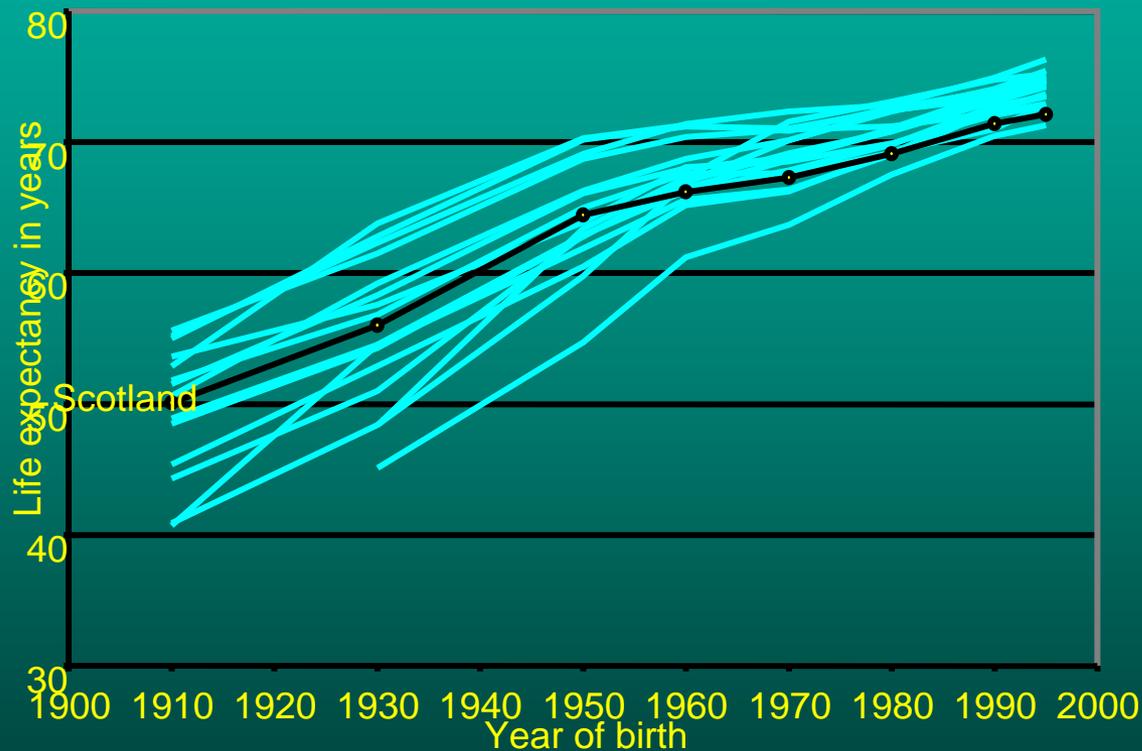
