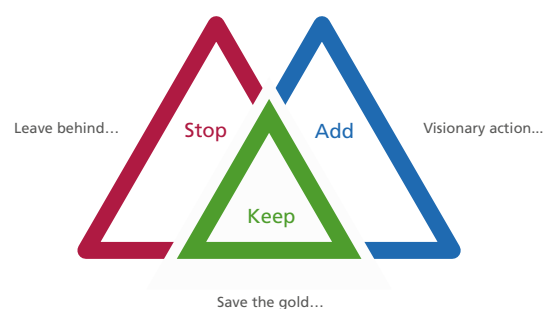- Add – What do we need to start doing?

Leave behind…   Stop   Add   Visionary action…

Keep

Save the gold…

Dr. Adeyinka Onabolu, Senior Advisor at the Nigerian Ministry of Agriculture and Rural Development, in dialogue on how to develop schools into health promoting environments.

The participants could bring up any issues related to promoting healthy eating and physical activity for school children. Questions from the Pre-Conference Report (see below) were used as background and inspiration for the discussions. It was not compulsory to address all questions and the group discussions therefore placed less focus on some of the questions.

- Children need to learn a lot in schools. What should schools do to promote health and nutrition literacy? And to what extent?
- How can we convince teachers, parents, children and policymakers that promoting health and nutrition literacy in schools is important?
- What do school staff and teachers need to be able to develop and implement successful school polices for a healthy school environment?
- What can policymakers and schools do to improve the environment in and around schools?

- Do you see any evidence gaps and research needs related to the role of schools in promoting health and nutrition literacy?
- How can public health professionals and school professionals collaborate on improving school children's diet and physical activity? What other stakeholders should be involved?

Proposals from the workshop
Schools as healthy zones
Stop

- Schools need to be a healthy zone. Unhealthy food must be banned and thus not be the easy choice for school children during the school day. Vending machines, if present, should offer healthy choices. Marketing ties with schools, both obvious and less obvious, should be restricted. Advertising in the environment around schools should also be restricted.
- Stigmatisation or bullying of overweight children should not occur. Avoid blaming overweight children and their parents.

- The judgement and assessment of a school's success should not be based purely on performance in theoretical subjects, as it is today in the case of international assessments such as PISA.

Keep
- All children eat in schools, whether the meal is school-provided or brought from home. Many countries have guidelines and policies for these meals and these are important if implemented.

Add
- We need to start basing judgements of a school's success not only on students' theoretical knowledge but also on health aspects: school children's subjective wellbeing, their knowledge about health, and how the school, through teaching and the school environment, promotes health.
- Reward systems should be introduced to help and encourage schools to promote health and health literacy. Systematic awareness, documentation, audits, feedback and goal-setting are all strategies likely to lead to success if a school wants to improve health. Where school meals exist but suffer from a negative public image, a rebranding of school meals as attractive and cool is necessary and possible.
- Politicians and urban planners are involved in the planning of growing urban areas as well as rural development and infrastructure. They have an important role to play in making the school environment as well as transport to school safe and activity-promoting.
- It should be possible for all school children to be physically active during their school day.

Leadership and collaboration
Stop
- Avoid black-and-white thinking and one-size-fits-all thinking when recommending actions for schools and for individuals. There is no one right answer and there needs to be cultural, gender and socioeconomic sensitivity.
- Avoid working in professional silos.

Add
- Teachers are key figures. Teachers need to be educated in health and diet to be able to teach children about health issues and provide a healthy school environment. Health should be part of teacher training for all teachers, and part of teachers' continuous professional training. Schools are pillars of the community, so they can potentially educate the community in these matters and be a champion of health equity. School leaders are also key figures. They are often influential, and strong leadership is very important for schools to promote health in teaching, in the school environment and in the community. Politicians are a third group of key figures. Politics and supportive policies are obviously important. Regulations that require schools to work with health are one option. Further, it is of importance to capture all opportunities for collaboration – between schools, between schools and the community, etc.
- In all planning of the environment and activities to promote school children's health, it is important to include the perspective of the children and adolescents themselves. Children and adolescents should be included in decision-making processes. Issues of social identity and peer pressure must be taken into account. The perspective should be *salutogenic*, including an emphasis on school children's strengths, and promote *empowerment*.

School curricula
Keep
- Knowledge about food and food preparation is generally decreasing. School subjects such as Home Economics and Physical Education are vitally important. Here large differences are seen between countries. In some countries the situation is stable and all students study the subjects, in some these subjects exist but are under threat, and in yet other countries the subjects do not even exist in the curriculum. Thus the solution may range from continuing to teach home economics and physical activity, making these subjects compulsory for everyone, to even introducing these subjects in schools.

- Critical thinking and media literacy are important elements of school education to enable children and adolescents to make sense of the overwhelming amount of easily available information from various sources regarding health, diet and fitness.

Add
- Health should be included in all subjects. Diet, nutrition, health, sustainability and physical activity need to be integrated into other topics. Schools are often under immense pressures. 'Adding' things in the form of new campaigns or new practices may not be as productive as including them as part of the curriculum instead, which would have the added advantage of being more sustainable in the long run.
- The school environment must generate opportunities for physical activity throughout the school day. Activity could be part of teaching in all subjects, so as to reduce sitting. The environment must be designed to promote safe and fun activities for school children and adolescents.

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The Need for Food Industry Actions and Innovations

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Photo: Mikael Wallerstedt

Background

The connection between the abundance of food with high contents of sugar or salt, often experienced as palatable, and childhood obesity is widely recognised. In the report "Ending Childhood Obesity", one of the WHO Commission's main recommendations to the private sector is to "Support the production of … food and non-alcoholic beverages that contribute to a healthy diet". All data show that too many children drink and eat too much poor food, rich in sugar or fat, and low in nutrients, and that in many settings, this consumption pattern is more frequent among vulnerable socioeconomic groups.

Among the stakeholders, the food industry could play a more central role in leading children and their parents towards healthier food patterns through strategic actions, innovations and effective communication.

Photo: Mikael Wallerstedt

Representatives of consumer organizations, the food industry, patient organizations and academia shared thoughts on the need for innovations in the food industry and necessary multi-stakeholder partnerships.

