

Obesity and diabetes: taking the patient view

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International
Diabetes
Federation



- The IDF
- The diabetes and obesity epidemic
- The factors that predispose to type 2 diabetes
- Policies to support prevention of type 2 diabetes
- From policies to people



THE INTERNATIONAL DIABETES FEDERATION

230 member associations
representing 2 million members
in 170 countries



IDF is
the legitimate
voice
of people with
diabetes



The NCD Alliance
Putting non-communicable diseases
on the global agenda



Diabetes: A global emergency



Estimated number of people with diabetes worldwide
and per region in 2015 and 2040 (20-79 years)

North America and Caribbean

2015 **44.3 million**
2040 **60.5 million**

Europe

2015 **59.8 million**
2040 **71.1 million**

Middle East and North Africa

2015 **35.4 million**
2040 **72.1 million**

Western Pacific

2015 **153.2 million**
2040 **214.8 million**

South and Central America

2015 **29.6 million**
2040 **48.8 million**

Africa

2015 **14.2 million**
2040 **34.2 million**

South East Asia

2015 **78.3 million**
2040 **140.2 million**

World

2015 **415 million**
2040 **642 million**





Adults who died from diabetes, HIV/AIDS, tuberculosis, and malaria



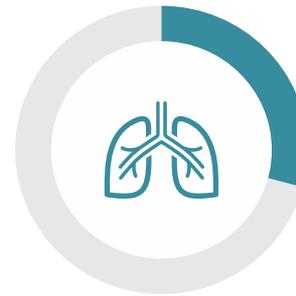
5.0 million

from diabetes
2015
IDF



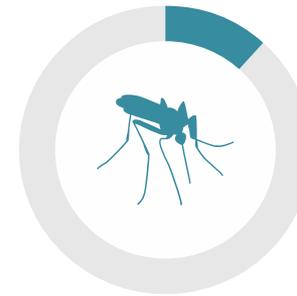
1.5 million

from HIV/AIDS
2013
WHO Global Health
Observatory Data
Repository 2013



1.5 million

from tuberculosis
2013
WHO Global Health
Observatory Data
Repository 2013

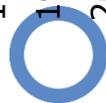
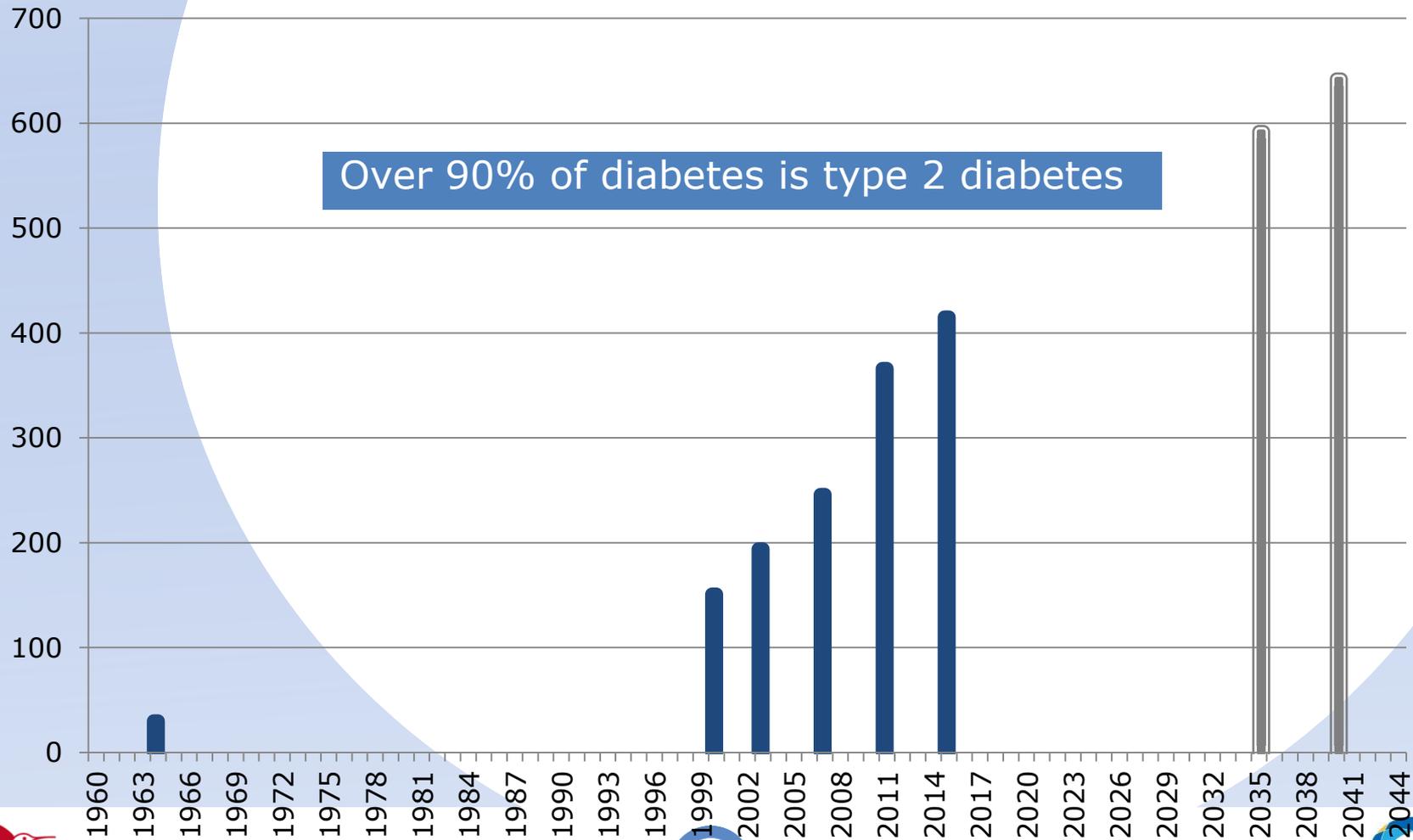


