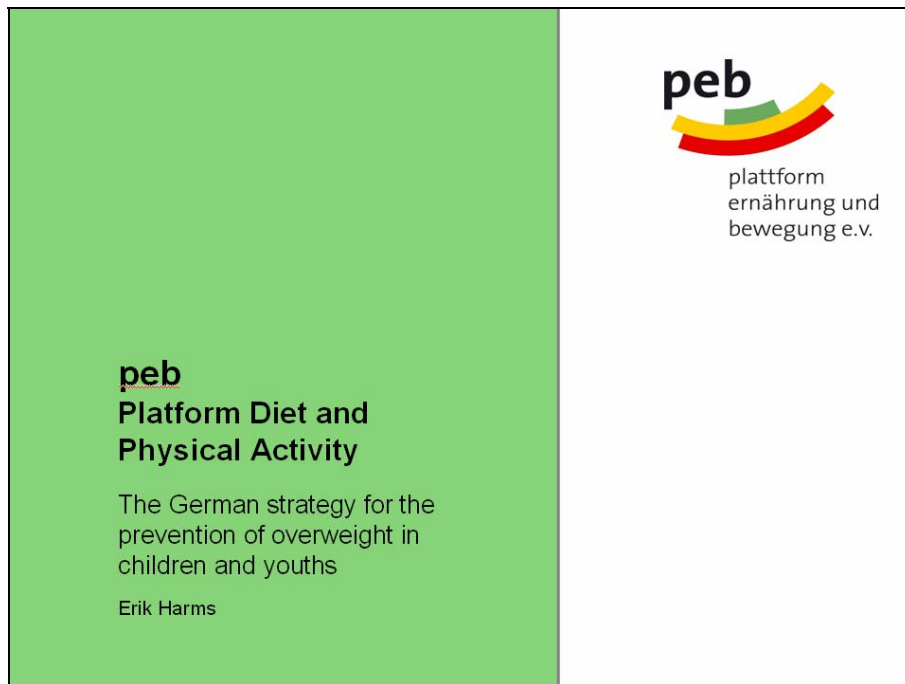



## Platform Diet and Physical Activity

The German strategy for the prevention of overweight in children and youths

Prof. Dr. Erik Harms (chairman)



I am pleased so many people have accepted our invitation and provided us with the opportunity to present the new German “Platform Diet and Physical Activity”. Seventeen months on from its establishment this platform is probably the most wide-ranging initiative for the prevention of overweight and obesity in children and young people in Europe.



### The problem

- School enrolment check-ups everywhere in Germany show a two- to three-fold **increase in overweight** and **obesity** (*adipositas*) within the last 15 years
- Overweight and obesity therefore start to develop **at pre-school age**


**Example: School enrolment check-ups in Berlin**  
(from Berlin Health Report 2003-2)

The bar chart shows the percentage of obesity in Berlin for two years: 1985 and 2001. The y-axis represents the percentage of obesity, ranging from 0 to 15. The x-axis shows the years 1985 and 2001. The bar for 1985 is approximately 3.5%, and the bar for 2001 is approximately 13.5%. A legend indicates that the light blue bars represent '% obesity'.

Year	% obesity
1985	~3.5
2001	~13.5

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The last 10 – 15 years have seen a dramatic increase in the number of overweight and obese, adipose people in all industrialised countries with a high gross domestic product. There are only two occasions when the height and weight of all citizens is measured and recorded: at birth and when enrolling at school. These school enrolment check-ups show that there has been a two-to-threefold increase in overweight and obesity in the last 15 years. The overall trend is the same everywhere but with some regional differences. However, when obesity is established at the school enrolment check-up, the condition must have developed during pre-school years, i.e. at home and in pre-school care. Here you see school enrolment check-ups in Berlin, specifically the comparison between 1985 and 2001, without doubt a very stark example.




