



KOPPERT CRESS  
*Architecture Aromatique*



# KOPPERT CRESS

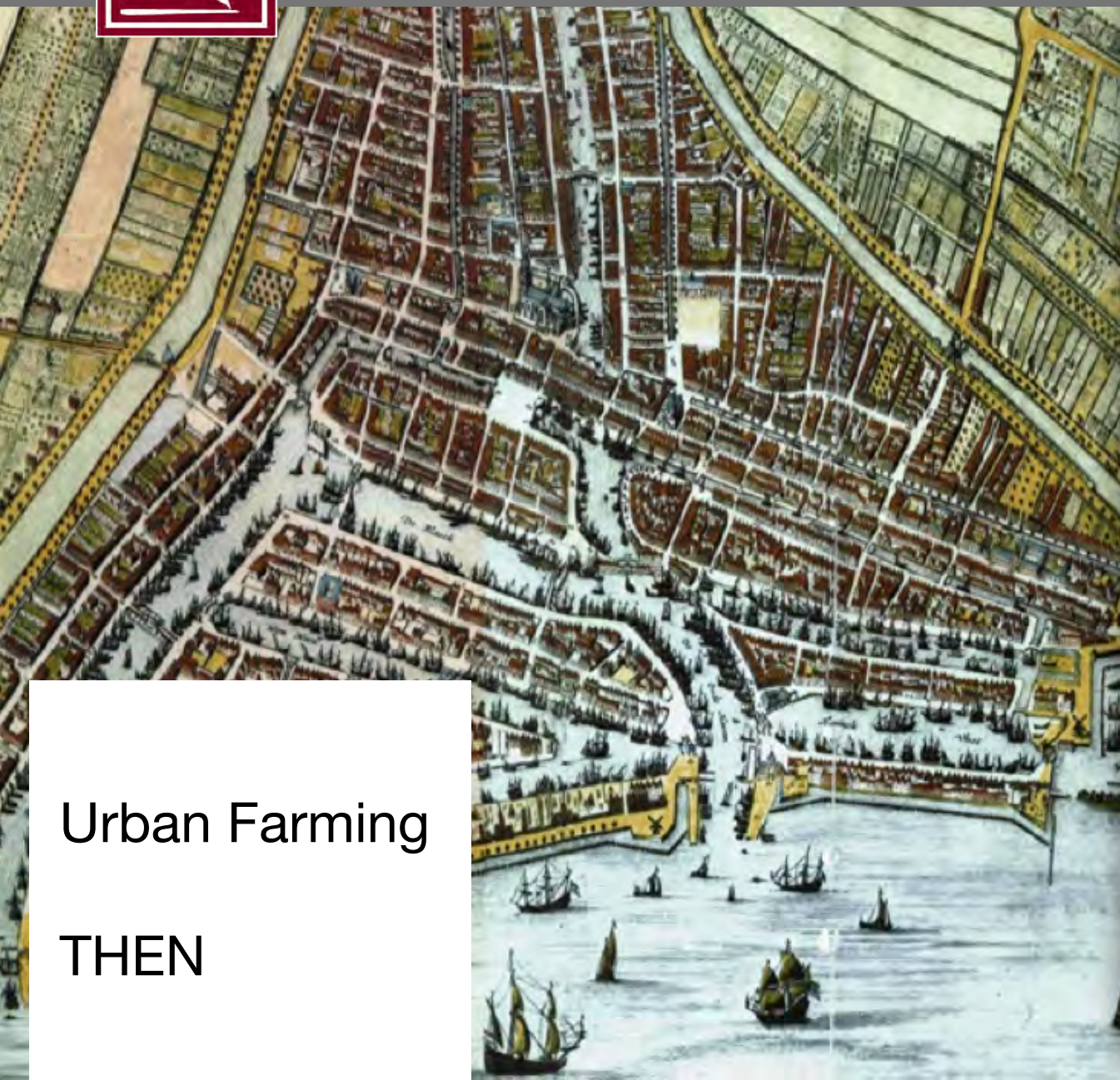


*Architecture Aromatique*





# Urban Farming THEN







# Urban Farming NOW







How to feed  
a city?







with  
1 million people





of which

150,000 obese  
More than 500,000  
overweight







(ideally) consuming  
200,000 kg  
vegetables a day

is 2,500,000 tomatoes







and  
220,000 kg  
meat a day

is 730 cows





throwing  
35% a day  
away

is 50,000 garbage bags







we need **3,650**  
hectares

to produce  
that amount  
of vegetables  
in the city







but even more  
to produce that  
much meat

average of **91,250**  
hectares



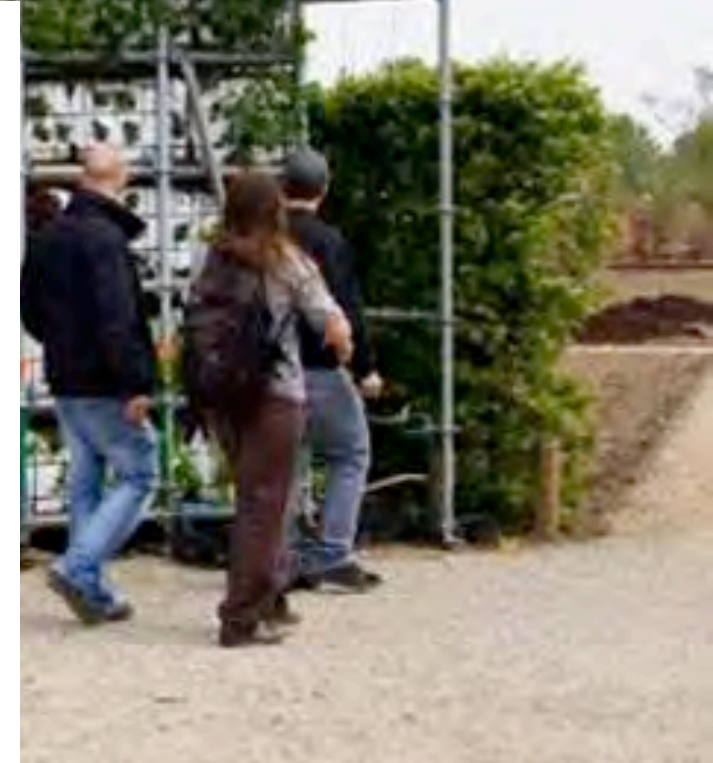
**16,600 hectares**  
still 5 times more  
than vegetables





to feed this city  
we need 20,000 hectares of land  
at 300 euros per square meter  
is an investment of at least 60 billion euros





so..

