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for better  
health**

CHILDREN WHO ARE OVERWEIGHT

# Gladsaxe cracks the code

Firm boundaries and shared family responsibility deliver lasting change

Over the last decade, Gladsaxe Municipality has seen a significant fall in the number of school-age children who are overweight. Today, the proportion of school-age children in this category is a full 10 percentage points lower than in 2007.

The road to these impressive results has been long and full of learnings, involving new measures, thorough evaluations and tough priorities.

## A national challenge with local solutions

The number of children and adolescents who are overweight in Denmark has trebled in the last 30 years<sup>1</sup>. Today, almost one in five school-age children are overweight<sup>2</sup>, which, as well as bringing physical challenges in daily life, can also lead to bullying, loneliness and mental health problems. Unfortunately, many children carry that overweight into adult life, with up to 70% of children who are overweight also being overweight as adults<sup>2</sup>. This is why it is vital to address overweight in childhood, so that children establish good habits and patterns to take forward into adult life. There is, moreover, a demonstrable social gradient, with children from families with a lower educational level<sup>3</sup>, lower income<sup>4</sup> and non-Danish ethnic origin<sup>5</sup> particularly vulnerable.

There is a nationwide consensus and focus on providing preventive, health-promoting and therapeutic offerings for citizens across Denmark's municipalities and regions. However, according to the Danish Health Authority, knowledge of which measures are the most effective in preventing overweight is modest<sup>5</sup>, and the municipalities must therefore find their own path. Within the parameters of the Danish Health Authority's recommended initiatives and focus areas, the municipalities themselves have to work out which combination of initiatives will work best locally.



Today, almost one in five school-age children are overweight<sup>2</sup>

### Gladsaxe: child-centred intervention

Gladsaxe Municipality has prioritised initiatives for children. The municipality has implemented a number of targeted interventions and, in recent years, has succeeded in breaking the trend for overweight among school-age children, which has fallen from 26% in 2007 to 16% in 2020<sup>6</sup>. The municipality ascribes this success to its broad palette of offerings, with a dual focus on both physical and mental health. In the last few years, it has also recorded positive experiences with its overweight clinic, where the focus is on the family unit, fixed boundaries and shared responsibility.

## Early experiences

Gladsaxe Municipality placed a strong emphasis on prevention and health promotion from an early stage, and chose to prioritise resources for its youngest citizens. The municipality drew up its first health policy as early as 2007, introducing action plans for children and adolescents. Healthy food was provided to Gladsaxe's day-care centres, and, also in 2007, the municipality was successful in attracting government funding from a special pool dedicated to the social arena to establish the "Flik Flak" project, designed to prevent and treat children who are overweight.

As the purpose of the special pool is to test new methods, the project did not cover the whole municipality but a number of selected childminders, day-care centres, schools, after-school centres (SFOs) and clubs where it could be trialled. The Flik Flak programme comprised both general preventive initiatives and specific initiatives targeted at children who are overweight.

At the 10 day-care centres that took part in the project's general preventive initiatives, a number of early-years educators were trained as health workers and acted as coaches in getting the children to move more and in helping to inspire and develop healthy habits among the municipality's youngest citizens.

The specific initiatives in the project were directed at all children in the municipality with overweight in Years 4, 5 and 6. During the project period, 80 children and their families took part in a one-year treatment programme involving family conversations with a public health nurse and a family adviser. In addition, 16 children's groups were established, each meeting twice a week for conversations and exercise, and to prepare healthy snacks together. One year after the project started, 68% of the children had achieved weight loss or weight stagnancy.



### Evaluation and key learnings

When funding from the government pool had been used up in 2008, the municipality decided to continue the specific initiatives using its own resources until 2013, when the project as a whole was evaluated.

All 10 of the day-care centres that participated in the project involving general initiatives reported that Flik Flak had given them usable knowledge of diet and exercise, and had helped to set new health initiatives in motion. However, it was also concluded that the early years educators had difficulty in prioritising health aspects because they were also required to implement other areas of focus.