### The problem

- Approx. **1 million children and young people** in Germany are currently overweight or obese – but only approx. 10,000 therapy places
- The long-term success of overweight therapy (intervention) is disappointing – fat children mostly become fat adults
- Long-term risks of overweight and obesity include: **diabetes type 2, high blood pressure, cardiovascular diseases, orthopaedic diseases, psycho-social impairment**
- High **individual health risk**
- Severe **strain on the health care system and the efficiency** of society as a whole

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There are currently around one million children and young people in Germany who are overweight or obese. In Germany, however, we only have around 10,000 therapy places. Unfortunately therapy does not have a high success rate and the outcome is positive only when both the child and the child's environment are receptive to the therapy. Therefore the long-term success rate of overweight therapy is very disappointing: fat children unfortunately mostly become fat adults. The long-term risks posed by overweight and obesity have been known for some time: type 2 diabetes, high blood pressure, cardiovascular diseases, a wide range of orthopaedic secondary diseases, and above all psycho-social impairment and lower self-esteem. Therefore there is a high risk to the

health of each overweight individual. The consequences place a severe strain not just on the health care system but on the efficiency of our entire society. As the impact will be felt in the years and decades ahead, there is also likely to be a corresponding explosion in healthcare costs.

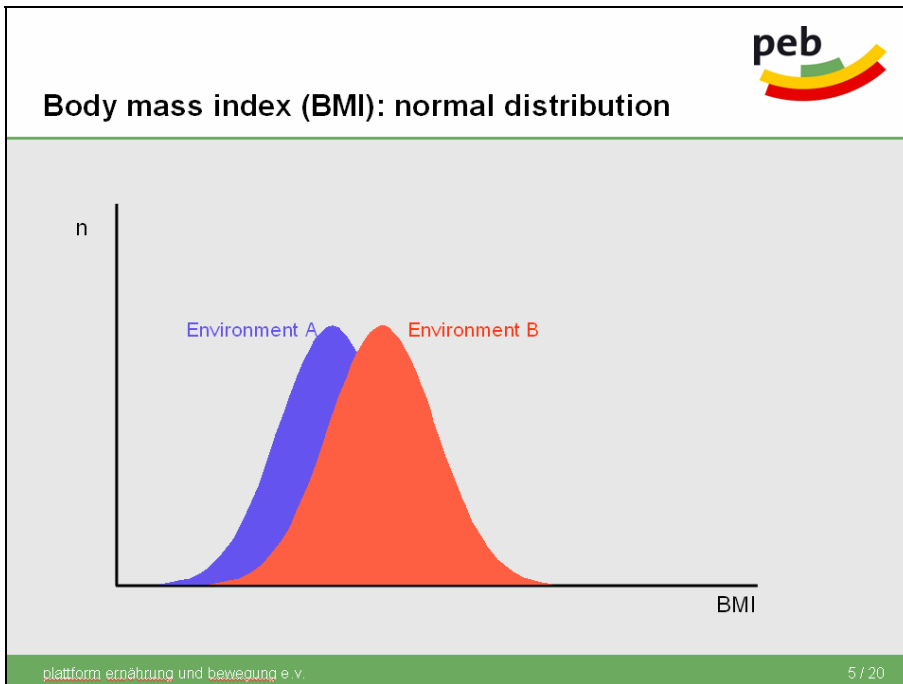


### Causes of this development?

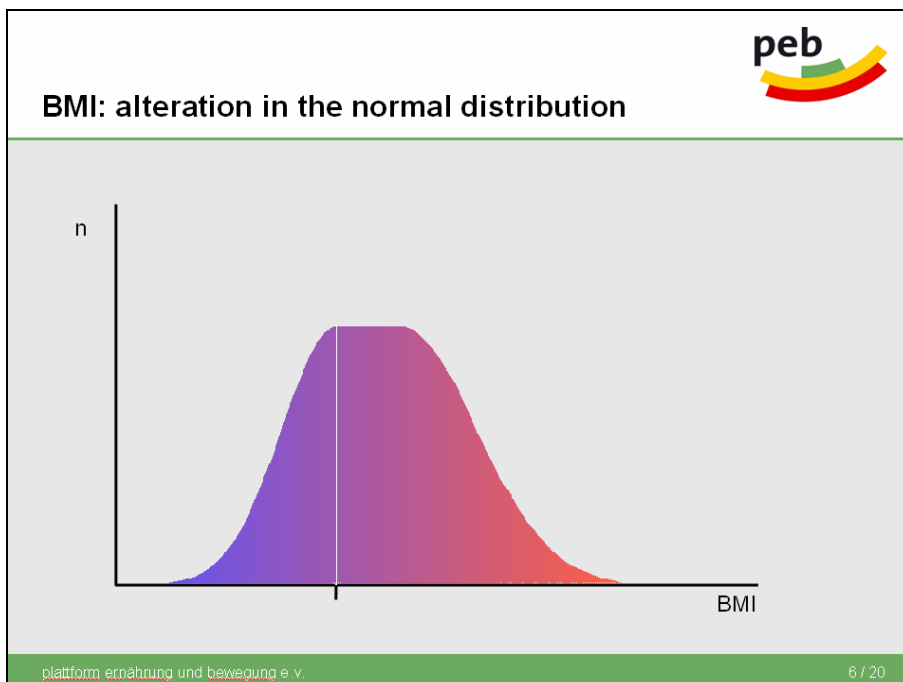
- The particular dispositions of individual citizens have certainly not changed in this short time, but
- the **lifestyle** in our society has **changed dramatically!**
- The relationship between energy intake (nutrition) and energy consumption (exercise) has become unbalanced.
- As well as **personal risk factors**, **lifestyle**, **socio-economic factors** and **environmental influences** are also responsible for this development.

