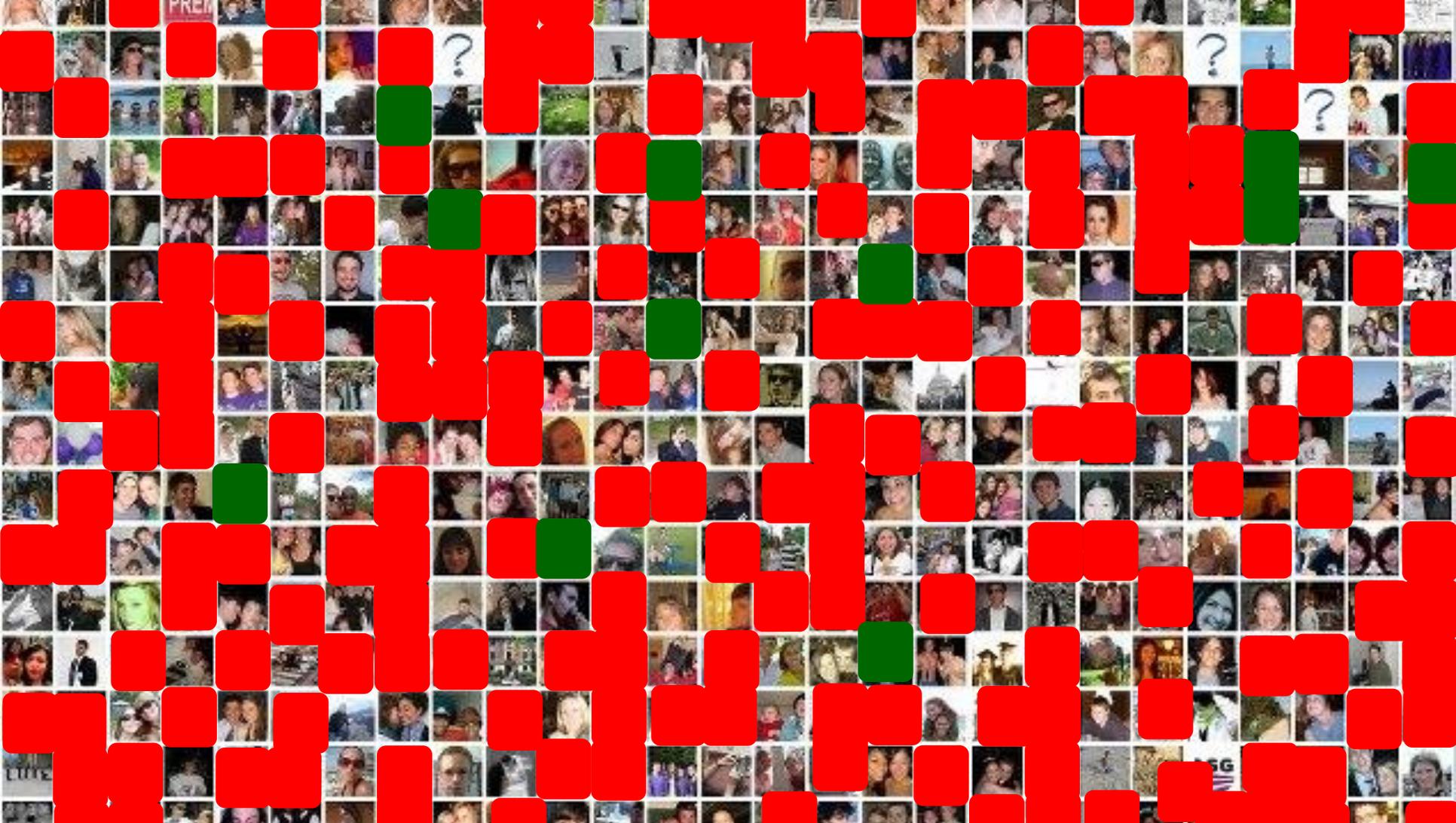


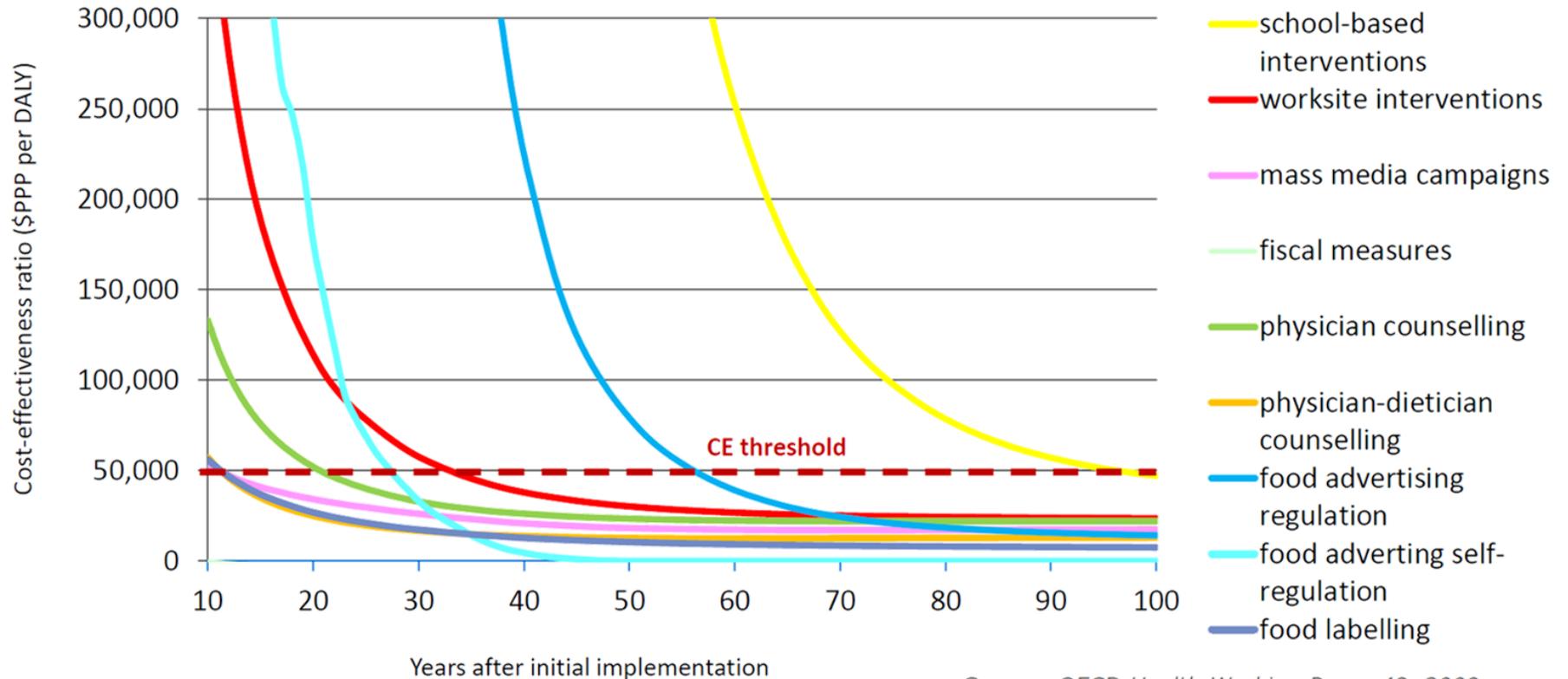


# Walk away from Diabetes

Prof. Dr. med. habil. Peter Schwarz, MBA  
Universitätsklinikum Carl Gustav Carus  
Dresden