0.6 million

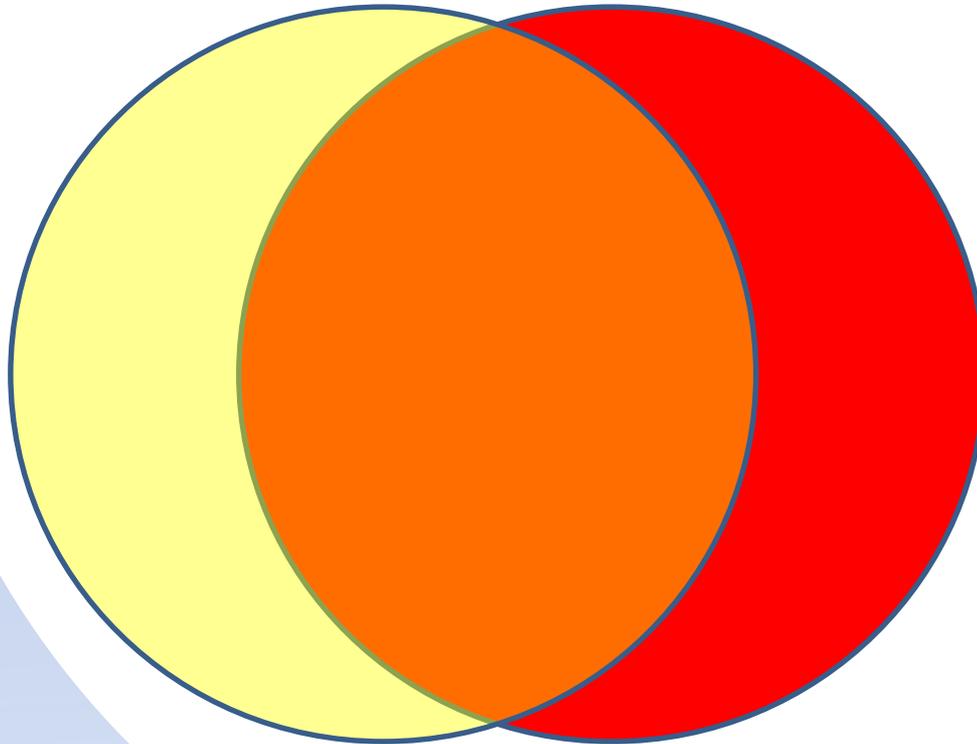
from malaria
2013
WHO Global Health
Observatory Data
Repository 2013



Estimated cases of diabetes (millions)

