

Lifestyle Medicine in medical curricula.

Why do we need it?

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NUTRITION



EXERCISE



TOBACCO
& ALCOHOL



STRESS
MANAGEMENT



HEALTHY
RELATIONSHIPS



SLEEP



"What conflict of interest?!
I work here in my spare time."

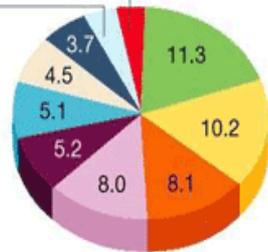
THE MAIN MESSAGE

LEADING CAUSES OF DEATH IN THE US

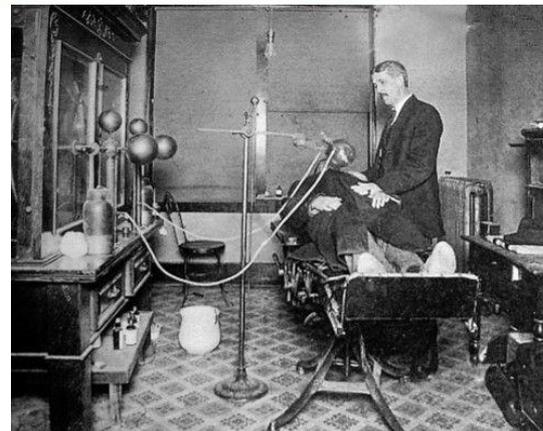
1900

2.3

2.6

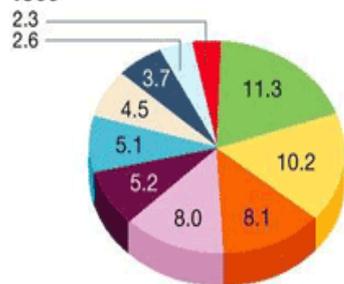


- Tuberculosis
- Pneumonia
- Diarrhoea
- Heart disease
- Liver disease
- Injuries
- Stroke
- Cancer
- Bronchitis
- Diphtheria

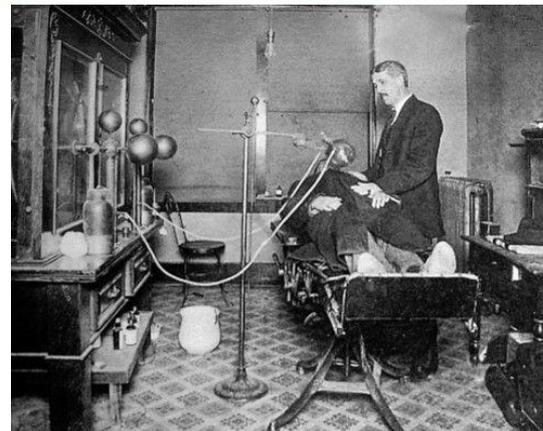


LEADING CAUSES OF DEATH IN THE US

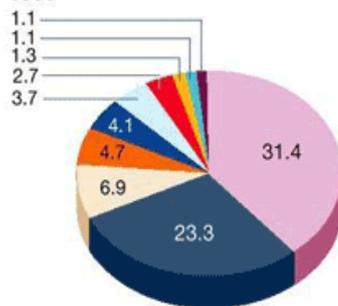
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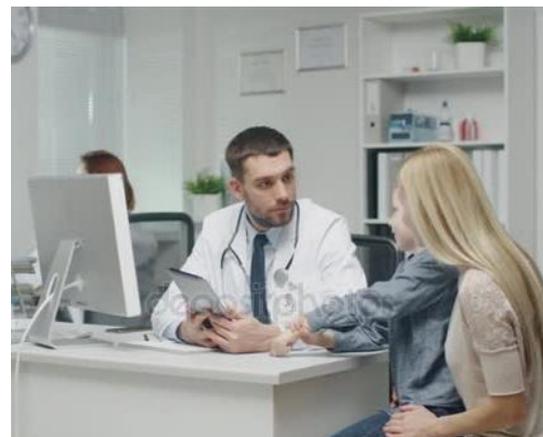
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1997

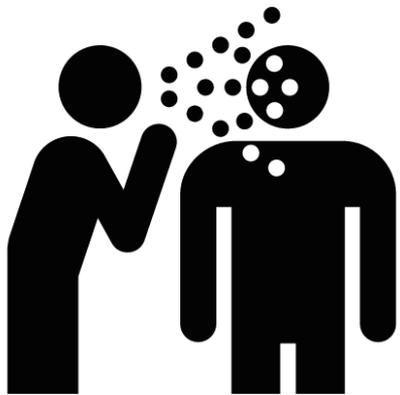


- Heart disease
- Cancer
- Stroke
- Chronic lung disease
- Unintentional injuries
- Pneumonia / influenza
- Diabetes
- Suicide
- Chronic kidney disease
- Chronic liver disease

