

The need for antiageing medicine

Who, Why, What and When!

Presented by

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Great Britain

www.antiaging-systems.com

Who's aging well?



Raquel Welch at 68



Jane Fonda at 71



Sophia Loren at 75



Robert Vaughn at 80



Kirsty Alley



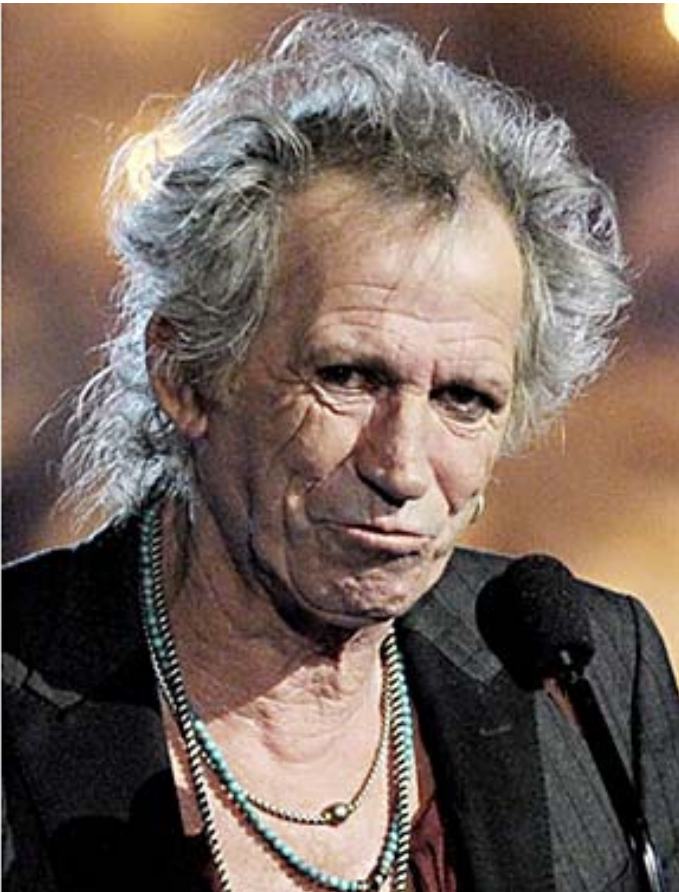
Mark Hamill



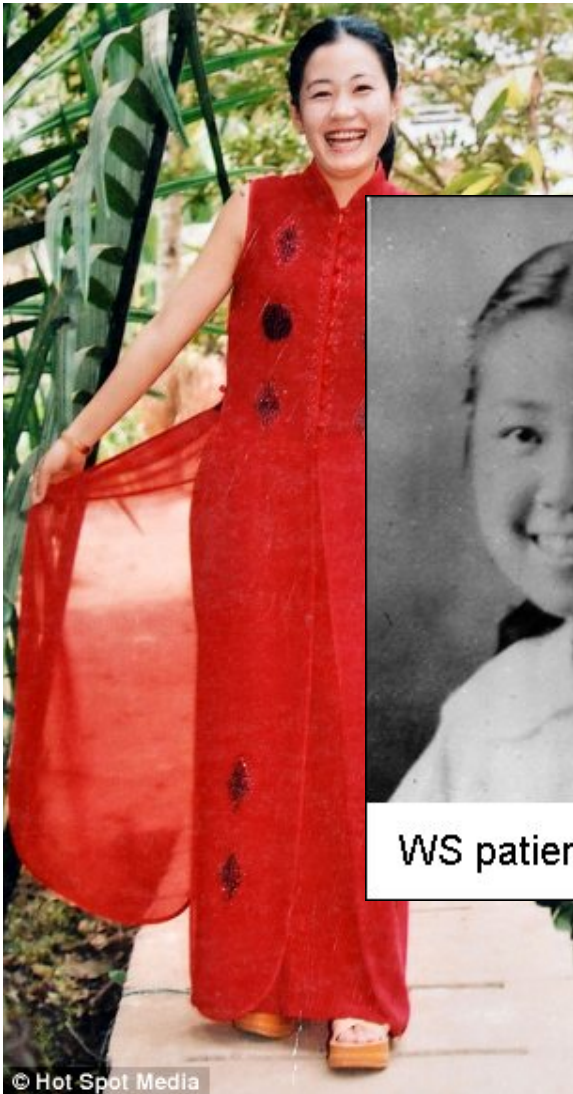
Kathleen Turner



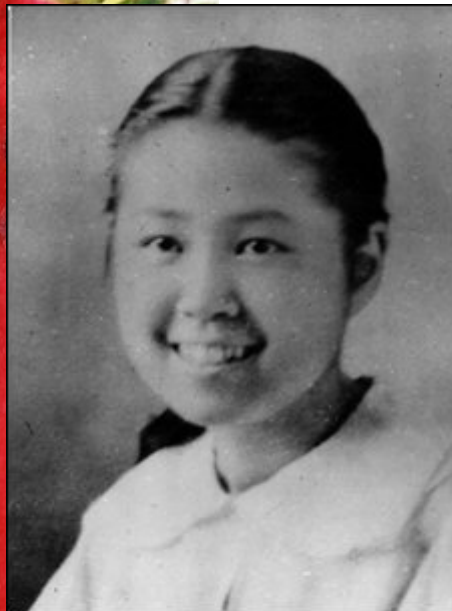
Keith Richards



Extreme aging examples



