



# Healthy Ageing; some experiences

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## Demographics



10,000 US birthdays today

65

Demographics



1 in 5 Americans in 2030

65+

Demographics



By 2035

65+

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-18

Demographics



Global 2050, those aged 60+

**2bn**

Demographics

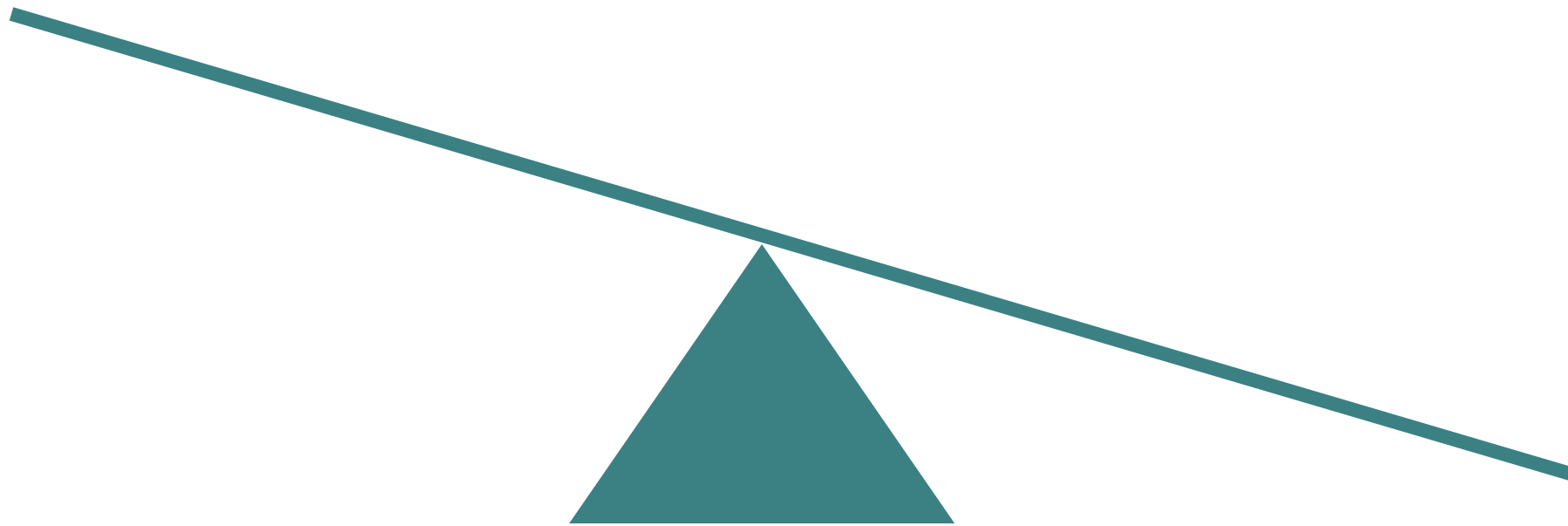
1900's

**Live to 100**

2000's

**1/500**

**1/80**



## Theories of ageing

Finite Heart Beat Theory

Metchnikoff (1904) – bacterial toxins in gut

Surgical implantation of animal testicles from goats/pigs (1920)

Rate of Living Theory (LEP)

Telomeres

Oxidative Damage

Accumulated DNA Damage (XX vs XY)