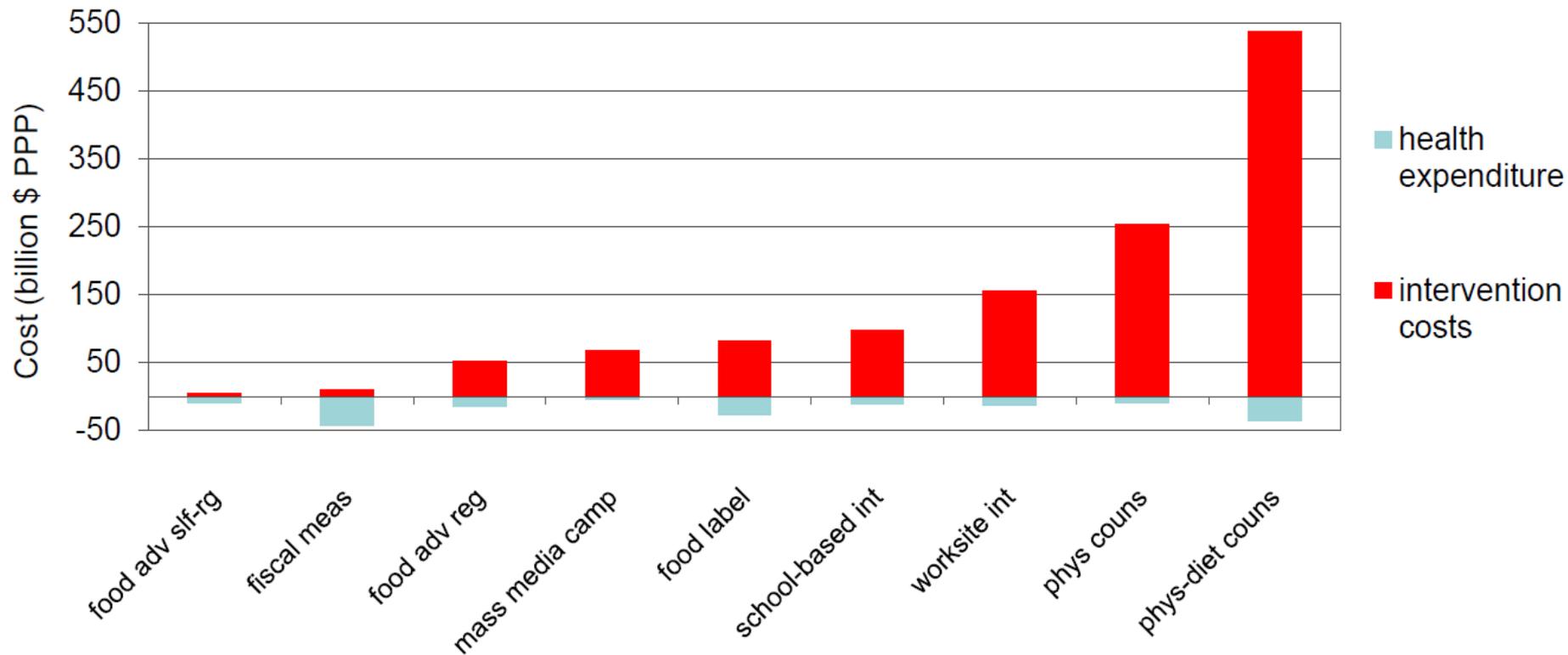


# Prevention is a Good Long-Term Investment



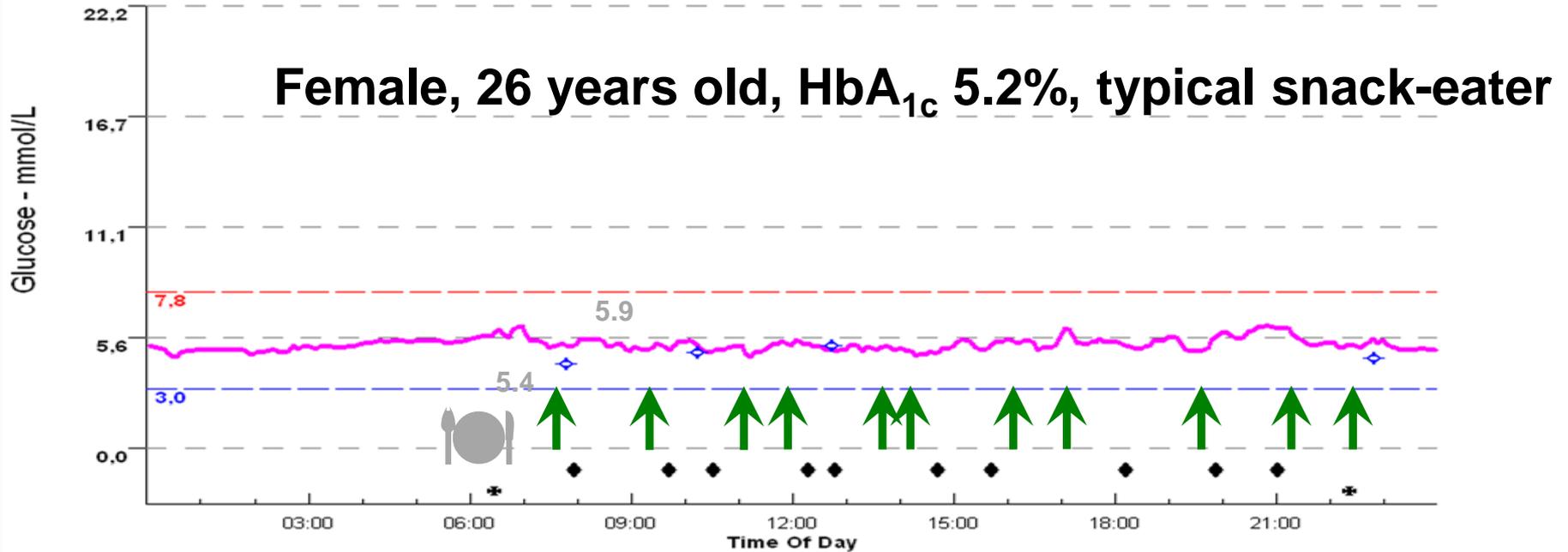
Source: OECD Health Working Paper 48, 2009