Ng Thi Phuong
aged 21

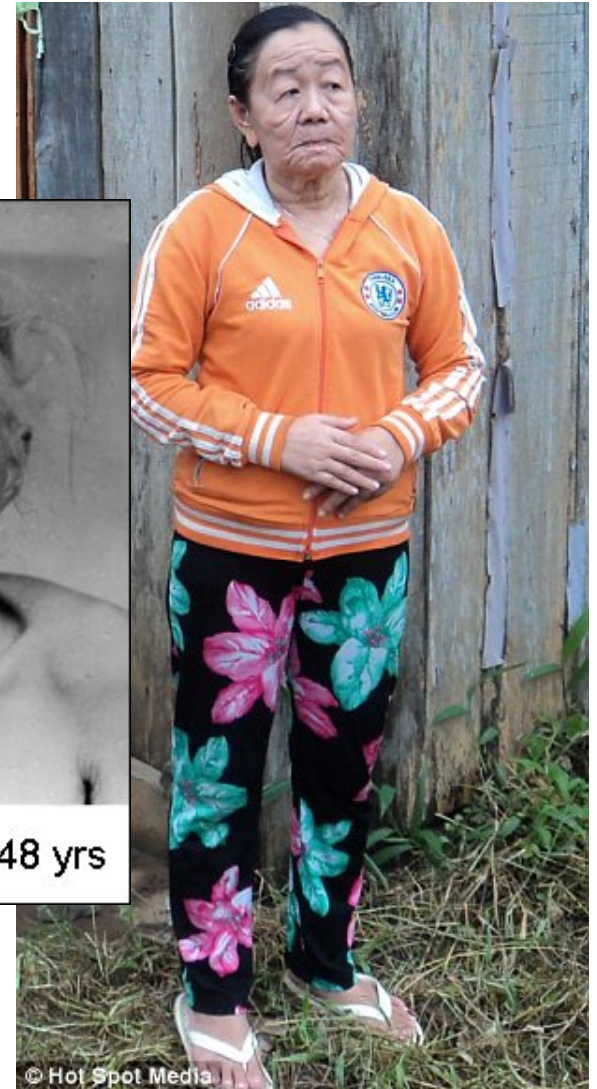


WS patient age 15 yrs

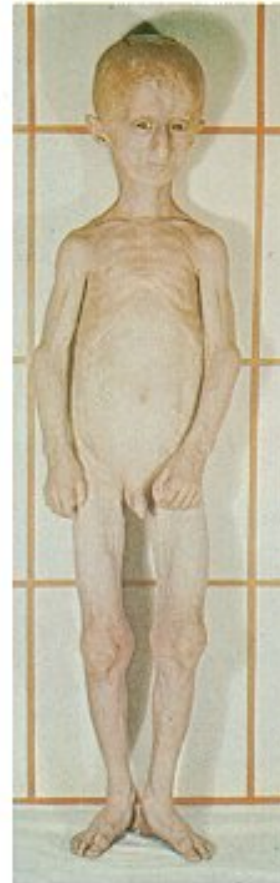


WS patient age 48 yrs

Ng Thi Phuong
aged 26



Progeria

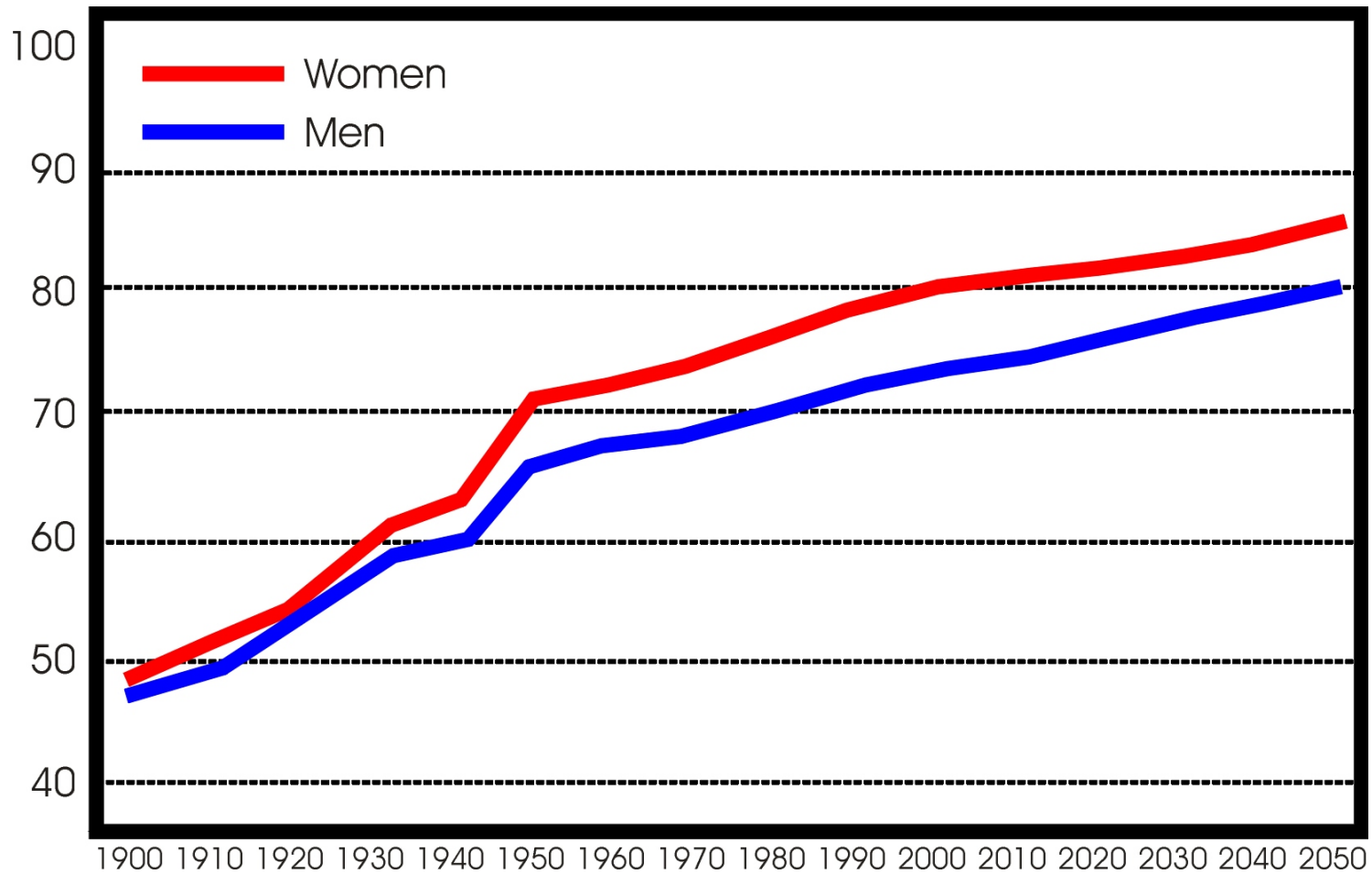


Progeria: Premature aging. Usually die at 10-15 yrs. of heart failure.
SS Gellis, M Feingold. Atlas of Mental Retardation Syndromes. 1968.

Why?



Life expectancy



Source: US Department of Health and Human Services, January 2000

What can we expect now?