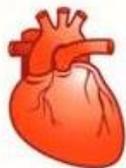


THE WORLD HAS CHANGED

THEN: SIMPLE UNIFACTORIAL DISEASE



NOW: COMPLEX SYSTEMS DISEASES



Cardiovascular Diseases



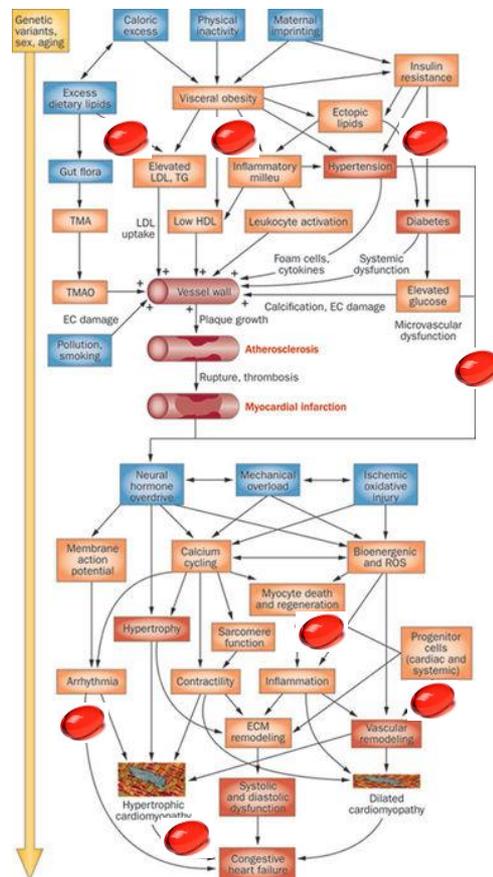
Cancers



Diabetes



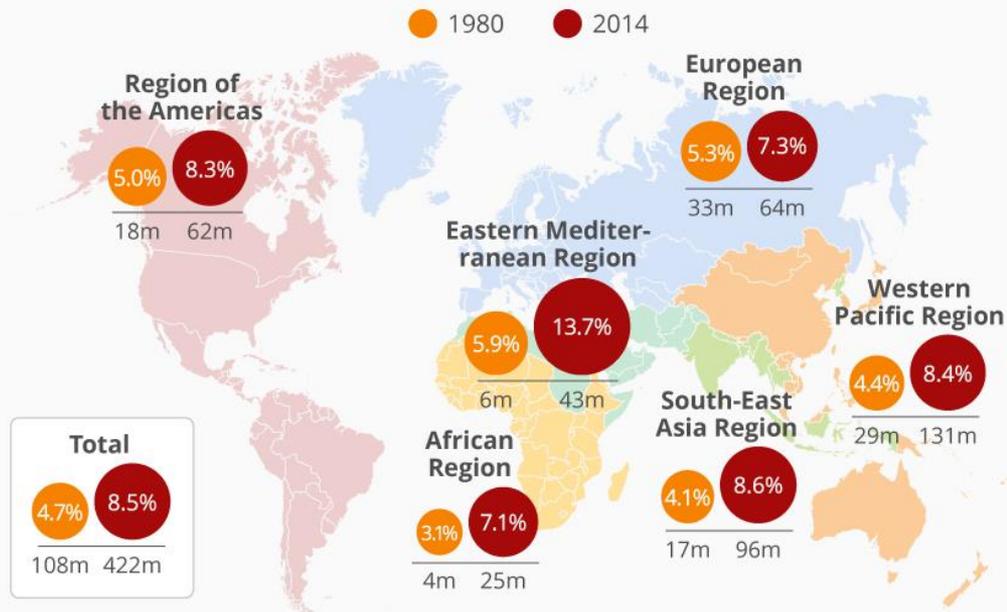
Chronic lung Diseases



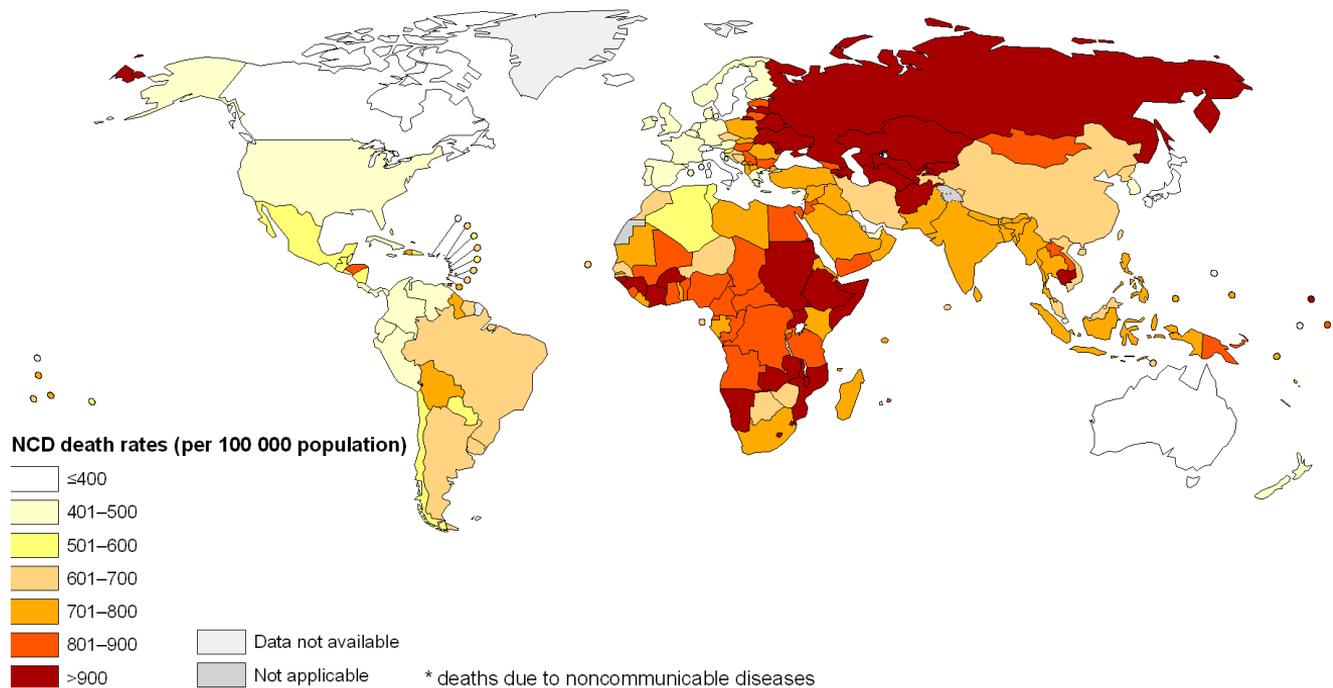