urban farming = charming

but no solution to feeding  
the city of the future









**SUSTAINABLE**  
URBAN DELTA



An initiative by Meiny Prins

Netherlands, the greenest city in the world





## Holland is not a dense country, but an empty city.

*Nederland is geen vol land, maar een lege stad.*







Sustainability





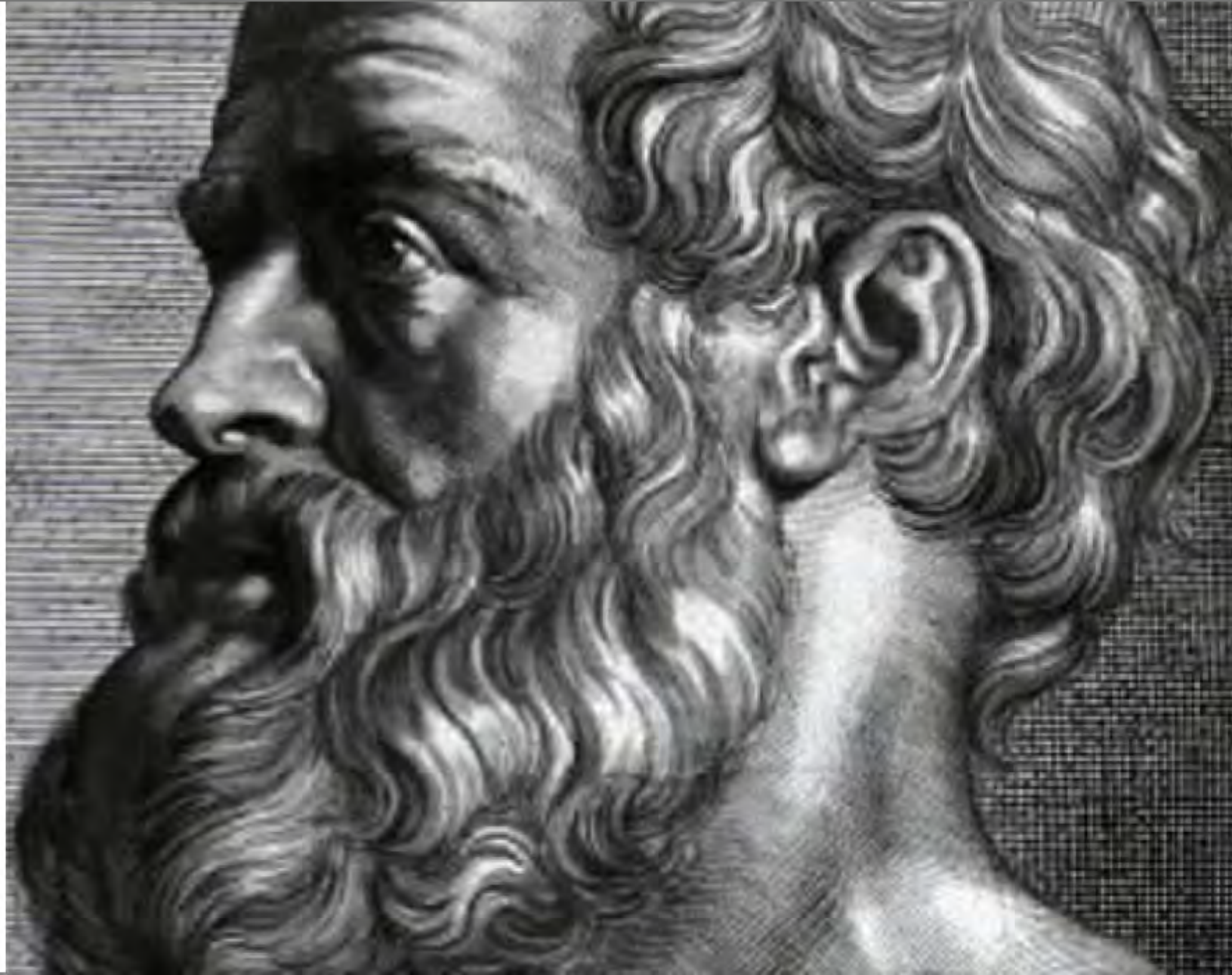






*"Let thy food be thy  
medicine and thy  
medicine be thy food."*

HIPPOCRATES







lycopene, ellagic acid, quercetin,  
hesperidia, anthocyanidins



lutein/zeaxanthin, isoflavones, EGCG,  
indoles, isothiocynates, sulphoraphane



EGCG, alicin, quercetin,  
indoles, glucosinolates

## the Green Pharmacy



alpha-carotene, beta-carotene, beta cryptoxanthin,  
lutein/zeaxanthin, hesperidin



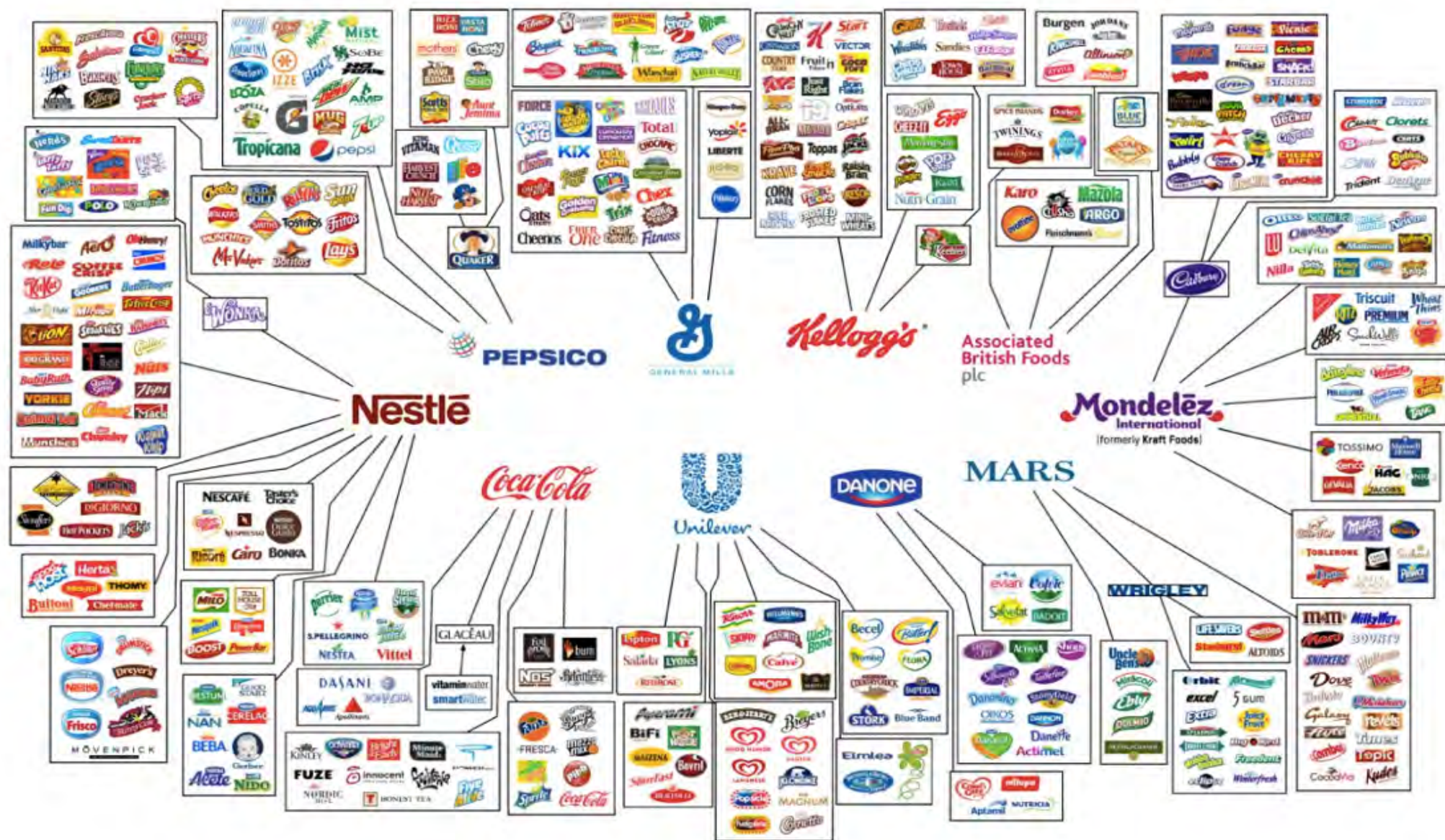
resveratrol, anthocyanidins, phenolics, flavonoids





We have to ‘scientifically’ prove the Green Pharmacy









Let's change the way we look at  
fresh food and health







We can do it

Combine medical research  
with plant research for fresh produce





## Our focus: sulforaphane levels



Broccoli (fresh):	0,2	mg per 100 grams
Broccoli (stir fried):	0,1	mg per 100 grams
Broccoli (boiled):	0,01	mg per 100 grams



1 sprout BroccoCress®: 0,13 mg





13527 published studies on broccoli  
Only 4 conducted on humans (human intervention studies)

NCBI PubMed 2016 Search: broccoli

US National Library of Medicine  
National Institutes of Health

Article types: Clinical Trial, Review, Customize ...  
Text availability: Abstract, Free full text, Full text  
PubMed Commons, Reader comments  
Publication dates: 5 years, 10 years, Custom range...  
Species: Humans, Other Animals  
Clear all  
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1. [Selenium alleviates chromium toxicity by preventing oxidative stress in cabbage \(\*Brassica campestris\* L. ssp. \*Pekinensis\*\) leaves.](#)  
Qing X, Zhao X, Hu C, Wang P, Zhang Y, Zhang X, Wang P, Shi H, Jia F, Qu C.  
Ecotoxicol Environ Saf. 2015 Jan 29;114C:179-189. doi: 10.1016/j.ecoenv.2015.01.026. [Epub ahead of print]  
PMID: 25638524 [PubMed - as supplied by publisher]  
[Related citations](#)

2. [A phytosterol enriched refined extract of \*Brassica campestris\* L. pollen significantly improves benign prostatic hyperplasia \(BPH\) in a rat model as compared to the classical TCM pollen preparation Qianlie Kang Pule'an Tablets.](#)  
Wang R, Kobayashi Y, Lin Y, Rauwald HW, Fang L, Qiao H, Kuchta K.  
Phytomedicine. 2015 Jan 15;22(1):145-52. doi: 10.1016/j.phymed.2014.10.001. Epub 2014 Oct 23.  
PMID: 25636883 [PubMed - in process]  
[Related citations](#)