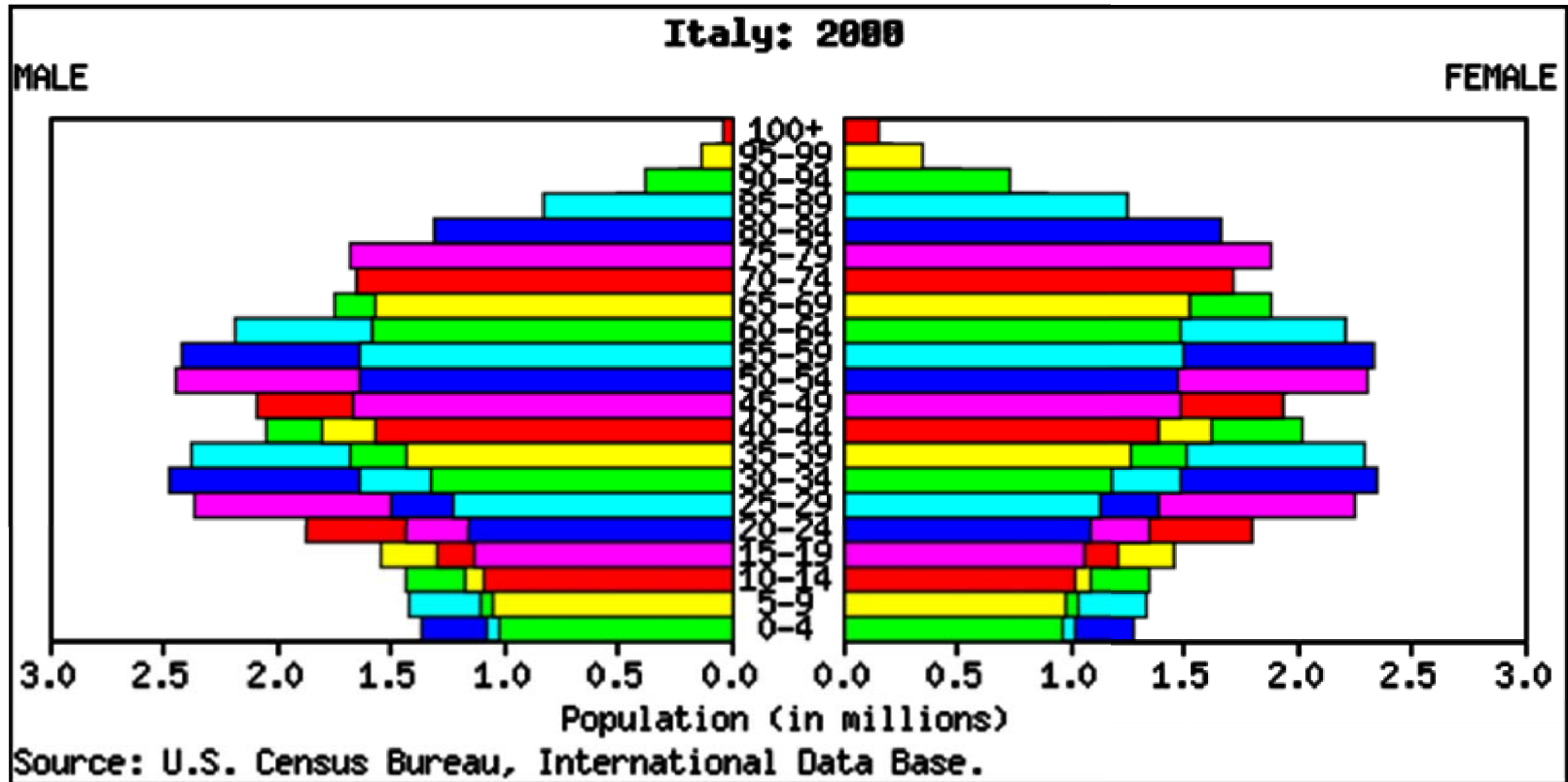


❑ On average, once we reach 65, men can expect to live an additional 14.8 years and women can expect to live an additional 17.6 years

❑ A child born in 1997 can expect to live 29-years longer than one born in 1900

Source: United States Census Bureau
US Department of Commerce, May 1995

How is the population changing?



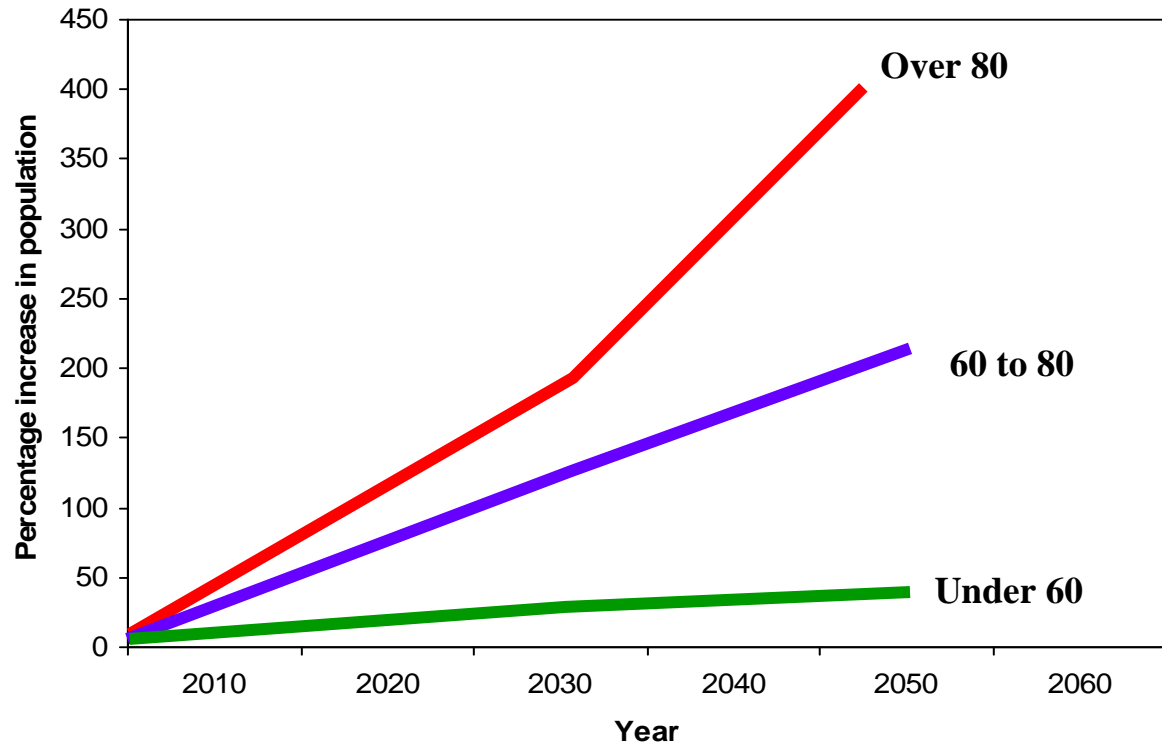
65+ age bracket has experienced a surge of growth from 2010

Worldwide aging trends

❑ In 2000, there were 600 million people aged 60 and over; there will be 1.2 billion by 2025 and 2 billion by 2050

❑ In contrast those between the ages of 15 and 59 are expected to increase by 16% and under 15 by 5%