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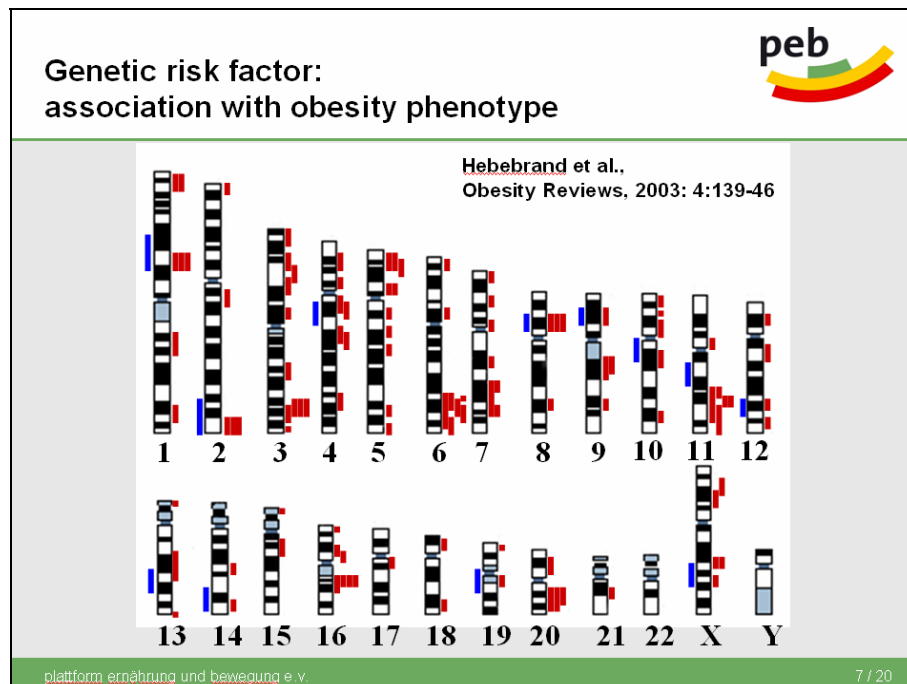
When seeking to establish the causes of this development it can be safely assumed that the particular dispositions of individual citizens have not changed in this short period. What has changed dramatically, however, is the lifestyle in our society. A healthy and stable bodyweight can only be maintained by achieving a balance between energy intake and energy consumption. A steady or increased calorie intake in combination with a reduction in physical activity leads inevitably to weight gain – the balance between nutrition and physical activity has been lost. In addition to personal risk factors, lifestyle, socio-economic factors and environmental influences are all regarded as the primary reasons for this development, even among the youngest children.