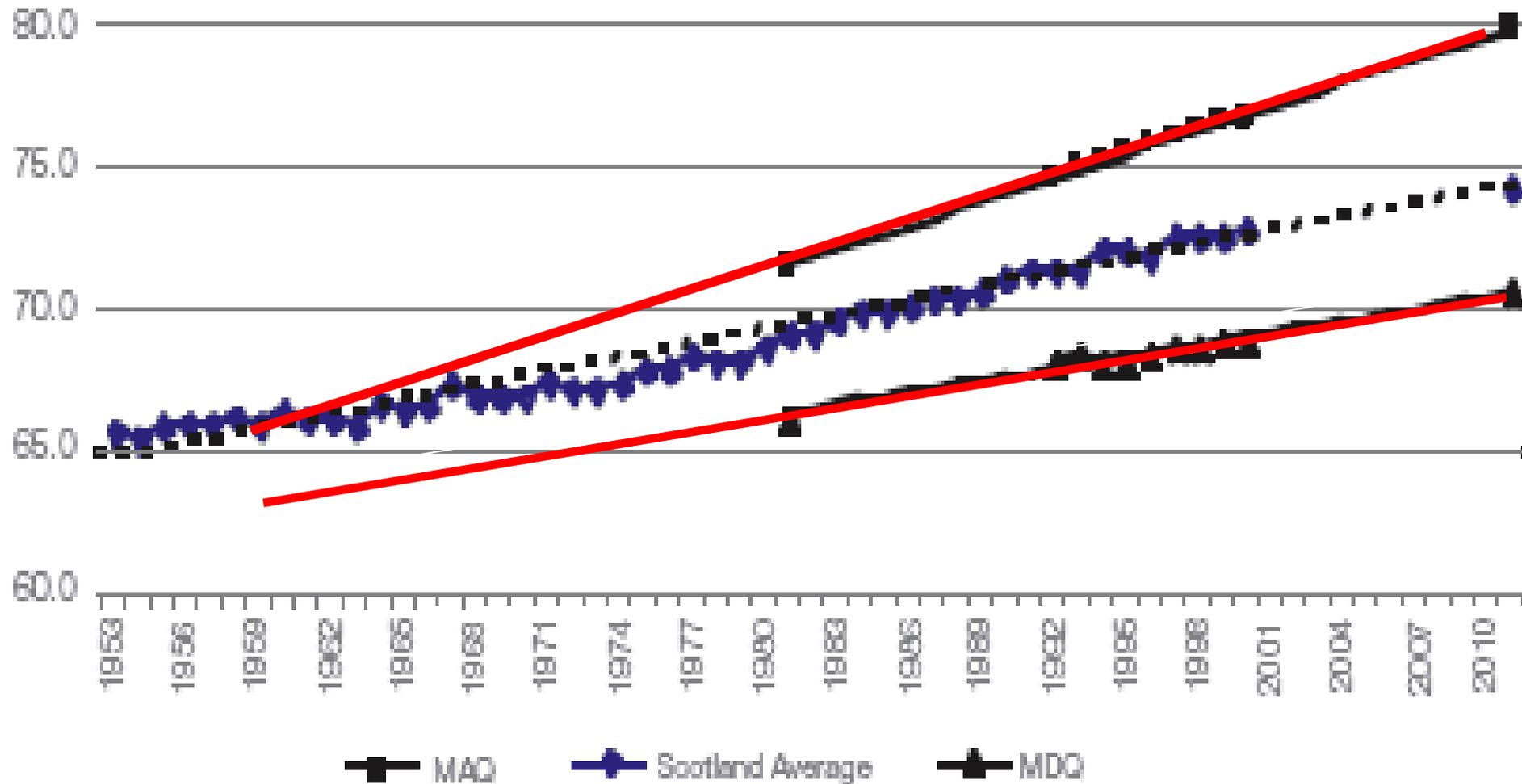