An often cited argument is that the food industry has a vested interest in continuing to produce and sell food and beverages that are high in e.g. sugar and salt. But there is also a trend towards more healthy products that contribute to more sustainable business. Do we need policy changes or other interventions to drive and monitor this trend?

Ending childhood obesity can be seen as a wicked problem in that it is difficult to solve for a variety of reasons. It requires an understanding of the problem's multi-dimensional complexity and relies on a vast number of stakeholders' interest in finding solutions. These stakeholders need to contribute in various actions that no single stakeholder could accomplish alone.

The workshop delegates represented academia, the public sector, the retailers and the food industry. The proportion of delegates coming from industry was higher in this workshop (30 %), compared with other workshops at the Summit.

Aim

The aim of the workshop was to identify industrial actions needed to combat childhood obesity. The workshop also made efforts to discuss these actions in light of promoting conditions for healthy eating in general for all consumers.

Main conclusions

Conclusions were reached at several different levels, but here we summarise the most global conclusions reached during the workshop.

• It is difficult to gather stakeholders and create arenas where companies of different sizes, authorities, academia and others can achieve a constructive solution-oriented dialogue on actions to combat childhood obesity. *Multi-stakeholder partnerships have been successfully used in other areas to improve public health and could be a way forward.* Actions should rely on a firm scientific basis.

- *Political leadership* to formulate demands for actions is essential and would speed up the pace of change, but is lacking.
- *Mistrust* is a barrier that the industry should address by showing responsibility and transparency. The industry is not a homogeneous group and efforts must be adapted with this in mind.
- *Product reformulation* can lower sugar, salt, fat, etc., but should preferably be done in stages, since taste perceptions can be affected. Broad joint efforts by many actors to create a level playing field could lower the barriers for individual companies to act.
- *Food labelling, including health claims, and guidance* towards healthier eating need to be adapted to current needs from a health perspective, and must also be easy to communicate and understand, e.g. via clear labelling systems. Positive recommendations were commended and preferred to recommendations on what to avoid.

Food innovations for health

The *mind-set* was identified as an important success factor for food innovations: problems need to be seen as opportunities! Successful innovation addresses real market needs and often arises from multidisciplinary science with high levels of expertise and strong financial support throughout the process.

'Food innovation' may refer to value-creating solutions and processes enhancing the quality or contents of actual food products, but also enhancing the taste experience. It may furthermore be a question of innovations *connected* to products and the use of products and services, e.g. labelling and recipes. Innovation also concerns the entire food value chain, which indicates that we need to involve actors along the food chain to understand success factors for innovation.

Access to *new technology* will be crucial for the development of healthy foods, but *building the market* will also be critical for success. The introduction of low calorie formulations replacing sugar in food provides an example. This case underlined the importance of building consumer awareness and demand for products with lower calories, in this case through a centre for product design and education. Do-it-yourself courses for children, adults, and companies have proved to be effec-

tive for acceptance, combined with social media and the use of ambassadors.

Food reformulation

The need to reduce the level of sugar, salt, and calories has been on the food industry's agenda for a long time, and significant progress has been made. Sugar reduction is challenging due to our inherent liking for sweetness, regulatory limitations and the functionality of products, as well as negative perceptions of low energy sweeteners.

The companies at the workshop presenting their experiences of product reformulation included representatives from the global food industry. They advocated cross-industry and cross-country programmes to improve the nutritional profile of foods and beverages and to set benchmarks for different products.

Referring to progress made in food reformulation, delegates believed new technical advances will allow for lower sugar and salt levels in products whilst maintaining product acceptance by consumers. Representatives of the global beverage industry reported a steady increase in sales of 'no added sugar' soft drinks and low calorie products during the last decade.

To be successful, in their opinion, product reformulations should be undertaken in *small steps*, and *broad initiatives* are needed to obtain comprehensive industry engagement and impact.

Food labelling and health claims

Labelling, e.g. symbols and health claims, can guide consumers towards healthier eating. However, it may also be confusing, particularly considering the wide range of labels, symbols and claims currently in use. Research has proven the effectiveness of providing simplified information to help consumers make healthier choices. It is also important to note the diversity of information and messages presented to consumers, a flood in which labels and health information can easily drown.

Despite knowledge that labelling, symbols and claims can be used for effective consumer communication to support healthy food choices, there is limited insight into how health symbols and claims are understood in real-world shopping situations.

"Food systems are at the moment not working for undernutrition and they are also not working for obesity."
Professor Corinna Hawkes, Director, Centre for Food Policy, City University, London.

Food industry representatives at the summit welcomed regulations on labelling and other consumer communication, as long as they are transparent and fairly similar, also in their implementation, between different countries and regions.

Health claims, i.e. statements about a relationship between food and health, are regulated in Europe, in the USA and in many other regions to protect consumers and to ensure an effective and efficient market. Only authorised claims are allowed after rigorous evaluation of the scientific evidence.

Sweden was a pioneer in this area by adopting a Code of Practice on Health Claims before

legislation was in place in Europe. The starting point was a round table discussion with industry and retailers, guided by the Swedish Nutrition Foundation (SNF). This gave rise to a mutually agreed set of rules, a code of conduct, which regulated the marketing of health aspects of food products. It is worth noticing that this was not legislation, but the outcome of a round table discussion and a commitment to a truthful and transparent dialogue with consumers. This voluntary agreement was replaced by corresponding EU regulations in 2007.