One of the conclusions reached for the specific initiatives was that even though children and families were pleased with the family conversations, they had not had the desired effect in terms of weight loss. Moreover, a specific target had been set to get more children who were overweight to participate in the municipality's sports provisions, but the evaluation showed that this had not been achieved to the desired degree.

One important learning was that, in the family conversations, many parents transferred the responsibility for weight loss to the children, even though overweight in children is generally linked to the whole family's habits and lifestyle. From this, the municipality realised how important it is to ensure that the whole family takes shared responsibility for the weight loss, so that the child has the family's support throughout the process and is not left to shoulder the responsibility alone.

### A palette of well-being support

Based on the evaluation of Flik Flak, it was concluded that there was a need to further step up the initiative targeting school-age children who were overweight. It was decided to continue the programme of family conversations, but

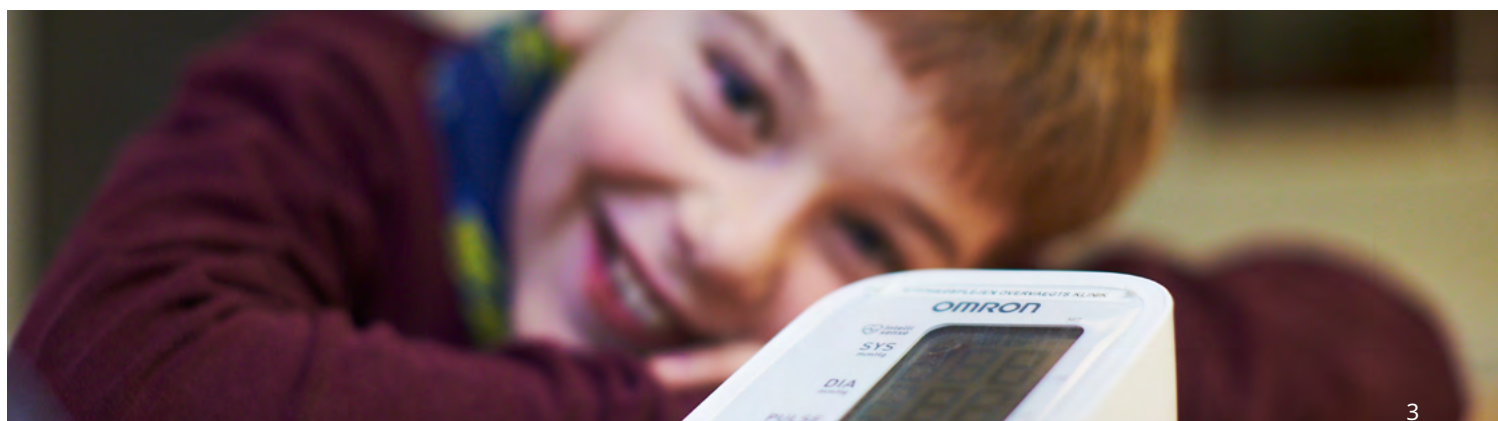
to improve them based on the experiences gathered. The municipality also entered into a collaboration with the charity Julemærkefonden (the Christmas Seal Foundation) to help children who were overweight to achieve stable and permanent weight loss. Children and families from the municipality were then allocated a place at one of the residential centres funded by the charity, and they benefited from supportive conversations and activities before and after their stay.

The enhanced initiative was based partly on experiences from Flik Flak and incorporated newer evidence in the field. Furthermore, the Danish Health Authority's packages of preventive measures inspired more systematic work in the area.

This resulted in the "Well-being palette", which was introduced in 2014 and combined a raft of initiatives targeted at the child's physical and mental health and individual needs.