❑ But the biggest increase will be those over 80, growing by more than 400%

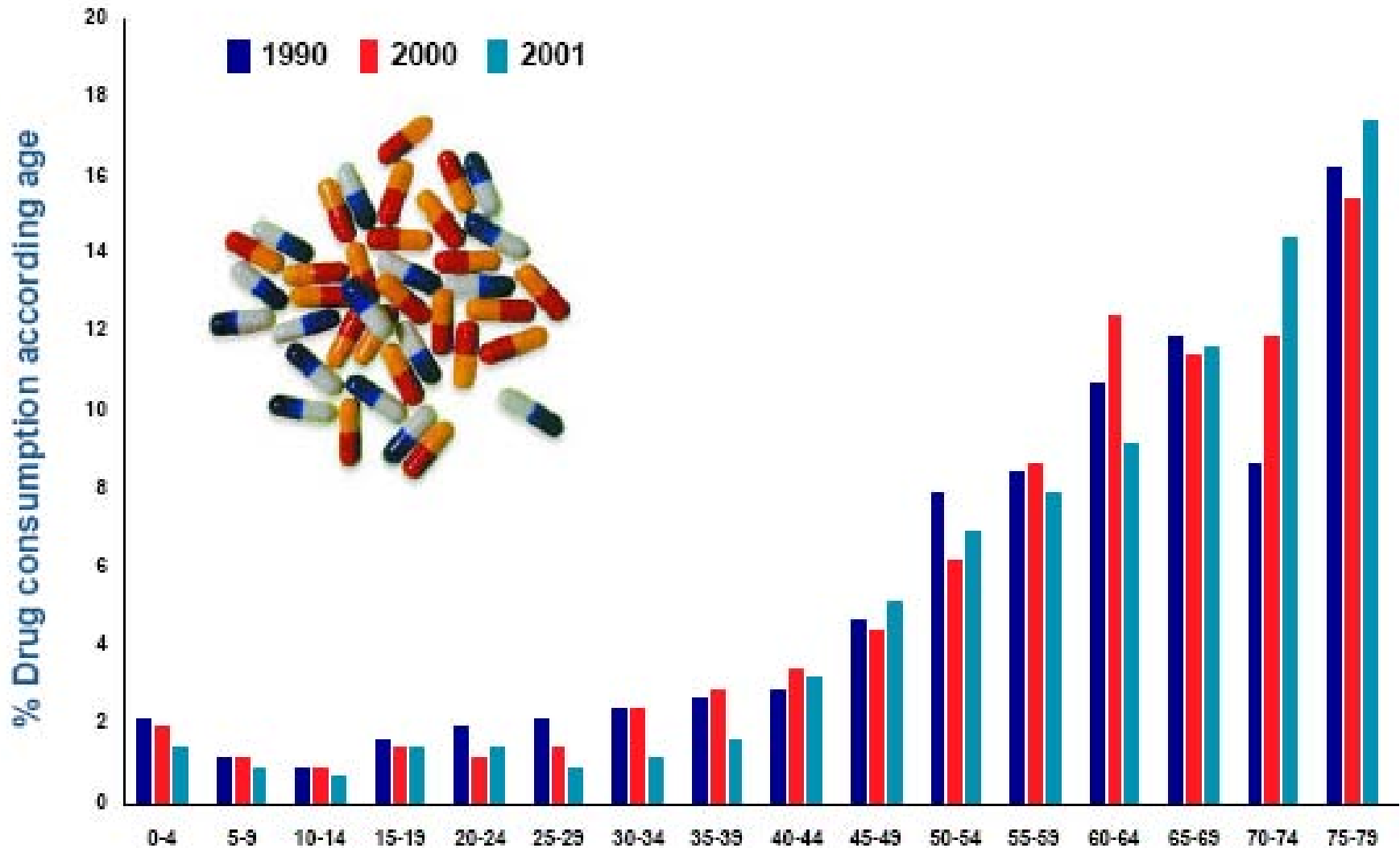


❑ 66% of older people live in the developing world, this is expected to increase to 75% by 2025

