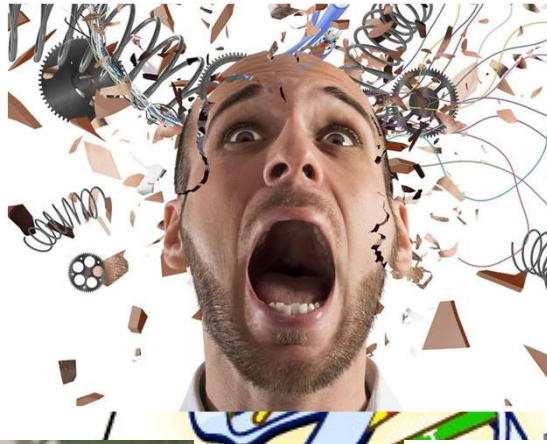


The background of the slide is a photograph of two men from the waist up, standing on a sandy beach. Both men are significantly obese, with large, protruding bellies. They are wearing swim trunks; the man on the left is in green, and the man on the right is in blue. The background shows the ocean and a clear sky.

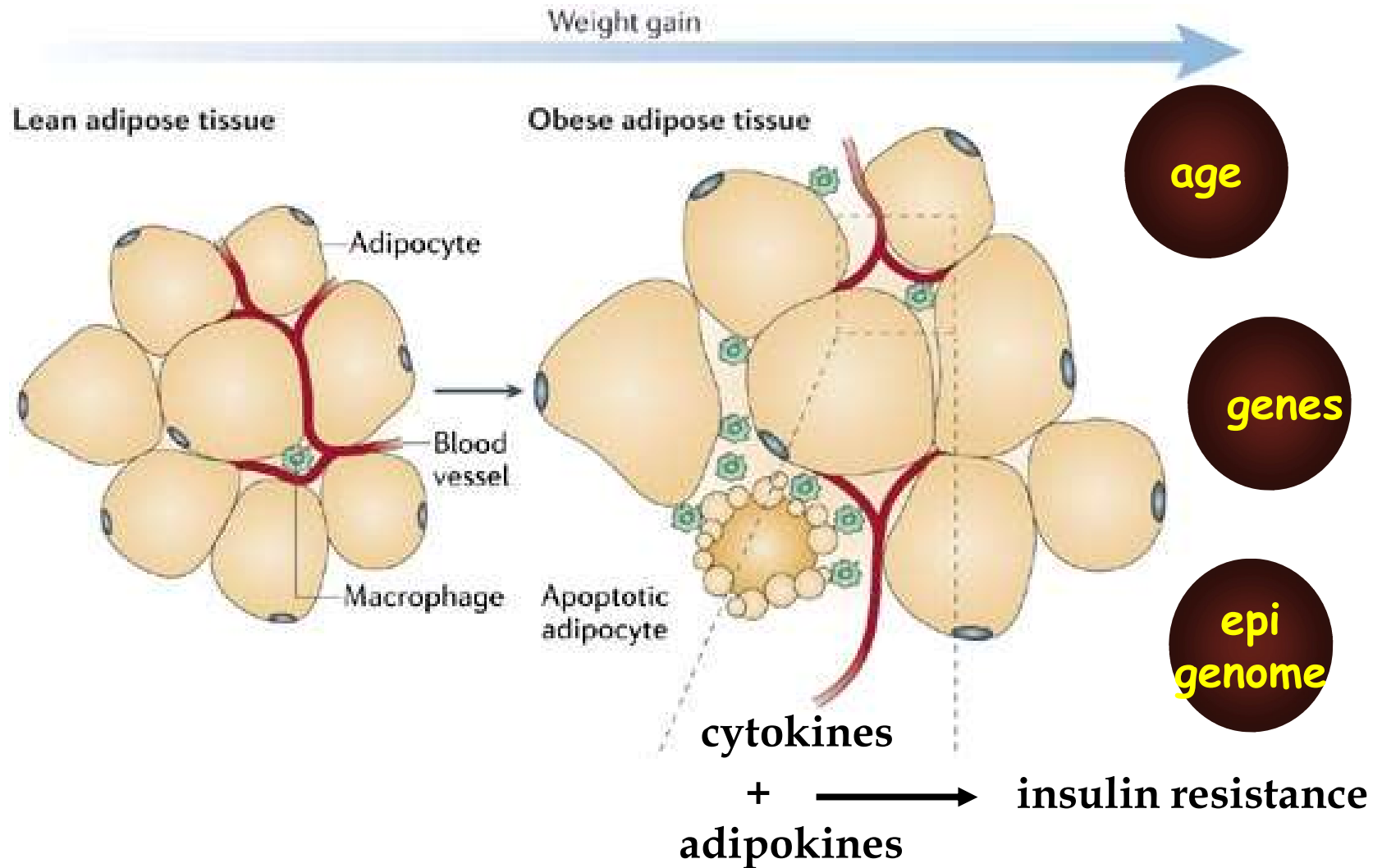
TYPE 2 DIABETES MELLITUS

Can it be cured?