After almost 10 years of experience of having legislation in place in Europe, it has been concluded that the different nutrition and health claims being made bear little relationship to the
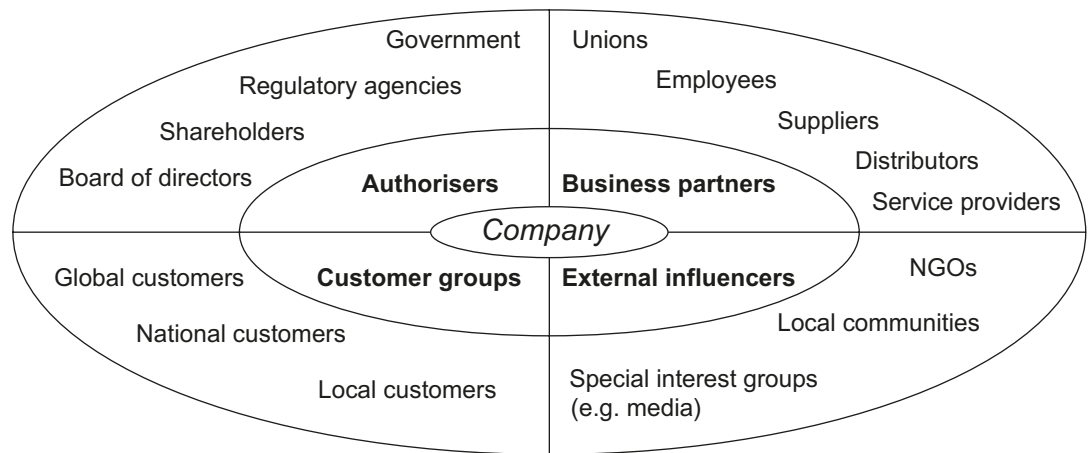
Figure 1. Different corporate stakeholder groups (adapted from Roberts, 2003, 162).

burden of diet-related disease in the EU. It can be argued that health and nutrition claims in general do not reflect consumers' actual needs. While the present legal framework for claims in the EU requires scientific substantiation, it does not require that claims be nutritionally relevant. This means that while an effect may well have been scientifically proven, its relevance from a nutritional point of view might not be high.

Moreover, despite the positive aim of promoting innovation, the EU Nutrition and Health Claims Regulation presents several challenges which may negatively affect innovation in the EU food sector. Recent surveys seem to support the view that the regulation appears not to have fostered innovation in the sector. The cost of developing scientific substantiation to back up health claims is high, which has *de facto* led many food producers to refrain from developing new products, fearing the investment will not be profitable.

The future usefulness of health claims to enhance healthy eating therefore depends on how the regulation is applied in practice. The focus could preferably be put on ensuring that approved claims are nutritionally relevant. Potential changes needed to improve usefulness include:
• Separate food from supplements.
• Prioritise claims relating to common health issues.

Voluntary actions from the food sector to improve the power of claims and consumer confidence were also demanded, but no particular examples of how to do so were elaborated.

The power of multi-stakeholder partnerships

The usefulness of the concept of multi-stakeholder partnerships is well recognised, as it allows for addressing a multitude of aspects, including ethical aspects, of organisational behaviour which may result in collective social interventions. A stakeholder perspective for this dialogue focuses on the role that stakeholders may take (Figure 1).

Figure 1 illustrates how various stakeholder roles may influence corporate actions. Authorisers, business partners, customer groups and external influencers – they may all contribute to creating conducive conditions or barriers for food industry initiatives and actions addressing childhood obesity.

The *Danish Whole Grain Partnership* is a recent example of a successful multi-stakeholder initiative. The partnership, which started in 2007, is a multi-stakeholder partnership between commercial partners (the food industry), and non-commercial partners (governmental agencies and NGOs), aimed at improving public health via increased consumption of whole grain products (to 75 g/10 MJ/day). When the project was initiated the average consumption was 36 g/10 MJ/day. Current evaluations show average consumption of 63 g/10 MJ/day. The activities undertaken include product development, communication (facts provided on food packages, a health label and dietary guidelines), availability, and efforts to gradually alter consumption-related norms. Key success factors have been identified as:

- scientific understanding as a basis for all kinds of communication
- careful documentation of outcomes
- measurable goals in the initiative to maintain a high level of engagement among the stakeholders
- patience

This example highlights the power of multi-stakeholder collaborations and shows that it is possible to provide solutions that are economically feasible for consumers and for the food industry, and that may benefit public health.

Ways to successful multi-stakeholder initiatives

Addressing challenges related to childhood obesity should be seen as *a process* that needs to be taken in steps, sometimes incremental steps and sometimes bold steps that create momentum for change. The Danish Whole Grain Partnership is an example of the need for a *long-term vision and patience* to allow for a gradual change.

Successful joint actions also require *open and transparent communication*, irrespective of stakeholder roles and actions taken. This dialogue may provide legitimacy as well as an understanding of a political process that addresses childhood obesity. Even if communication and actions must be grounded in solid scientific data, the communication also needs a language that includes a wide group of stakeholders.

Restoration of trust is needed for progress

Today many consumers distrust food industry and their incentives. Aggressive marketing towards children, food safety scandals or fraud in the industry have received much attention, and contributed to this situation. There is great need for the food industry to restore its reputation and increase consumers' confidence. Mistrust is a barrier to the desired actions and initiatives, but corporate actions are important to create solutions to these problems. Good examples also need to be voiced, perhaps through a legitimate ambassador who can 'tell the story'.

Complex problems often require a mix of solutions, actions that individually are hard to assess and evaluate. This underlines a need for strong political policy-based long-term leadership, which is currently lacking. These are some of the problems that are contextual factors for corporate and industrial engagement in public health.

Childhood obesity actions and initiatives vary from one cultural, geographical and market context to another. Corporate strategies in a large company on the other hand may be the same, whatever the market the company is active in. The contextual aspects of actions needed in different markets may limit what large corporations are actually able to do.

Much of the responsibility pertaining to the corporate role in addressing childhood obesity is placed on large corporations, even multinationals. There is an overarching risk that small and medium-sized businesses are overlooked in the overall dialogue on solutions. Cases of local production where children or daycare centres are given active roles in community-supported production may serve as examples of educational initiatives that improve the offer of healthy products while empowering the community.

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Innovations Needed in Retail and in the Food Value Chain

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Photo: Yulia Grigoryeva

Background

A lot of attention has been focused on the food environment and its impact on obesity. Individual studies have been able to link, for example, the *state-level density* of large supercentres to a decrease in the consumption of fruit and increase in obesity among adults and children.

The strategies adopted by retail chains have led to lower prices. At the same time, we have registered substantial increases in Body Mass Index (BMI).