#### Offers in the Well-being palette:

- Conversations with the public health nurse at school
- Well-being conversations with well-being coach following referral by the public health nurse
- Conversation with and examination by physiotherapist
- Parent-and-child yoga, mindfulness and well-being coaching for children in kindergarten to Year 2
- Yoga, mindfulness and well-being coaching for children in Years 3–6
- Guidance from a dietician
- Family conversations at the Family and Adolescent Centre
- Family conversations for parents of 2–5-year-olds who are overweight



### Yoga and mindfulness boost children's self-esteem

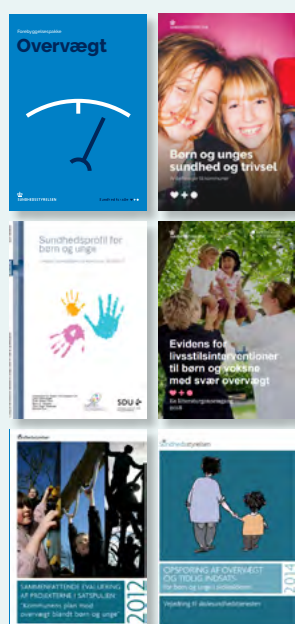
Since 2014, all children with overweight in the municipality have been offered yoga/mindfulness courses, designed to contribute to the child's mental well-being. As underlying issues such as low self-esteem, stress, grief and loneliness may be the reason for overweight, the courses give the children methods for handling negative emotions in daily life. Evaluations of this initiative have shown increased well-being, inner calm, improved self-esteem and better body image among the children who participated.



### Gladsaxe Municipality's offers for children who are overweight

Gladsaxe Municipality's initiatives to tackle overweight in children are driven by political priorities, evidence in the field and experience gathered from its own initiatives. Continual evaluations and follow-up actions ensure that the interventions achieve the quality targets set and create value for the municipality's residents to a high degree.

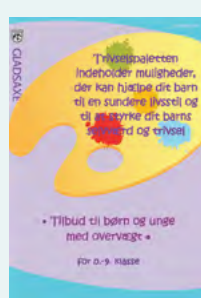
#### Experience and evidence



#### Health policy



#### Offers for children and adolescents who are overweight



- Conversations with a public health nurse
- Well-being conversations with coach
- Conversation with and examination by physiotherapist
- Guidance from a dietician
- Yoga, mindfulness and well-being coaching
- Family conversations
- Overweight clinic for school-age children and their families

#### Quality goals

- Normalisation or stabilisation of BMI in participating children
- Retaining families in treatment offer

#### The overweight clinic

- Treats school-age children who are overweight
- Based on the Holbæk model (multi-year family treatment programme with action plan and follow-up)
- Gladsaxe Municipality's Prevention Centre: regular conversations
- Led by specially trained public health nurses
- Recruitment via school public health nurses, general practitioners, yoga/mindfulness sessions, the Aula school communication platform

#### Follow-up/reporting

#### Treatment offers

## The overweight clinic

In 2017, the municipality established the overweight clinic as a supplement to the other offers in the Well-being palette. It was decided to base this on the “Holbæk model”, which has been developed specifically to treat overweight and obesity in children.

*“We chose to work with the Holbæk model in the overweight clinic because it was a new approach that involved making concrete requirements of the parents, and the results of the model sounded really promising.”*

Charlotte Westh, public health nurse and treatment provider at the overweight clinic

### The Holbæk model

The “Holbæk model” was developed by consultant Jens-Christian Holm, PhD, to treat overweight and obesity in children. The method was first used at Holbæk Hospital but has proved so effective that it is now used by municipalities across Denmark. The treatment involves five to eight consultations with the child and family per year and a tailored action plan comprising 15-20 changes to be implemented at once. Having the family's backing is important to a good outcome, and the treatment must be provided by someone who has undergone training with the Holbæk team.

When the clinic was established in 2017, it set an internal target of starting 25 families on a treatment programme within the first year, and training two public health nurses and one dietician in the Holbæk model. This target was achieved after just three months.

Today, the overweight clinic is one of Gladsaxe Municipality's key provisions for children with overweight, and a further treatment provider has been trained, meaning the clinic now has three public health nurses and one dietician.

The present case study places particular emphasis on the overweight clinic, which, together with the Well-being palette, has successfully reduced overweight in the children it has treated.