# 20<sup>th</sup> century trends in life expectancy in Scotland and 16 other Western European countries

Males



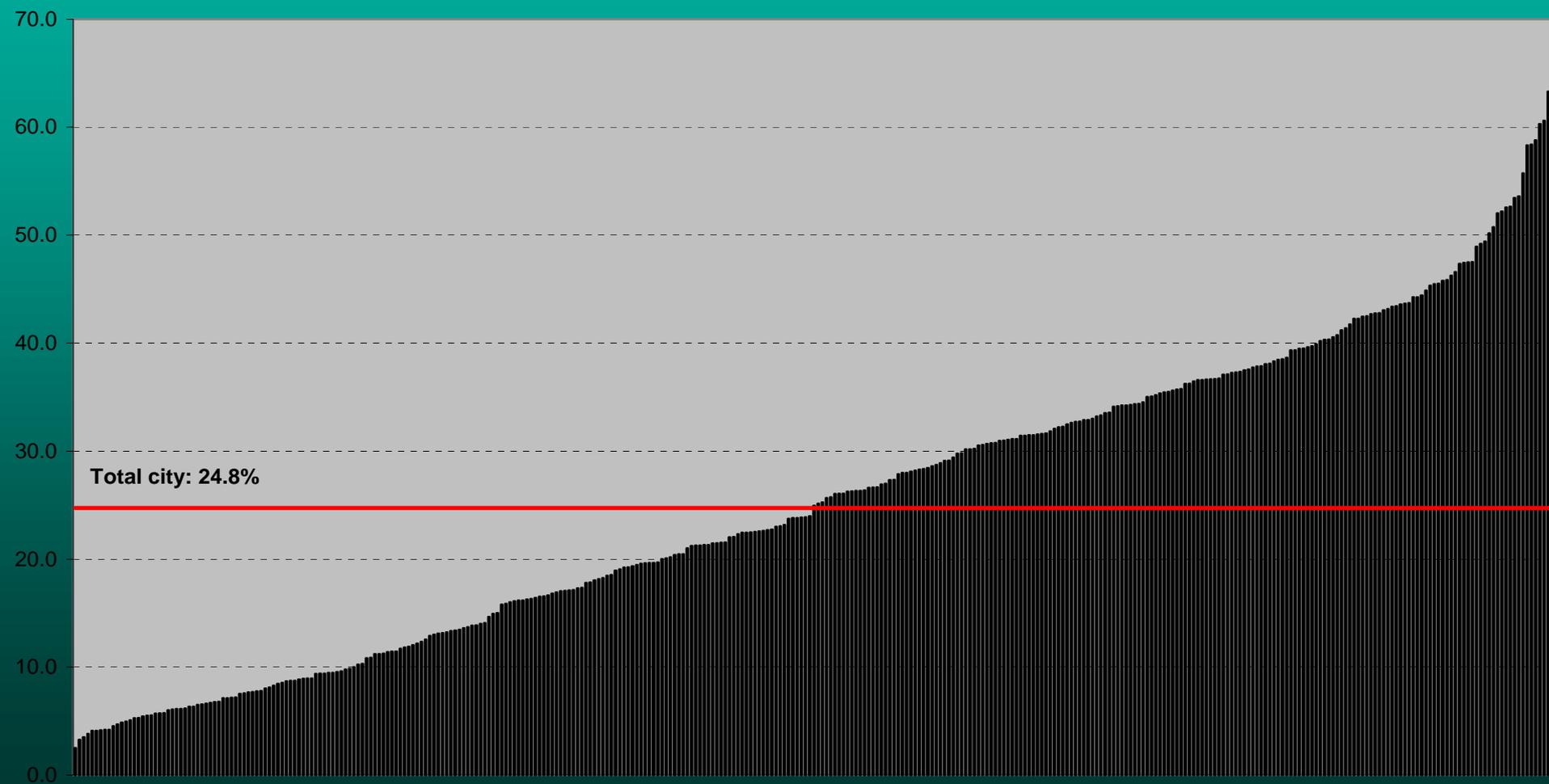