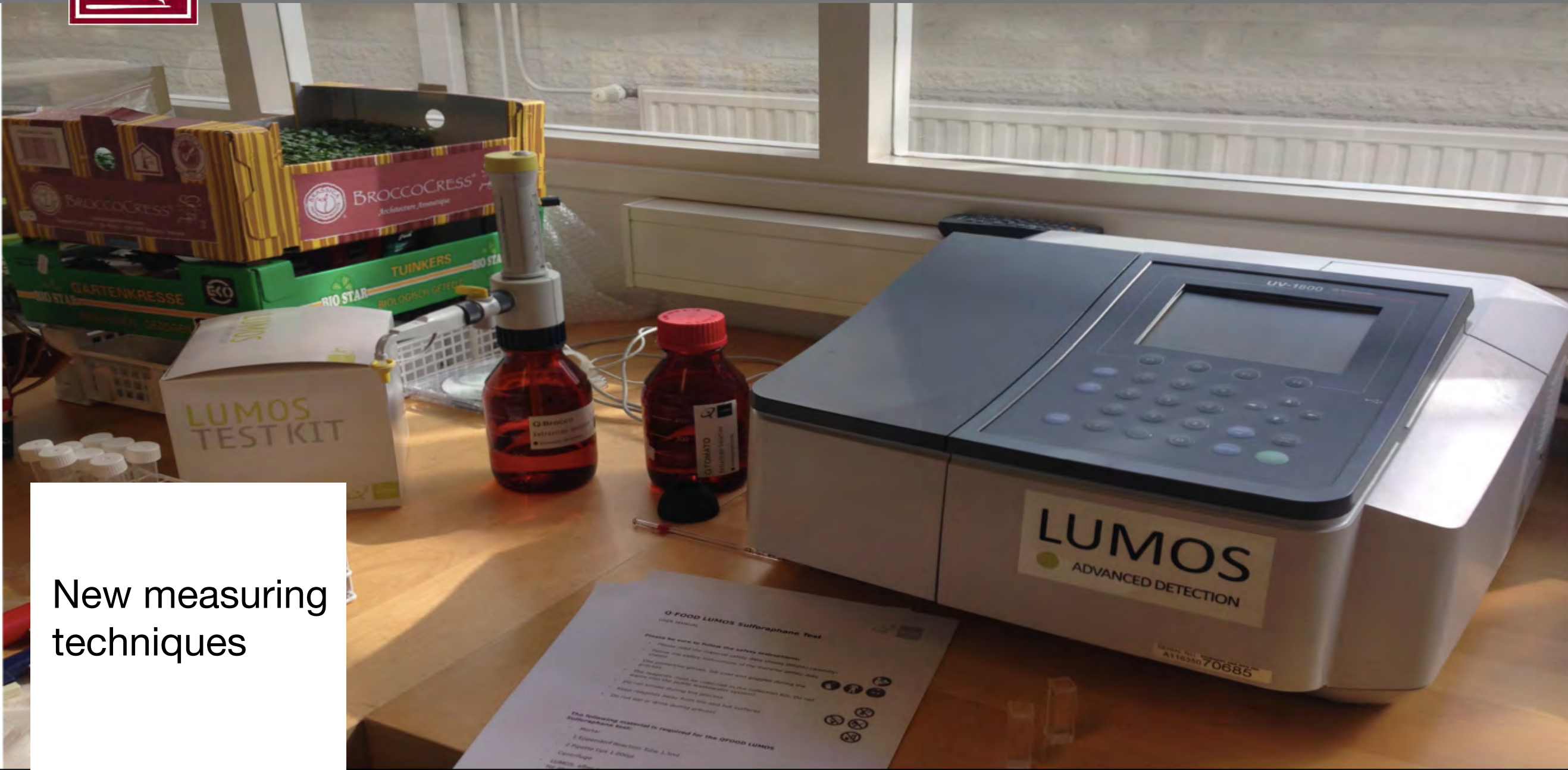
3. [Genome-wide analysis of Dof family transcription factors and their responses to abiotic stresses in Chinese cabbage.](#)  
Ma J, Li MY, Wang F, Tang J, Xiong AS.  
BMC Genomics. 2015 Jan 31;16(1):33. [Epub ahead of print]  
PMID: 25636232 [PubMed - as supplied by publisher] [Free Article](#)  
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Related searches:  
broccoli sprout  
sulforaphane broccoli  
broccoli prostate  
broccoli autism  
broccoli cancer prevention