Furthermore, we know that retailers spend substantial resources on advertising and there is a logical link between where products are placed in the store and increased sales. However, in some countries food retailers have started to offer healthier alternatives to help consumers make healthier choices. What can we learn from these initiatives? How have they influenced consumers' health, in particular childhood obesity, and how have they influenced the retail trade?

Retailers – whether individual stores or large commercial groups – are part of a much wider value-creating chain, in which they hold a pivotal role between consumers and the food industry, biotechnology and farmers. Understanding the role of each link for value creation in the value chain is key if we want to engage retailers and producers in a sustainable way.

Photo: Mikael Wallerstedt

Professor Rudolfo M. Nayga Jr., University of Arkansas, introduced the workshop on retail. Here in dialogue with Professor Kostas Karantininis, responsible for the same workshop.

Aim

The aim of this workshop was to look into the role that retailers and other stakeholders in the food value chain can play to help children and their parents move towards healthier food patterns and to reduce childhood obesity.

Main conclusions

- Child obesity is a complex problem, associated with broader issues than simply access to healthy food. But the role played by retailing is one of several important aspects to include in a strategy to end childhood obesity.
- One suggestion was to empower and/or incentivise consumers through education or nudging, thus increasing the value of healthy food options and driving change. Farm-to-school programmes can be one way to empower consumers via school children and students.
- Retailers may need incentives to enrol in programmes to develop healthier choices for consumers. Policies to enlist and incentivise can include nudges, pledges and changes in VAT.

- Providing motivation and drivers for retailers to engage in promoting healthy and sustainable products remains an area where we lack data and knowledge.
- Current legislative and regulatory frameworks sometimes impede change. There is a need for a well-aligned, non-conflicting legislative and regulatory environment.
- The dialogue with the retail trade and food industry needs to be intensified.
- Retailers and other stakeholders respond to profit incentives. We need more knowledge and further research on how different strategies and new business models can be implemented to promote a shift towards healthy food consumption, in a way that is profitable to retailers and all other stakeholders in the agri-food chain.

Workshop delegates

The workshop delegates represented academia, the public sector, retailers and the food industry. The proportion of delegates coming from industry was slightly higher in this workshop (18 %), compared with other workshops at the Summit.

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The effect of the food retail environment on childhood obesity

The convenient availability of food in close proximity is of great importance to overall health, especially children's health. Retail environments that provide variety and choice are not always present; on the contrary, 'food deserts' are often observed. These are low-income neighbourhoods where residents do not have access to supermarkets that provide a broad range of healthy foods, and where public transport is poorly developed or non-existent. Studies provide evidence that overall, food deserts are associated with increases in BMI z-scores[*]. Children in low-income areas with no access to retail stores offering fresh fruit and vegetables tend to have higher BMIs. Life in a food desert raises the cost of access to a healthy diet and thereby contributes to the risk of weight gain. Residents of disadvantaged neighbourhoods face higher prices with a poorer range and lower quality in healthy food categories. Lower-income households spend considerably more time travelling to grocery stores and shop for groceries less frequently. The presence of supermarkets significantly affects food accessibility and food purchase behaviour.

Although it is difficult to conclude that food deserts cause child obesity, there is ample evidence that food deserts are a risk indicator and that food desert areas may be obesogenic in ways that other low-income neighbourhoods are not.

It is not entirely clear that food access is the only problem in these areas. Poor neighbourhoods may not attract supermarkets because they are considered unsafe. Such environments may also be less conducive to outdoor physical activity among children, which is a well-known cause of child obesity.

As a result, public-private financing, programmes, industry incentives or other efforts designed to improve the food environment in lower-income neighbourhoods may not be enough to result in meaningful reductions in childhood obesity.

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*   The z-score, or standard deviation score, indicates how many standard deviations an element is from the mean for the population.

Actions proposed to improve the food retail environment
Local products often healthier

Even if locally produced food is not automatically a healthier choice, switching to certified and carefully selected local suppliers may provide fresher and often healthier food. This can be achieved, for example, by short supply chains involving farmers' markets. Community support to local farms selling directly to consumers, by providing infrastructure and quality control, may be a good strategy to promote healthy and safe local food. Also, there is some evidence that when retail chain stores allow for independent procurement systems, this may increase the supply of locally produced food products. The growth of local food production can create multiplier effects in the local economy.

Farm-to-school programmes

The role of schools as an arena for healthy eating was widely discussed during the Summit. In this workshop, we discussed the fundamental ideas of favouring public procurement (an important retail channel) of local food products in school settings, such as canteens or cafeterias, and of engaging students in hands-on learning related to food and agriculture.

However, in many countries, e.g. within the EU, legal issues may be a constraint since public procurement regulations often do not permit restricting purchases to a particular group of suppliers. We may therefore need further discussion on how to adapt legislative instruments to support purchasing policies aimed at health development.

Online purchases

Online technologies and websites enabling consumers to make their food purchases via the internet have proliferated, at least in many EU countries and the USA. Integrating technology such as online purchasing in the food purchasing process can be a useful tool not only to counteract a poorly developed food environment (a food desert) but also to influence people to make healthier choices. Online food purchases are of course more difficult in more challenged environments, such as food deserts with poor access to the internet. In more advanced environments, online choices may be an option and may provide new opportunities for existing retailers by

enabling customers to customise their food purchases, for example.

Retailer initiatives for healthier food consumption
Choice editing and information

In many high-income countries today, retail companies have substantial information on consumer preferences, for example from scanner data. Using these data, they can nudge consumers towards healthier food choices.

'Choice editing', or nudging, could be a strategy to promote healthy and sustainable products. By eliminating options to buy unhealthy and unsustainable items, retailers could promote the consumption of healthy, sustainable items and hence reduce child obesity.

Dissemination of information and education are tools used by retailers in their stores to create awareness. Examples were mentioned from Sweden where retailers offer children entertaining programmes to teach them to eat in a healthy way, and to encourage them to try new healthy items. Teaching cooking techniques to make healthy food more attractive is another example of how to change consumers' awareness and behaviour. Naturally, as always, it is important to find out what motivates consumers to change their food consumption behaviour, and this will vary between different geographical, cultural and socioeconomic contexts.