# Trends in life expectancy - males



# Income deprivation - Glasgow

Glasgow merged DZs: income deprivation distribution

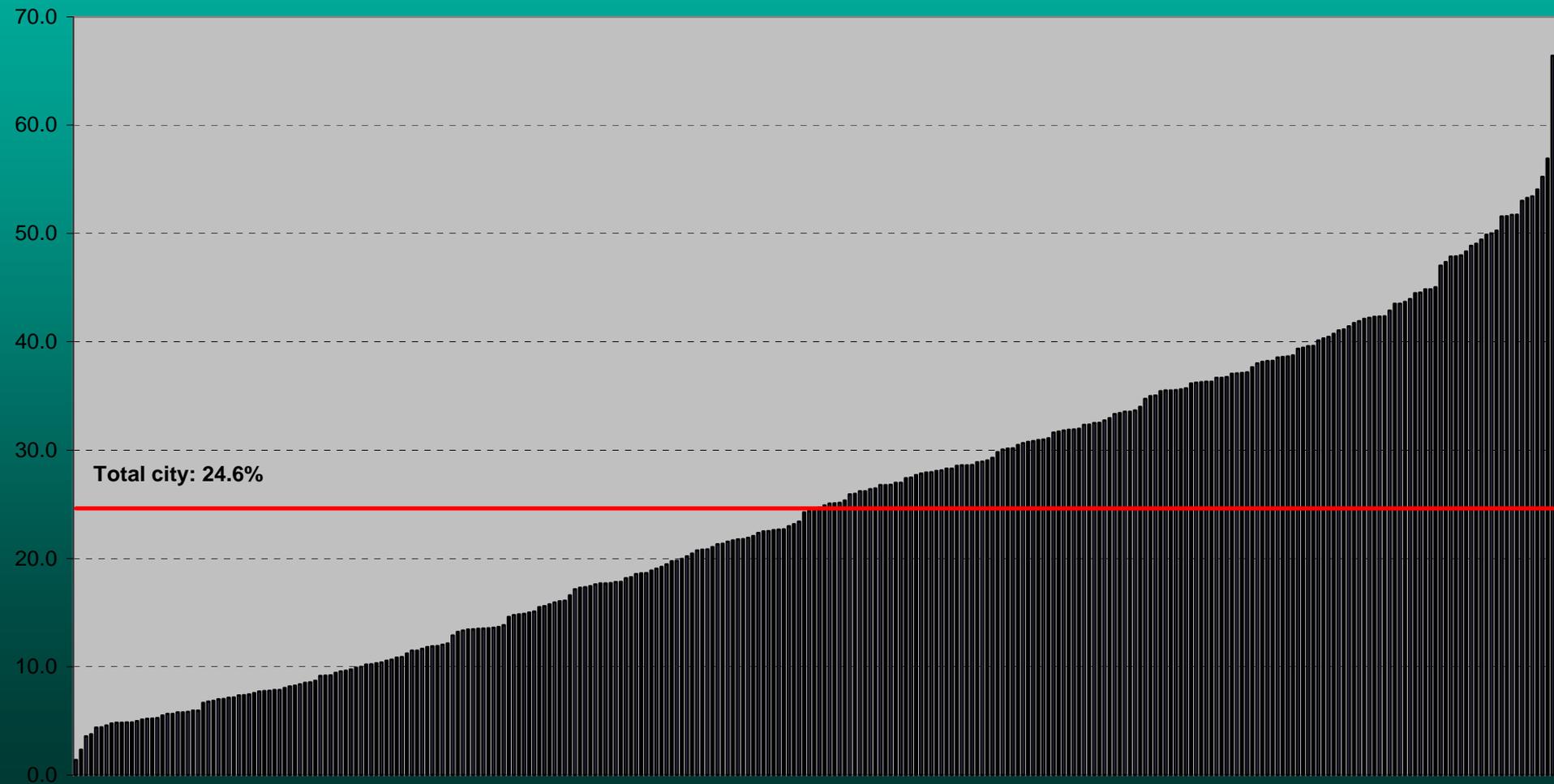