## New measuring techniques

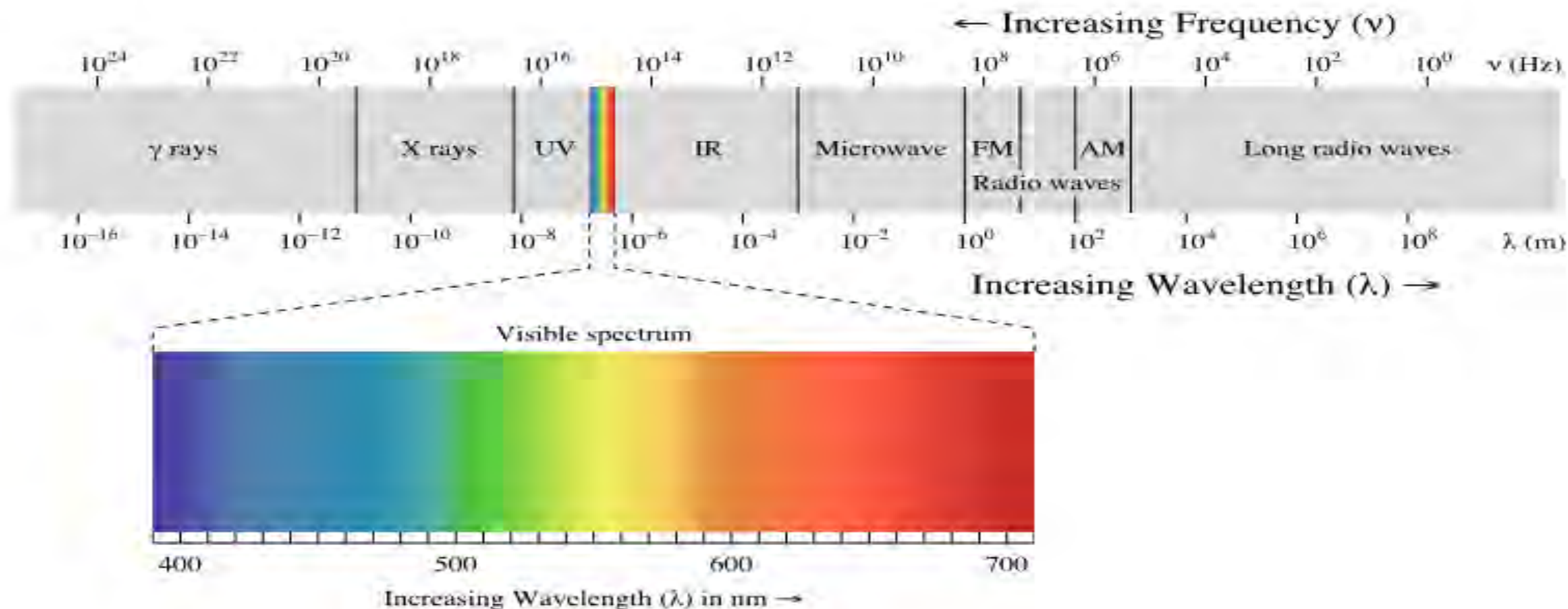






# LUMOS: Spectrometry

Sulforophane level is visible in blue/green area







Ag & Food Tech Safari Silicon Valley





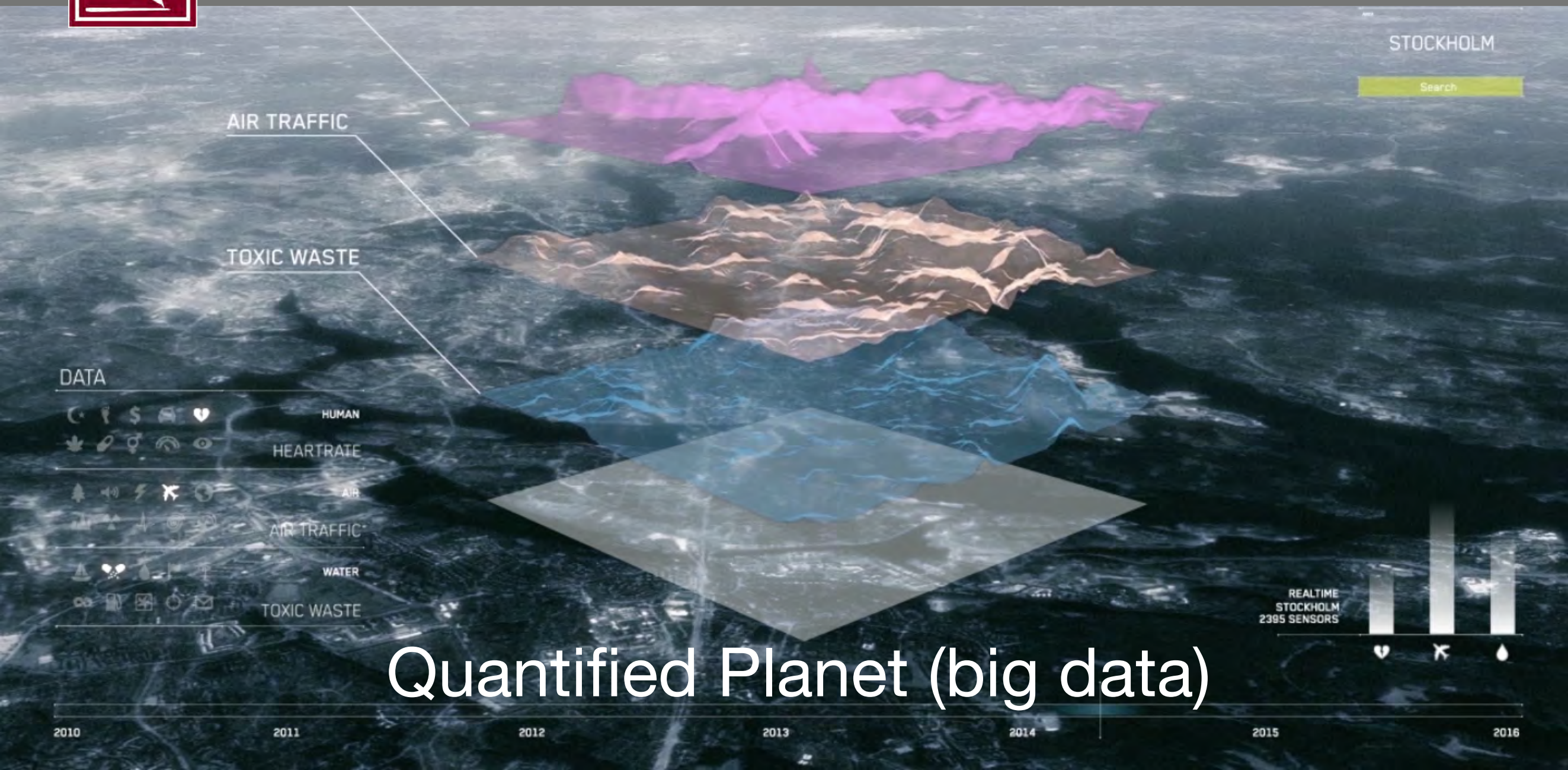
# Quantified Self





E-health

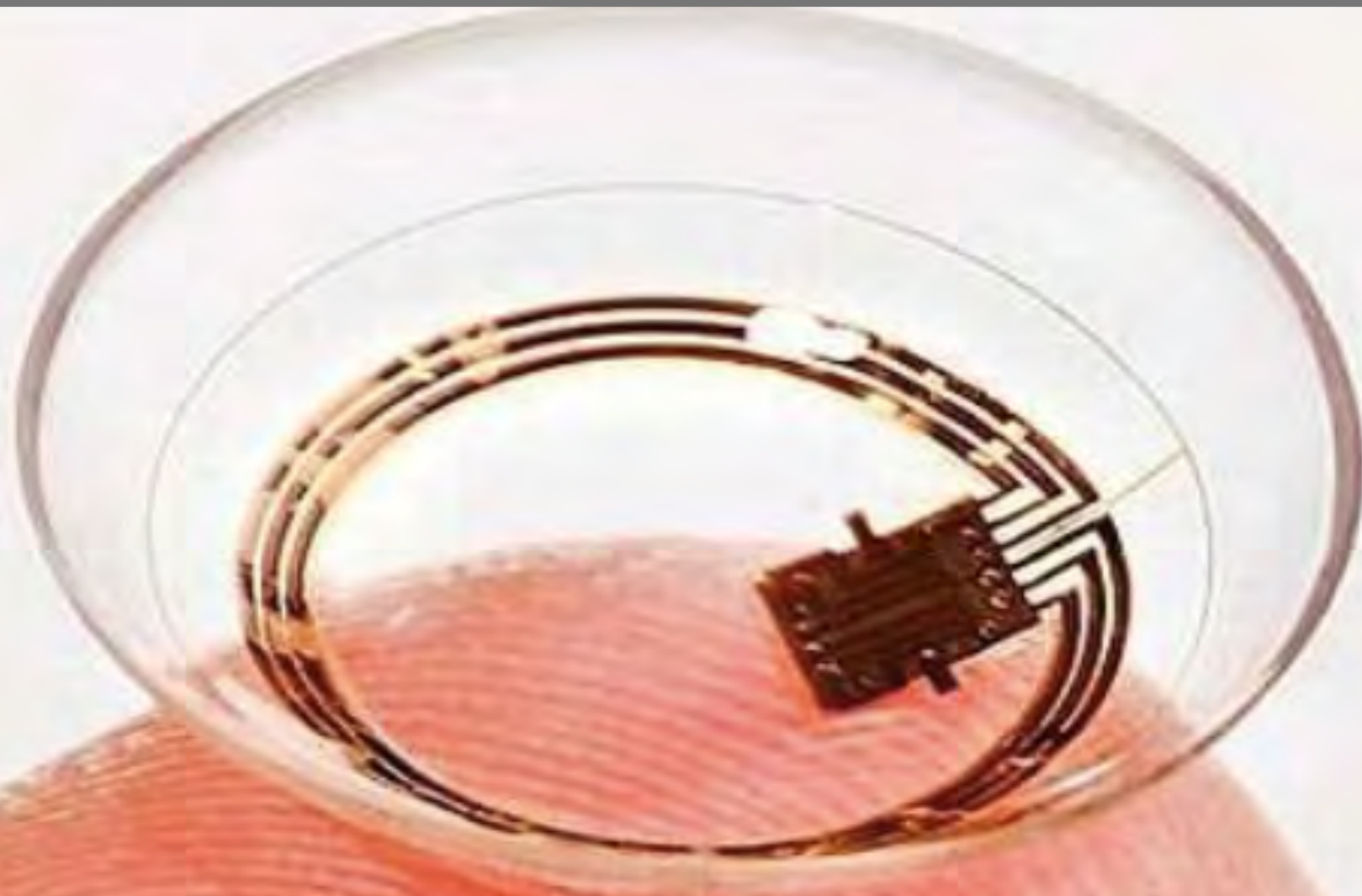
















We have to do it

In order to reduce health costs

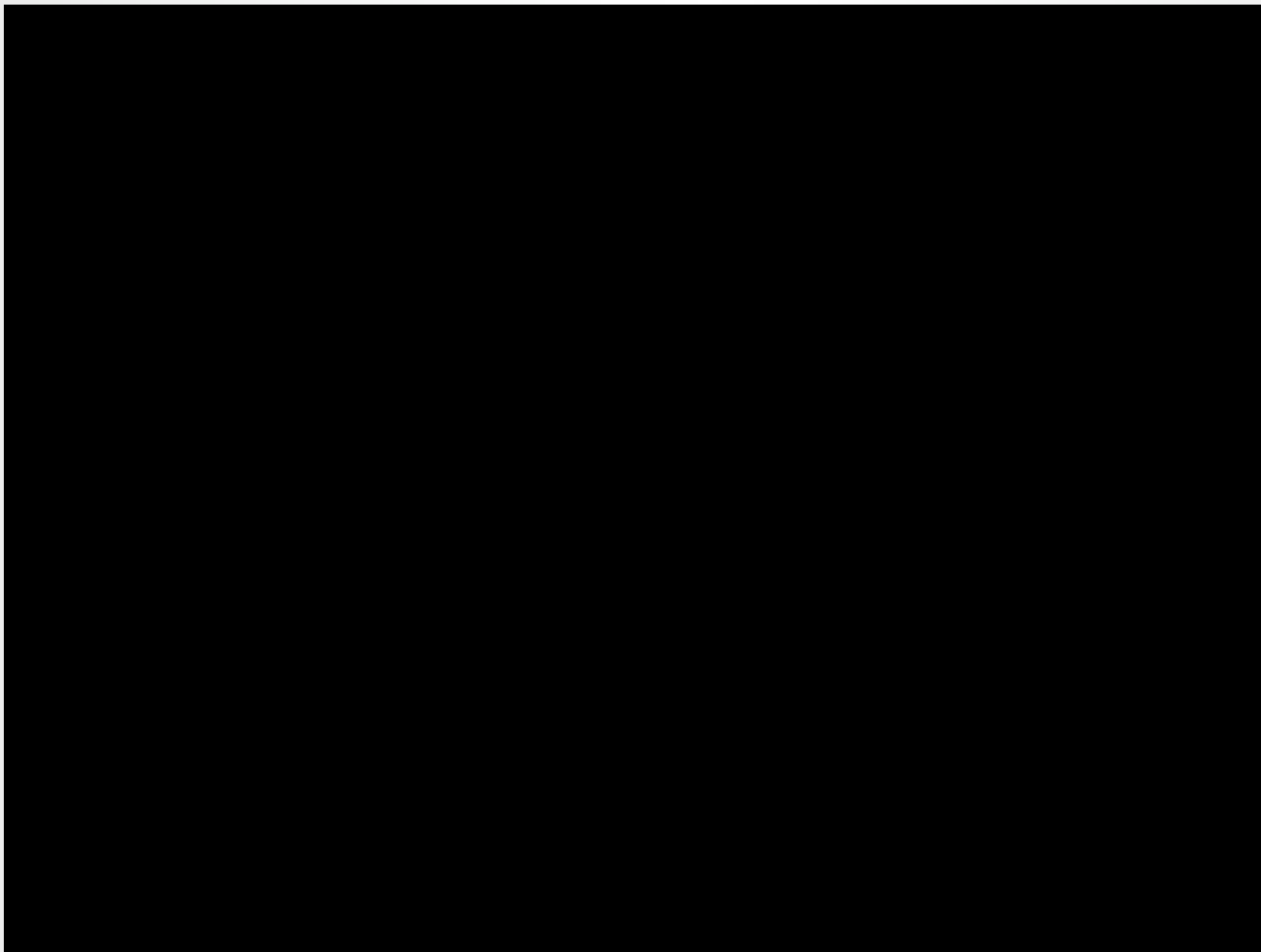