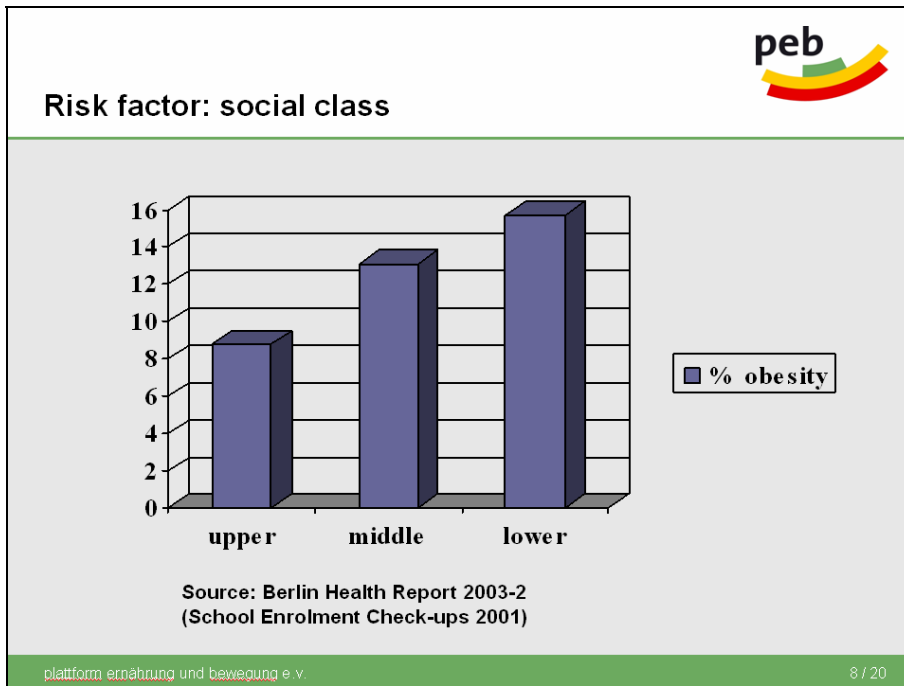
We use the Body Mass Index (BMI) – body weight in kg divided by squared height in metres – to establish whether a person’s weight is normal or they are overweight. The distribution of the Body Mass Index follows a normal distribution whereby all people between 10-90 % are defined as of normal weight. If environmental conditions change, normal distribution as a whole is moved, provided that all people respond in the same way to the change in environmental conditions. The result again would be a regular, homogeneous distribution.



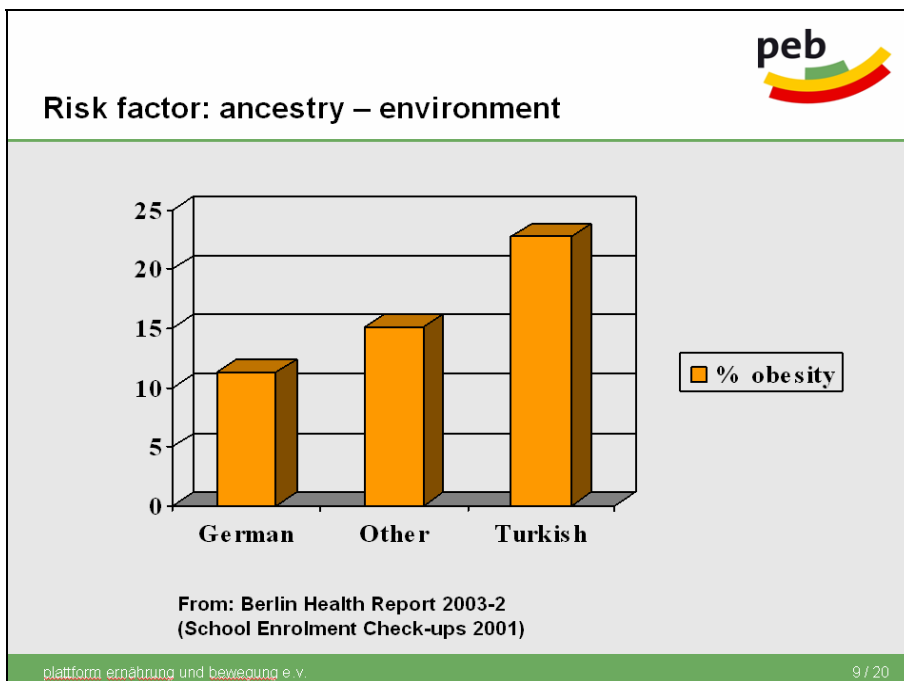
This, however, does not correspond with the reality observed. Whilst in the last ten years distribution in the area of the low or normal Body Mass Index has scarcely changed, there is a sharp distortion in the upper area of the distribution curve, with ever larger Body Mass Indices. It must therefore be assumed that we do not have a homogeneous population in which everyone responds in the same way to a change in living conditions but that we have an inhomogeneous population with a wide range of risk factors. These risk factors have now largely been established.