Source: GCPH, based on SIMD/DWP data



# Income deprivation - Liverpool

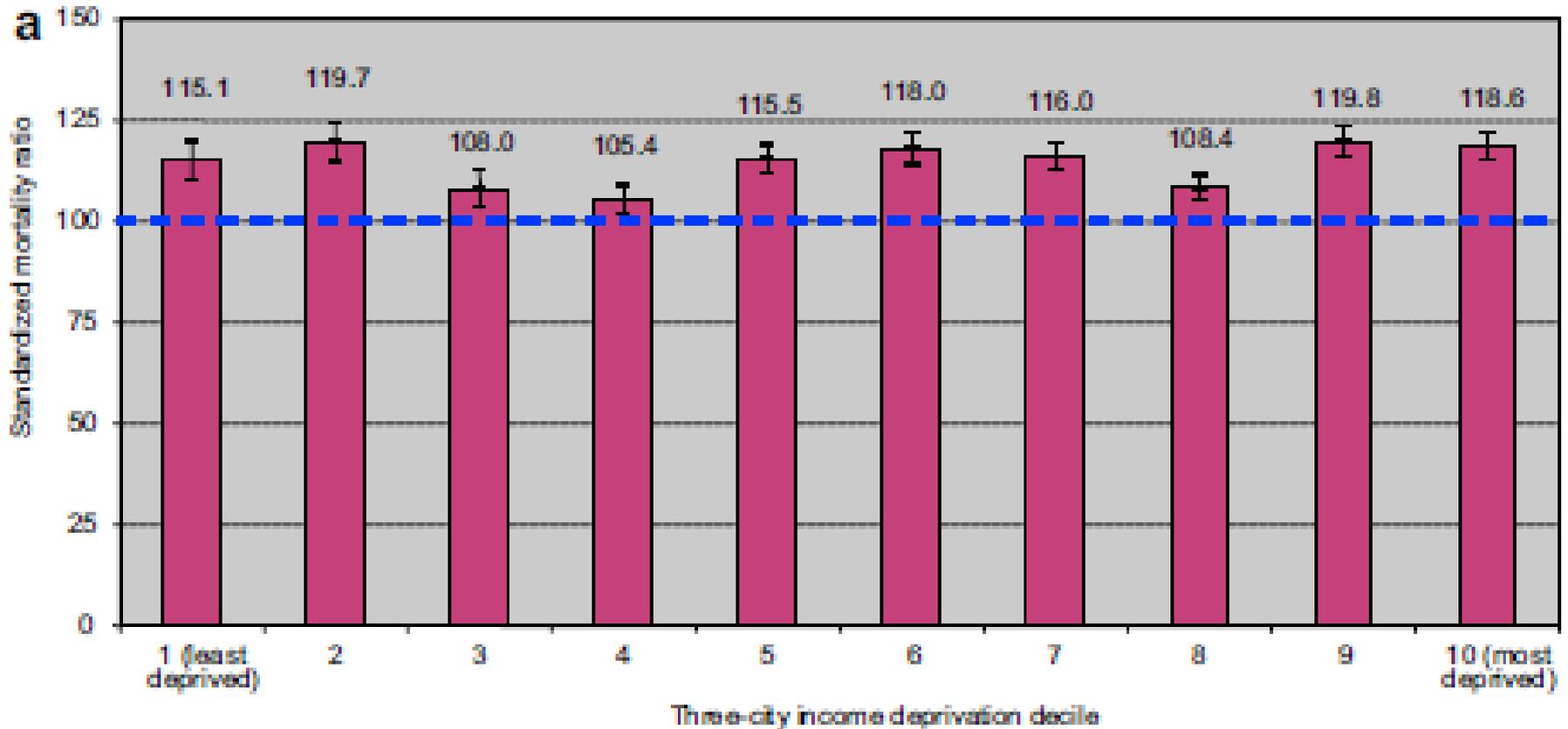
Liverpool LSOAs: income deprivation distribution