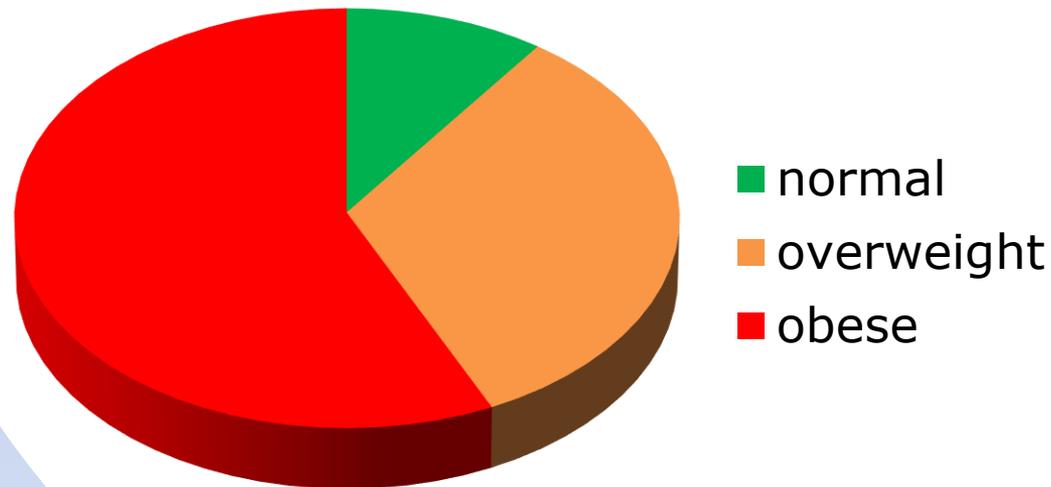


Type 2 Diabetes and Obesity



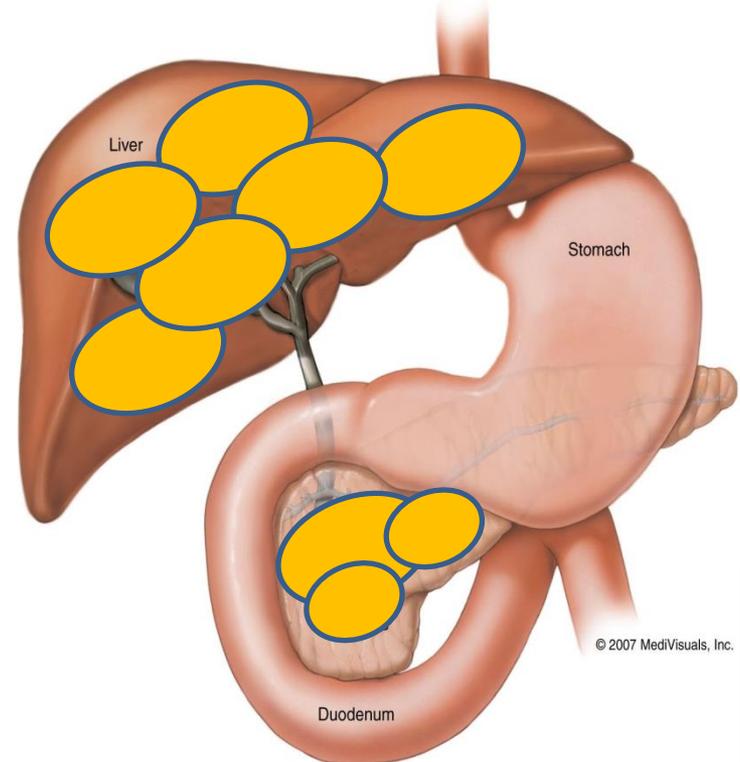
Type 2 Diabetes and Obesity

Body weight at diagnosis of type 2 diabetes



Fat on the inside

- Type 2 diabetes results from accumulation of fat in the liver and pancreas
 - Liver fat: glucose stores leak into the bloodstream (insulin resistance)
 - Pancreatic fat: pancreas cannot produce enough insulin
- High insulin levels lead to increased storage of fat in organs