# Financial Impact

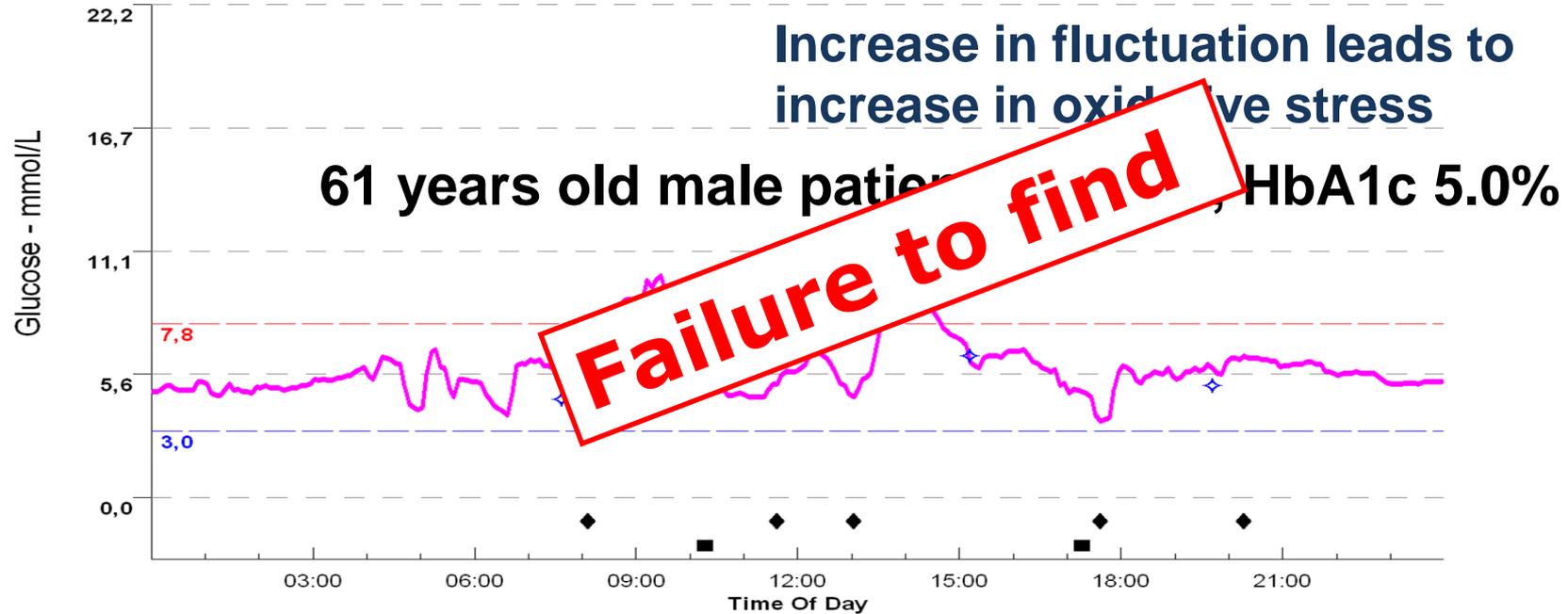


Source: OECD Health Working Paper 48, 2009

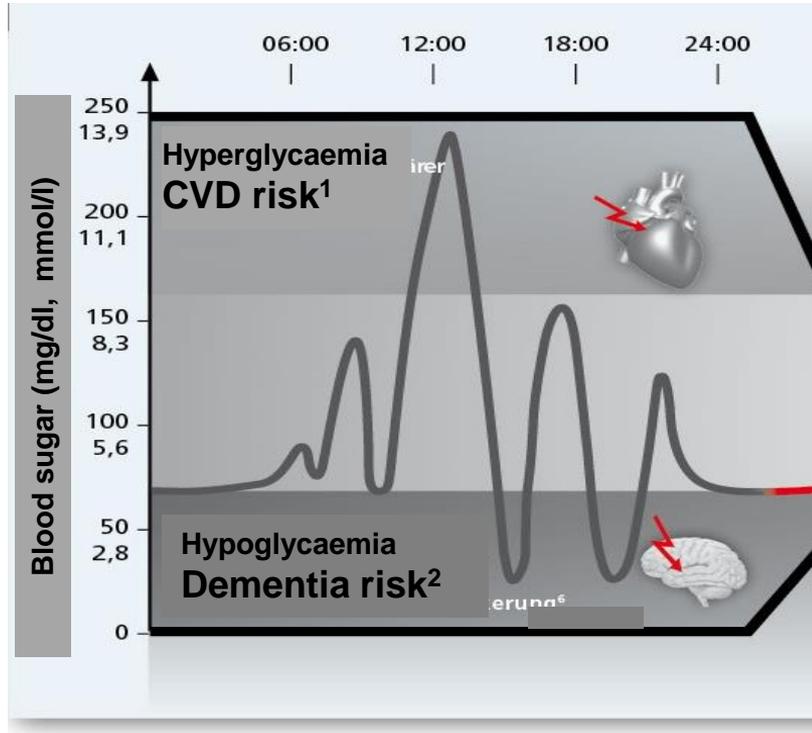
# Continuous glucose monitoring in a healthy person



# Prediabetes starts with postprandial glucose peaks



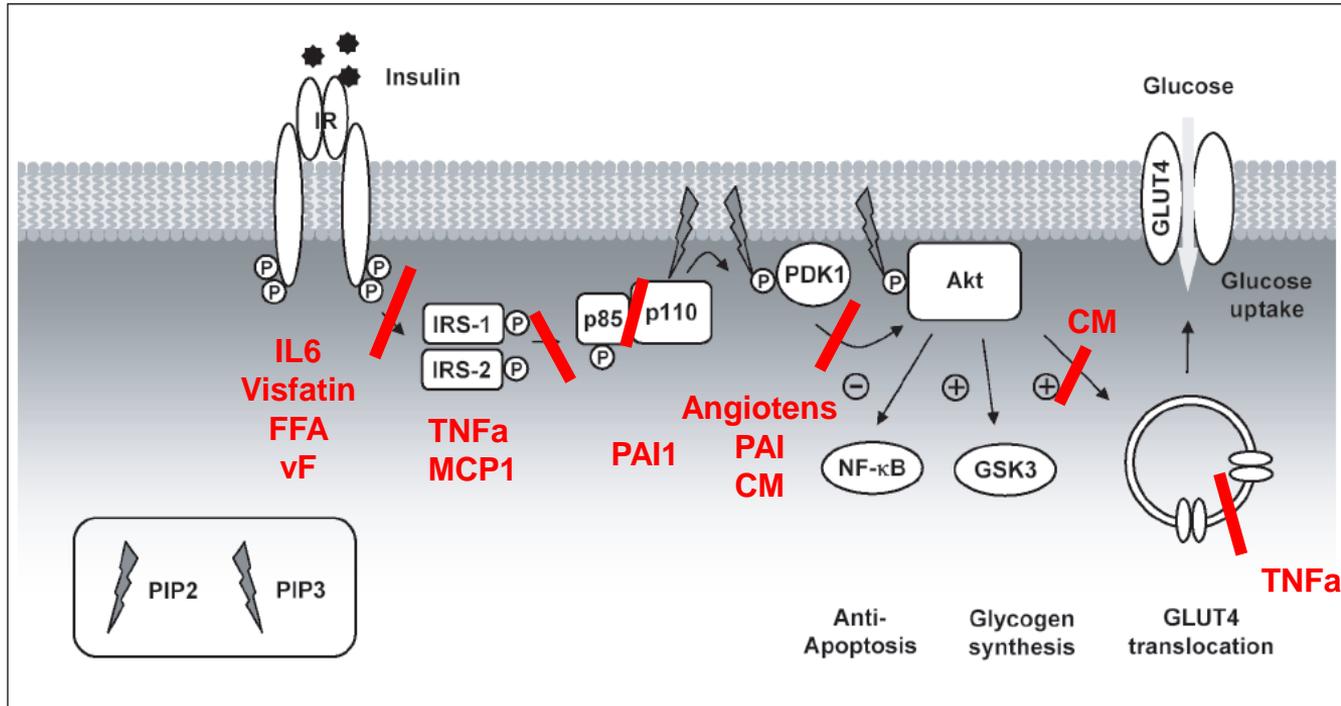
# Effective Reduction of glucose variation