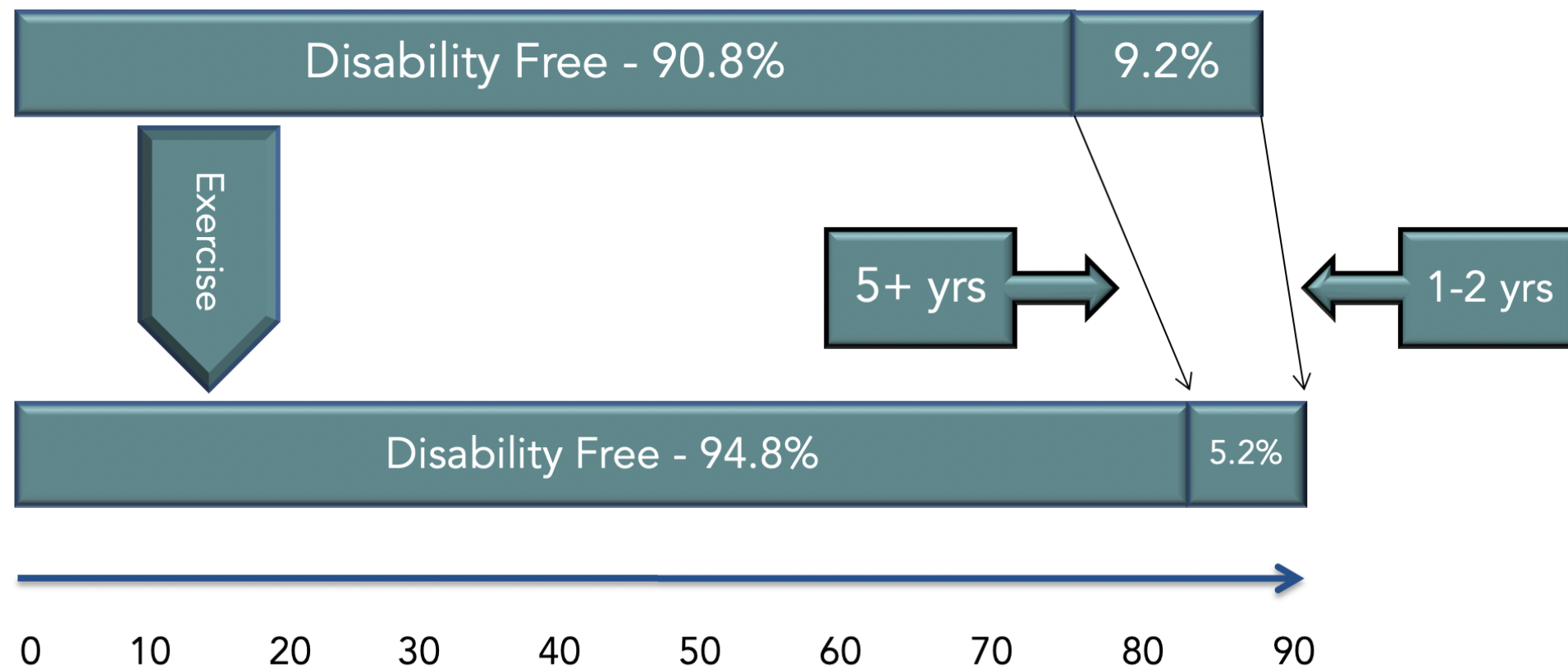
Antagonistic Pleiotropy (i.e. testosterone)

## Definition

*“Successful Ageing is defined as the ability to maintain low risk of disease or disability, high mental & physical function, and active engagement with life.”*