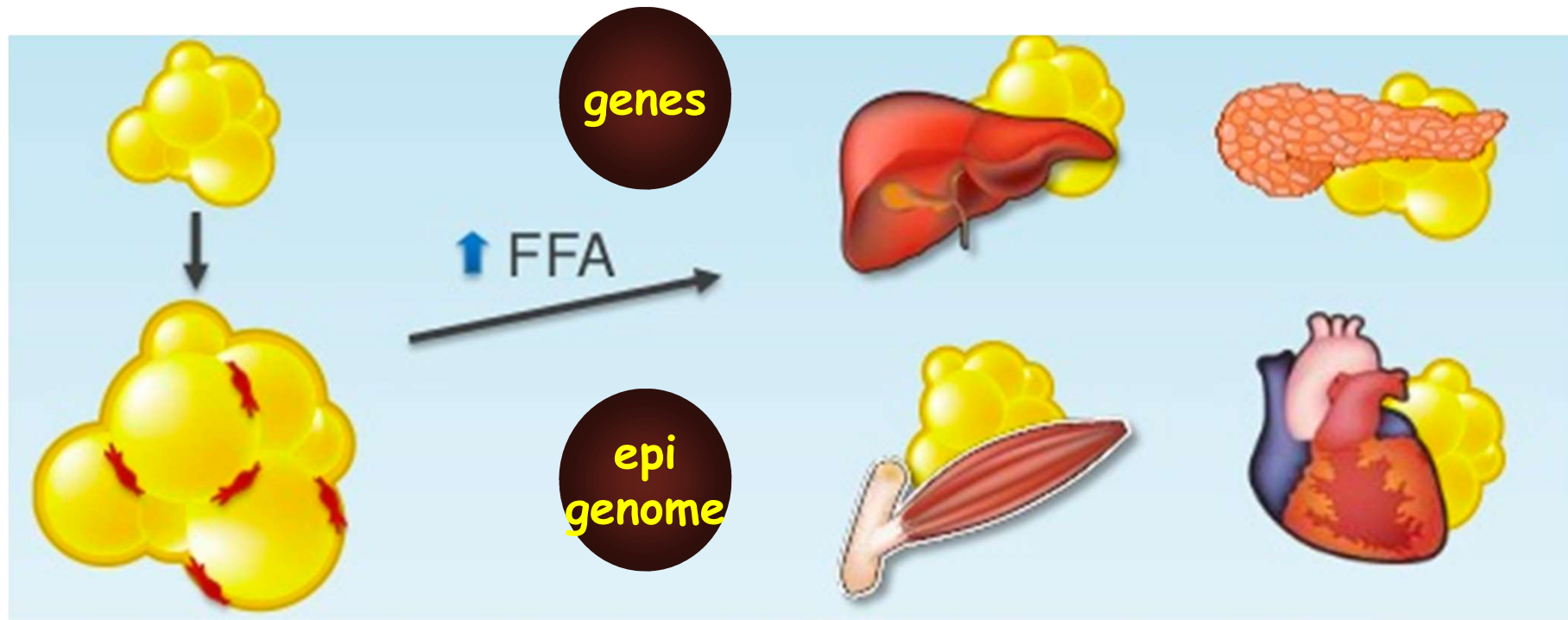
Hanno Pijl
h.pijl@lumc.nl

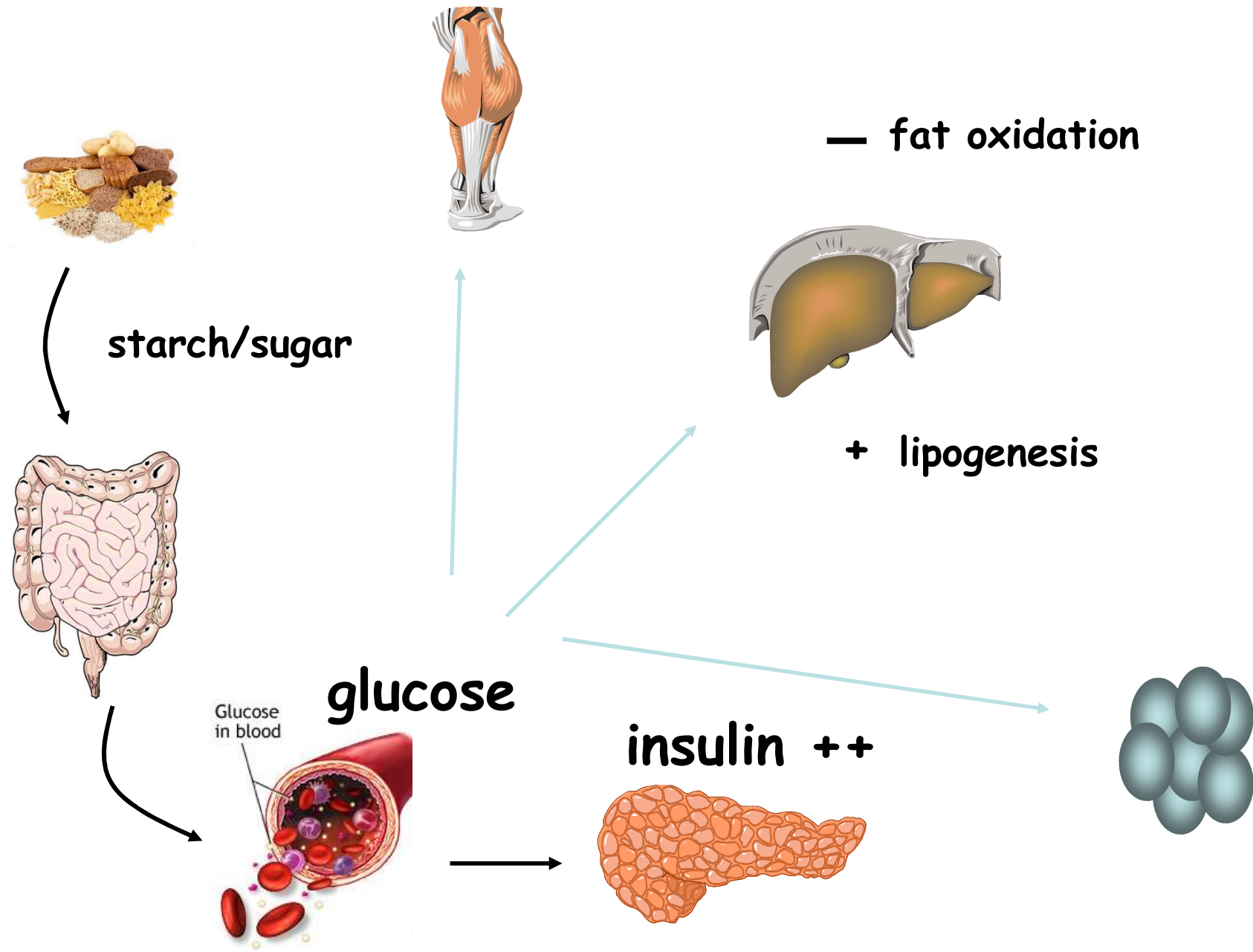


Low grade inflammation

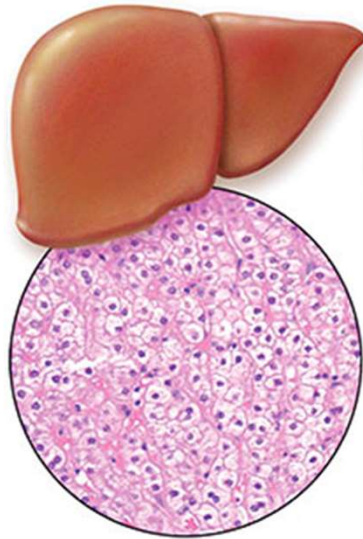


Ectopic fat storage

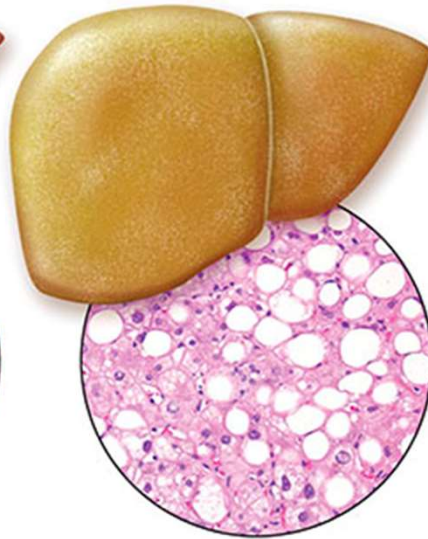




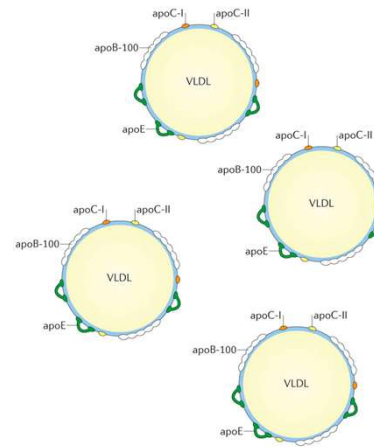
Healthy liver