One is naturally the personal disposition of each individual, their genetic inheritance, which determines their energy metabolism. On this slide you can see the 46 human chromosomes in a presentation by Professor Hebebrand. Everywhere where red and blue marks are indicated there are gene clusters on the chromosome that are associated with an adipose phenotype, ie. with obesity. There is no isolated single obesity gene that can be held responsible. There is only an extremely varied, complex genetic base for which a lot of genetic information is responsible. We know from everyday experience that there are differences between people. Each of us knows people who can obviously eat whatever they like without becoming overweight, and also people for whom the opposite is true.

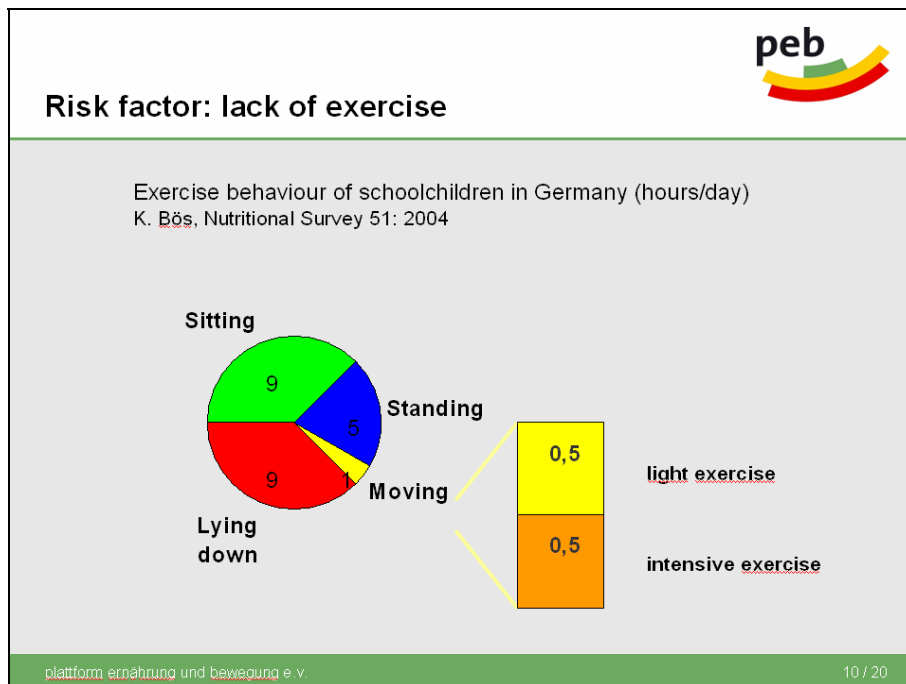


An additional clearly defined risk factor is social class. Here again you see the distribution of prevalence of obesity by social class from the school enrolment check-ups in 2001 in Berlin. That low social status is a higher risk for early development of overweight has been demonstrated by many studies.



Origin and the environment in which children live can also be particular risk factors. Those from migrant backgrounds are prone to overweight. This risk is particularly pronounced

among citizens of Turkish origin, especially boys – this diagram has also been prepared using the school enrolment check-ups in Berlin in 2001.



As our society becomes more mobile we are exercising less and less. There has been a significant increase in seated activities. Prof. Bös has studied the exercise behaviour of school children in Germany. As this graph shows, children in Germany only exercise for one hour per day, of which half an hour is light exercise and only half an hour is strenuous physical activity. This, however, is the average, which means that some children take practically no exercise whatsoever. As stated earlier, taking insufficient exercise while eating the same amount or more inevitably results in overweight.

## Risk factor: parents?

- 1 obese parent: Risk of obesity for children 40%
- 2 obese parents: Risk of obesity for children 80%