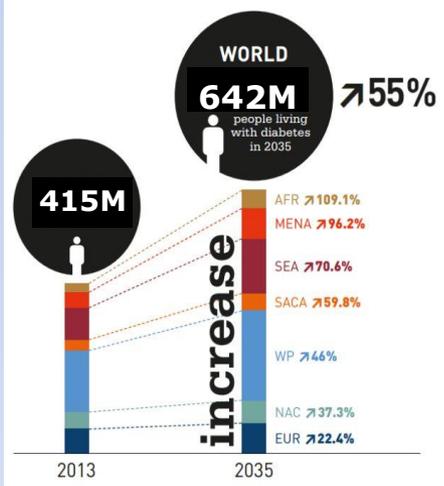


Type 2 diabetes is a lifestyle disease

Risk factors incl. weight

- Inactivity
 - Prolonged sitting down
 - Driving to work
- Unhealthy diet
 - Sugar-sweetened drinks including fruit juice
 - Processed foods
 - White rice
 - potatoes

Diabetes →

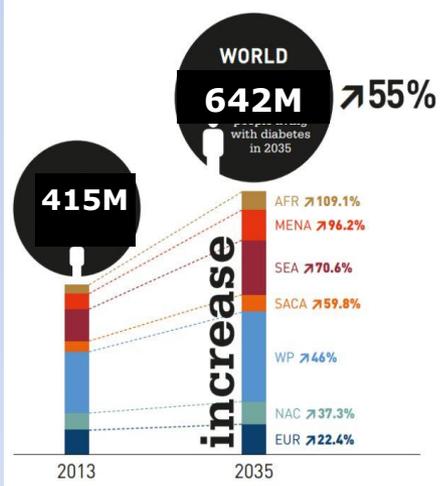
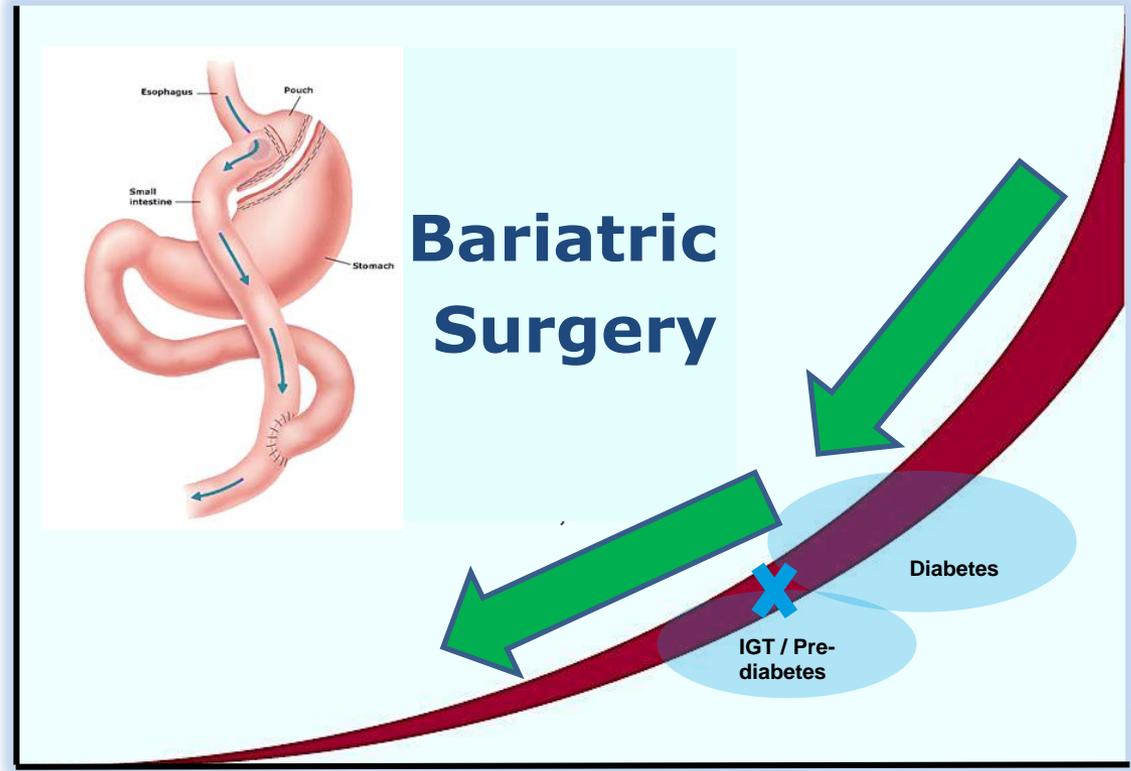


Urbanisation.....