Source: DWP



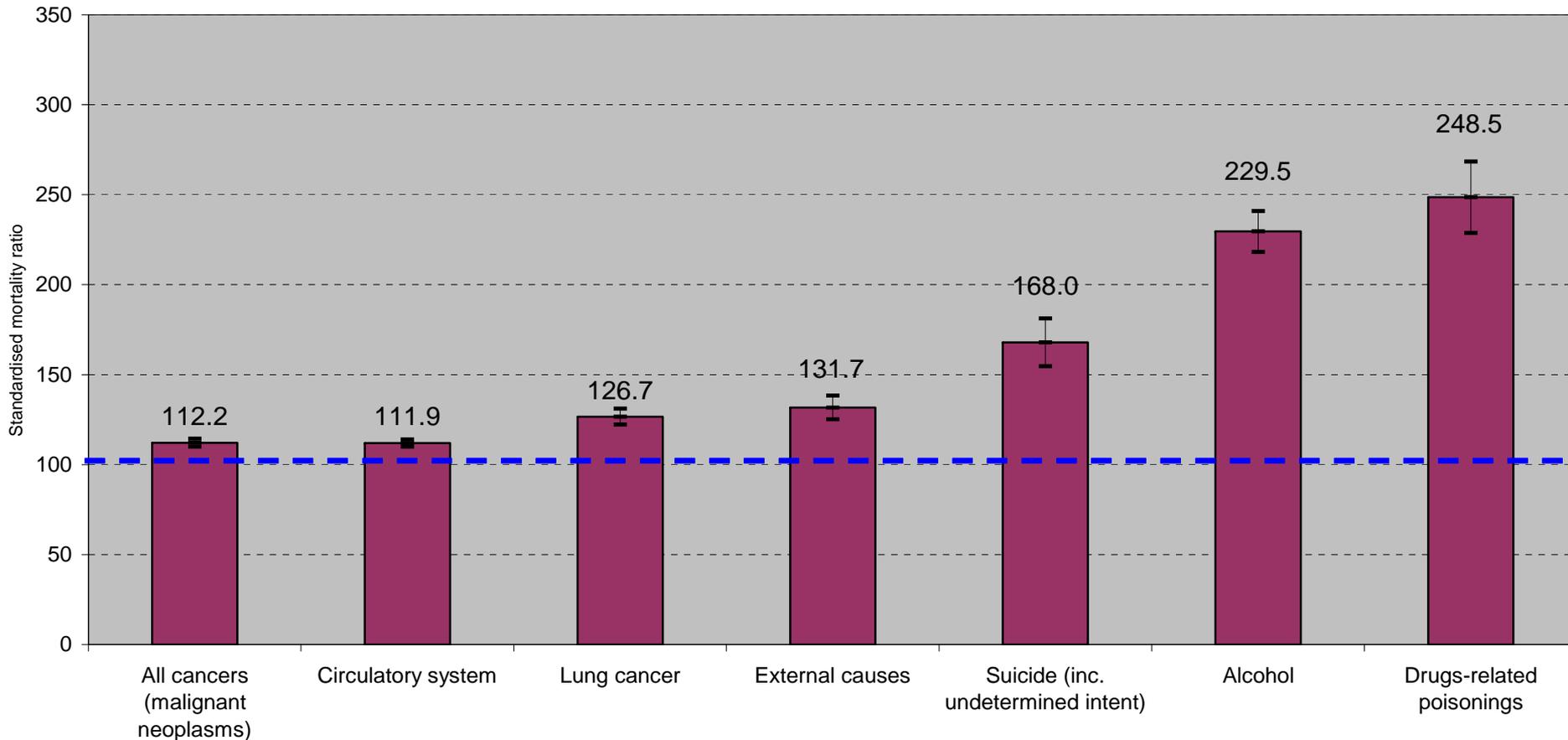
# Mortality – Glasgow v other cities

## Comparison across deprivation deciles



# SMRs by cause, all ages: Glasgow relative to Liverpool & Manchester

All ages, both sexes: cause-specific standardised mortality ratios 2003-07, Glasgow relative to Liverpool & Manchester, standardised by age, sex and deprivation decile  
Calculated from various sources



# Aaron Antonovsky 1923-1994

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# Salutogenesis....

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- u Highlights factors which create and support human health rather than those which cause disease
- u It focuses on resources and capacities which impact positively on health and aims to explain why, in adverse circumstances, some stay healthy and others don't.

# Sense of coherence....

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“.....expresses the extent to which one has a feeling of confidence that the stimuli deriving from one's internal and external environments in the course of living are **structured, predictable and explicable**, that one has the **internal resources** to meet the demands posed by these stimuli and, finally, that these demands are seen as **challenges, worthy of investment and engagement.**”

# For the creation of health....

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...the social and physical environment must be:

- u Comprehensible

- u Manageable

- u Meaningful

- u .....or the individual would experience chronic stress

# Creating health

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Challenge  
Stress  
Tension  
Response  
Resolution