As part of the discussion on how to increase awareness of healthy food products, the suggestion was made to incorporate concepts such as health and food into the overall sustainability concept. Sustainability is a well-perceived concept with broad acceptance among consumers and citizens in general. Incorporating 'health' alongside the environmental, economic and social pillars of sustainability might improve the penetration and success of the promotion of healthy food, and hence reduce obesity.

Although several examples were given of how retailers are acting to influence consumers towards a healthier consumption of food, it was clear that little is yet known about the impact of these activities on retailers. Do they contribute to the retailers' profitability, and if so, how? Are these actions important as 'CSR activities', strength-ening the brand in contexts where health and sustainability are shared values? Or do they also directly influence returns in a positive way?

We must not forget that the retail industry is a profit-driven business. Even if various social business initiatives do exist, they must work under the same logic, though lower returns on investment can be accepted. In all cases, margins count. To decrease business risks, and to incentivise retailers to change their supply or to engage them in consumer awareness campaigns, policy changes, such as lower VAT on healthy products, nudges and pledges will be important.

Oligopolistic industry – an obstacle or an opportunity?

The food sector is an industry largely characterised by oligopolistic structures. This has led to a situation in which actors compete among themselves by means of prices, brand proliferation and low costs. This rivalry often leads to a 'race to the bottom' in terms of both quality and price. A 'healthy collusion' towards sustainable healthy food consumption is necessary in order to avoid 'unhealthy' rivalry.

To succeed in leading consumers towards healthier eating and reducing child obesity, all stakeholders in the food value chain – from lab to plate – need to come together and develop a common strategy. There are opportunities for crosscutting collaborations among competitors, and perhaps this is a good case for 'coopetition', i.e. cooperation among competitors.

This may not necessarily happen by itself. Both government policies and civil society actions are needed here and may, if properly run, lead in the right direction. A good example was given from Norway, where the government entrusted the food industry and retail stakeholders to self-regulate. The targeted group then refrained from promoting unhealthy food for children under the 'threat' of much stricter government regulations.

Actions from outside
Health claims

The possibility of making health claims may be an effective tool to increase incentives for the food industry and retailing to increase the availability and value of healthy products. These

claims must of course be true, built on evidence and easy for consumers to understand and relate to. Consumers expect health claims to be regulated and supported by the government or other authorities, such as the EU or the WHO. Relevant regulatory frameworks and supporting infrastructures need to be responsive and adjusted to such needs. Furthermore, health claims and dietary recommendations need to be communicated and legislation on how to do this needs to be transparent and effective.

In developing countries, legal frameworks governing communications about food to children are often weak, as is monitoring. While on the one hand this opens up an opportunity to communicate well-founded health claims to drive the consumption of healthy food, on the other hand it is clear that the lack of a legal infrastructure is a risk, particularly for children.

As noted in the WHO report "Ending Childhood Obesity", there is a strong need to implement the recommendations on the marketing of foods and non-alcoholic beverages to children adopted by the World Health Assembly in 2010.

Driving innovation via Corporate Social Responsibility
External monitoring and reporting on the retail industry's actions and their consequences may drive retail innovation. Such external monitoring is currently conducted by various organisations. These include consumer and patient organisations, and actors like the Global Reporting Initiative (GRI), an independent international organisation that helps businesses, governments and other organisations to understand and communicate the impact of business on critical sustainability issues. Experience shows several cases where such actors have had a substantial impact on retailing and the food industry, resulting for example in retailers refusing to sell certain food products, or in self-regulation criteria on the marketing of food products targeting children.

Considering the oligopolistic situation discussed above, outside pressure can promote innovation, including the product range and labelling. Good examples were cited, e.g the Swedish Consumers' Association's policy of show and tell, which exposed unhealthy children's foods. As a consequence, a number of unhealthy food products have been withdrawn and replaced by new healthier substitutes.

Consumer pressure groups can therefore be encouraged and given resources to put pressure on marketers of unhealthy products for children. Consumer groups can be assisted in promoting healthier food consumption, for example, through information and scientific support from government and universities. This support could even extend to developing countries, and international development agencies could include such support in their development and aid initiatives.

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Workshop

Empowering Towards Healthy Behaviours

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Background

Most people today are exposed to a multitude of messages which all influence lifestyle choices. We are differently equipped to navigate this complex landscape. Sending more information will not necessarily help, and we need to go from 'why' to 'how'.

In the empowerment process, the focus is on handing over the power of 'how' to the target group, and making them agents of change. Over the years, many interventions for healthy lifestyles have focused on raising awareness by advising and informing. However, these approaches are insufficient to change and sustain behaviours.

One approach is to empower individuals and families to set their own goals and identify challenges and potential solutions, and to support them in reaching these goals. Empowerment involves an active process of supporting and enabling individuals or groups to help themselves through solutions that fit their respective needs and circumstances. The individual or group here becomes an active participant rather than a passive recipient.

Aim

The workshop focused on how societies can empower families and children to navigate the increasingly complex food environment and maintain healthy behaviours. Starting out with discussions focusing on several different contexts representing either low- and middle-income settings or vulnerable populations in high-income settings, the workshop aimed to develop concrete ideas on how to promote user autonomy in complex food environments. The group discussions centred around two main questions:
• Who are the relevant stakeholders in the process?
• What are the immediate actions needed at policy and local levels?

Main conclusions
• A key issue is ownership of the challenge at hand (childhood obesity) and therefore of its potential solutions. Global and local leadership is needed but *local ownership is essential*. This enables local anchorage and promotes local coordination of interventions.
• Ignite or kick-start new initiatives to change norms using role models (parents, athletes, etc.).

If given the opportunity, children can act as change agents towards healthy behaviours. Here, children from *Friskis & Svettis, Uppsala*, help lead physical activity sessions at the Summit.

- Avoid processes that risk stigmatising children, individually or as groups.
- Work on the safety aspect for outdoor activities. It is crucial and often neglected.
- Coalitions of relevant stakeholders that include both 'doers' and 'decision-makers' at multiple levels are important. Involve children and families in such initiatives and make them 'fun' or 'cool' – they are potentially vital for success.
- Special provisions in the form of aid and subsidies may be needed to address the needs of disadvantaged and vulnerable population groups. Such provisions should be viewed as investments in health and health outcomes.
- Utilise best practices in digital technologies as part of intervention strategies to promote empowerment and peer support, and to collect data for evaluation.
- Always follow up and evaluate new initiatives and interventions. Measure impact where possible and evaluate the investment made using established concepts and measures.