EXPLODING DIABETES EPIDEMIC

The Unrelenting March Of Diabetes

% prevalence and number of adults with diabetes by WHO region in 1980 and 2014*

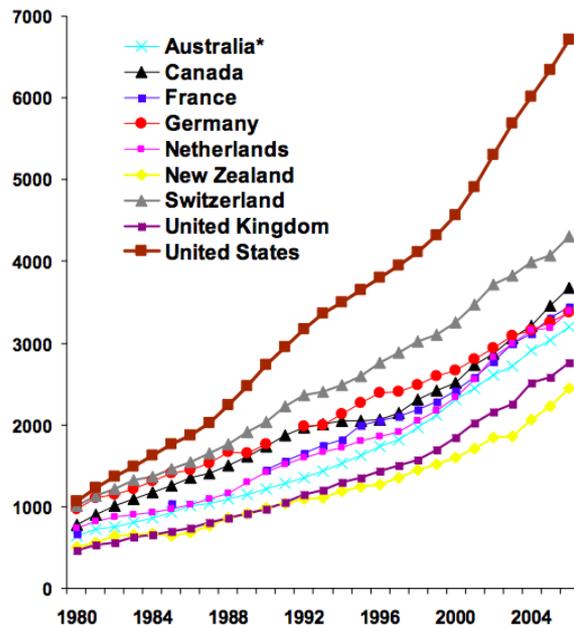


GLOBAL NCD DEATH RATE

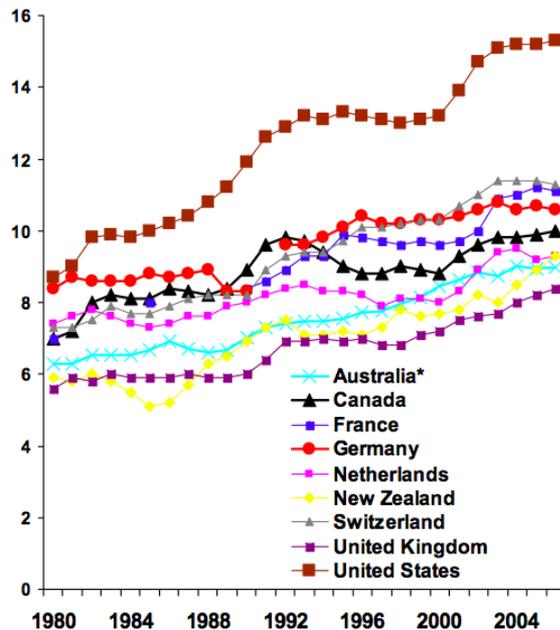


COSTS OF GLOBAL HEALTH CARE

Average spending on health per capita (\$US PPP)