### A chronic illness which requires treatment

One important premise in the Holbæk model is

acknowledging severe overweight (obesity) as a chronic illness. The public health nurses and dieticians who have been trained to carry out a course of treatment according to the principles of the Holbæk model are called “treatment providers” to emphasise that overweight requires treatment in the same way as other illnesses. The first step in the programme involves working with the family to draw up an individual treatment plan, setting out the changes that need to be made to achieve the desired weight loss.

*“It's about acknowledging severe overweight as an illness. After all, you wouldn't keep asthma medicine from your child if they had asthma.”*

Betina Kærager, public health nurse and treatment provider at the overweight clinic

The treatment providers at the overweight clinic find that parents take their child's overweight more seriously if it is addressed as an illness. At the same time, this alleviates the feelings of guilt and shame about the child's overweight, which can otherwise often be a barrier to treatment for the parents.

### Fixed boundaries and no slip-ups

The Holbæk model differs from the municipality's earlier interventions targeted at children who are overweight in that it has fixed boundaries for the course of treatment and makes high demands of the parents.

The family's habits are mapped at the very first appointment at the overweight clinic. This involves the treatment provider going through a questionnaire of around 50 questions with the family about diet, exercise, sleep, screen time, etc., all of which require specific answers in terms of number, quantity or frequency.

The family's answers are used to draw up a treatment plan comprising 15-20 points, which are reviewed carefully with the family, providing advice and guidance on how ingrained habits can be changed. The treatment providers at the clinic not only provide guidance on which foods the children should eat but also, in equal measure, which they should avoid.

It can be challenging for the families to follow the plan, but it is key to the Holbæk model that the plan is followed rigidly and without any “slip-ups”. Working as a treatment provider at the overweight clinic means being more prescriptive and instructive than public health nurses usually would.

At the same time, there is understanding that the families will sometimes “fall off” and not follow the plan to the letter. It may even generate a positive outcome eventually for the treatment if the plan is not followed, when the family sees how the child’s weight increases or stagnates as a result. This demonstrates that the treatment plan works and can help to ensure that the family takes responsibility for following it.

*“There’s a lot of care and acknowledgement in this approach, but you have to be able to stand firm and exude ‘this is how it’s going to be’. The public health nurses at the clinic are dedicated to striking that balance.”*

Linda Malmgren, leading public health nurse

Although it is acknowledged that there may be many factors in a child’s life that come into play in their overweight, the appointments focus 100% on the weight and the points in the treatment plan. The treatment providers listen to any psychosocial challenges but do not explore these issues. Instead, they refer the child and the family to other facilities such as yoga/mindfulness courses, the school’s public health nurse or the Family and Adolescent Centre, where conversations about the child’s well-being and the challenges they face take centre stage.

*“It’s... been positive that the public health nurse hasn’t been judgemental when things haven’t gone to plan, but has just smiled and said ‘let’s get cracking again’.”*

Parents of child being treated at the overweight clinic

### Parental cooperation

At the initial appointment, the treatment plan is drawn up in cooperation with the parents, and it is absolutely essential that they take ownership of the plan from the start, because, after all, the actual work on weight loss happens at home. This is why the parents must be open to all the family changing their eating habits, as it is not possible to ask a child to eat differently from their family. One positive side effect of the Holbæk model is therefore that the programmes often encourage whole families to live more healthily.

*“[It’s] been both straightforward and difficult at the same time. When you’re a family that loves food – and everything that goes with it – the whole family has to be involved in making the necessary changes.”*

Parents of child being treated at the overweight clinic



### The treatment programme

The treatment programme at the overweight clinic normally lasts between 18 months and two years, but the needs of the individual child and family are assessed on a case-by-case basis. Most families attend the overweight clinic every six to eight weeks, while some may have a shorter programme, having successfully implemented the treatment plan after four to five sessions.

### No mention of motivation

It is a basic principle of the Holbæk model that the word "motivation" is not used in connection with treating overweight. If the weight loss were to be down to motivation, the entire responsibility for weight loss would be transferred to the child. In the worst case, this could lead to the child experiencing shame, depression and a feeling of powerlessness if the weight targets are not achieved.