Why empower?

Empowerment can be considered a powerful tool for carrying out a number of recommendations and related actions proposed in the WHO Draft Implementation Plan on Ending Childhood Obesity, as well as other actions proposed in this document, such as changing consumer demand driving the retail and food industry, and promoting healthy eating in schools.

Dr Pilvikki Absetz and Michael Quarshie kicked off the workshop with examples of empowerment strategies used in interventions involving families in a variety of contexts, and of how internet-based technologies can support and sustain such strategies.

This set the stage for table discussions where the workshop delegates were divided into six groups and requested to select a specific setting as a platform for their discussions. Using their respective projects, the delegates drafted practical solutions, i.e. the 'how' of empowering individuals, families and communities towards healthy behaviours in their chosen setting. These contexts and project ideas were:

Socioeconomic context	Project ideas
Low- and middle-income setting: Village in Ethiopia	From farm to table: integrated community project to improve production, distribution and consumption of healthy foods
Low- and middle-income setting: Urban area in China	Strengthen the existing: improving knowledge and skills for healthy eating through schools in deprived areas
High-income setting: Schools in deprived areas in Stockholm	Making healthy foods 'cool': reaching families through children and schools in disadvantaged areas
High-income setting: Immigrant populations in Sweden	Collective urban gardening: promoting healthy foods through community ownership
High-income setting: Socioeconomically disadvantaged urban area in the United States	Improving access to healthy foods by establishing food store chains through coalition of local stakeholders
High-income setting: Refugee camps in Europe	Healthy foods as a side-benefit to improving care and services in refugee camps

The 'how' of empowering towards healthy behaviours

Despite the different contexts and projects discussed, many similar and overarching themes emerged from the workshop discussions. These are summarised in the following pages.

Towards a new 'normal'

Make knowledge 'cool' and learning 'fun'

Healthy food and healthy habits have to become 'cool' and children should learn in an environment where they are free to experiment and find out what would work best for them. This process can be fun, and at the same time improve knowledge and practices.

Schools can facilitate 'learning by doing' to improve knowledge and skills about healthy versus unhealthy eating/foods, how to read labels and how to cook in a healthy way. This theme was further elaborated in the workshop on "Healthy eating in schools", held during the Summit's first day (see pages 26–31).

In many settings, obesity among children is considered a sign of wealth or pride. This perspective spans over generations and requires different tools and strategies for different age groups.

Apart from knowledge about the link between food and health, addressing practical issues can help individuals to develop healthy practices. For example, in primarily agricultural economies, where cereals and other carbohydrates are available all year round, but fruit and vegetables are not, families can be engaged in processing and storing fruit and vegetables during the rainy season.

Use starters or ignition points

Novel initiatives and interventions often require a 'starter' to get people interested enough to try out something new, though it may be insufficient to sustain the action. Appropriate role models such as parents, athletes or other well-known personalities and non-monetary incentives such as access to gym facilities or sporting gear could serve as 'ignition points' to kick-start activities.

Address the critical S's: stigma and safety

Children living in unsafe neighbourhoods may need adult support to go out or require extended exercise breaks in schools. Exercise materials are available online and today's tech-savvy generation can engage in physical activity sessions at home supported via the internet or by filming themselves and sharing with others.

Who owns the challenge and thus also its solution? Global leadership is essential, but so is local ownership! Dr. Meena Daivadanam reported back to plenum from the workshop on empowerment.

A second critical issue is bullying of obese children and the stigma associated with obesity and other eating disorders, which is common in schools and other settings. The focus can be shifted from an individual child to issues that are faced by many, including non-obese children, by exploring different perspectives, identifying each other's strengths, learning from each other or focusing on a common challenge associated with themes such as healthy eating or physical activity.

Co-creating opportunities and solutions
Local ownership
A key issue is ownership of the challenge at hand (childhood obesity) and its potential solutions. While global and local leadership is needed, local ownership is essential. Insider understanding of the context and engagement with surrounding society are key requirements. This also enables local anchorage, promotes local coordination of interventions and improves the potential for long-term sustainability.

Identify decision-makers and build relevant coalitions
Building a coalition of relevant stakeholders from different levels using both top-down and bottom-up approaches will help to develop a structure for coordinating the action. Relevant questions here are 'what is going on?', 'what should be done?', 'who will do what?' and 'who

decides?' Make a point of including mid-level managers or administrators – they are rarely 'doers' but are usually the decision-makers in finance, personnel and anything else you care to name. Involve them and work with them!

A stakeholder coalition consisting of teachers, community actors, healthcare providers, food suppliers or supermarkets and researchers may be relevant in socioeconomically disadvantaged areas to jointly address access to healthy foods and health outcomes. Such coalitions are useful to promote an efficient use of resources, to advocate for a change in norms and to sustain activities such as continuing community education.

Create opportunities
Facilitating joint action through unconventional methods such as urban gardening could enable socialisation processes in communities around new themes. A number of different opportunities and project ideas were formulated, all focusing on activating families with or via their children towards healthy behaviours.

Families, communities and local governments can take joint decisions to change day-to-day practices. For example: banning cars from stopping and parking in front of schools; putting water bottles on children's desks and providing the opportunity to refill them at regular inter-

Micro-credits for rural development, urban gardening or making healthy food "cool" were just some of the empowering projects ideas generated during this workshop's lively and creative discussions.

vals; not allowing sweets to be brought to school or supplied in schools. School children can also be involved in planning school menus and making school meals.

Digital technologies
Digital technologies were mentioned both in the introduction and during discussions as tools that can be used in fruitful ways to support empowerment strategies. Best practices for digital technologies can be used as part of intervention strategies that promote empowerment and peer support. It was noted that peer-to-peer support is important for developing and sustaining healthy behaviours, and that in this arena, digital technologies, particularly social media, are invaluable. In addition, the possibility of collecting behavioural data at a group level is important for population-level monitoring and to further drive the development of different types of interventions.