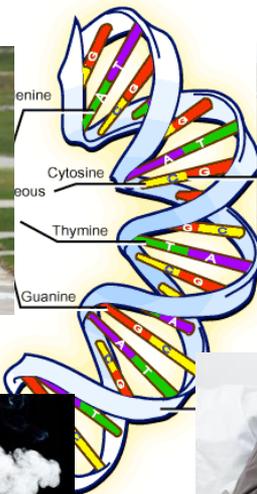


Total expenditures on health as percent of GDP



ETIOLOGY

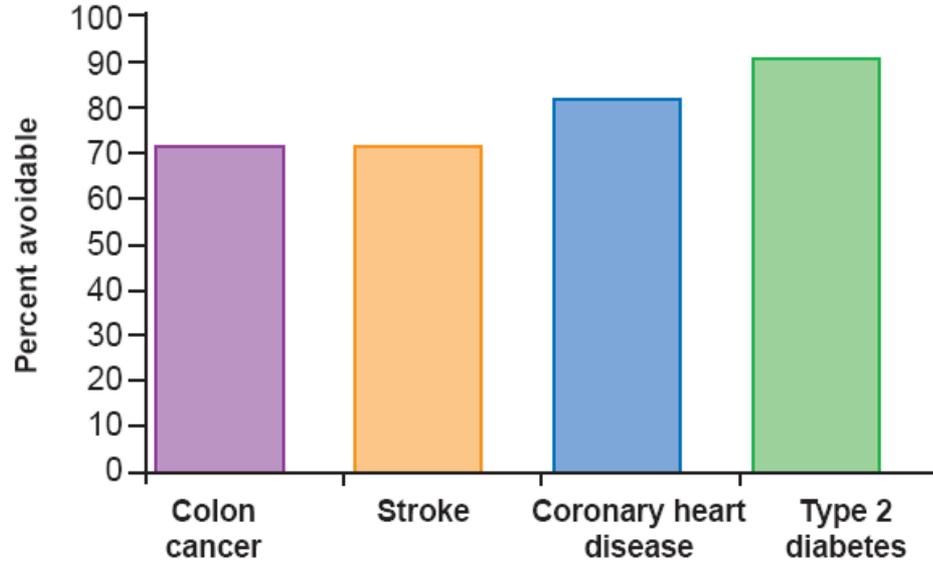
ETIOLOGY OF NCD



ENVIRONMENT IS KEY

Population grouping	Region	Percentage prevalence
Europeans	Britain	2
	Germany	2
	Australia (1981)	2
	Australia (2002)	8
	United States	8
Native Americans	Chile Mapuche	1
	US Hispanic	17
	US Pima	50
Pacific Islanders	Nauru (1952)	0
	Nauru (2002)	41
New Guineans	Rural	0
	Urban	37
Aboriginal Australians	Traditional	0
	Westernized	23
Middle East	Yemen, traditional	4
	Yemenite Jews in Israel	13
	Lebanon, westernized	14
Black Africans	Rural Tanzania	1
	Urban South Africa	8
	United States	13
Chinese	Rural China	0
	Urban Singapore	9
	Urban Taiwan	12
	Urban Mauritius	13
Asian Indians	Rural India	0
	Urban Tanzania	11
	Urban India	12
	Urban Singapore	17
	Urban Mauritius	17
	Urban Fiji	22