Fatty liver

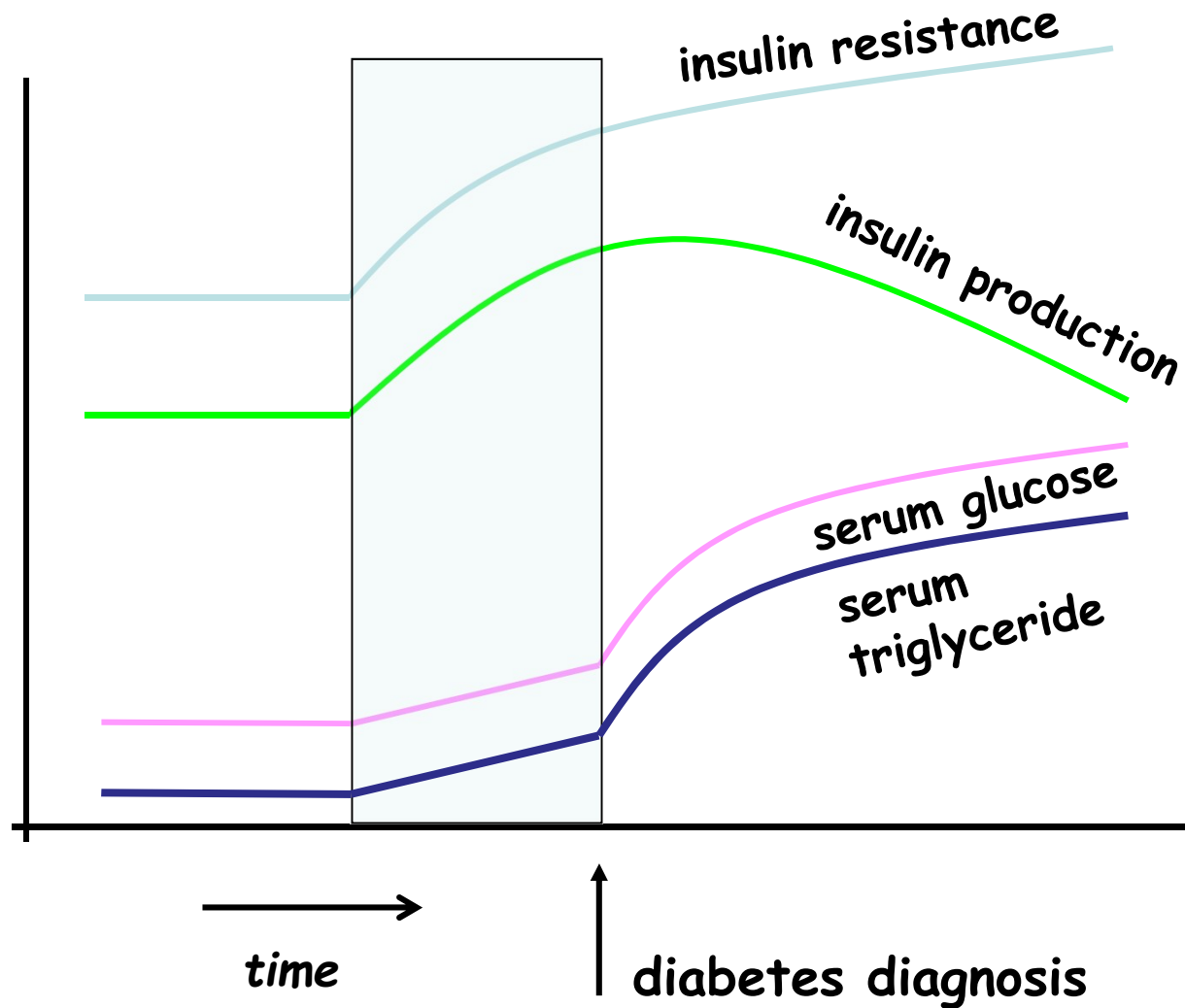


VLDL- triglyceriden

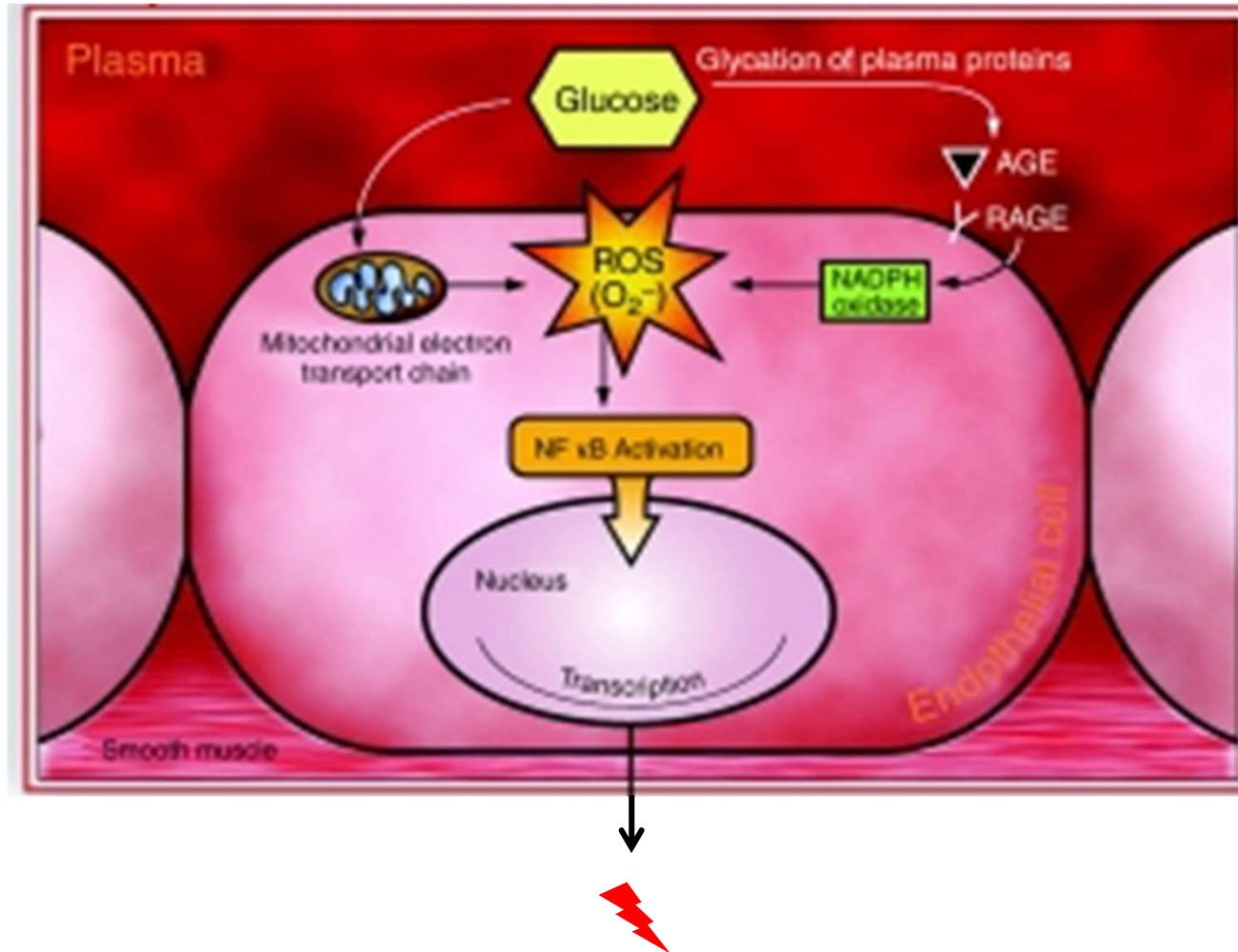


Type 2 diabetes mellitus

10-30 yrs

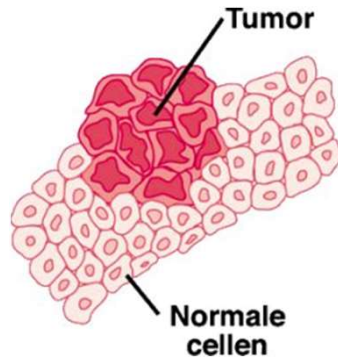


Glucose and inflammation



Insulin effects

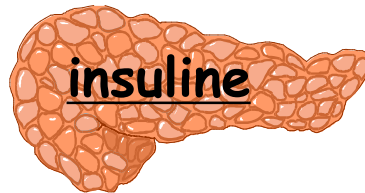