❑ In very old age the ratio of females to men is 2 to 1

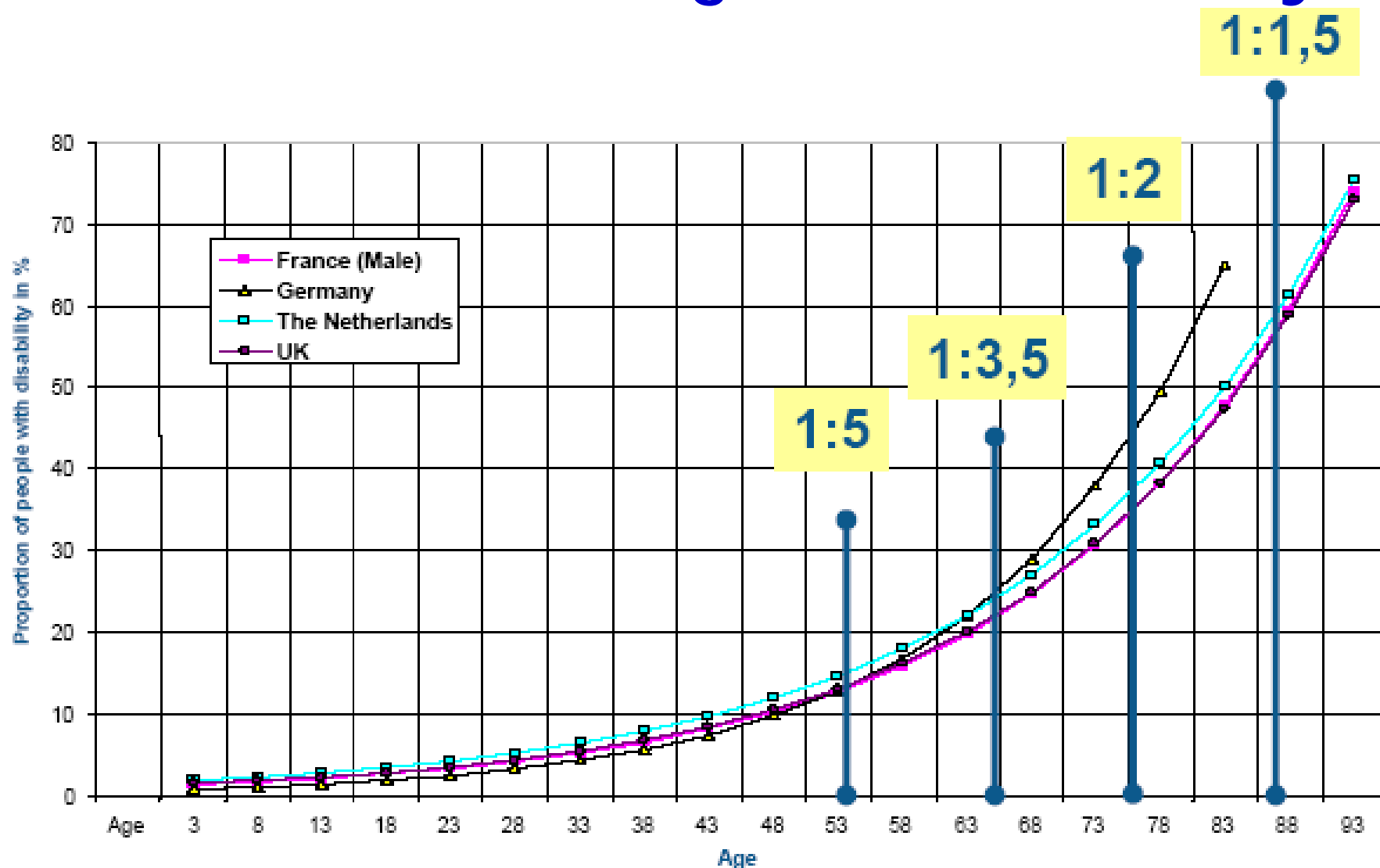
Source: World Health Organisation Ageing & Health:
www.who.int/hpr/ageing