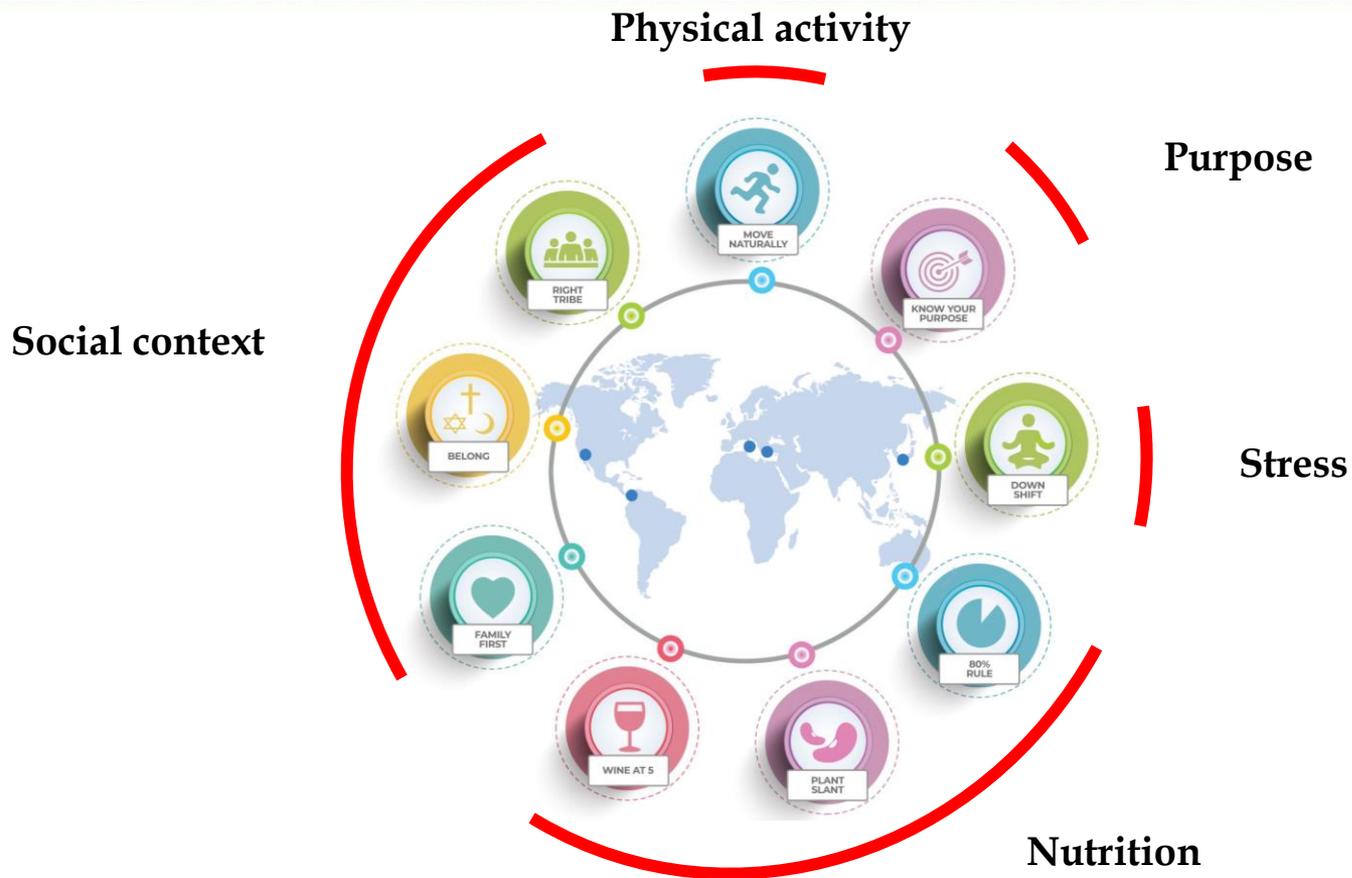
NCD IS AVOIDABLE



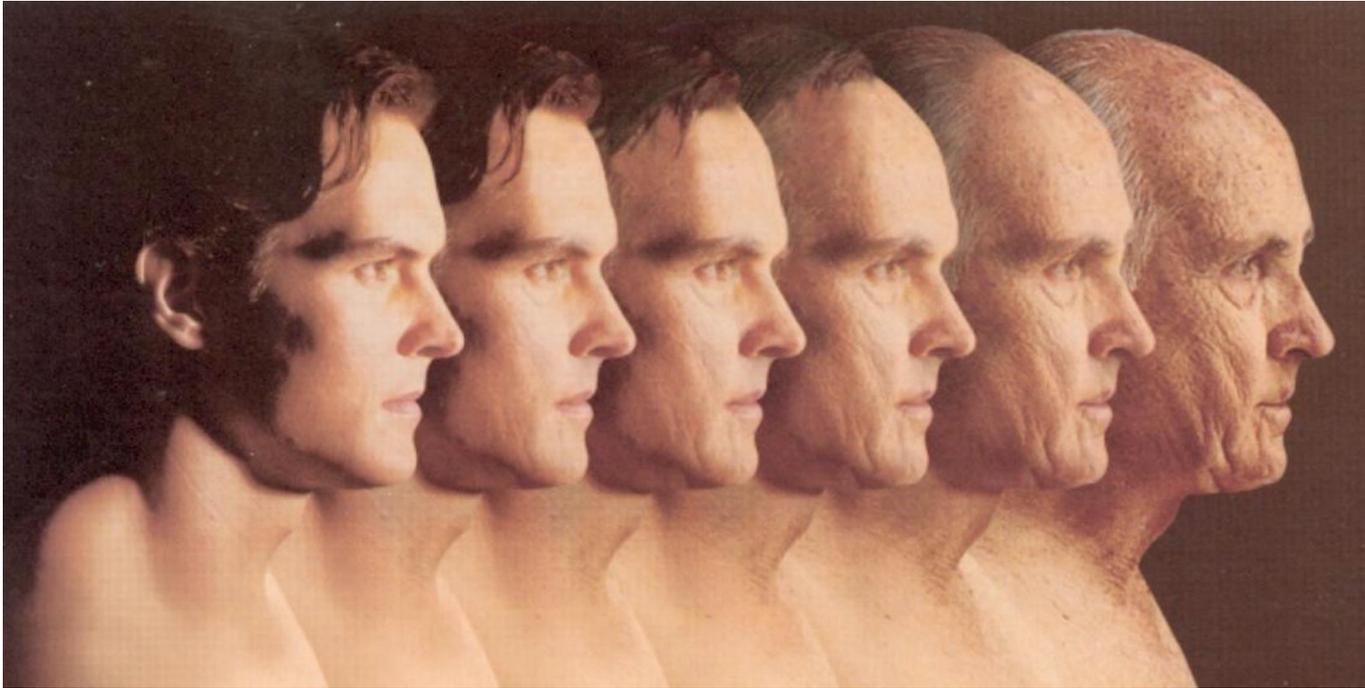
DIET IS KEY....



BUT THERE IS MORE TO IT



MISPERCEPTION 1

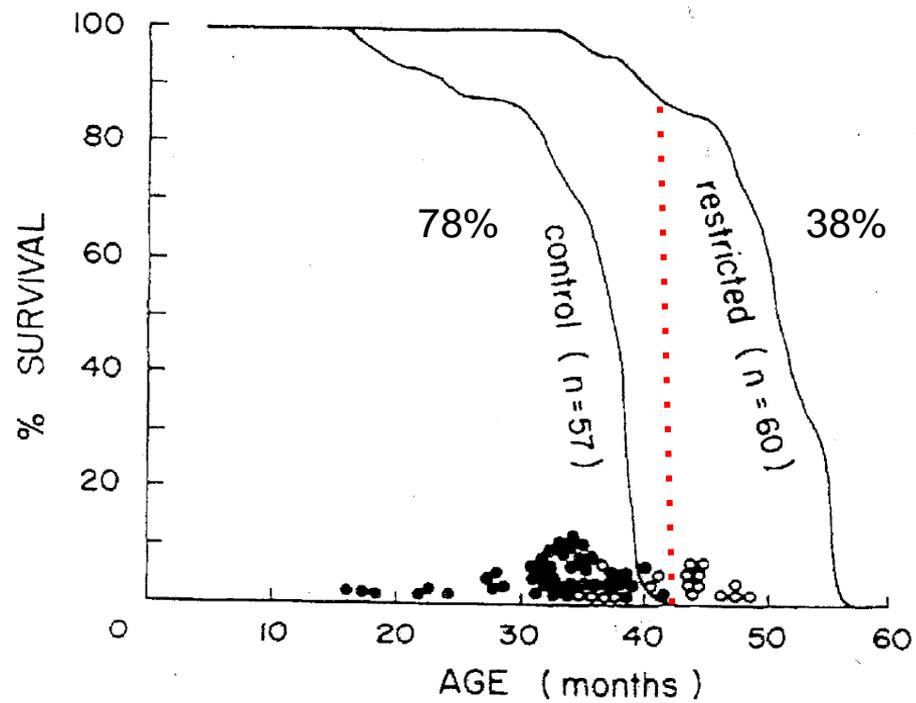


Cell damage

MISPERCEPTION 1/2



MISPERCEPTION 2



CASE HISTORY



WIM & SAÏDA

2007



2016



LIFESTYLE MEDICINE: WHAT IS IT?



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EXERCISE



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SLEEP



HEALTHY
RELATIONSHIPS

WHY DOCTORS?



Inform

Inspire

Check

SPECIALIZED HEALTH COACH



DEPRESSION

DIABETES

CARDIOVASCULAR DISEASE

INFLAMMATORY BOWEL DISEASE

COPD

CANCER

MEDICAL EDUCATION

WHAT DO WE NEED?