To promote healthy ageing





We need a  
**masterplan**  
to help new generations with healthy ageing

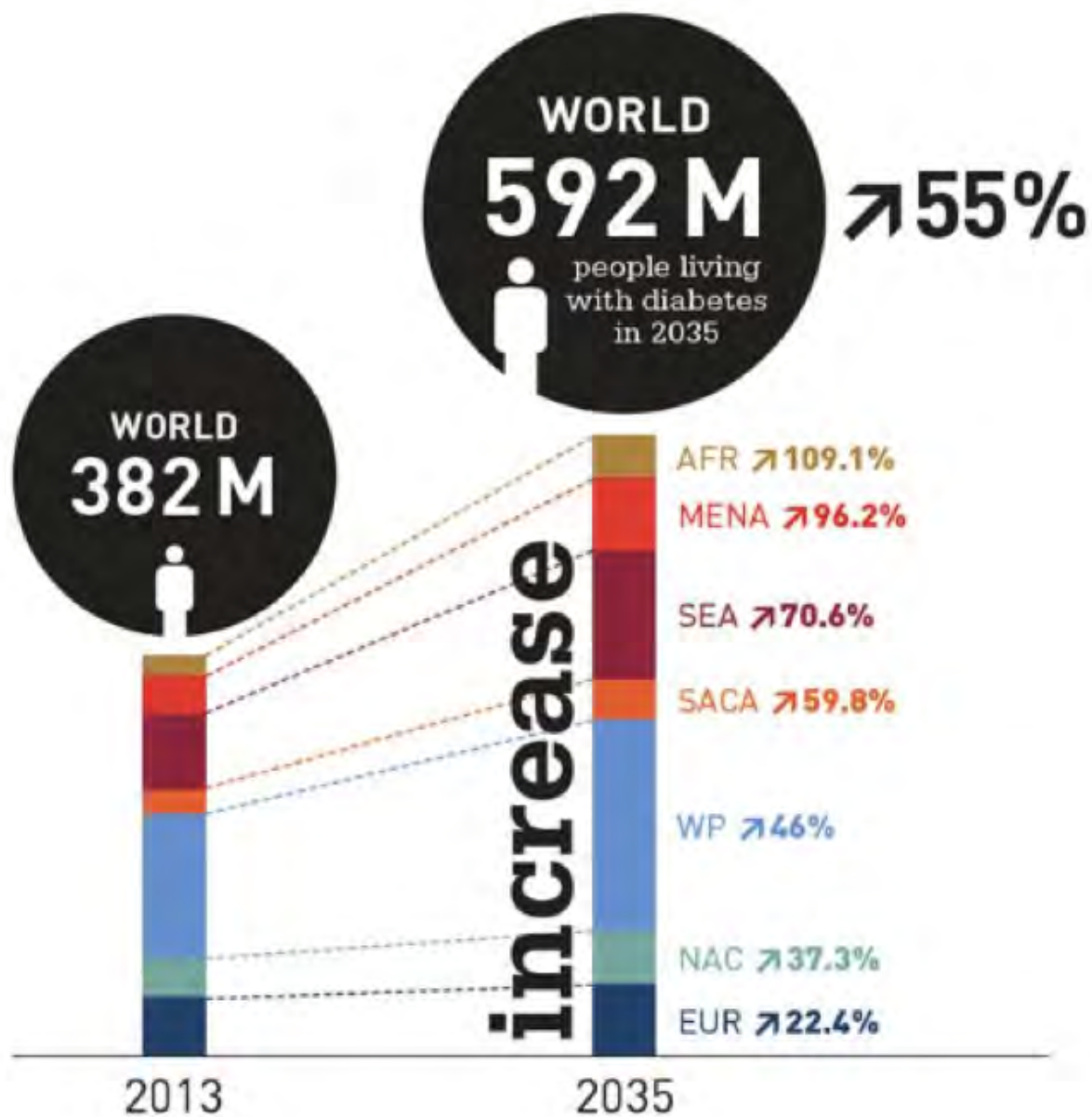






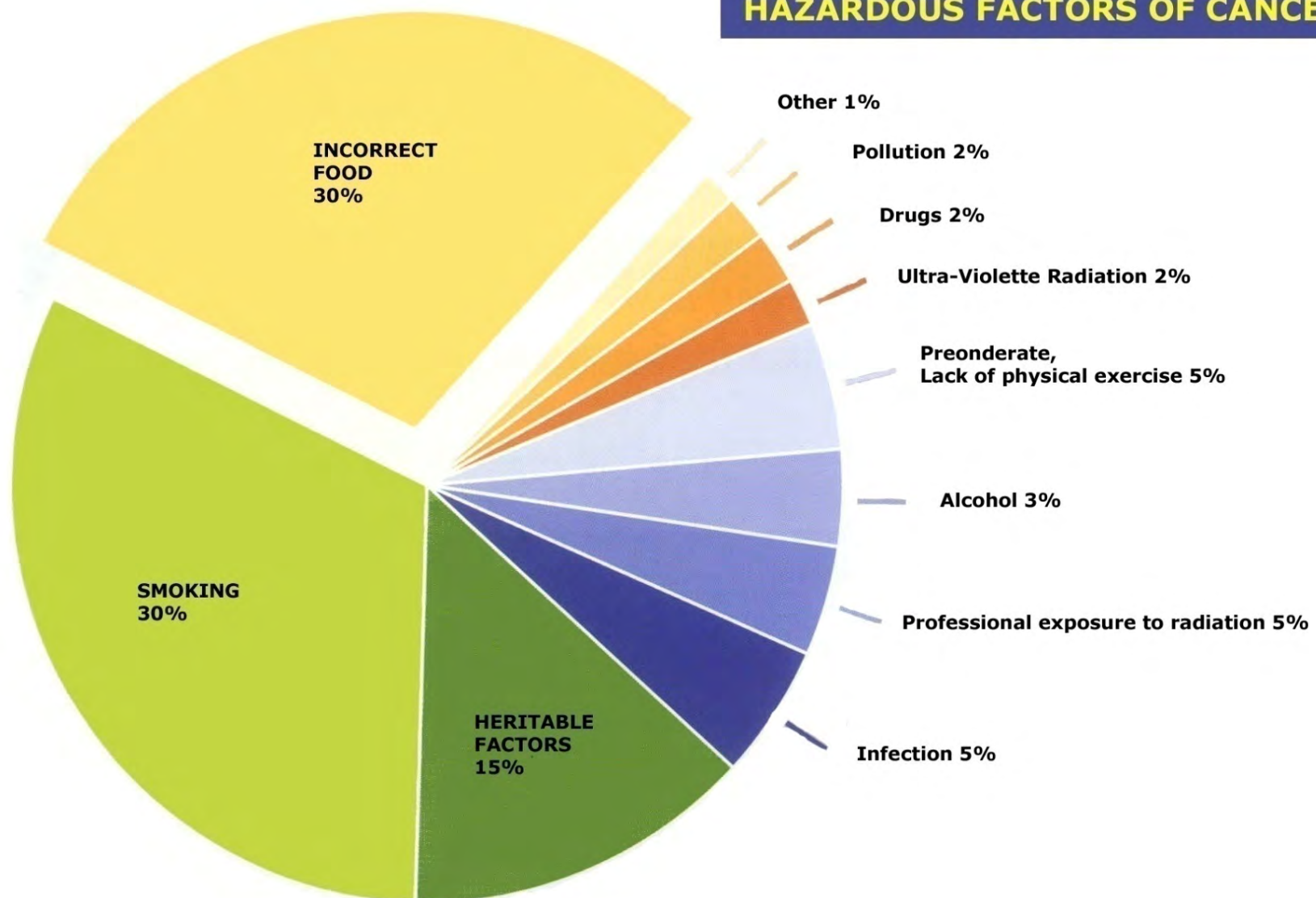


## Diabetes





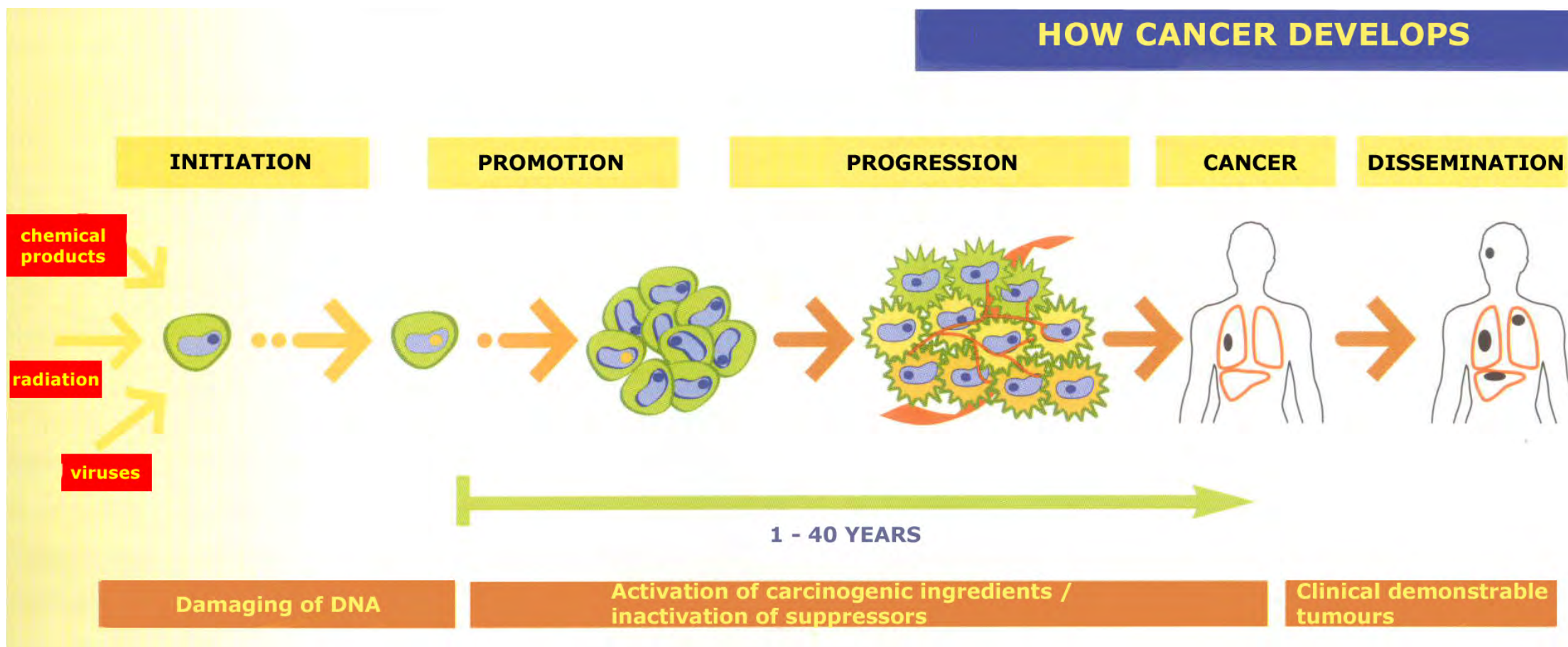
## HAZARDOUS FACTORS OF CANCER





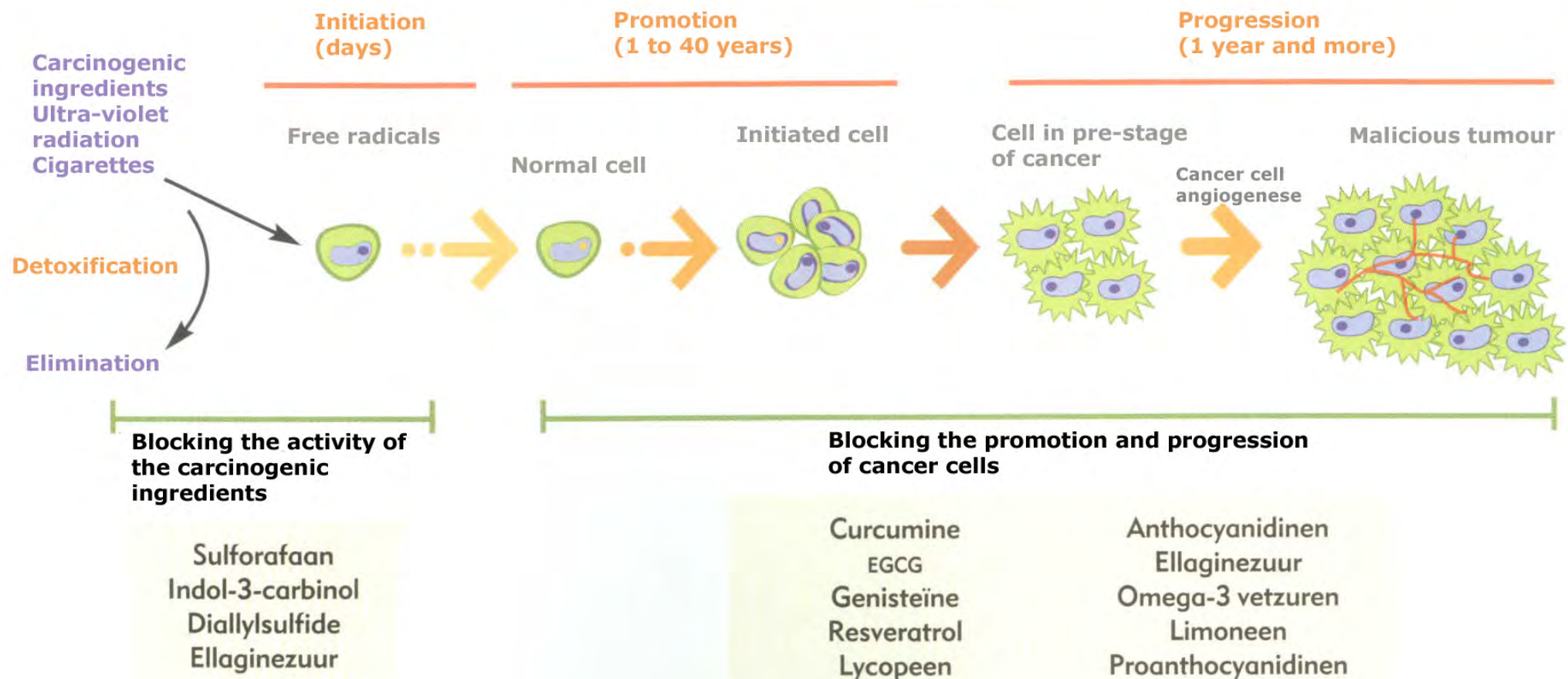


## HOW CANCER DEVELOPS





## The function of cancer-resistant ingredients





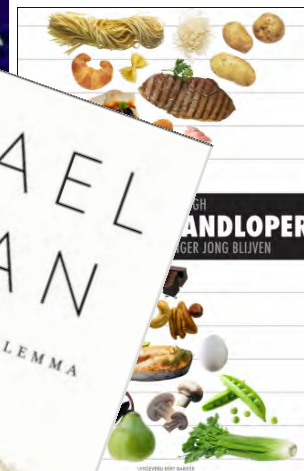
