

**What IS Ageing?**

# Scientifically ....

*Ageing is a PROCESS that converts an optimally healthy, fit organism (for its environment) into a less healthy, less fit organism*

**Ageing is a biological process**

**Ageing is not a disease, *per se***

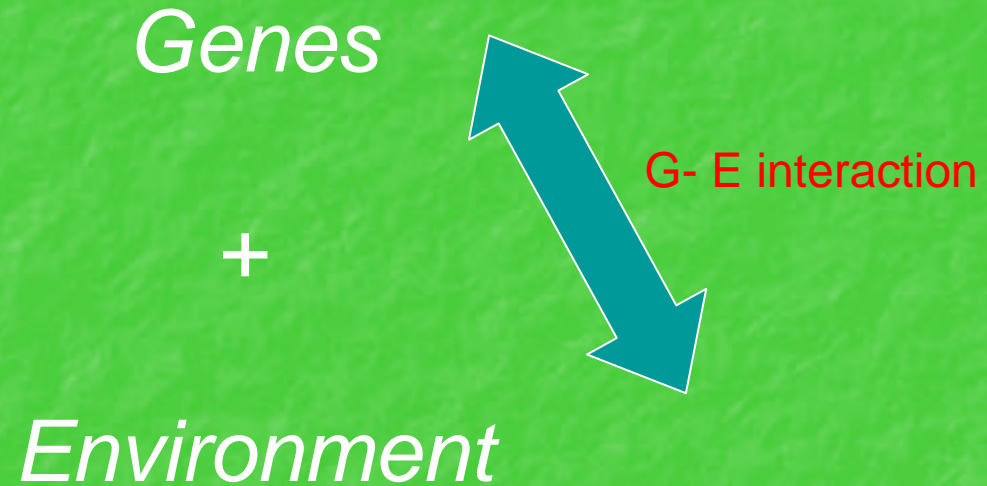
# Practically ....

*Ageing = reduced tissue/physiological function*

*Ageing = increased susceptibility to disease  
(age-related diseases)*

*Ageing = decreased resistance to stress  
(physical and psychological)*

# Why do we age?



# Species-specific longevity genes

*There are genes that determine why mice live <4 years, whereas humans live >100 years.*