**Visceral Fat!**

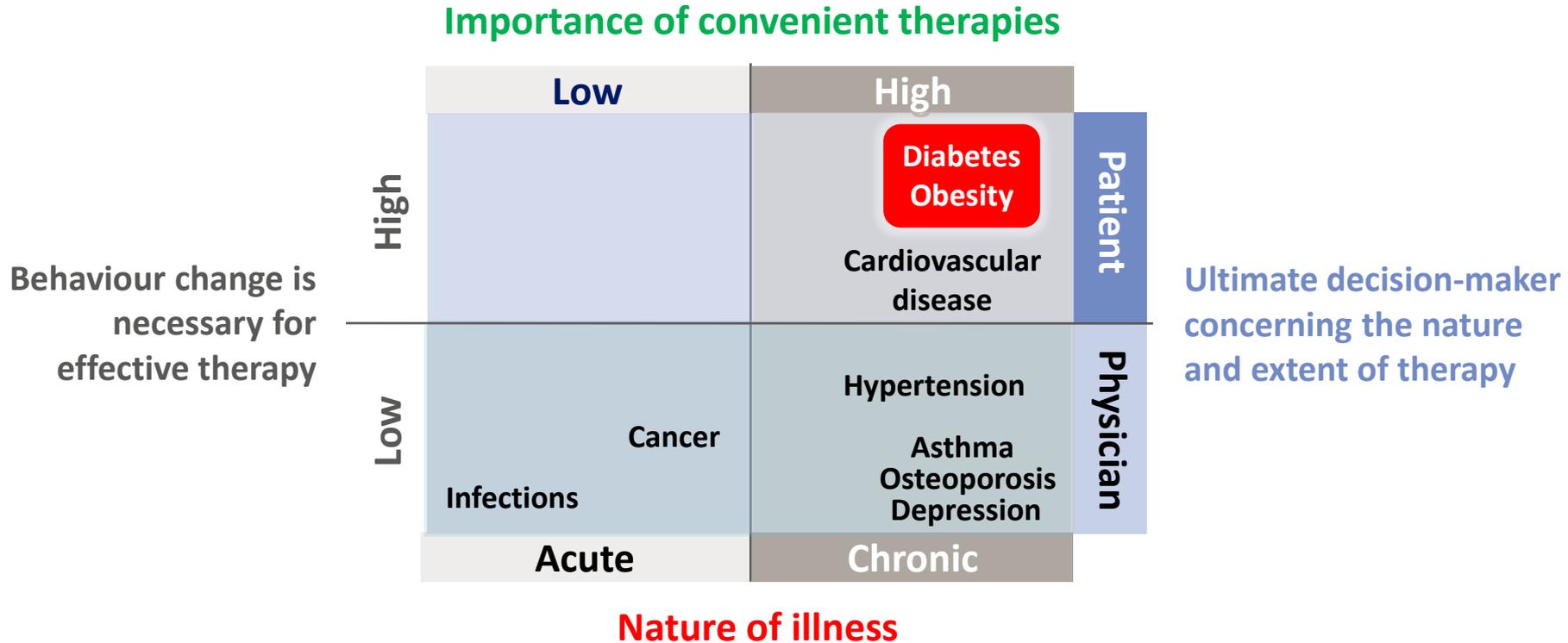
**Liver Fat!**

# Visceral fat and glucose tolerance



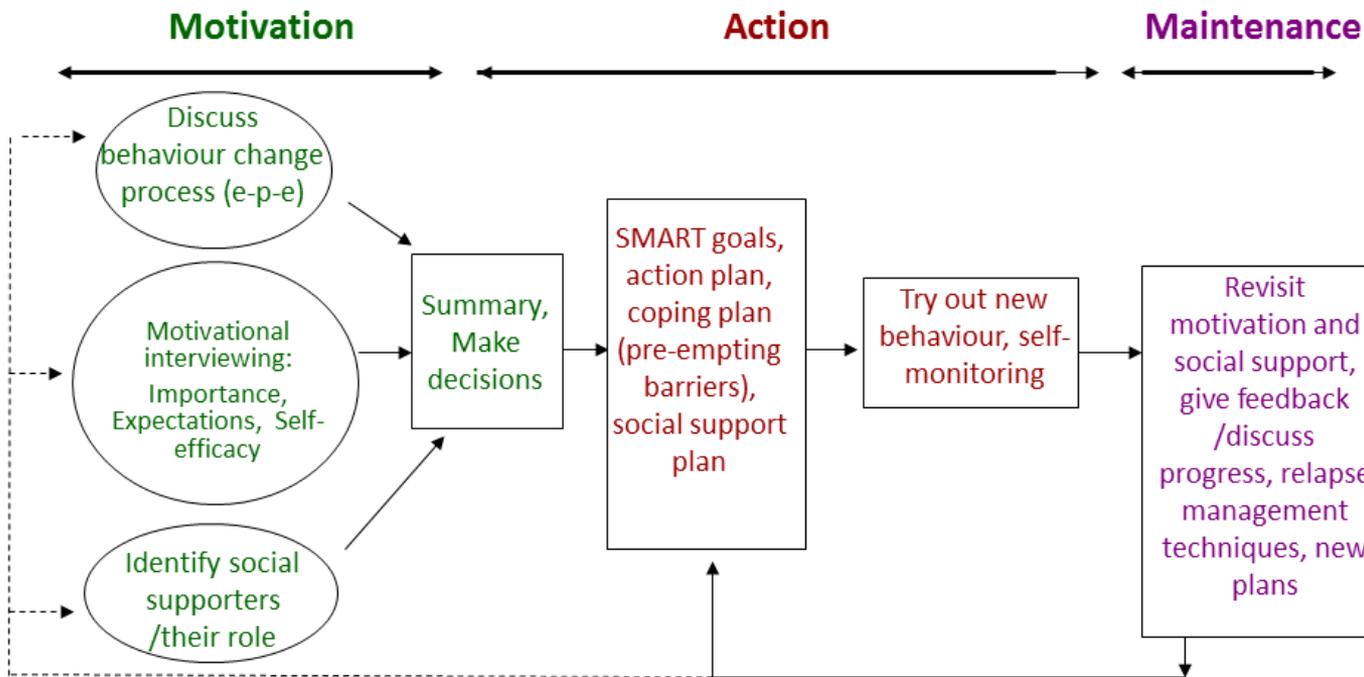
**Prevention must  
address needs**

# Quality of life drives adherence



- successful disease management includes patient behaviour change

# Behaviour Change works in stages



**Astrid Krag, MoH Denmark**

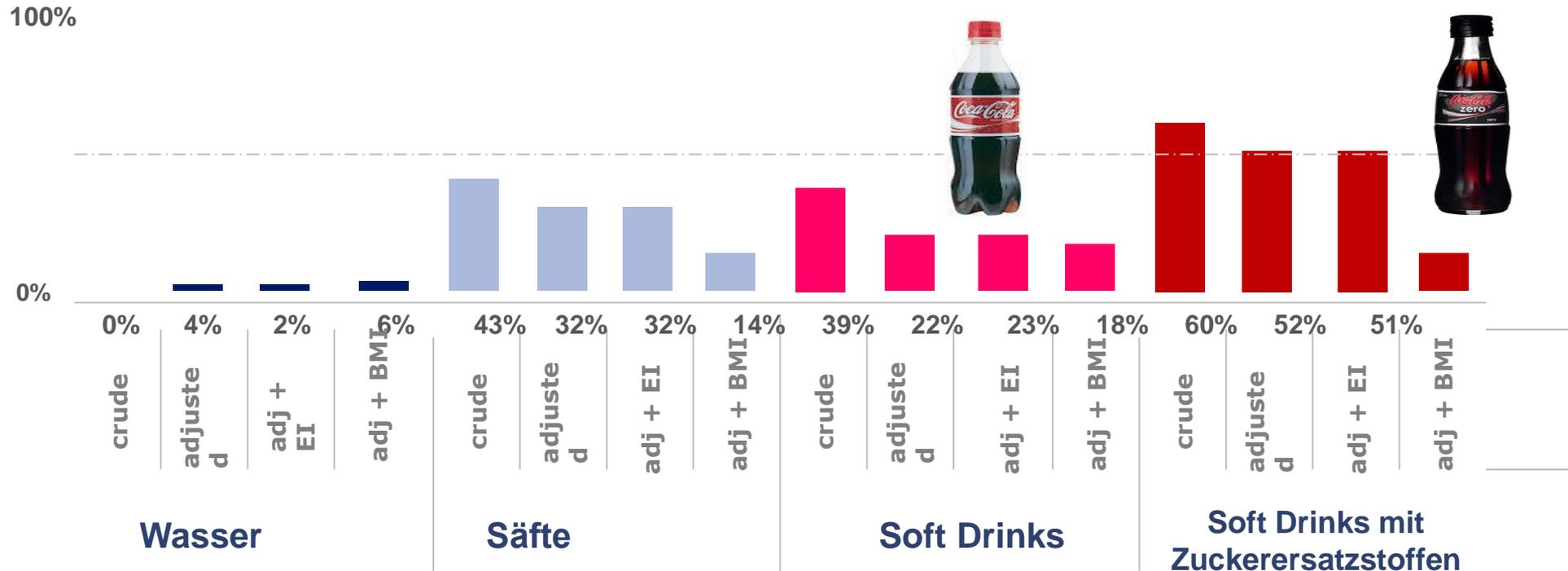
Self-management is the only way. Educational programs must support Self-management and informed decision making