growth stimulus



vasoconstriction



insuline



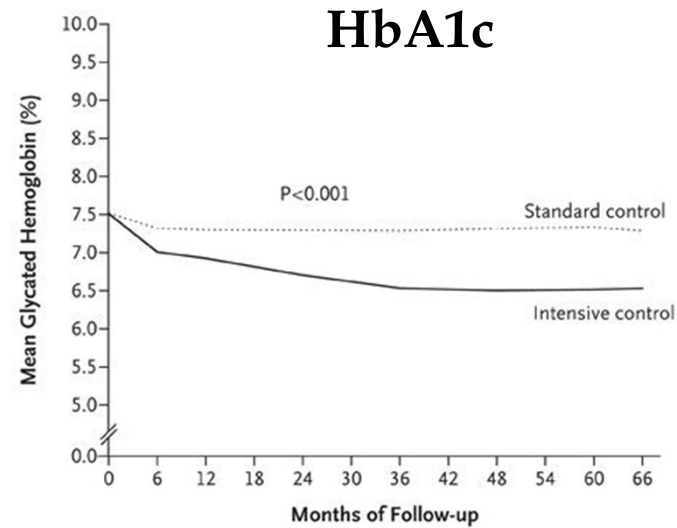
CNS activation



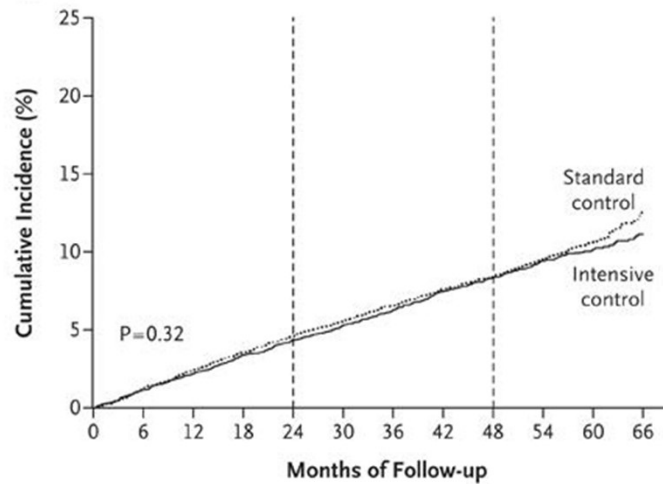
Na⁺ retention

(dutch) guideline DM2 treatment

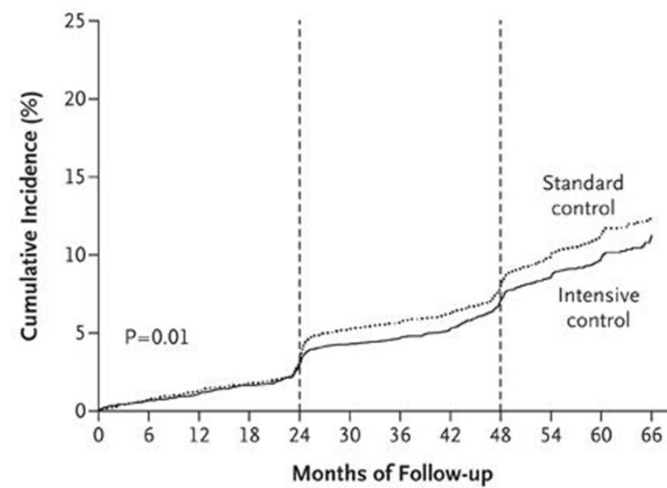
	Treatment
	Lifestyle
Step 1	Metformin
Step 2	SU
Step 3	Insulin