# Why do we age? - ENVIRONMENT

*Present environment  
(including life style)*

*Past environment  
(evolutionary history)*

**Nutrition and stress**

# DIET

*Eat well, but not too much!*

**FOOD ---> ENERGY**

*Food ----> simple molecules*

*+ oxygen (mitochondria) ----> energy*

*Oxygen metabolism ----> damaging byproducts  
(ROS, oxidative stress)*

*Anti-oxidant defences good, but not perfect  
(differ among species)*

**OPTIMAL food**

**= less ROS, less damage, more defences  
longer lifespan?**

**Think good thoughts!**

Avoid undue stress

***Physiological stress:***

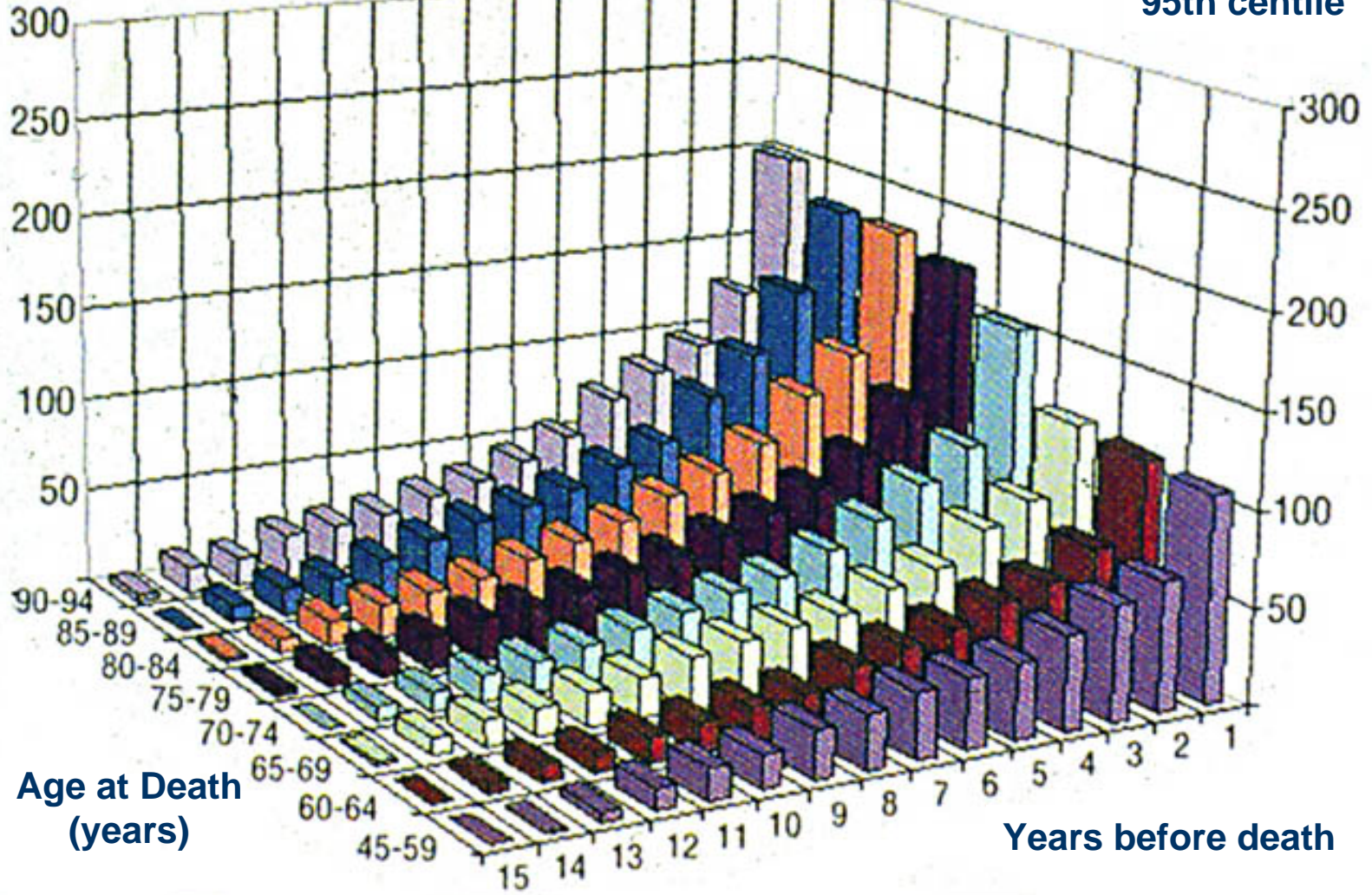
*Stress hormones, a double edged sword*

***Physical stress:***

*Overwhelm cellular defence mechanisms*

# Cumulative days in hospital

95th centile



Himsworth et al. BMJ 1999

# Principles of elderly care assessment

- **Goal** Promote wellness, independence
- **Focus** Function, performance (gait, balance, transfers)
- **Scope** Physical, diet, cognitive, psychologic, social
- **Approach** Multidisciplinary
- **Efficiency** Perform rapid screens to identify target areas
- **Success** Maintaining or improving quality of life

# Goal of comprehensive geriatric assessment

To determine a patient's:

- medical status
- functional capabilities
- psychosocial status

in order to develop an overall plan for treatment and long-term follow-up

# Summary

**The focus of elderly assessment is on function:**

- **Successful assessment promotes wellness and independence**
- **Use strategies to enhance communication with older patients**
- **Comprehensive assessment includes physical, nutrition, cognitive, and social aspects of health**

And finally....

**Thanks to Dr Catto for all his work.**

The slides I have used today, come from part of his presentation that he gave to NAGE, in York, back in November 06