**Desislava Dimitrova, DMOH, Bulgaria**

Chronic Care Management is the most effective way to improve Self-Management

**Prävention  
becomes  
specific**

# Wie erhöht ein Softdrink (336 g) das Risiko für Diabetes mellitus



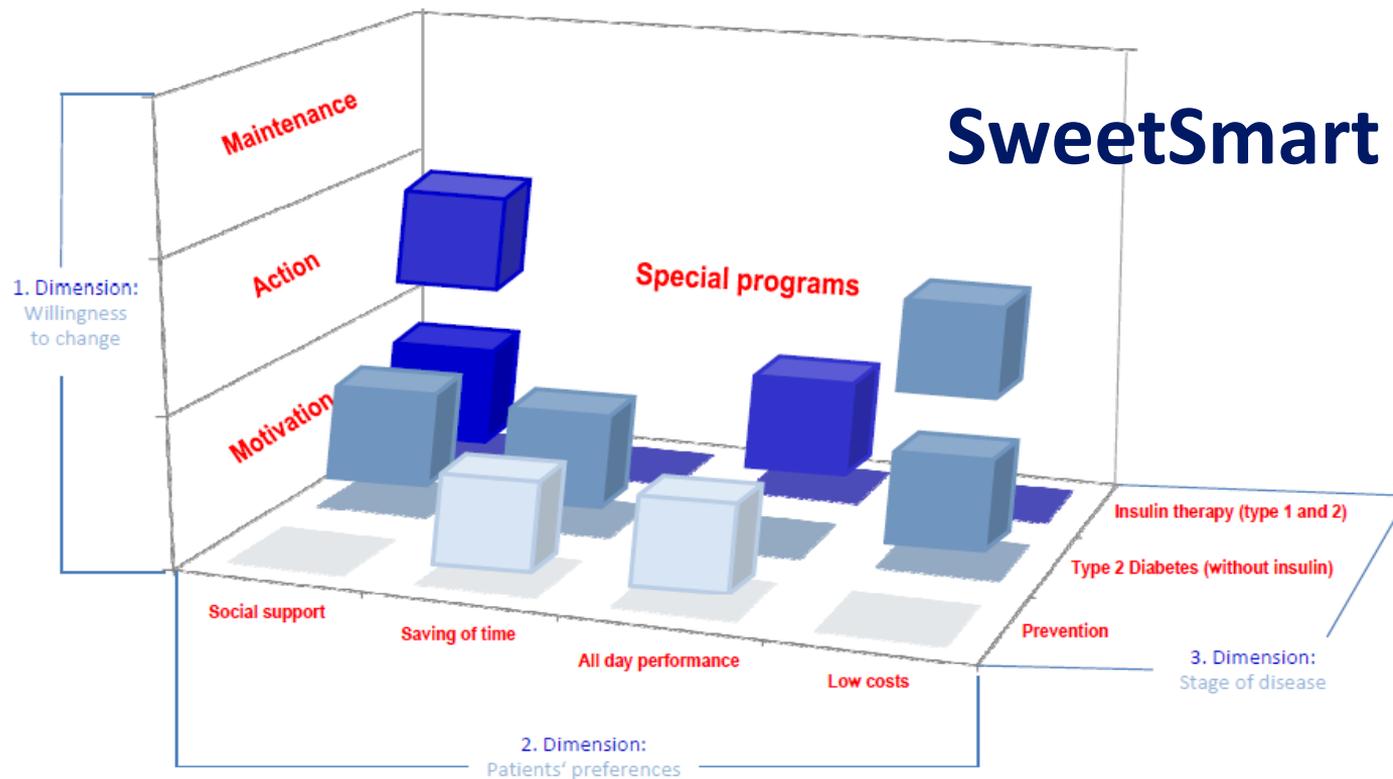


**This is our lifestyle**

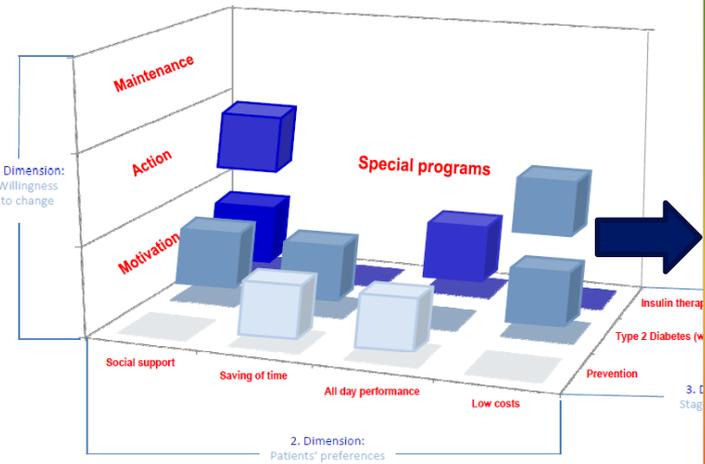


**Prevention  
becomes  
individualized**

# Individualism - strength for empowerment



# Competence Toolbox



## Assessment and risk stratification

|                       |                             |                                  |                                   |                                      |                            |                                |
|-----------------------|-----------------------------|----------------------------------|-----------------------------------|--------------------------------------|----------------------------|--------------------------------|
| Hypoglykämie          | Individuelles Essverhalten: | Bewegung mit Handicap            | Keine Zeit für Bewegung?          | Motivation fehlt:                    | Rückfall Prophylaxe 4      | 1000 Schritte mehr wöchentlich |
| Hyperglykämie         | Esstagebuch                 | Bewegung und Essen               | Familie in Bewegung               | Motivationsanalyse                   | Motivational Interviewing  | Ich will nicht                 |
| Reisen                | Ballaststoffe               | Welche Bewegung schafft wieviel? | Sportvereine                      | Ich traue mir das nicht zu           | Mot.-Aufbau                | Ich kann nicht mehr            |
| Familie               | 5 am Tag                    | Schrittzähler                    | Anlaufstellen, regionale Angebote | Selbstwirksamkeit stärken,           | Erfolgserlebnisse schaffen | Wettbewerb                     |
| Schwangerschaft       | Nährstoffzusammensetzung    | Saisonale Bewegungsarten         | Individuelle Risikoanalyse        | Ich weiß nicht, was ich machen soll! | Rückfall Prophylaxe 2      | Depression                     |
| Gestationsdiabetes    | Trinken                     | Bewegungstagebuch                | Diabetes                          | Unterstützung bei Zielsetzung        | Rückfall Prophylaxe 3      | Smartphone                     |
| Diabetischer Fuß      | Snacken                     | Individuelle Trainingspläne      | Metabolisches Syndrom             | Ich fühle mich alleingelassen        | Reflektive listening       | Sport                          |
| Bewegung mit Diabetes | Mahlzeiten Gestaltung       | Spezielle Bewegungsarten:        | Risikostratifizierung             | Soziale Unterstützung rekrutieren    | Change Talk                | Was will ich                   |
| Partnerschaft         | Essen und Job               | Was brauche ich dafür?           | Ernährungstagebuch                | Keine Beratung gewünscht:            | Confidence ruler           | Meine Angehörigen              |
| Küchenfertigkeiten    | Saisonales Essen            | Wie starte ich?                  | Energieverbrauch bei Bewegung     | Rückfall Prophylaxe 1                | Aktionsplan                | Ziele                          |
| Alkohol               | Allergien Unverträglichkeit | Wo? Mit Wem?...                  | / Genussmittel                    | (Urlaub, Feste                       | 10000 Schritte am Tag      | Meine Bedürfnisse              |

**Prevention  
becomes digital**





# Innovative patient education – individualized but centralized

- Patient receives education online through social education network
- Educational modules are selected based on persons individual needs
- Educational content vary based on educational medical and motivational needs
- Interactivity and peer support assure adherence

The screenshot displays the 'Patientenakademie' website interface. At the top, there is a navigation bar with 'Home', 'Schulungen', and 'Login'. The main content area features a header 'Die Patientenakademie' with a sub-header 'Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aenean commodo ligula eget dolor. Aenean massa.' Below this is a green line graph and a 'mehr Informationen' button. A video player shows a man in a suit speaking, with a 'Start Assessment' button overlaid. Below the graph, there is a section 'Unser Schulungsangebot' with three cards: 'Dem Diabetes davonlaufen', 'Thema 2 Headline', and 'HealthThema'. Each card contains a title, a sub-header, an icon, a paragraph of text, and an 'Action button'. At the bottom, there is a section 'Testen Sie Ihr Risiko' with a paragraph of text and an 'Action button'. On the right side, a smartphone displays a video of the same man in a suit, with a play button and a progress bar at the bottom.