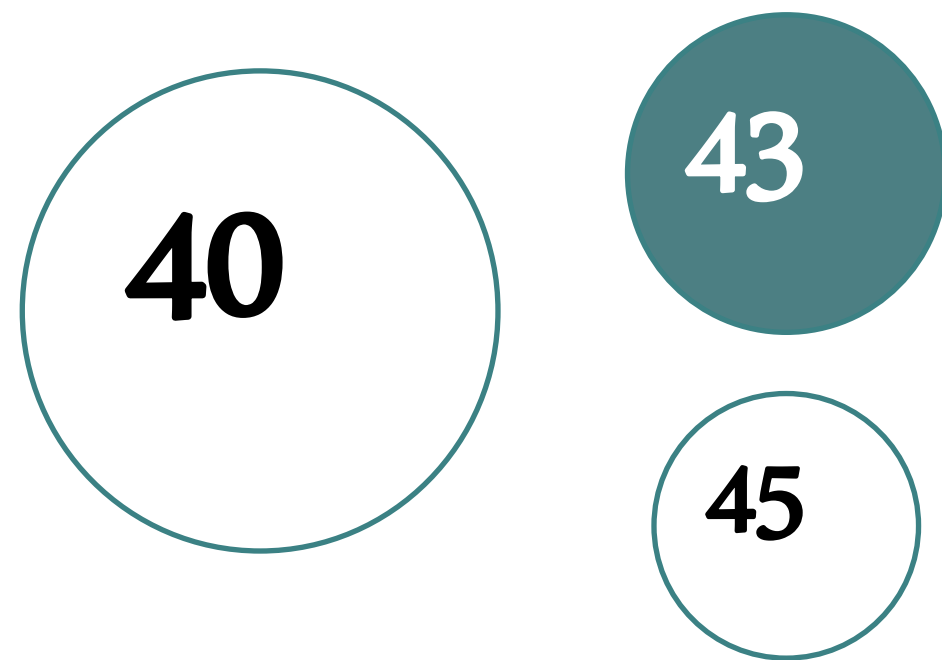


Start now



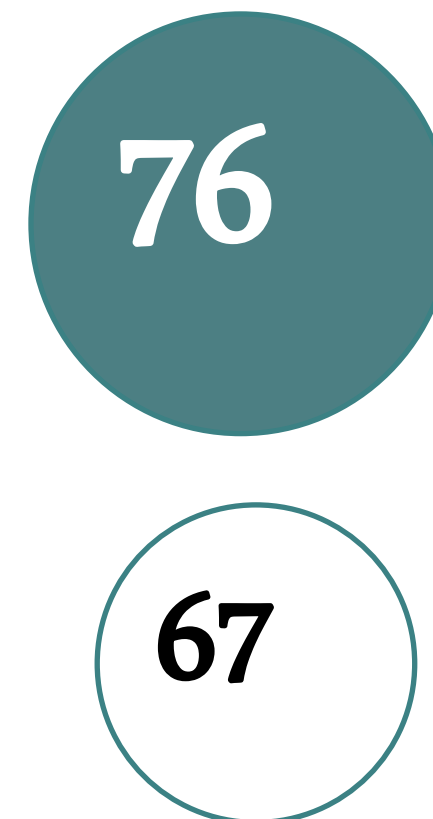
## Mortality

Your current health age in years



## Morbidity

Potential years spent in optimal health



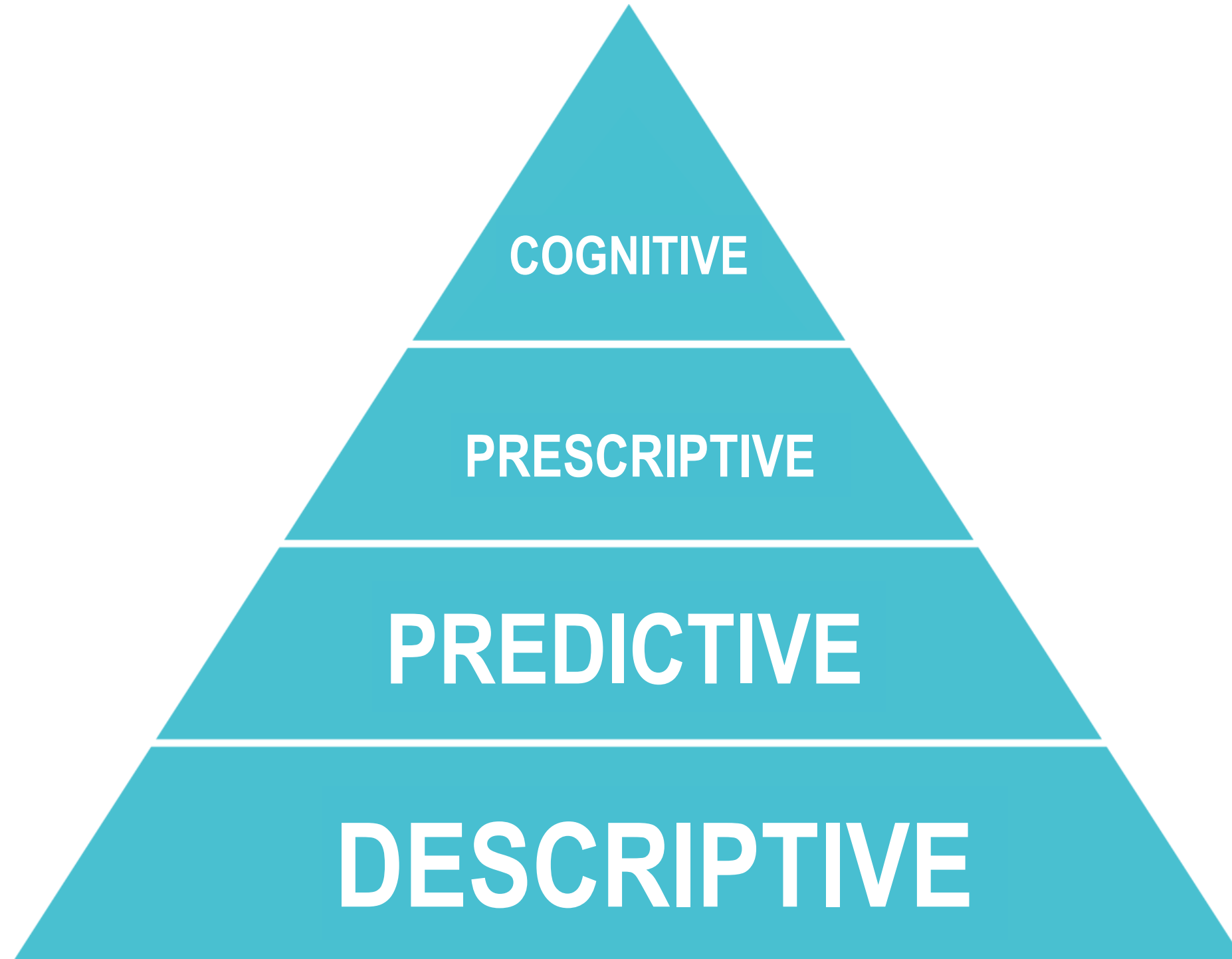
Extrapolating fitness data

Healthy minute



Diabetes minute

The path to AI



## Understanding the building blocks

Soft science



Hard science

Sleep

Smoking

Nutrition

Mindset

Alcohol

Exercise

Relationships

*more*

**Algorithms**

**/**

**Choices / options**

**=**

**Actions**

**Impacts**

The next frontier

Behaviour

Lifestyle

Environment

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AI / machine learning

Quantification

Models

Measurability

Science

Change

Thank you

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