### Being willing volunteers is key

Coercion does not work, as evidence at the overweight clinic shows: families who have been "coerced" into a treatment programme by one means or another drop out long before the end of the programme and usually without a positive outcome. However, the school public health nurse, doctors, teachers and other persons in contact with children with overweight and their families provide information about the overweight clinic and can also encourage the parents to contact the clinic.

### Cooperation with other public health nurses in the municipality

Public health nurses at schools in the municipality are often the first who identify and kick off dialogue with the children who may benefit from one of the municipality's health provisions. Their role is important, as they have the initial conversation with the child (and the family) and assess which of the municipality's offers will most benefit the child: yoga/mindfulness, the overweight clinic, both or a third option.

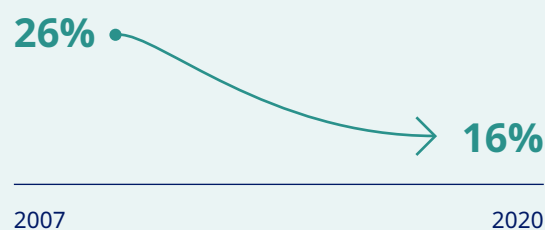
The three public health nurses and the dietician – i.e. the treatment providers – at the overweight clinic work closely with public health nurses in schools in the municipality, who often use them as sparring partners in relation to children and overweight issues.

## Results

Over a number of years, Gladsaxe Municipality has succeeded in breaking the trend for overweight among school-age children, which is down from 26% in 2007 to 16% in 2020<sup>6</sup>.

The municipality ascribes this reduction to its broad palette of measures and the continual evaluation and development of its initiatives. At the overweight clinic, the outcomes have been measured in terms of change in BMI. In 2020, more than 80% of the children had achieved a decrease or stagnation in BMI by the end of the treatment programme.

### Overweight among school-age children 2007-2020<sup>6</sup>



*"Our son has lost 20 kg in just under a year. Now that he's at continuation school, food is a challenge, but he focuses on doing more exercise to compensate. It's as if he has understood the balance more."*

Parents of child being treated at the overweight clinic

In addition, the municipality has experienced substantial interest in the overweight clinic from local residents. The target for the first year was achieved in the first three months in 2017, and by the end of 2020, more than 130 children and their families had been treated at the clinic.

*"We now have a happy and positive girl, who doesn't always feel she stands out from the crowd."*

Parents of child being treated at the overweight clinic

The municipality's overall strategy also contains targets for the proportion of children with normal weight in selected school years, with the trend being monitored on an ongoing basis. The most recent weigh-ins of school pupils carried out by health nurses showed that the target of 82% of intermediate-stage pupils being normal weight had been achieved<sup>7</sup>.

## Not without challenges

Although the municipality's experiences with the overweight clinic and the initiatives in the Well-being palette have been generally positive, there are still a number of challenges that are being addressed on an ongoing basis.

### **Fear of stigmatisation and poor self-esteem**

Overweight can be associated with guilt, shame and stigmatisation, both for the children with overweight and their families. The treatment providers at the overweight clinic find that some families hesitate to start their child on a programme at the clinic for fear that the "confirmation" of the child's overweight that a course of treatment at an overweight clinic will imply to some, will contribute to the child being further stigmatised in their social circle and further reduce already poor self-esteem.

The overweight clinic takes steps to eliminate the individual child's feelings of guilt, including by characterising overweight as an illness that requires treatment and for which the child is not responsible.

### **Unhealthy habits and lack of opportunities to exercise**

It is important that the children who need to lose weight have a supportive environment around them that inspires exercise and healthy habits. Even though preventive measures focusing on both diet and exercise have long been a priority for the municipality, it can be challenging to encourage all stakeholders to step up and play their part. Whereas the municipality's day-care centres, for example, have been serving healthy food for years, there is a different standard in some after-school centres – and these cultures can be difficult to change.

Integrating exercise as a natural part of the children's everyday lives is an important element in ensuring permanent weight loss. Unfortunately, the municipality finds that children with overweight do not always feel comfortable in "ordinary" sports clubs, where the level of ambition for physical performance is too high.