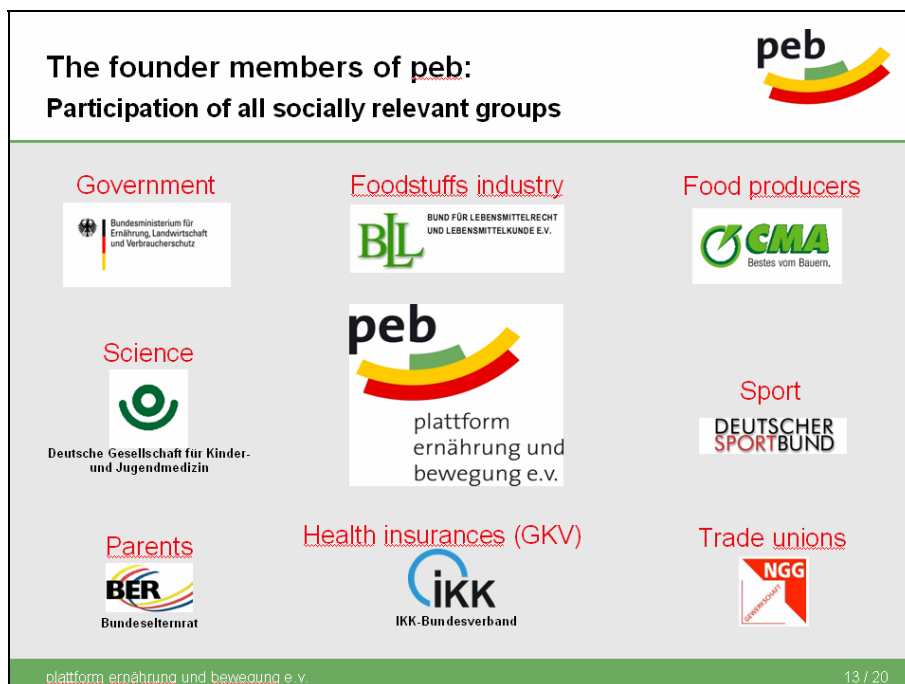
**Genetic or by example?**

Parents are without doubt a further risk factor. I know that this is not a popular thing to say. We know, however, that the risk of a child becoming obese is 40% greater if a parent is obese and that this risk rises to 80% if both parents are obese. It is open to argument whether this is due to an inherited genetic disposition or the parents setting a negative example – or even both. After three decades working as a paediatrician I must unfortunately say that there has been a shocking decline in parenting skills in many cases.


## Conclusions

- **Therapy** (intervention) is **not a suitable solution** because of its lack of success and because of the extent of the overweight epidemic
- **Primary prevention** must be started at pre-school age, before a vicious circle has set in
- **All stakeholders** who define the environment of families with children of pre-school age **must be involved** in primary prevention
- **Early planning and education must be used to ensure and maintain a balance between nutrition and exercise.**

If we weigh up what has been said so far, we must conclude that therapy (ie. intervention in cases where overweight gain has already occurred) is not a viable solution to this problem given its lack of success and the extent of our overweight epidemic. Poor habits obviously become established even in the pre-school years, vicious circles that cannot be broken by therapy. Primary prevention obviously has an important role to play in addressing the problem, and must reach children and parents. Primary prevention must be started at pre-school age to prevent vicious circles becoming established. All stakeholders who define the environment of families with pre-school age children must be involved in such primary prevention. Primary prevention must show the way at an early stage and show how to achieve a healthy balance between nutrition and physical activity. The *Platform Diet and Physical Activity* has developed from these conclusions and considerations.



Upon founding the platform the first task was to involve all socially relevant groups. These are the founder members and the societal grouping they represent: the Federal Government, represented by the Ministry for Food, Agriculture and Consumer Protection, the food industry, food producers, sport, the trade unions, the umbrella organisations of insurance companies, - very importantly – parents through the Federal Parents’ Council and science through my own society.



## Development of peb

- 9/2004                    **Founding** of peb (founding congress)  
(statute, founding programme)
- 3/2005                    Conclusion of the **1st campaign programme**
- 3/2005                    Formation of a number of **study groups**
- 10/2005                  Constitution of a **scientific expert advisory board**
- 11/2005                  Opening of own **office**
  - currently **approx. 100 members**
  - active promotion of **10 innovative projects**
  - involved in approx. **300 campaigns** throughout Germany

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The *Platform Diet and Physical Activity* was founded in September 2004. Our statute and founding programme are available here or can be downloaded from our website. The platform's members concluded the first action programme in March 2005. We have formed working groups for individual tasks. A scientific advisory board was founded in October 2005 to advise us. Its members are leading German scientists but also include for example Mrs Sandrine Raffin from the French initiative EPODE. And in November 2005 we were finally able to open our own office in Berlin. We currently have around 100 members. We are sponsoring 10 groundbreaking projects and are involved in around 300 initiatives throughout Germany in the battle against obesity.



## Campaign areas

# 1

Determining causes and developing "good practice"

# 3

Informing the public and extending the work of the platform

# 2


Knowledge transfer and training players

# 4

Trying out new approaches

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Four campaign areas were defined in the founding programme and the first action programme: 1. Determining causes and developing good practice, 2. Knowledge transfer and training players, 3. Informing the public and extending the work of the platform and 4. Trying out new approaches.