Macrovascular disease

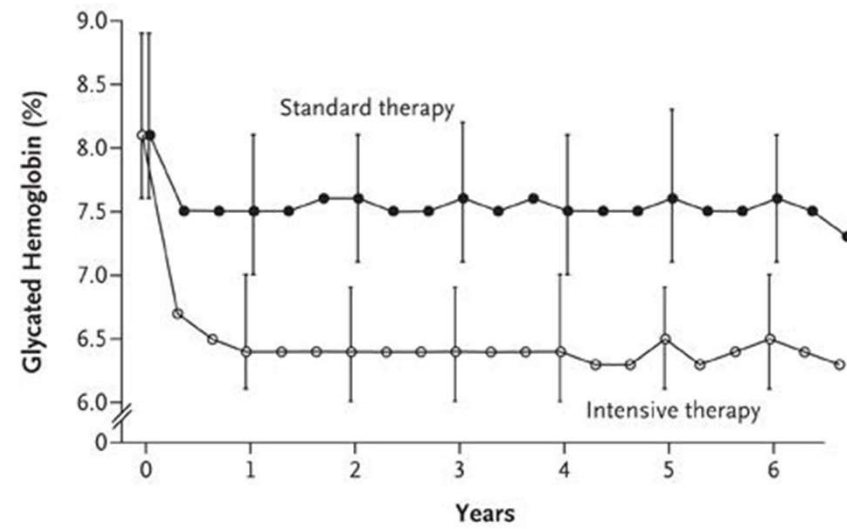


Microvascular disease

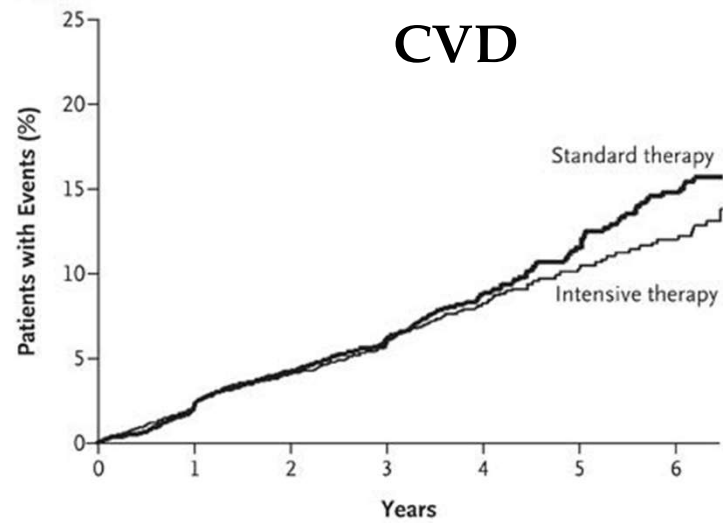


ADVANCE, NEJM 358: 2560, 2008

HbA1c

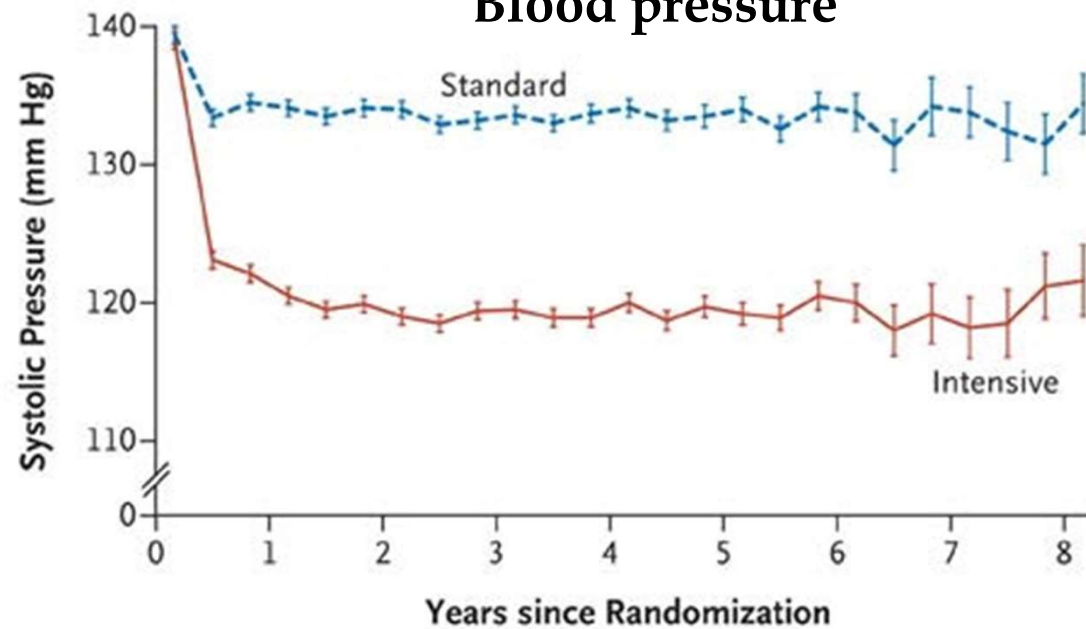


CVD

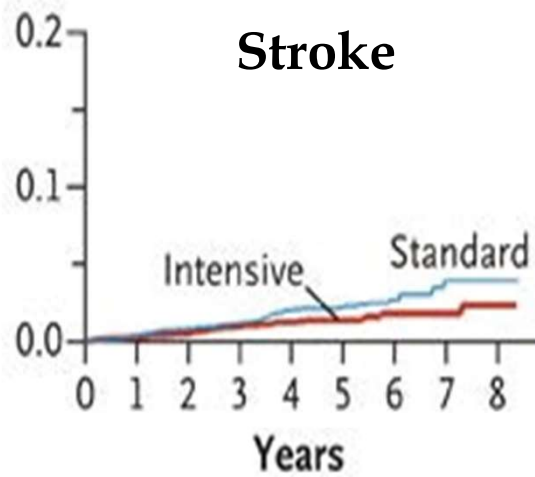


ACCORD, NEJM 358: 2545, 2008

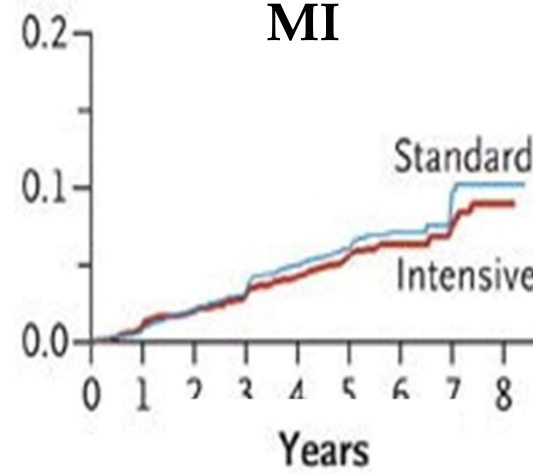
Blood pressure



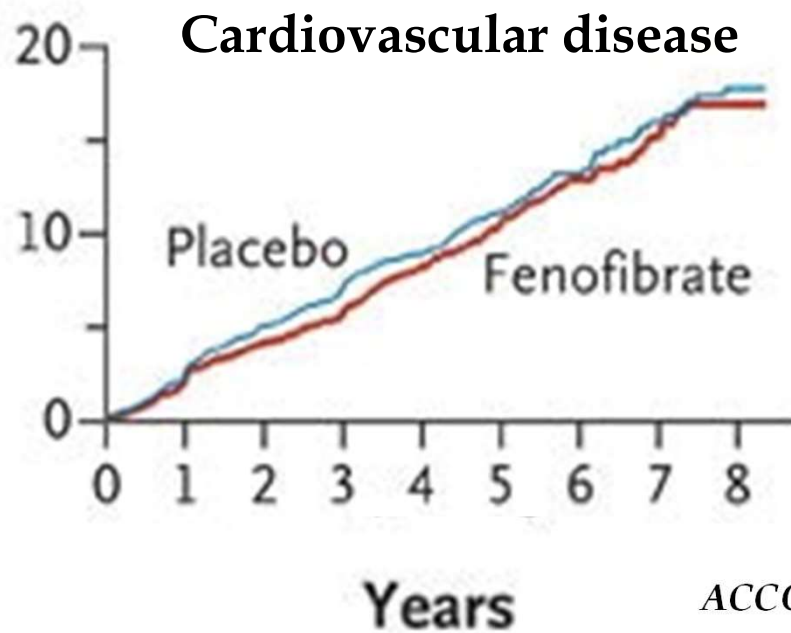
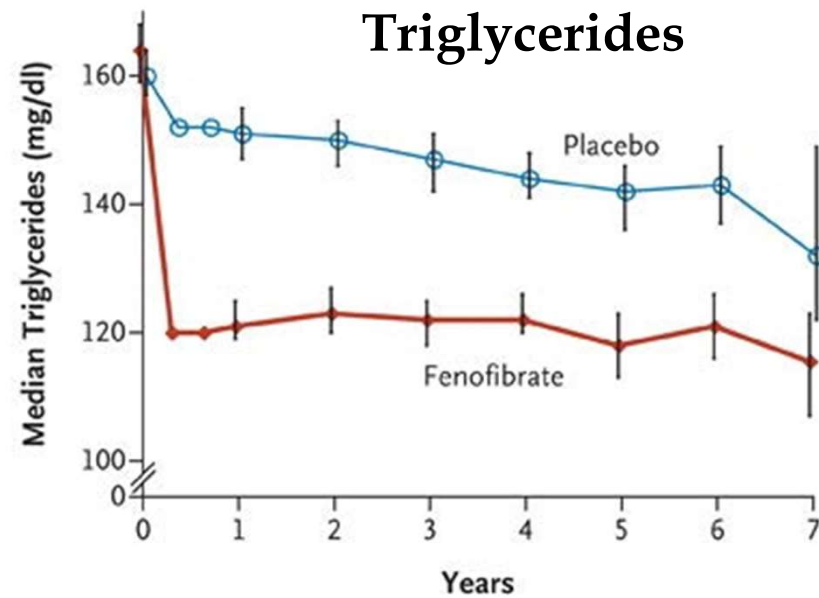
Stroke



MI



ACCORD, NEJM 362: 1575, 2010



ACCORD, NEJM 362: 1563, 2010

The background of the slide is a faded, light-colored version of Leonardo da Vinci's Vitruvian Man drawing. The figure of the man is centered, with arms and legs extended, inscribed within a circle and a square. The text and list are overlaid on the left side of the image.

Lifestyle advice

- **Avoid processed food**
- **Restrict refined starch (bread, pasta, rice, potatoes)**
- **Vegetables and fruit are the core elements of the diet**
- **Drink water/coffee/tea instead of fruitjuice or softdrinks**
- **Increase physical activity**
- **Sleep regularly 7-8 hours**
- **Stress control**