Type 2 diabetes is preventable

Risk factors incl. weight ↑



Diabetes →

....and reversible

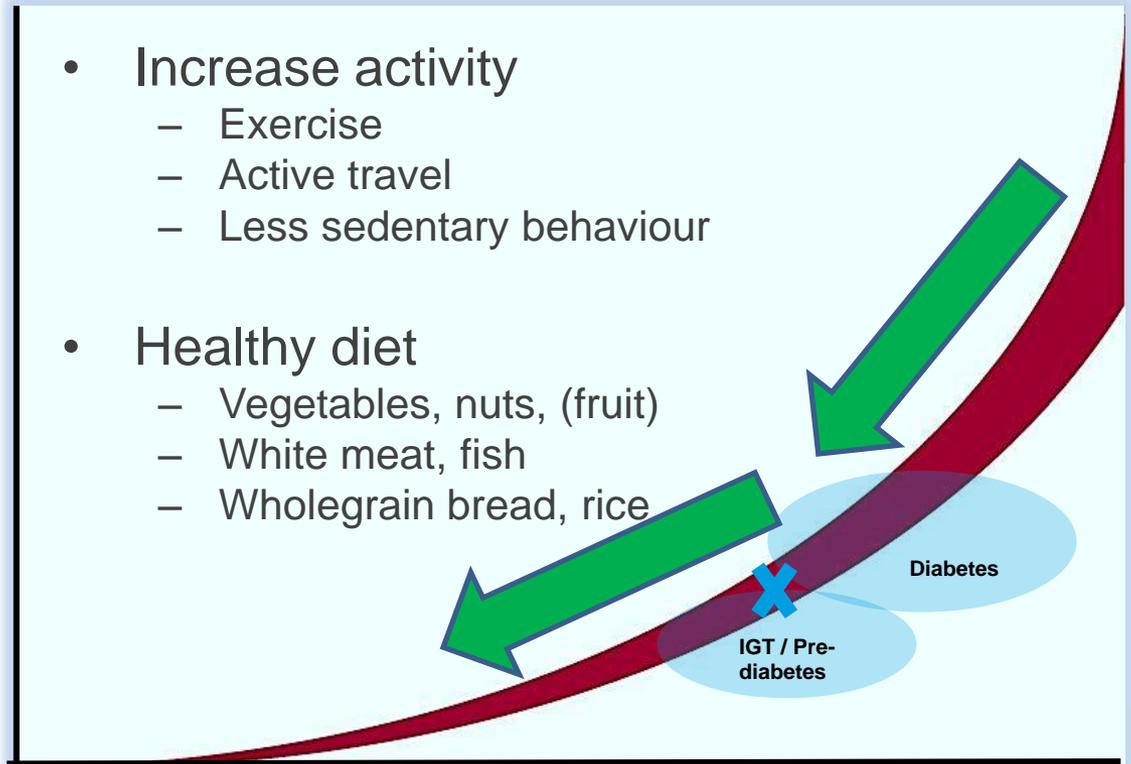


International Diabetes Federation



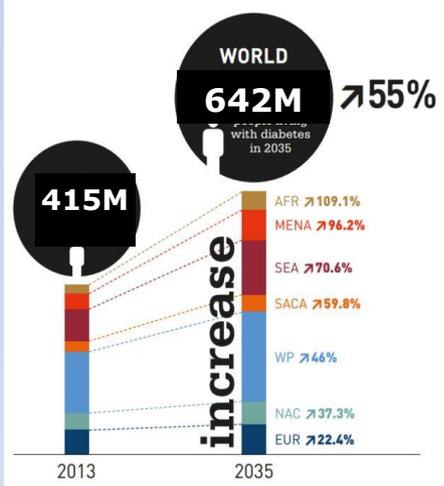
Policies to address Type 2 diabetes

Risk factors incl. weight ↑



- Increase activity
 - Exercise
 - Active travel
 - Less sedentary behaviour
- Healthy diet
 - Vegetables, nuts, (fruit)
 - White meat, fish
 - Wholegrain bread, rice

Diabetes →



Prevention of type 2 diabetes

- Primary prevention
- Primordial prevention
 - change the environmental influences that predispose to type 2 diabetes
 - Food (and water) environment
 - Physical (urban) environment
 - School environment



IDF Framework for Action on Sugar

CONSUMERS

- Clear front of pack labelling
- Ban on :
 - Advertising sugary products to children
 - Sponsorship of sporting events by manufacturers of sugary products
 - Selling in schools & public sector workplaces