**Prevention  
becomes  
individual**

# 10.000

steps a day from the age of 22 prevents any chronic disease

# 1.000

additional steps a day reduces postprandial glucose by **1,5 mmol/l**

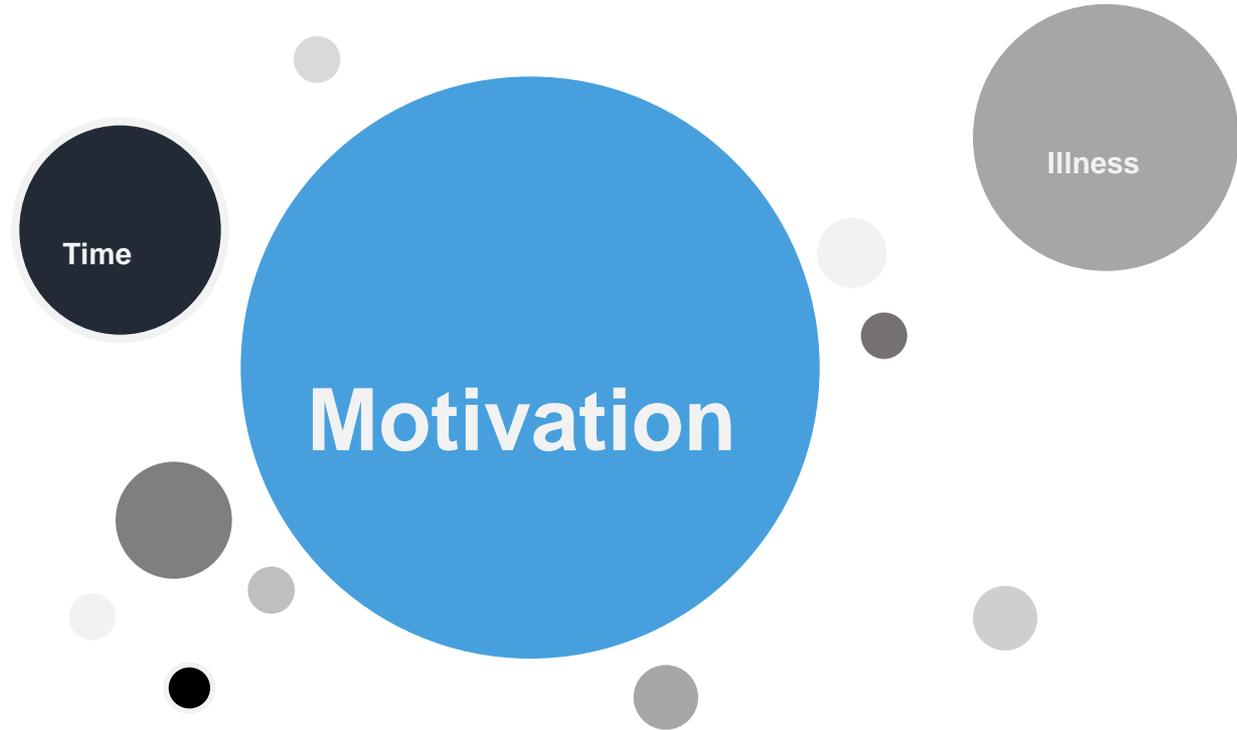
**27000**

**How many hours a day are we inactive?**

**23.40**



# What keeps us from walking 10.000 steps?



# What makes us walk the 10.000 steps – findings from motivational research



## Immediate benefit

Our behavior has to produce an immediate reward for us.

We are much more motivated to do something if this behavior brings an immediate reward for us.



## Perspective of loss

If we can prevent loss by doing something, we will do it.

The perspective of losing something motivates us more than the perspective of winning something.



# The Anker-Principle

Motivation through monetary Incentivation



# Anker-Prinzip – verankert die Motivation für ein Ziel am Gewinn bzw. Verlust von Geld



## Wette auf die eigene Performance

Der Einzelne wettet darauf, dass Ziel zu erreichen und bestimmt einen Betrag, den er verliert, sollte er das Ziel verfehlen.



## Motivation durch Aussicht auf Verlust und Gewinn

Die Aussicht auf den Verlust des Einsatzes bewirkt einen Motivationskick, ebenso wie die Aussicht auf einen Zugewinn bei Zielerreichung.



# Masterarbeit Anker5-amTag

## Anica Jakubzyk



- WhatsApp-Group(Anker Principle) vs. Paper checklist (no Anker support)
- Goal: 2 Portions fruits & 3 Portions vegetable daily
- Making a photo and post your meal within the group in a ready to eat format @Mario:👍G 👍0
- Evaluation per hand
- Anker bid was valid for 7 days
- Participants post the weekly bid within the group
- All losses were distributed to the winners





# Anker5-aDay - Results



Anker5-amTag

## WhatsApp-Group

- Mean increase from **3 portions /Day** –  
from 2,4 to 5,4 Portions a day
- In 96% of te cases the people reached the  
5 Portios a day

## Paper checklist

- Mean increase from **0,3 portions /Day** –  
from 2,2 to 2,7 Portions a day
- In 12% of te cases the people reached the  
5 Portios a day

# Apps for physical activity

# Apps for PA on the market



# Apps for Physical activity

## Pedometer APP`s

- Use movement sensor
- Run in the background
- No start/Stop necessary
- Count steps, calculate distance and burned calories
- Optimal for daily physical activity

## Fitness Apps

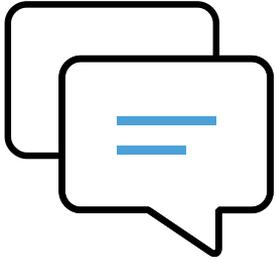
- Use GPS
- Tracking of training units
- Start/Stop necessary
- Optimal for sportive activity not effective for daily activity

## Lifestyle Apps

- Activity sensor & GPS
- Count steps automatically in the background
- Start/Stop necessary to track training unit tracking form nutritional behaviour
- Tracking of sleep quality

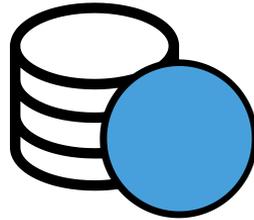
Linking with Gadgets

# Apps for Physical activity - Motivators



Feedback

Jawbone, Argus, Runtastic,...



Monetary incentive

Pact, miwalk, Nexercise,...



Gamification approach

Zombies Run, Bring Back my Pets, Max-My Fitness Dog,...

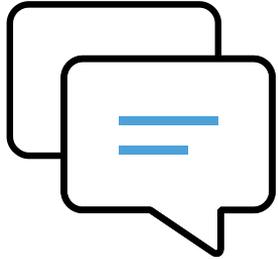


Training plans

C25K, fitbit, dacadoo,...

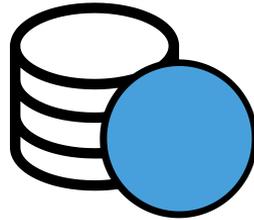


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Training plans

C25K, fitbit, dacadoo,...





# Apps for Physical activity - Facit

- Many many apps and gadgets are on the market
- Only a few APP`s which work with monetary incentivitation and support



# Apps for Physical activity - Facit

- Many many apps and gadgets are on the market
- Only a few APP`s which work with monetary incentivitation and support
- There is no App available which support the user with an sustainalbe healthy lifestyle change



# AnkerSteps

With the Anker Principle you can reach 10.000 steps a day





# 10.000 Steps a day With AnkerSteps you will achieve this

The Motivational App AnkerSteps helps you to reach your steps goal  
and rewards your for every active day with cash money.



[www.ankersteps.com](http://www.ankersteps.com)



# How AnkerSteps works



## Commit to you!

You agree to walk 10.000 steps per day and you set an amount of money that you will give to other AnkerSteps users in case you lose your bet.



# 1

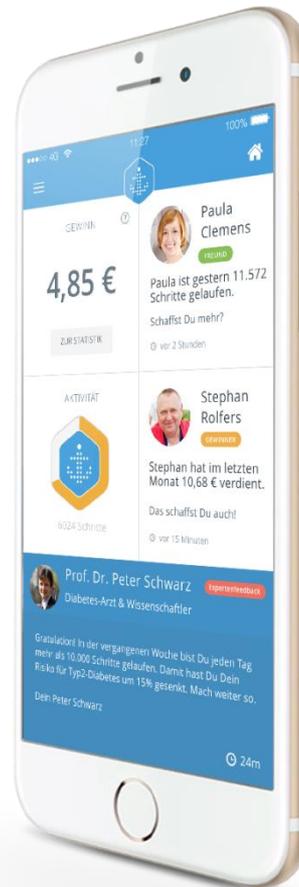


# How AnkerSteps works



## Win your game!

The perspective of losing your stake if you don't reach the 10.000 steps will give your motivation an unexpected boost.



# 2



# How AnkerSteps works



## Get rewarded!

For each successful day you keep your stake and get a reward on top, payed to you by AnkerSteps users who walked less than 10.000 steps that day.