Drug use by age group



Source: Lehman Brothers Equity Research

Correlation of age and disability



Source: Association for the advancement of assistive technology in Europe



The implications of aging

- ❑ Old age dependency rates will rise in every major world region during the next 25-years
- ❑ The elderly support burden in 2025 will be 50% larger than that in 1998

Source: United States Census Bureau, May 1995

- ❑ In 2020 about 1 in 5 will be considered 'elderly'

Source: United States Department of Commerce, 1990

- ❑ Increase of just 6-years extra life expectancy in the US between 1970-1990 translated into a worth of \$57 trillion in 1992 value
- ❑ The estimated economic value of curing disease is:
Heart \$48 trillion: Cancer \$47 trillion

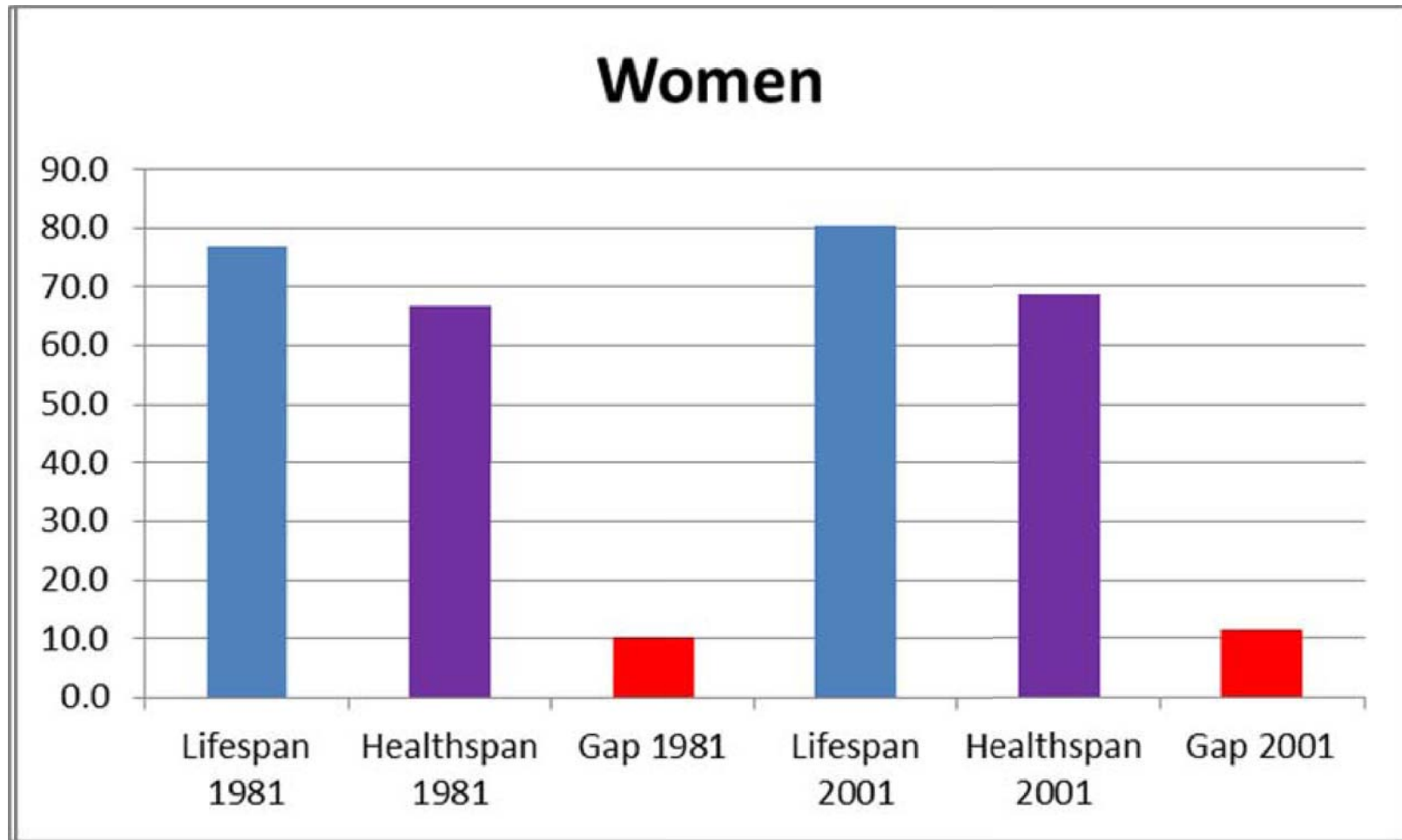
Source: The Economist 3 June, 2000



Alzheimer's disease

- ❑ Alzheimer's disease is currently the 12th leading cause of death
