Suresh Rattan
Editor
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Healthy Ageing, but What is Health and How to Maintain it?

Suresh Rattan  PhD, DSc

Laboratory of Cellular Ageing
Department of Molecular Biology and Genetics
Aarhus University - DENMARK
Health is a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity.
Idealistic definition

**ABSOLUTE** physical and mental independence in ADL.

Pragmatic and realistic definition

**ADEQUATE** physical and mental independence in ADL.
Biologically, at what point in lifespan ageing begins?

Essential lifespan (ELS)

Average lifespan

Maximum lifespan
Biologically, ageing happens after essential lifespan (ELS) of the species.

Psychologically, human ageing “stops” after ELS of about 40-50 years.
Ageing occurs at all levels of biological organisation, but differently…
we are not programmed to age and die

There are no gerontogenes whose sole function is to cause ageing and eventual death

Genes determine essential lifespan of a species (longevity-assurance genes; vitagenes)
Not homeostasis, but **HOMEODYNAMICS**
Ageing is the shrinkage of the homeodynamic space.
Anti-ageing or healthy ageing?
Ageing interventions:

1. Wishful thinking and miracles
2. Piecemeal remedies / replacements
3. Replenishments – hormones, anti-oxidants
Wholistic interventions for maintaining health
HORMESIS

- Biphasic dose response
  - U-shaped response
  - Inverted-U shape response
- Adaptive response
- Compensatory response

Three types of dose response curves...
Challenging of homeodynamics stimulates compensatory, adaptive, and reparative processes.
Repeated mild heat shock slows down ageing, improves angiogenesis, wound healing and healthspan
A condition that causes hormesis is: HORMETIN
The science of hormesis is HORMETICS

Physical hormetins
exercise, heat, cold, radiation...

Nutritional hormetins
spices, micronutrients, fasting

Psychological hormetins
Social and mental engagement, focussed attention (meditation)
Hormesis for humans –

Health beneficial effects of stress of choice....
What we need for maintaining health:

**Biological level** – food, shelter, biomedical technology

**Sociological level** – identity, contact, communication

**Psychological level** – attitude, ethics, connection
Aging Science Related Journals

- Anaplastology
- Journal of clinical & experimental Dermatology Research
Aging Science
Related Conferences

- 5th International Conference on Clinical & Experimental Dermatology
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