**1** Determining causes and developing "good practice"

Players and scientists work together to identify **problems** and work out **solutions**:

Examples:

-  "Prävention von Übergewicht - Ansätze in Kindertagesstätten" workshop on "Prevention of Overweight – Approaches in the Nursery Environment"
-  "Prävention von Übergewicht in sozialen Risikogruppen" forum on "Prevention of Overweight in High-Risk Social Groups"
-  "Lebensmittel für die Zukunft" conference on "Food of the Future" (planned)

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In the first campaign area players and scientists work together to identify problems and work out solutions. We have already held one workshop and a forum. These looked at preventive approaches in nursery settings and preventing overweight in high-risk social groups. We are still unfortunately a long way from establishing practicable solutions for the latter problem. A conference is being prepared on the future of food.


## 2


### Knowledge transfer and training players



Concrete **projects** and **campaigns** are developed from the knowledge gained in workshops and forums

Examples:

 Platform project on "Nutrition, Exercise, Relaxation" in nurseries

 "Im Gleichgewicht - für ein gesundes Leben" (Balanced for a Healthy Lifestyle) – campaign, through which parents receive information and assistance on nutrition and exercise right from the beginning of their child's life.

**peb** works with a positive approach: **Motivation** and **strengthening individual responsibility**

In the second campaign area we are attempting to use the results of conferences, workshops and forums to develop concrete projects and campaigns, like the one you see here for nursery settings and families.


## 3


### Informing the public and extending the work of the platform




Development of **promotions** and **media campaigns** in order to communicate the **central message** to target groups

Example:

 Currently developing "pebbles" TV spots targeting children of pre-school age

 Cooperation with Super RTL

 Planned launch April 2006




Draft, Super RTL

In the third campaign area we are developing initiatives and media campaigns to reach our target groups with our core messages. A TV spot is currently being developed that specifically targets pre-school children. This is the current stage of development of the characters. It takes some getting used to the idea of disseminating the messages via

television because it is by watching too much TV that children become predisposed to obesity. It therefore seems a paradox initially to want to use TV to bring our messages to the target group. On the other hand it is only possible to reach the target group where it is to be found if you want to reach it at all.

4



Trying out new approaches



**Networking** of existing campaigns

Development and implementation of **innovative concepts**

Examples:

-  "Besser essen. Mehr bewegen." (Eat Better. Exercise More.) – Federal Ministry for Nutrition, Agriculture and Consumer Protection's competition for concepts , which supports the networking of local and regional players and initiatives on the prevention of overweight in children.
  
-  A symposium "Bewegungs(t)räume" (Exercise in the City) (planned), which will demonstrate possibilities for improvements for regular exercise and encouraging motor activity within urban environments.

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There are already a large number of individual initiatives in Germany aimed at preventing overweight gain and obesity. Our task is to network these initiatives at a regional and local level, thereby developing a more cohesive and effective preventive strategy. This objective is also served by the Ministry for Food, Agriculture and Consumer Protection's concept competition "Eat Better. Exercise More.", which will promote 25 projects for 3 years across Germany. We are planning a symposium to be held in the autumn "Exercise in the City", which aims to improve opportunities for regular exercise and motor activities in urban environments.




**Our goal:**

To bring together as many players as possible in our whole society in order to ensure a balance between healthy nutrition and healthy exercise habits and thus promote a healthy lifestyle right from the outset.

***“In balance - for a healthy life”***

Our aim is to bring together as many players in our society as possible to achieve a balance between healthy eating and exercise behaviour and to promote a healthy lifestyle from the earliest possible age, ie. from very early childhood. The slogan of the *Platform Diet and Physical Activity* reflects this objective: “Balanced for a healthy lifestyle.”

<p><b>Thank you for your attention!</b></p>	 The right side of the slide features the 'peb' logo at the top, with the full name 'plattform ernährung und bewegung e.v.' written below it. Below the text is a photograph of a young boy with short brown hair, wearing a blue and white patterned hoodie and blue jeans. He is sitting on a wooden swing set, smiling broadly while holding a green apple in his hands. The background shows a clear blue sky and the wooden structure of the swing set.
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Thank you for your attention.