- ❑ Presently if you are over 65 you have a 1 in 7 chance of being diagnosed with Alzheimer's disease
- ❑ If you are over 85, you have a 1 in 2 chance of being diagnosed with Alzheimer's disease
- ❑ \$80 to \$100 billion dollars is spent on health care expenses or lost in wages in the US alone each year
- ❑ Curing Alzheimer's disease alone could be worth \$1.5 trillion dollars

Lifespan vs. Healthspan



Trends in life expectancy and healthy life expectancy at birth, 1981 to 2001

Source: www.statistics.gov.uk

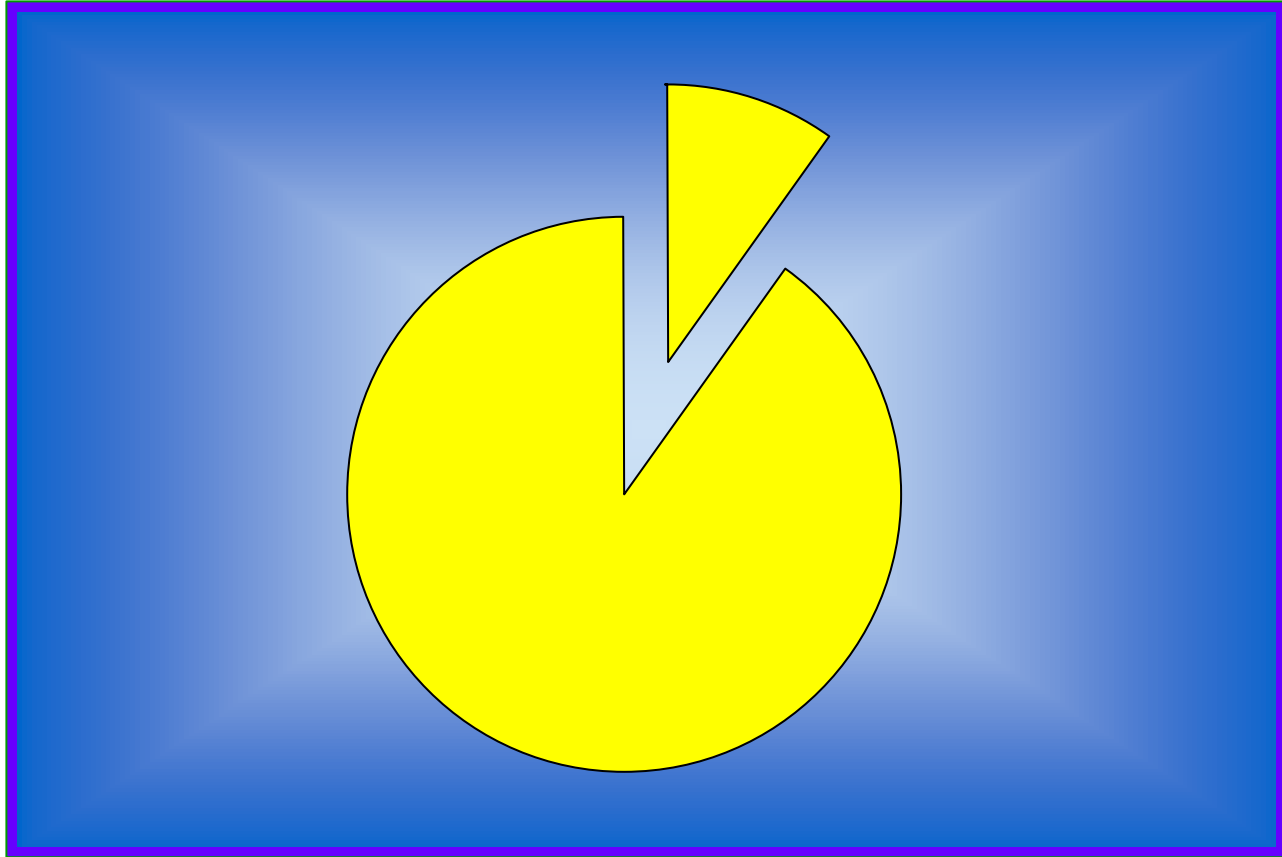


Disease categories

All diseases fall into one of the following categories:

1. Inherited (genetic disease)
2. Infectious disease
3. Trauma (accidents)
4. Degenerative disease (caused or accentuated by aging)

The real \$\$\$ cost of aging



90% of all health-care cost is spent on treating degenerative diseases (caused or accentuated by aging!)