KNOWLEDGE OF LINKS BETWEEN LIFESTYLE AND DISEASE



NUTRITION



EXERCISE



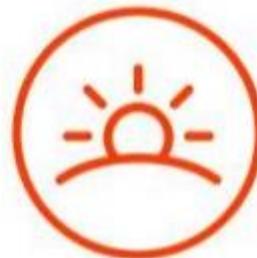
TOBACCO
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HEALTHY
RELATIONSHIPS

HOLISTIC APPROACH

environment

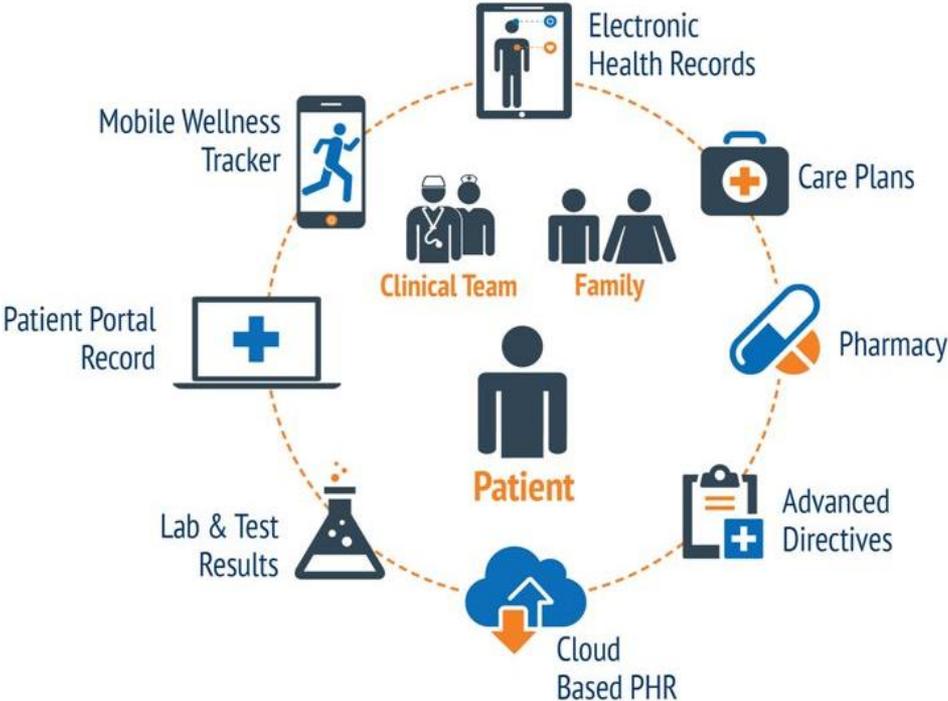
biology

behavior

spirituality



PATIENT EMPOWERMENT



COMMUNICATION SKILLS



BEHAVIOR CHANGE



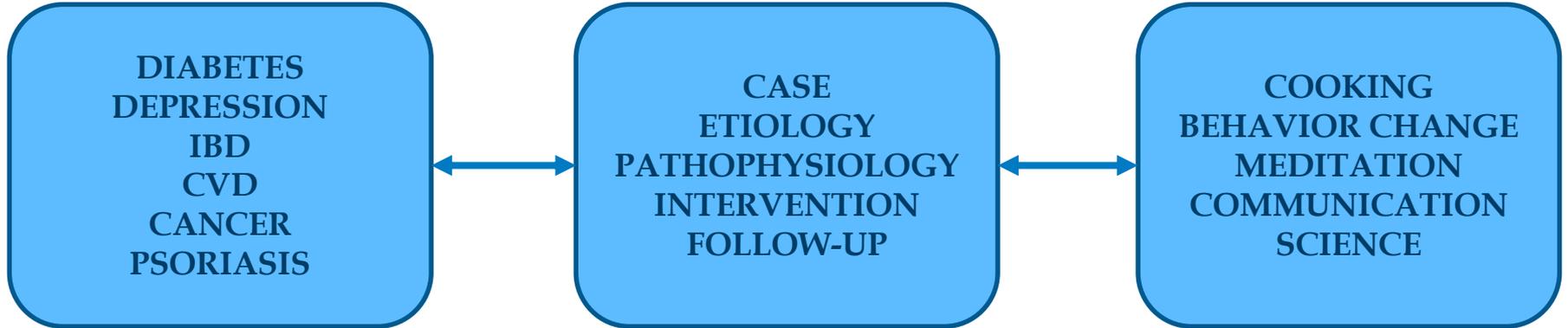
SCIENCE

?