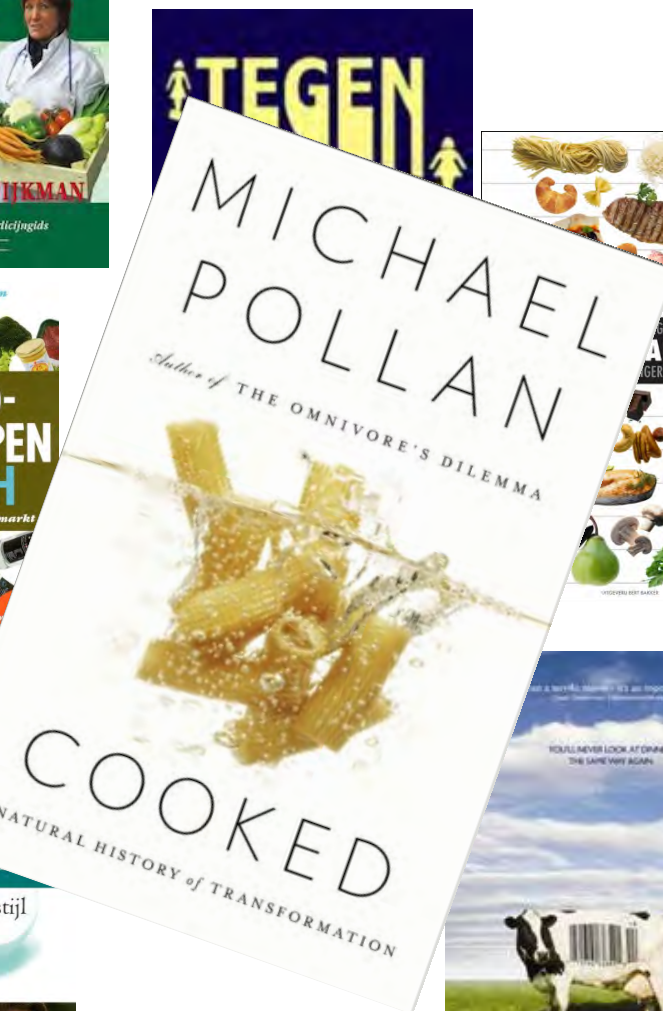
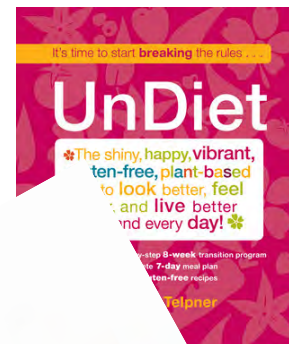
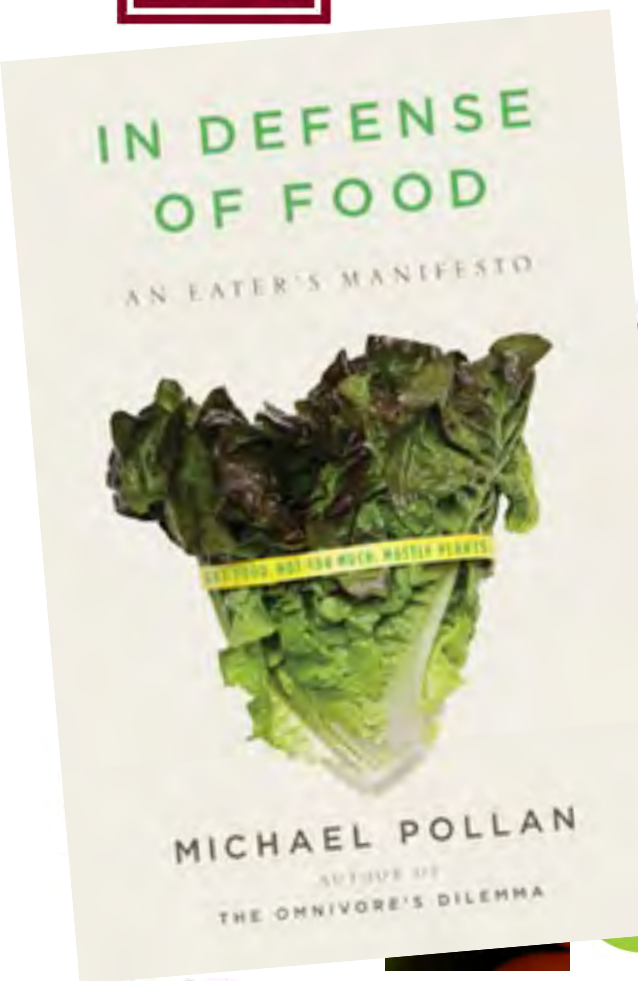


# Trend

## Increase in average healthcare spending

- The right food (choice) can prevent a large scale of the lifestyle related diseases

- |                               |     |
|-------------------------------|-----|