## The road to good results

Gladsaxe Municipality has been working to treat and prevent overweight in children for more than a decade and, among the many insights gained along the way, there are some that have particularly helped to pave the way to good results.

### **New initiatives must build on learnings**

Thorough evaluations of initiatives in the area have visualised where the effect has been greatest and what could be improved. New initiatives have been launched based on experiences gained from earlier ones.

### **Children and families differ**

There is no "one-size-fits-all" solution. Children differ, and this has to be reflected in a broad range of offers.

### **Motivation cannot be forced**

Lasting change is driven by willingness rather than coercion. There must be an explicit desire from both the child and the family to take part in the offers.

### **Positive approach**

Interventions work best when they are carried out in a positive, empathetic and non-stigmatising spirit, with the child's wishes and needs at the centre.

### **Change takes time**

Change does not happen overnight. Achieving positive results takes time and patience.



## The future

Gladsaxe Municipality has come a long way since implementing its first initiatives to prevent and treat children who are overweight.

Citizens' health – and overweight in children in particular – continues to benefit from a high level of attention from municipal politicians and executives, and is one of the orientation points in the “Gladsaxe strategy”, which sets out the municipality's ambitions for sustainable growth and welfare in the period 2018-2022. The strategy specifies a target for the coming years for keeping the percentage of school-age children with normal weight at the current level. The targets are reported on each year.

### Unlocking further potential through a digital platform

Looking ahead, there may be potential in introducing a digital platform at the overweight clinic, which would both streamline work processes at the clinic and facilitate ongoing dialogue with the families between appointments.

The overweight clinic is developing well, with rising numbers of participants and significant weight loss among the children who are attending or have completed treatment programmes. One obvious target would therefore be to identify and recruit more children with overweight in the municipality.

### More interdisciplinary cooperation

A shared understanding is growing in the municipality that cooperation across administrations, departments and institutions can promote health and weight loss objectives among children in Gladsaxe.

To facilitate more interdisciplinary cooperation, the Department of Health and Social Care plans to involve clubs and associations in Gladsaxe with a view to introducing exercise offers for children who weigh too much, and to engage in active dialogue with clubs and after-school centres on health and diet.

The municipality is also planning a new initiative intended to promote physical activity and well-being among children and adolescents. This initiative includes developing new mobile tools that can help children to cultivate healthier habits, and it will be implemented via “the open school concept” to ensure greater interdisciplinary cooperation with sports clubs and other local stakeholders.

*“Perhaps the initiative to tackle overweight can help to leverage more cooperation across departments. We could usefully extend our cooperation with schools to reinforce physical activity, an area where we're currently working on an action plan.”*

Steen Rank Pedersen, head of health care

### Health is a shared responsibility – and extends beyond the field of healthcare

Most ideas for new health-related measures require political decisions, coordination between different departments and significant creativity to procure the necessary resources.

The municipality already has examples of good practice, for example the “Headspace” programme for people with mental health issues, which is a collaboration between the Department of Children's Services and Culture and the Department of Health and Social Care.

Taking as its starting point the ambitious Gladsaxe strategy, which among other things sets targets for schoolchildren's weight and advocates for health in all aspects of the lives of its citizens, measures will be taken to step up an interdisciplinary collaboration to ensure healthy food in schools, after-school centres and clubs.

In light of the growing recognition that health is also fostered beyond the sphere controlled by the municipality's Department of Health and Social Care, the existing interdisciplinary collaboration across departments will be stepped up further.

Based on experiences to date in the health care area, there is a sound basis for continuing with the current initiatives, such as the overweight clinic, yoga/mindfulness and the other offers within the Well-being palette. Gladsaxe Municipality has “cracked the code” for achieving positive results and reducing the number of children with overweight, but the work does not stop here.

The municipality's health and social care area is keeping a watchful eye on experiences from other municipalities and developments in the evidence for types of overweight initiative. For example, the nationwide “Healthy Cities Network” will provide a source of inspiration as well as an opportunity to share Gladsaxe's own experiences.

## Information

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