Source: United States Health-Care and Finance Administration, 1996

What will we do?

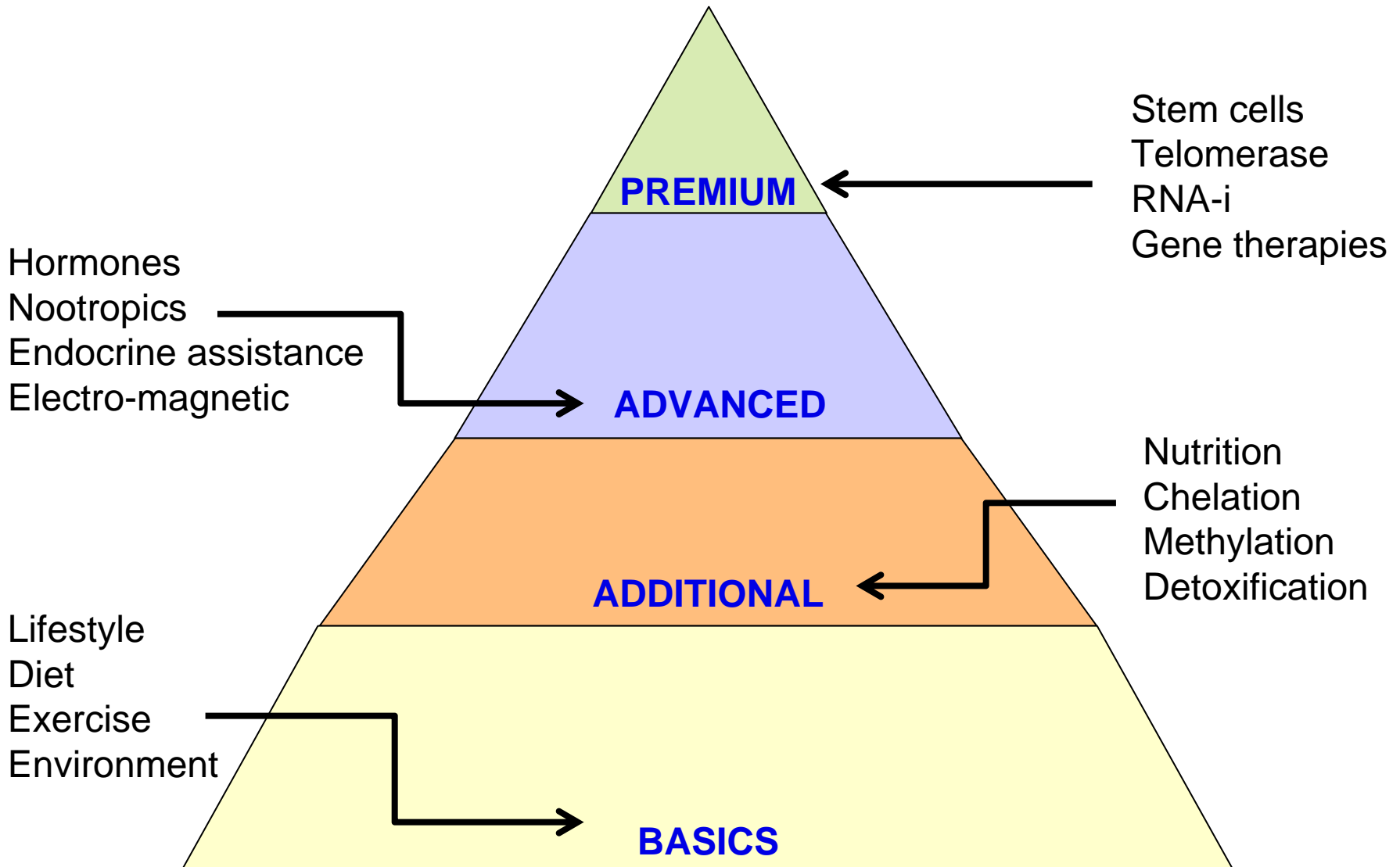
- ☐ Simply pay much more and expect the 'younger' working population to pay 70% or even more in taxes?
- ☐ Just allow more of the aged to end their lives in pain and discomfort?
- ☐ Low birth rate: Control how? Will people be allowed to have children at all?
- ☐ High death rate: Do we adopt a policy of euthanasia?
- ☐ Instigate life-long health education and adopt natural preventative medicine?



Or introduce antiaging medicine?



The optimal health pyramid



The body is an amazing thing!



The antiaging societies



Into the future

❑ Antiaging medicine makes sense on so many levels:

- ✓ Personal
- ✓ Family and friends
- ✓ Social
- ✓ Financial