Innovating in investment options
Identify alternative investment sources
Financial resources are often the stumbling block when carrying out development or intervention activities.

Alternative approaches include in-kind contributions, perhaps targeted towards a specific cause, such as sporting companies sponsoring sports equipment for local schools; commercial and

banking networks connecting producers to markets; or kick-starting community ventures such as irrigation systems or goat rearing through start-up costs. Some of these could well become self-sustaining over time.

One example is the concept of collective urban gardens. Municipalities identify available plots of land, which form the bulk of the cost, and communicate their availability, while citizens and other stakeholders lend their tools, equipment and time. Activities such as planting, weeding, harvesting and community markets can be organised around the urban garden.

Similarly, financial literacy plans, such as village banking systems that include insurance schemes and micro-credit initiatives, can be used as a platform to empower community members. Investing in small-scale income-generating ventures such as chicken farms or fruit farms and preserves has the added advantage of improving access to healthy and affordable food all year round.

Build on the 'existing'
Many projects deliver 'band-aid' interventions, which are easier to undertake as they require only a minimal understanding of the context. Instead, participants suggested working with local stakeholders or governments to build on and invest in structures already in place. This will

strengthen the 'existing' and potentially have positive spin-offs.

For example, policies that support or provide start-up incentives to establish cooperative supermarkets in socioeconomically disadvantaged areas will improve physical and financial access to healthy foods for local families. This also represents an investment in the community, through new jobs and services.

Expand the scope and function of the existing network of sports clubs and associations in countries where these are active rather than starting new ventures. Actively including and serving children and adults in under-privileged areas by strengthening existing infrastructure and services may be a more efficient and sustainable strategy to promote local development and empower healthy behaviours.

Follow up, measure, evaluate!
Follow up interventions! Economic arguments are important for policy discussions and sustainability. Utilise best practices to develop and implement interventions that promote empowerment and peer-to-peer interactions, including the use of digital technologies. Measure impact where possible and evaluate the investment made using established concepts and measures, such as return on investments (ROIs).

Recognising challenges and limitations
Competing interests
We have to recognise that in many circumstances – refugee camps, for example – essential basic needs will take precedence over health or health-related issues. 'Food' is perceived as a basic need, but that does not necessarily mean 'healthy food'. Only when health is severely compromised will it overtake other needs and long-term perspectives. Health, healthy foods or healthy lifestyles will then have to be tackled as part of a more 'basic' care plan.

Similarly, the 'healthy' options are not always available or affordable in all places. Fruit and vegetables are often more expensive than more filling and energy-dense 'junk' food, and the availability of vegetables and fruit is seasonal. Identifying such bottlenecks will help to prioritise actions so as to address needs in a more integrated manner.

It is also important to recognise that groups that are severely disadvantaged in socioeconomic terms in any setting will require targeted support in the form of subsidies, aid or additional social security measures, as they may need assistance even to meet basic food requirements. Such provisions are often necessary and should be viewed as investments in health outcomes and healthy societies.

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Initiate, Manage and Evaluate Multi-Stakeholder Interventions: *ECHO zones*

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Background

The alarming increase in childhood obesity cannot be explained by a single genetic, environmental or dietary factor. Therefore, to change this growing trend, a concerted multi-stakeholder initiative involving different kinds of interventions is necessary.

In its report "Ending Childhood Obesity", published in 2016, the WHO calls for integrated intervention strategies and approaches. The concept of 'ECHO zones' was launched prior to Uppsala Health Summit and encapsulates both the need for and the development of successful ways to initiate, sustain and evaluate multi-stakeholder interventions. 'ECHO' stands for 'Ending Childhood Obesity' and 'zone' implies a geographical area. There are examples of such focused, multi-stakeholder and multi-sectorial actions on several levels in Finland and Sri Lanka. However, initiating and executing multi-stakeholder initiatives in a sustainable way is a challenging task. Therefore, these initiatives serve as examples to learn from.

Aim

The UN Convention on the Rights of the Child states that all children have the right to a healthy start in life. To follow up on this commitment, immediate action must be taken on childhood obesity. The workshop "Initiate, manage and evaluate multi-stakeholder interventions, ECHO zones" was convened to convert the recommendations in the WHO report on Ending Childhood Obesity into action by introducing and operationalising the concept of ECHO zones.

With over 50 participants from more than 20 countries, the topic was discussed from various perspectives. The discussions in the workshop centred around four questions:
• How do we define ECHO zones and what do we aim for?
• How do we create ECHO zones?
• How do we create sustainable ECHO zones?
• How are ECHO zones evaluated?

The suggestions developed at the workshop will provide a good platform for starting ECHO zones. These, however, need to be carefully monitored to capture needs for adjustments.

Photo: Mikael Wallerstedt

Main conclusions
- ECHO zones are multi-stakeholder and multi-sectorial initiatives in a defined geographical area aiming to reduce the prevalence of overweight and obesity in children, by influencing determinants in the area.
- ECHO zones require the participation and coordination of a broad range of stakeholders, including local and regional authorities, NGOs and others, which should be explicitly stated.
- ECHO zones represent a format for multi-stakeholder activities, using both a bottom-up and a top-down approach, which offers the possibility to scale up activities.
- ECHO zones should be embedded in already on-going programmes and interventions, to sustain and scale up successful efforts.
- ECHO zones need to be flexible and open to learning, to capture new or unidentified needs.
- ECHO zones should be set up to enable monitoring and evaluation, which should be conducted by external actors.
- Involving children and their families in the creation, development, evaluation, and communication of ECHO zones will be necessary for a successful effort.
- Efficient communication within the ECHO zone and of results is key for sustainability.

- A global network for sharing experiences between ECHO zones is needed to provide sustainable support for their development.

ECHO zones – define, create, sustain, evaluate
Defining an ECHO zone
ECHO zones are geographically defined areas or regions, where concerted and structured action involving multiple stakeholders is put in place, to prevent and tackle childhood obesity and its comorbidities.