| • Obesity                     | 95% |
| • Type 2 diabetes             | 80% |
| • Heart and vascular diseases | 40% |
| • Cancer                      | 50% |



foodwatch<sup>®</sup>





We are doing it



“Er is inmiddels voldoende  
bewijs dat omkering  
mogelijk is”

  
**VOEDING LEEFT**  
Een nieuwe kijk op voeding

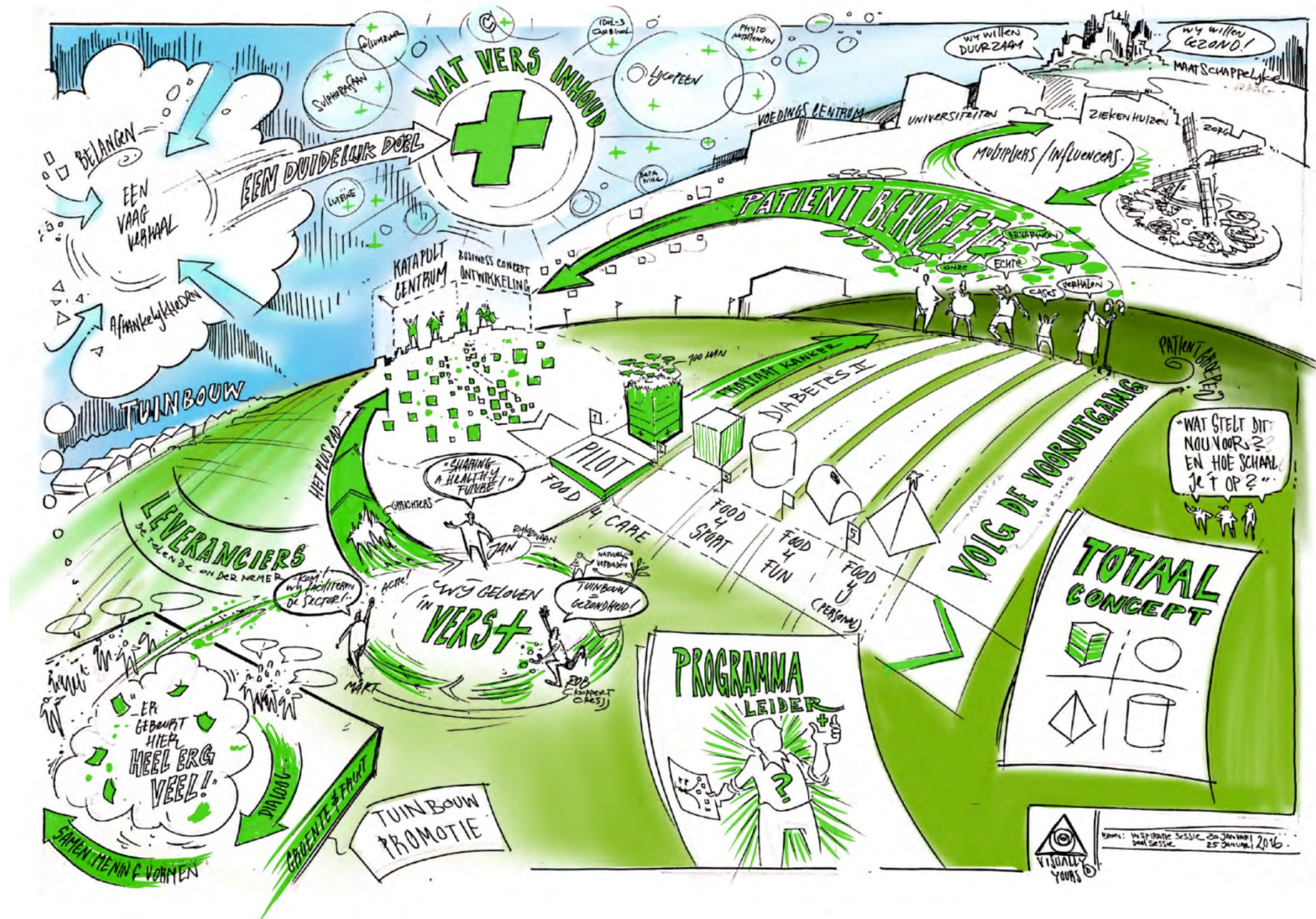
Reverse Diabetes Type 2  
**80% success rate**