GOVERNMENT

- Incentives to reduce consumption of sugar
- Increase access to water
- Increase green vegetable production and affordability
- Drive reformulation of processed foods



EDUCATION

- Revision of healthy eating guidelines
- Public health campaigns to promote awareness



RESEARCH

- Establishing links between sugar consumption and diabetes



Diabetes Prevention Score

- Physical environment:

Indicator	Brussels	Amsterdam	Difference in %	Notes
Motor vehicle density	0.46	0.11	+314%	Ratio of cars and motorbikes per person
Share of green spaces	0.12	0.32	-63%	Total green spaces over total green area
Public transportation rate	0.83	0.75	11%	Daily rides per person

- Affordability of drinkable water:

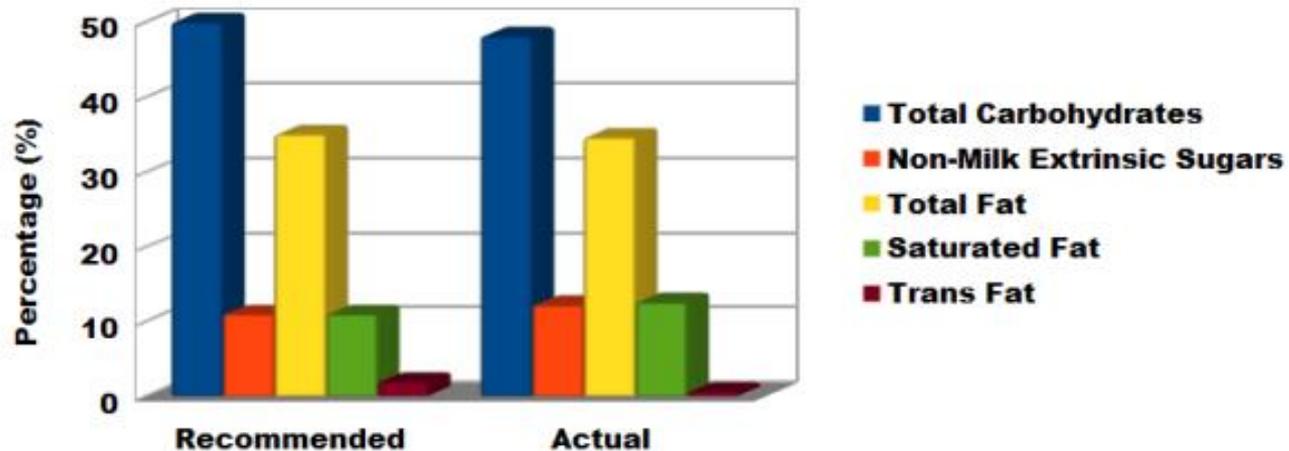
Indicator	Brussels	Amsterdam	Difference in %	Notes
Cost of bottled water	0.25	0.19	+28%	(cost per litre/average disposable income per person) *1000
Cost of bottled water VS cost of soda	1.08	0.77	+41%	cost per litre of bottled water/soda

From policies to people...

- For people with type 2 diabetes and those at risk
- Clear education and information
 - The process can be reversed
 - Emphasis on lifestyle change, not drugs
 - The foods that will help and hinder
 - Realistic increase in physical activity



Healthy eating?



- Carbohydrates stimulate insulin
- Insulin promotes liver fat
- Carbohydrate restriction is gaining popularity

Increasing physical activity

- 30 minutes moderate intensity exercise is an unrealistic goal
- Focus on reducing inactivity in everyday tasks
 - Break up sedentary periods
 - Walk more



The role of metabolic surgery

- Weight loss surgery to improve diabetes control and/or to reverse diabetes
- The only (cost-)effective treatment in the very obese
- Should be considered in moderately obese
 - Avoid perverse incentive to gain weight
 - Avoid artificial barriers to surgery



Tackle stigma associated with Type 2 diabetes and obesity

- It is a self-inflicted lifestyle disease
- Just like
 - Lung cancer
 - Coronary heart disease
 - HIV
 - Sports injuries



Conclusion

- Obesity and type 2 diabetes are increasing at an alarming rate across the globe
- In order to halt the increase, effective policy action, effective individual advice and treatment options are urgently required.



Thank you for your attention

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