The geographical area can be determined through specific characteristics based on public health data in this region, which can be obtained e.g. in school settings or childcare centres. An ECHO zone is also determined by ensuring that relevant stakeholders at multiple levels in the defined geographical area are involved and committed to addressing the challenge in a coordinated, multi-sectorial, and multidisciplinary way.

Creation of ECHO zones
To create an ECHO zone in a certain region, the magnitude of the problem needs to be defined by gathering baseline data. The target group needs to be decided, e.g. which age groups to address, as well as which stakeholders to involve, including parents as well as others in-

"
In global health, nutrition is a really important part, and vice versa, and yet we operate in separate communities.
Professor Corinna Hawkes, Director, Centre for Food Policy, City University, London

Dr. Shawn T. Brown, Global Obesity Center, Johns Hopkins Bloomberg School of Public Health, described how computational research data have helped them develop systems-based interventions, a method that can be useful when establishing ECHO zones.

fluencing the children's everyday environment. The target group may include all children of a certain age span, not just children who are overweight or obese. Such an approach would avoid stigmatisation.

The relevant context and stakeholders for building an ECHO zone will largely depend on the cultural and social environment. In some areas schools might be the most appropriate structure to start with, in others it may be the religious community or the municipality. In all cases, relevant stakeholders in the region need to be identified and convinced of the importance of establishing the ECHO zone. Obtaining resources for mapping existing initiatives is key.

An ECHO zone can be created from a bottom-up or top-down perspective, or a combination of both. For each zone it was suggested that a person with expertise and trustworthiness in the relevant context in the specific geographical area should be identified to function as a hub and coordinator.

Also, it was suggested that to start with, it would probably be an advantage to initiate ECHO zones on a small scale, involving a limited number of stakeholders and informing as many stakeholders as possible of the initiative at an early stage, to involve them and create ownership. Children and their families should

be included among the stakeholders to involve, together with school leaders, healthcare, local political leaders, retailers, etc., in the creation and development of ECHO zones. Short- and long-term objectives and outcomes, strategies, time plan, responsibilities and challenges must be identified and agreed upon. If there is not sufficient capacity and commitment among the identified stakeholders and participants it will be difficult to get the initiative off the ground.

Sustainable ECHO-zones
Creating a sustainable structure to be able to work long-term is a challenge but also imperative for success.

A key factor for sustainability is to build on existing structures and to integrate efforts in existing governance systems so as to ensure ownership, instead of creating new structures. Obtaining resources for mapping existing structures is key to building sustainable ECHO zones. It is also of key importance to identify potential challenges and barriers to implementation early on and actively work to overcome these. Further, for sustainability, it will be important to integrate technical support and new technologies for gathering, analysing and sending data between ECHO zones.

Efficient communication at different levels is vital for sustainability. When running initiatives involving multiple stakeholders, it is important to identify, at an early phase in the process, how the partners are to communicate so as to secure engagement and commitment. Long-term sustainability depends on communicating project progress and impacts to other interested stakeholders, funding bodies and governance structures.

One final prerequisite for sustainability is building up functional communication and advocacy between different ECHO zones, to be able to share best practice and empower others to start initiatives in their own settings. An ECHO zone network would improve sustainability and quality by enabling experiences to be shared, and would inspire the creation of new ECHO zones.

Evaluation of ECHO zones
The ECHO zones should be continuously evaluated to enable modifications along the way, securing quality and sustainability.

Professor
Frank Bloomfield,
Director of the Liggins
Institute, New Zealand.

Photo: Mikael Wallerstedt

It was considered important to involve the target groups and their experiences of the interventions in the evaluation process, and not only focus on hard data. Three levels of evaluation were considered important to perform:

1. The process: Are enough resources and the right capacities involved in the ECHO zones and has the process been satisfactory?
2. Outcome: Evaluation of changes in environment and individual behaviours.
3. Impact: Physical measurements like BMI and other health indicators compared with baseline data.

The evaluation processes require infrastructure with the capability and capacity to perform such evaluations, which needs to be secured in the planning stage. Finally, ECHO zones will benefit from independent reviews, for example, the use of external experts and scientific publication of data.

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Uppsala Health Summit 2017

Managing Infectious Disease Threats through One Health: Prevent, Detect Respond

Photo: Mikael Wallerstedt

Ms Joy Phumaphi, Executive Secretary of the African Leaders Malaria Alliance and former Minister of Health in Botswana, announced the theme for 2017: Management of infectious disease threats.

In our fast-paced, interconnected world, infectious diseases are resurfacing as a serious threat to global health, and to social and economic stability. Recently, Ebola, MERS, pandemic influenzas and Zika have revealed how vulnerable we are, especially in settings where healthcare systems are fragile, and how quickly an outbreak can become a global concern.

Multiple, interrelated drivers such as population growth and migration, poverty, deforestation, climate change and trade together create a perfect storm; the rate at which emerging disease events occur is increasing while our ability to respond is slowing down with growing antimicrobial resistance.

Turning the tide begins with a realisation that just as the drivers are complex, the response needs to be multifaceted. About 70 per cent of infectious diseases are zoonotic, i.e. they are transmitted between animals and humans. Actions aimed at reducing the risks long-term must therefore consider the strong interdependencies between people, animals and the environment. In other words, they must pursue a 'One Health' approach, which requires veterinarians, medical doctors, ecologists and social scientists to find solutions and implement them together.

Integrated human and animal health approaches are recognised as critical by many, for example in the WHO, FAO and OIE 2010 tripartite concept note on the importance of strengthening collaboration at the human-animal-ecosystem interface. An operational framework supported by the WHO, OIE and World Bank followed in 2014.

There is a need to continue to develop implementable solutions across sectors, new thinking may be necessary, and innovations and lessons from the field need to be shared.

Uppsala Health Summit 2017 will focus on some of the priorities for preventing, detecting and responding to emerging infectious diseases, using the One Health approach. These include but are not limited to the use of economic models, coordinated laboratory operations, surveillance, vaccines, social dimensions of zoonotic risk management in low-income countries, governance, risk perceptions and behaviours.

Under these broad themes we will identify and select areas where policies and practices could be improved. We are inviting leading practitioners and policy-makers from around the world to develop and refine priority actions to address this key public health challenge of our time.

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