bètacaroteen  
 $C_{40}H_{56}$







**GROENTE**  
CONGRES





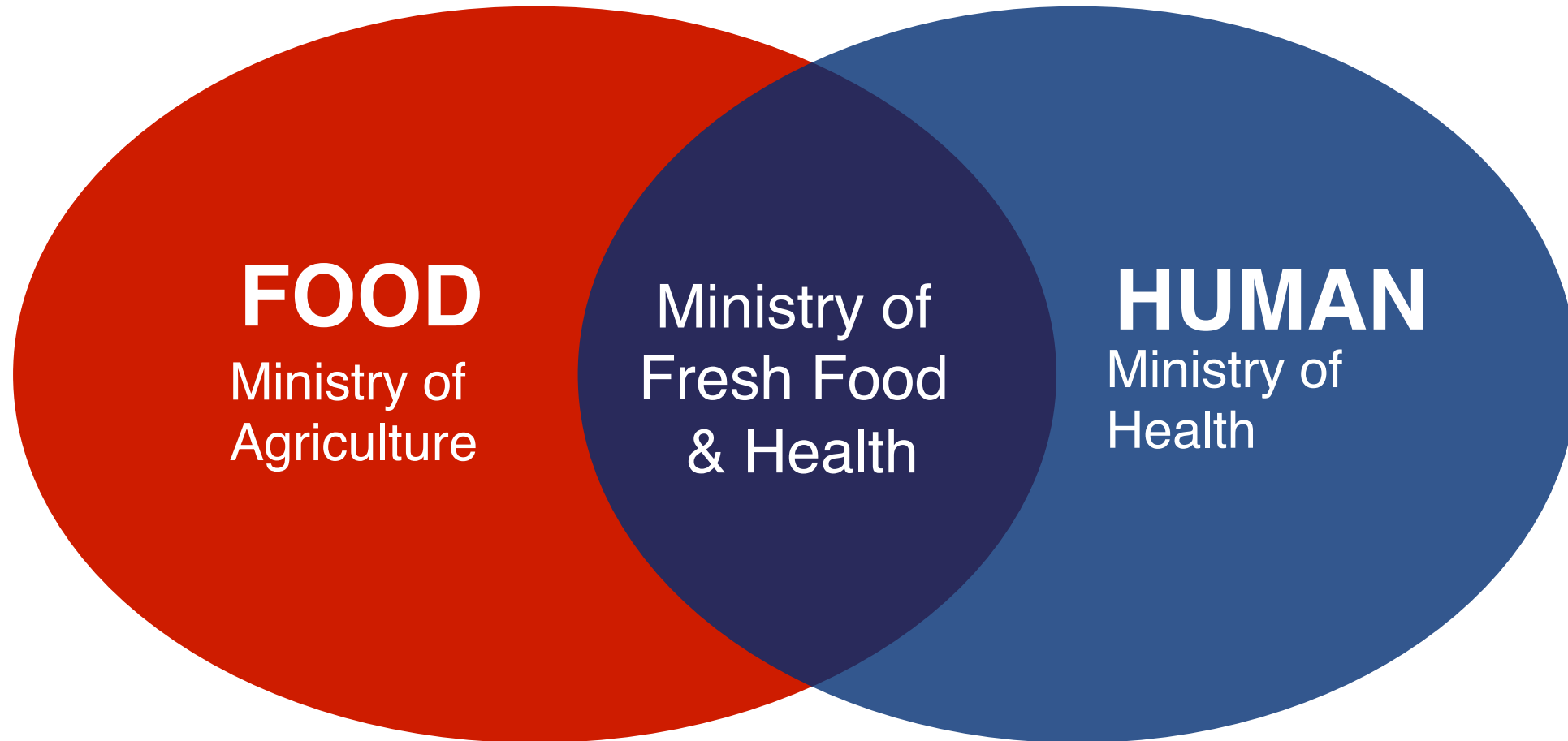








We need a stimulator



**Fresh Food is not just an economic affair  
Fresh Food is HEALTH!**



# AAN TAFEL! TIEN VISIES OP DE TOEKOMST VAN ONS VOEDSEL

HET VOEDSELSYSTEEM MOET ANDERS. EERLIJKER VOOR DE BOER, TRANSPARANTER VOOR DE CONSUMENT,...

LEES MEER

## Rob Baan



"Let's change the way we look at fresh food and health": laten we op een andere manier naar gezondheid en voeding kijken. Rob Baan benadrukt dat de medische wetenschap zich vooral richt op de genezing en reparatie van ziektes, terwijl er aan de preventie kant zoveel ongelooflijk meer te winnen valt.

Ten aanzien van voeding ligt de nadruk op voedselveiligheid en kostprijs. Hierbij wordt volkomen voorbij gegaan aan het nut van echt voedsel voor de gezondheid. Hij zou graag een focus zien op voedselinhoud. Het oorspronkelijke voedsel van de mens is planten eten, aangevuld met een beetje dierlijk eiwit. Hier zijn we compleet van weggeraakt met





# Restaurant derives from restore

[res·tau·rant (rst-ränt, -tr-nt)*n.* from present participle of restaurer, *to restore*, from Old French restorer;

see **restore**: to bring back to or put back into a former or original state (*Medical Definition of restore*)]



**THE REDISCOVERY OF THE DUTCH KITCHEN**  
**where vegetables are leading**





**80% VEGETABLES**

**20% ANIMAL**

**100% TASTE**

**APPLIED INNOVATION  
MODERN TECHNIQUES**



# CULTURE





A close-up photograph of a plant's root system. The roots are a vibrant reddish-brown color and are surrounded by dark, moist soil. Some roots are thick and gnarled, while others are thin and fibrous. The background is slightly blurred, showing more of the plant's structure.

# HEALTH





# NATURE





A topographic map of the Iberian Peninsula, showing the landmasses of Spain and Portugal. The map uses a color gradient from green to brown to represent elevation, with blue lines indicating rivers and coastlines. The word 'QUALITY' is superimposed in large white letters across the center of the map.

# QUALITY

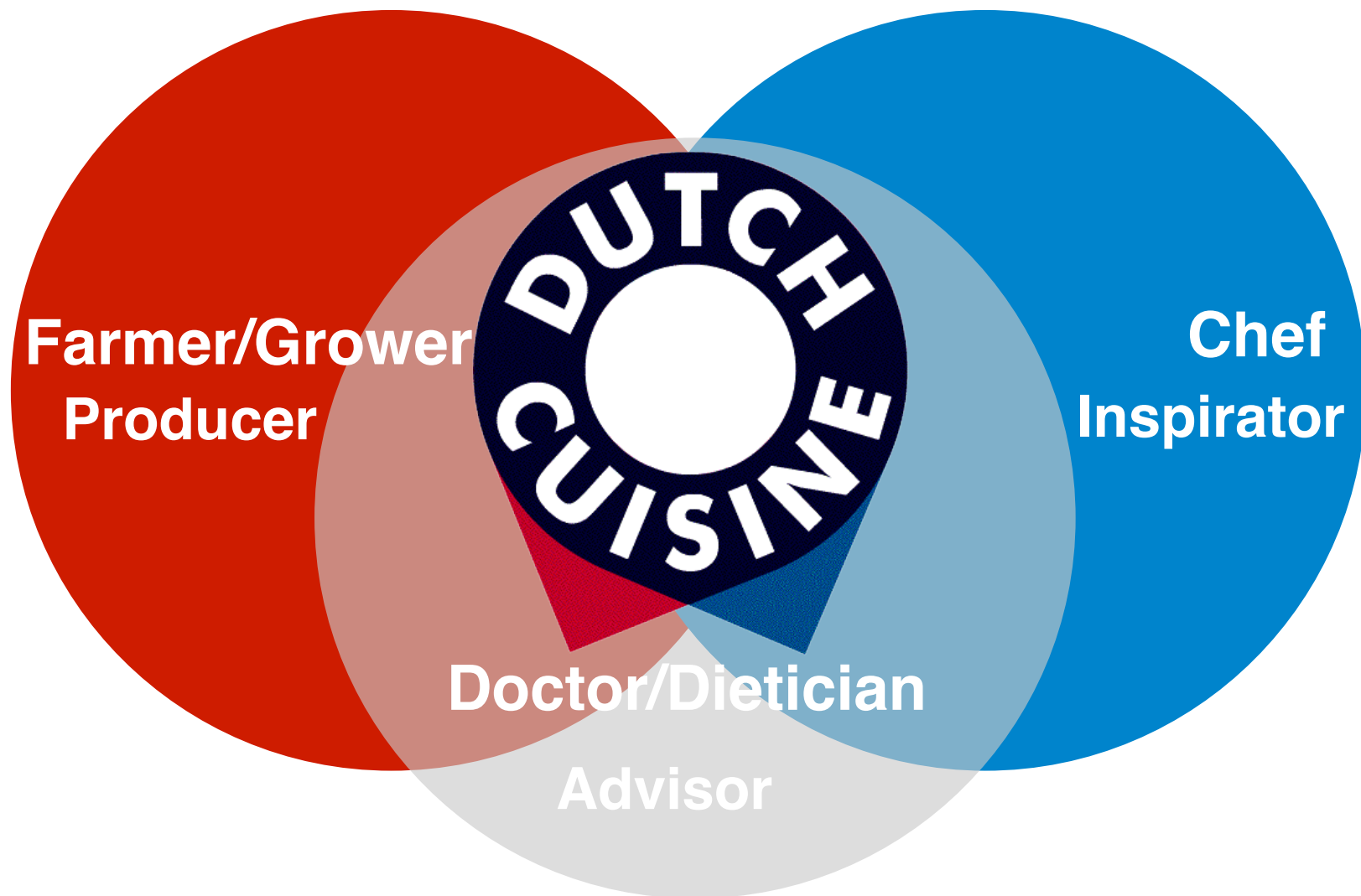




VALUE









# Green Deal Sustainable Food Consumption











Happy Hour  
Sophia  
Children's  
Hospital





Teach the  
Teacher  
taste lessons  
for children



Incubator

startup  
crowdfunding







Everything comes together on the plate





How can we feed 9 billion people?







How can we move away from an agricultural policy  
towards a food policy?





How can we focus on prevention  
instead of healing?







How can we give new meaning to  
'Going Dutch'?





Everybody knows

Nobody does





Fresh

food