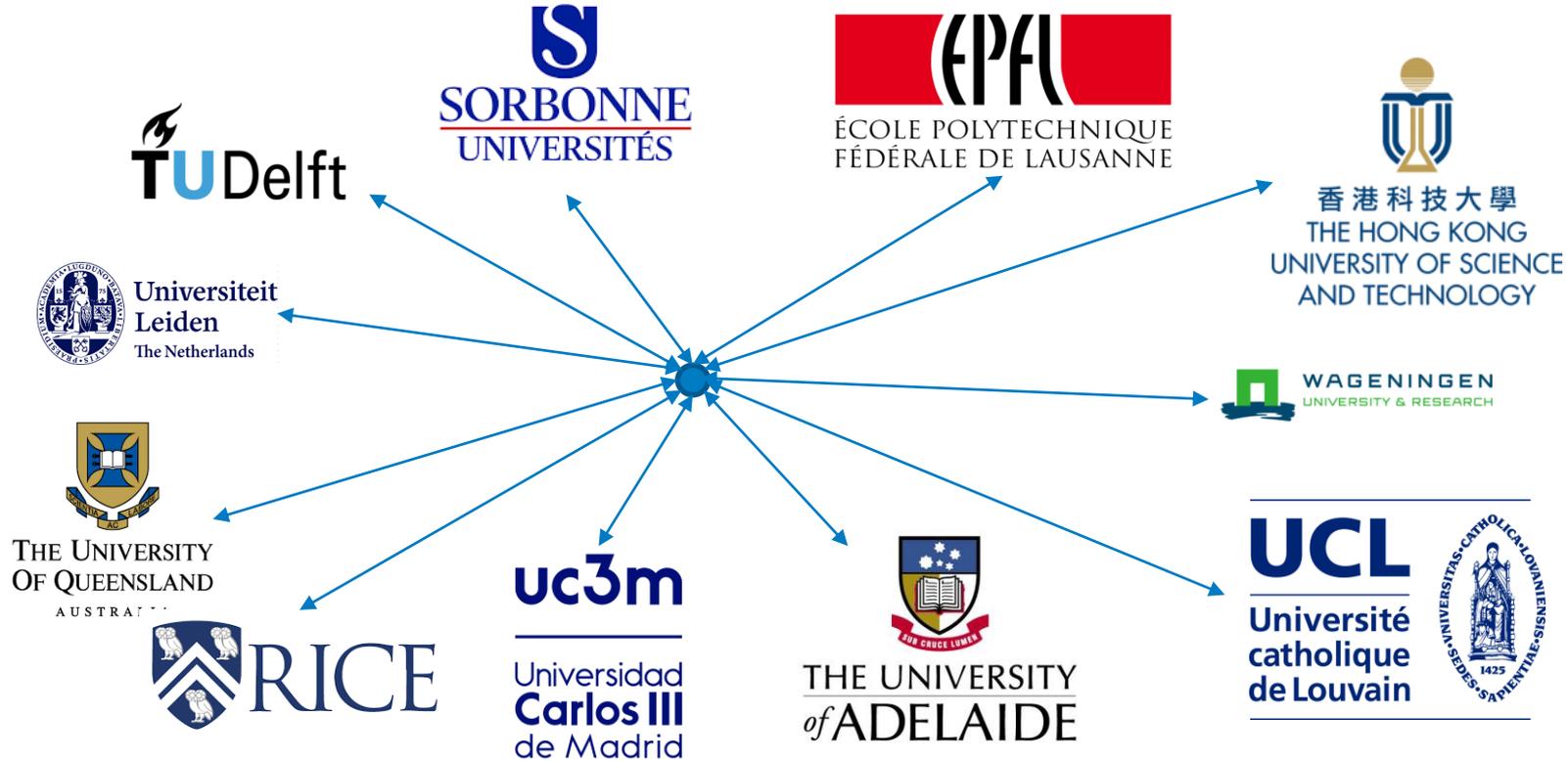
"NON-SCIENCE"



- **International, clinically oriented master course in lifestyle medicine**
- **Primary target group: medical master students**
- **Online**
- **Short video's, related text, references**
- **Assignments, scientific and practical**
- **Parallel course for patients (empowerment!)**



VIRTUAL EXCHANGE



- **The disease burden has changed, medicine should change as well**
- **Our way of life is at the root of many non communicable diaseases**
- **Lifestyle medicine tackles the roots of the etiology**
- **Patient empowerment is key**
- **Modern doctors are advisors, no more no less**