# 3



# AnkerSteps – intuitiv und alltagstauglich

- ✓ Synchronisation with pedometers and pedometer APP`s like Fitbit, Jawbone, Google Fit, S-Health, I-health etc.
- ✓ easy transaction for winning stakes and losses through PayPal
- ✓ „Lazy days“



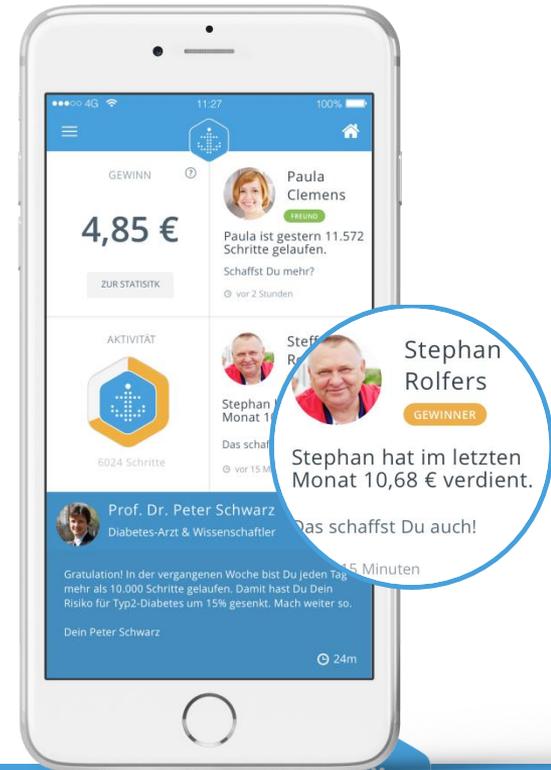
# Add. Motivators – Performance dependent Expert feedback

- Personalized motivational messages
- Feedback about the health effect of the own daily physical activity
- Experts: Physician, Sport and nutritional scientist, prevention manager

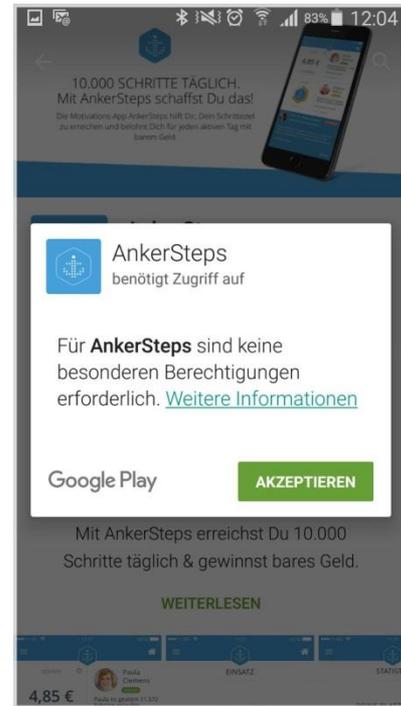
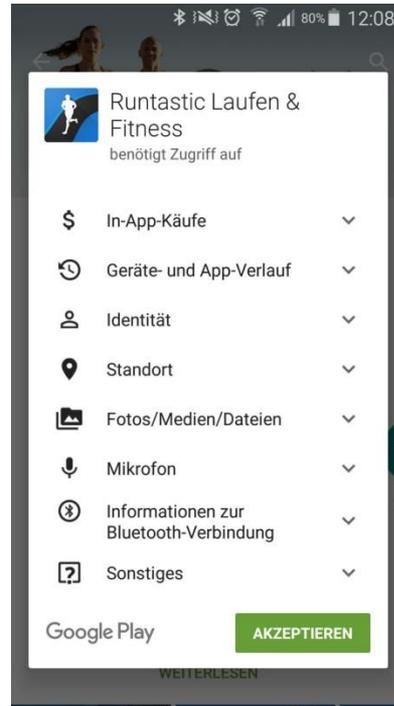
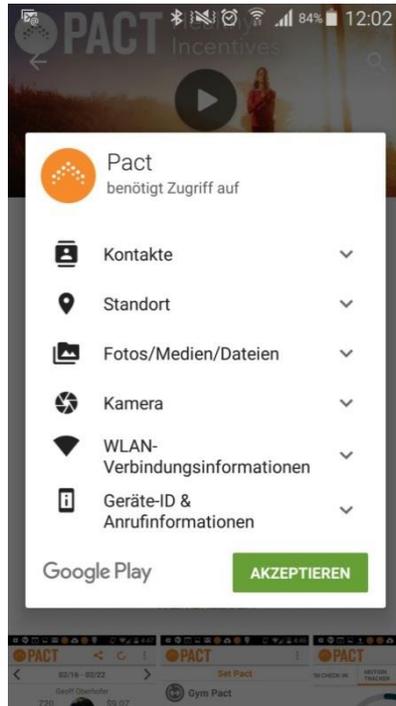


# Add Motivators – social support

- Via E-Mail and Facebook invite friends to join
- Share step count and incentives, records and pay out
- Incentive for every new friend to join



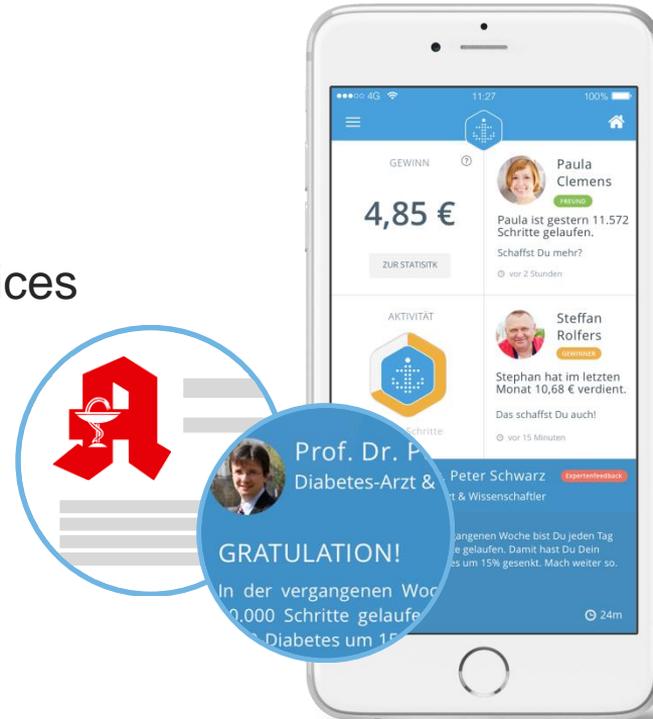
# Data safety: AnkerSteps does not save data



# Reach your patients with AnkerSteps

## Via Push-Messages within the App

- Personalised messages
- Invitation to events, Programs, Services
- Text with 650 icons & Weblinks,
- individual Layout



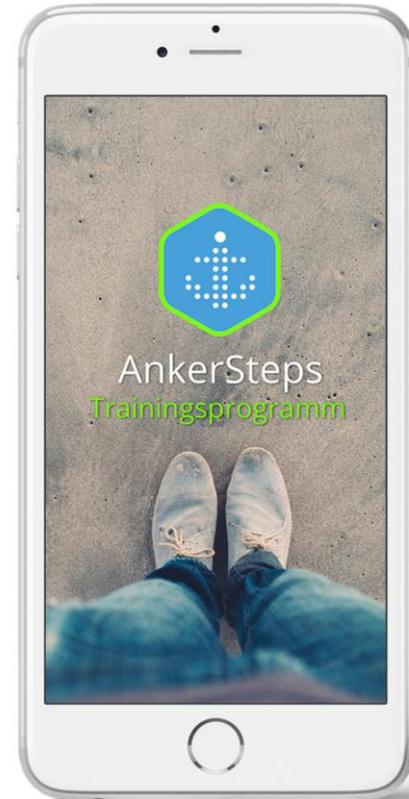
# With the PromoCode-System you can contact your clients directly

- PromoCode for Online- and Prevention Campaign's „STOP DIA“
- Accurate linkage from your clients to your campaign
- targeted contact to the clients
- Share the win



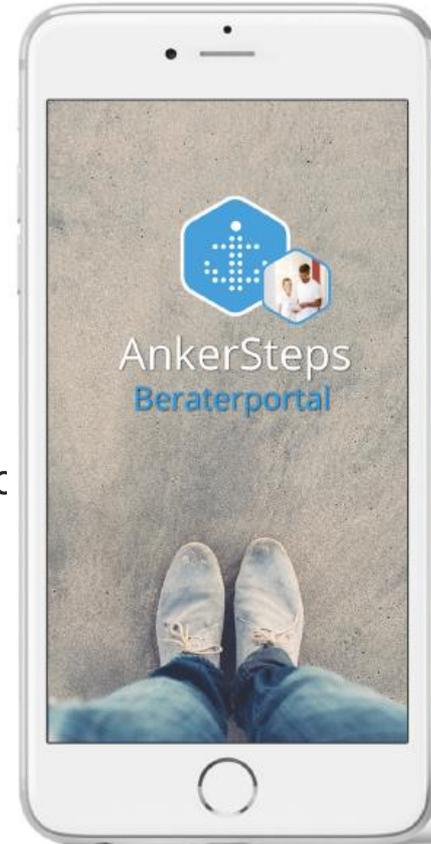
# New AnkerSteps Feature: Training program

- This feature breaks barriers to start daily physical activity
- supports the User STEP by STEP on the way to his personal step goal auf dem Weg zu seinem persönlichen 10.000 Schritteziel
- For every user an individual training