Successful  
stress  
management

# Creating health

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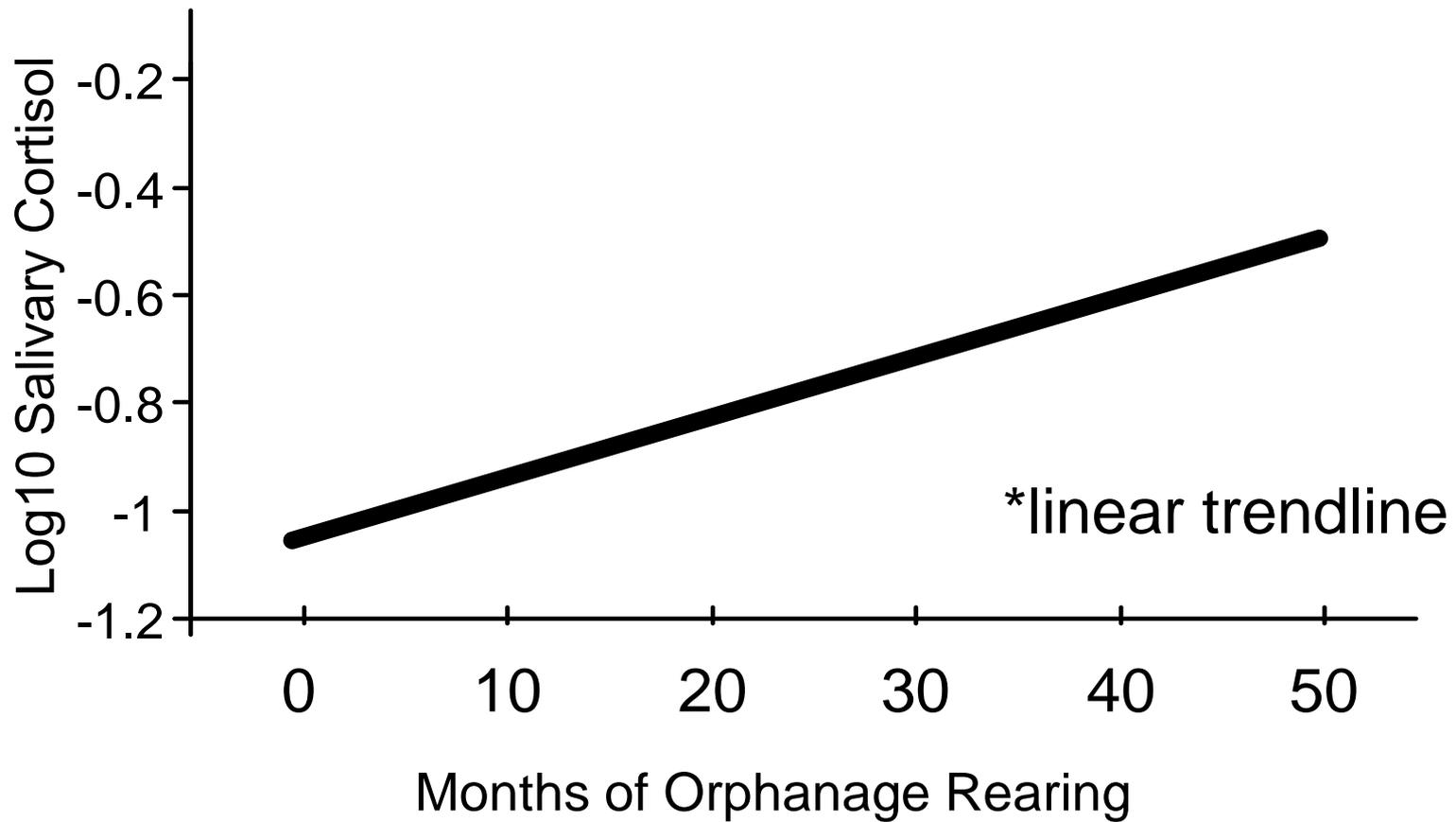
Consistency of response  
Participation in shaping  
Balance in stimulation