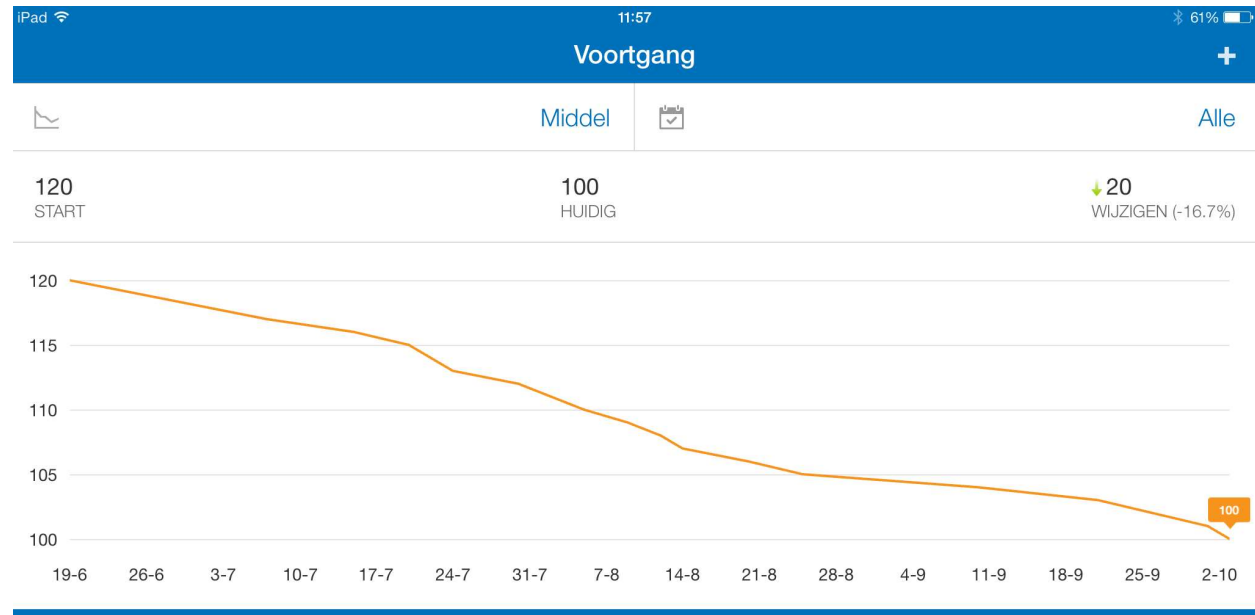
Bodyweight

4 months in
ketosis, lost
> 30 kilo

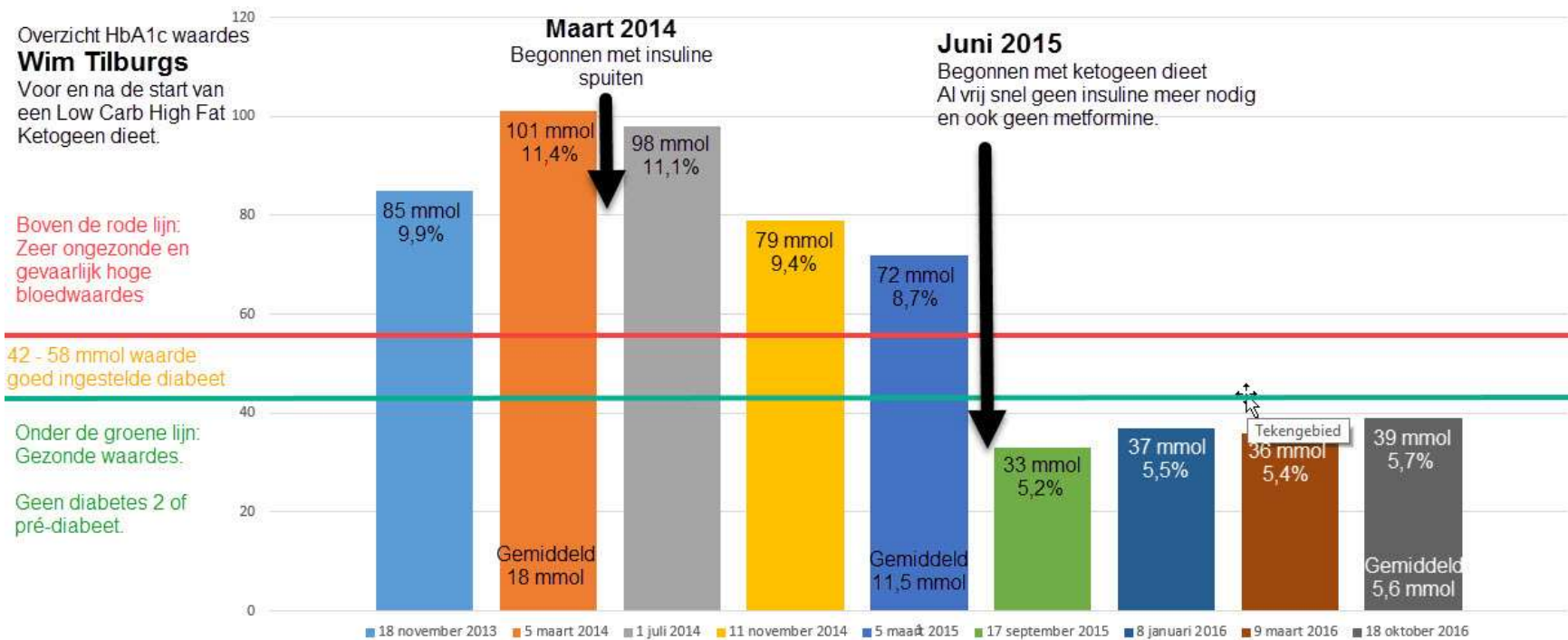


Waist circumference

4 months in
ketosis, lost
> 20 cm



HbA1c



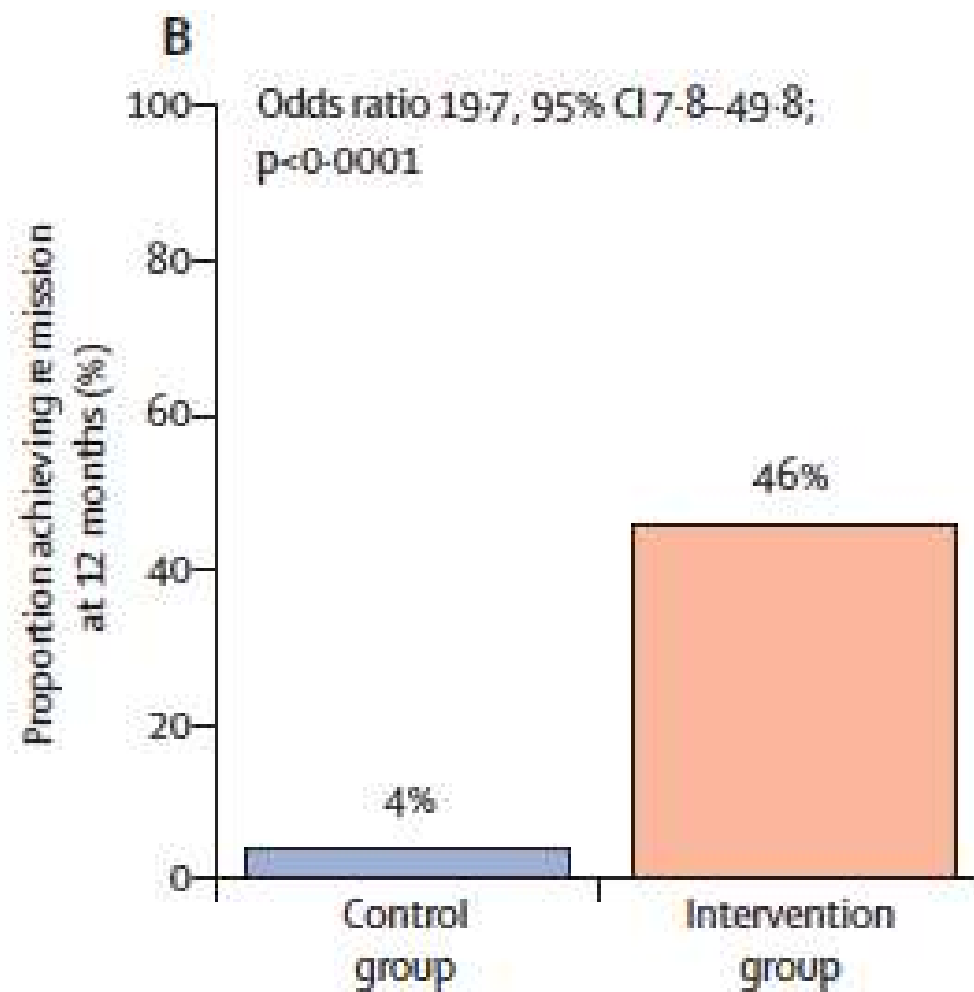


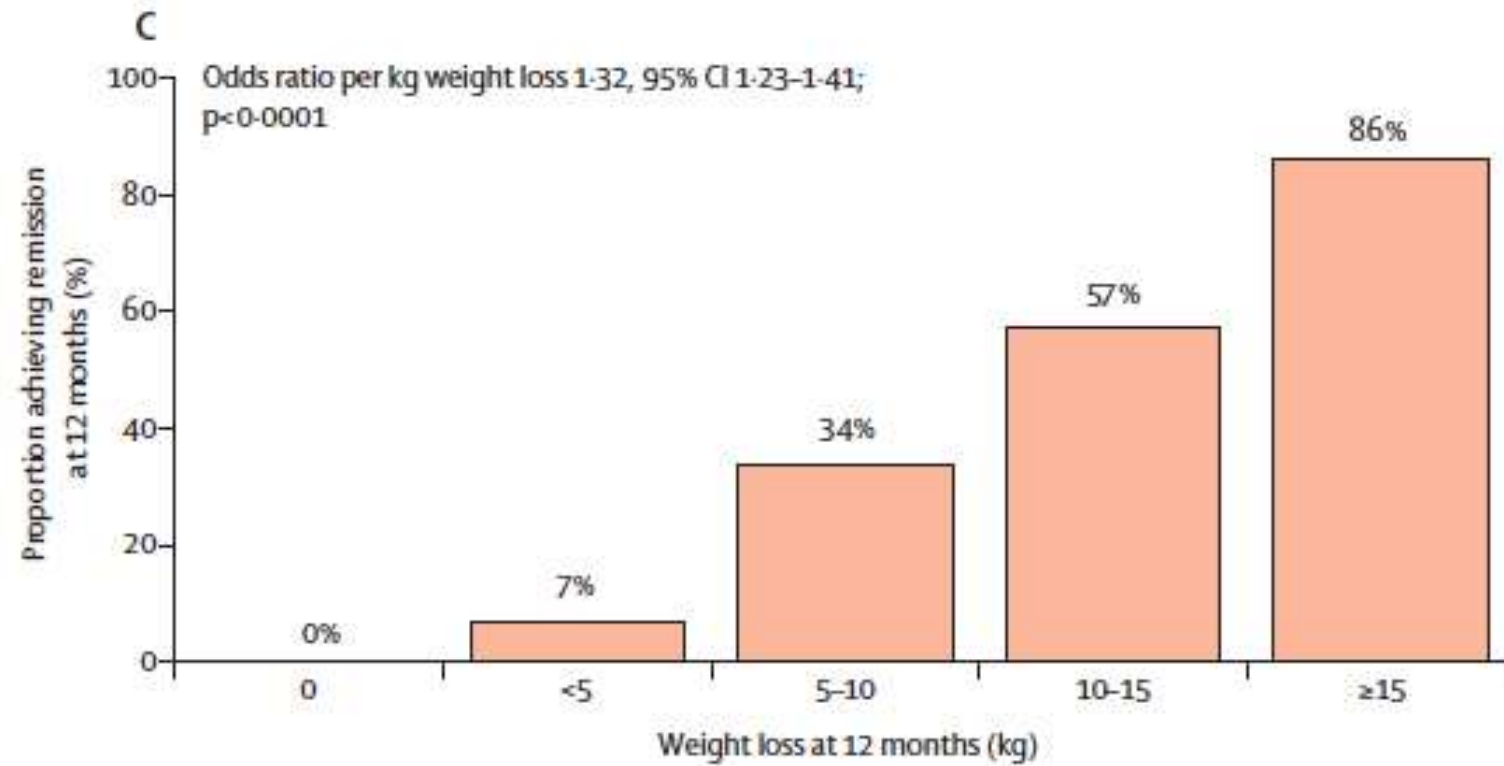
Positive changes

What did I experience after changing my lifestyle

- No medication anymore
- No obesity anymore
- No serious sweating anymore
- More energy.
- I enjoy physical exercise.
- Very good physical condition.
- Improved relationships.
- Think more clearly.
- Circadian rhythm restored.
- Much better mood.
- Not anxious anymore (PTSD improved).
- Better eyesight.
- Skin rash disappeared.
- Fibromas disappeared.
- Less hungry.







Lean MJ, Lancet Dec 5, 2017