# New AnkerSteps Feature: Coaching portal

- Health support 3.0
- This Feature offers health care professionals and – workers to coach and communicate with their clients and patients through AnkerSteps



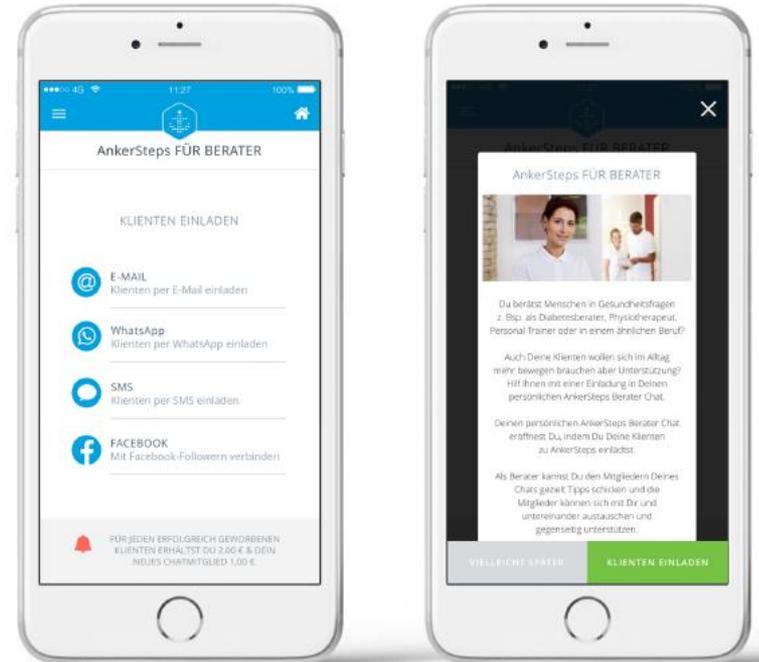
# New AnkerSteps Feature: Coaching portal

Advantages for the Coach:

- Coach-Group-Chat
- One-on-one-Chats
- Send messages directly to the client into the APP

Advantages for the client:

- Social network with others in the group
- Coaching via Handy / Smart Phone
- Private chat with the coach





# 100.000 Persons participating with AnkerSteps

Participation 1 year, 60% success rate

## Improvement of

- glycaemia -2,5 HbA1c-%
- blood press. -5 mm/Hg
- fat mass -3,7 kg
- cholesterine -17%
- triglycerides -12%

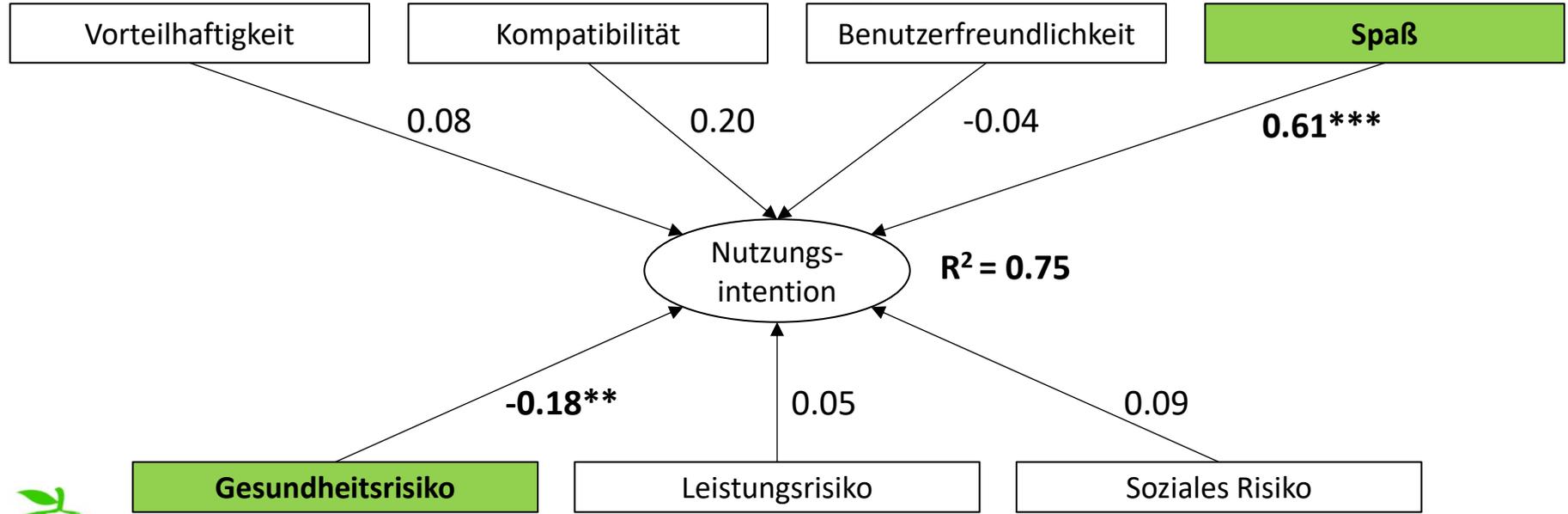
- Depression 48% (1200)
- Metabolic Syndrome 78% (5700)
- AMI 68% (80)
- Stroke 43% (56)
- Dementia 52% (230?)
- Diabetes 58% (8000)



# Ergebnisse Hauptstudie: Akzeptanz und Barrieren

## Anker Steps

Fazit: Der Spaß an der Nutzung ist der wesentliche Einflussfaktor für die Akzeptanz von Anker Steps. Eine Barriere liegt im vermuteten Gesundheitsrisiko.



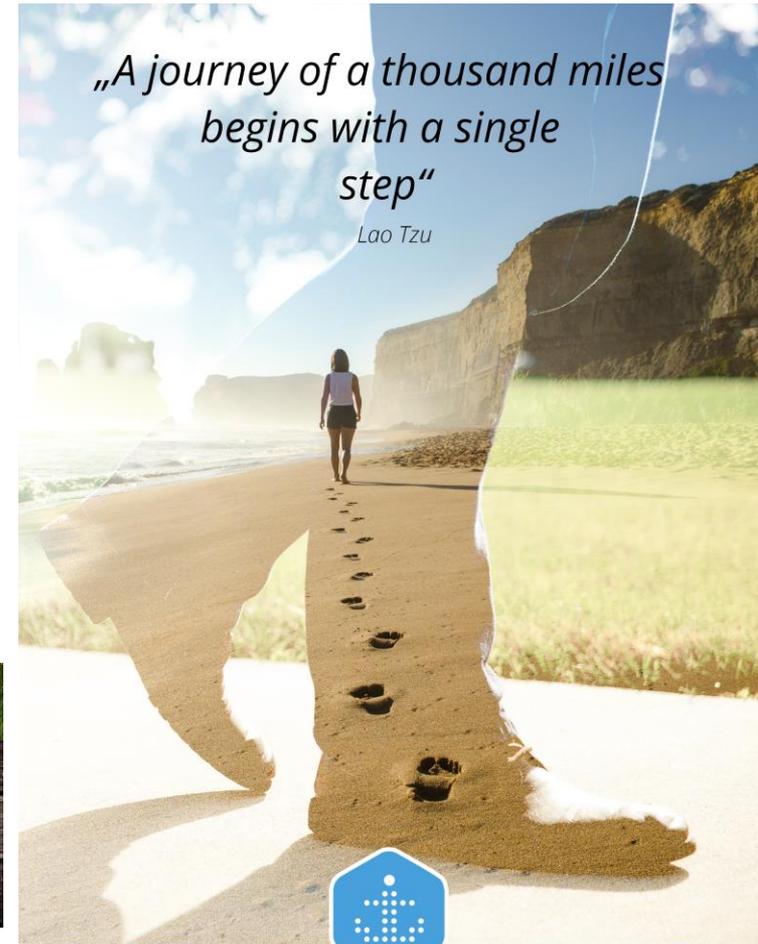
**10.000**

# AnkerSteps Onlinemarketing



AnkerSteps im Social Media Bereich

- die Marke AnkerSteps präsentiert sich auf Plattformen wie Facebook, Instagram und LinkedIn
- Themen rund um 10.000 Schritte, Motivation, Bewegung und Gesundheit







north america: 681  
africa: 130

south america: 135  
asia: 415

europa: 1444  
australia: 111





**Inter-  
connected  
digital  
tools**