Challenge  
Stress  
Tension  
Response  
Resolution



Successful  
stress  
management

# Evening Cortisol Levels Increase with Months of Orphanage Rearing \*

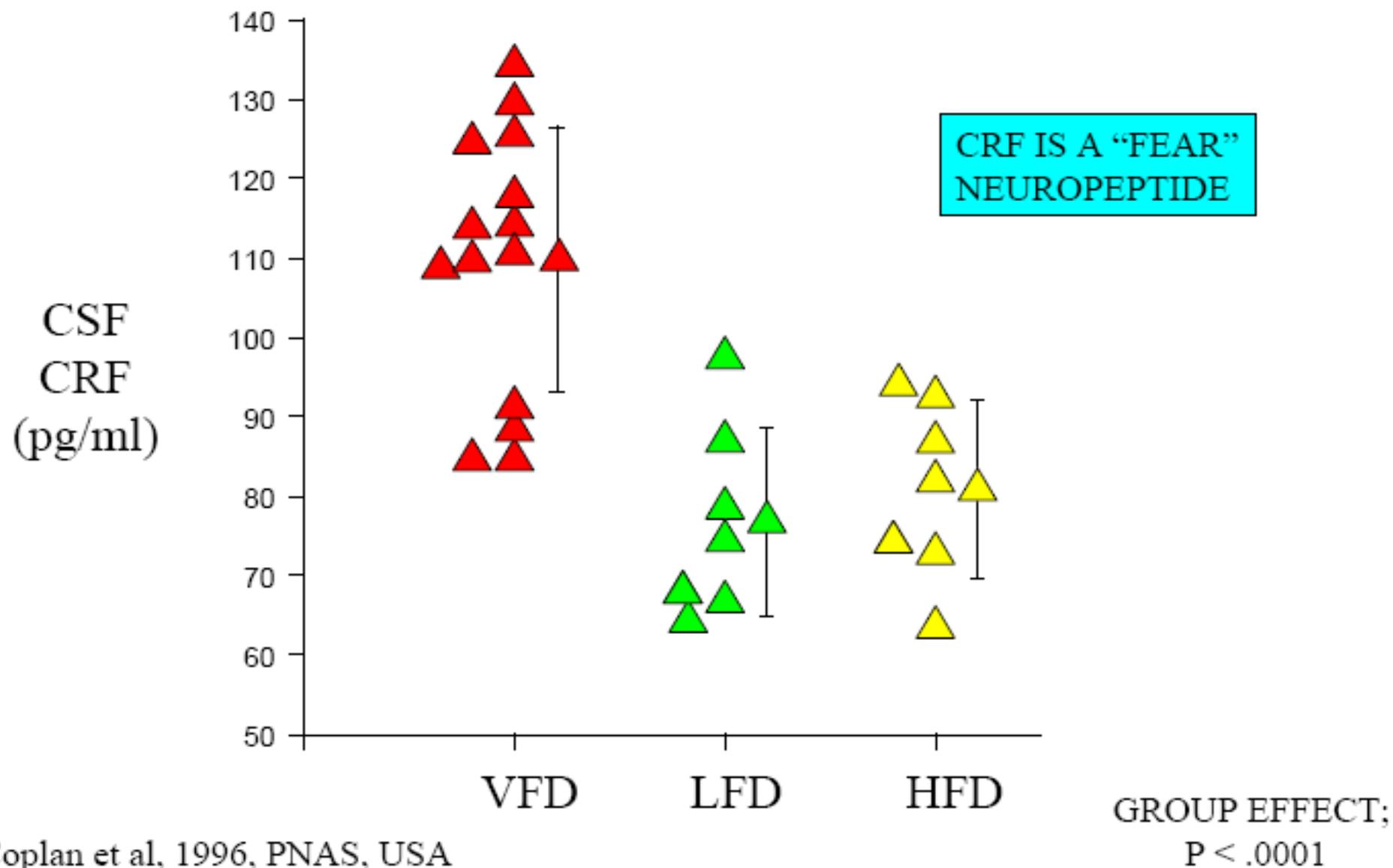




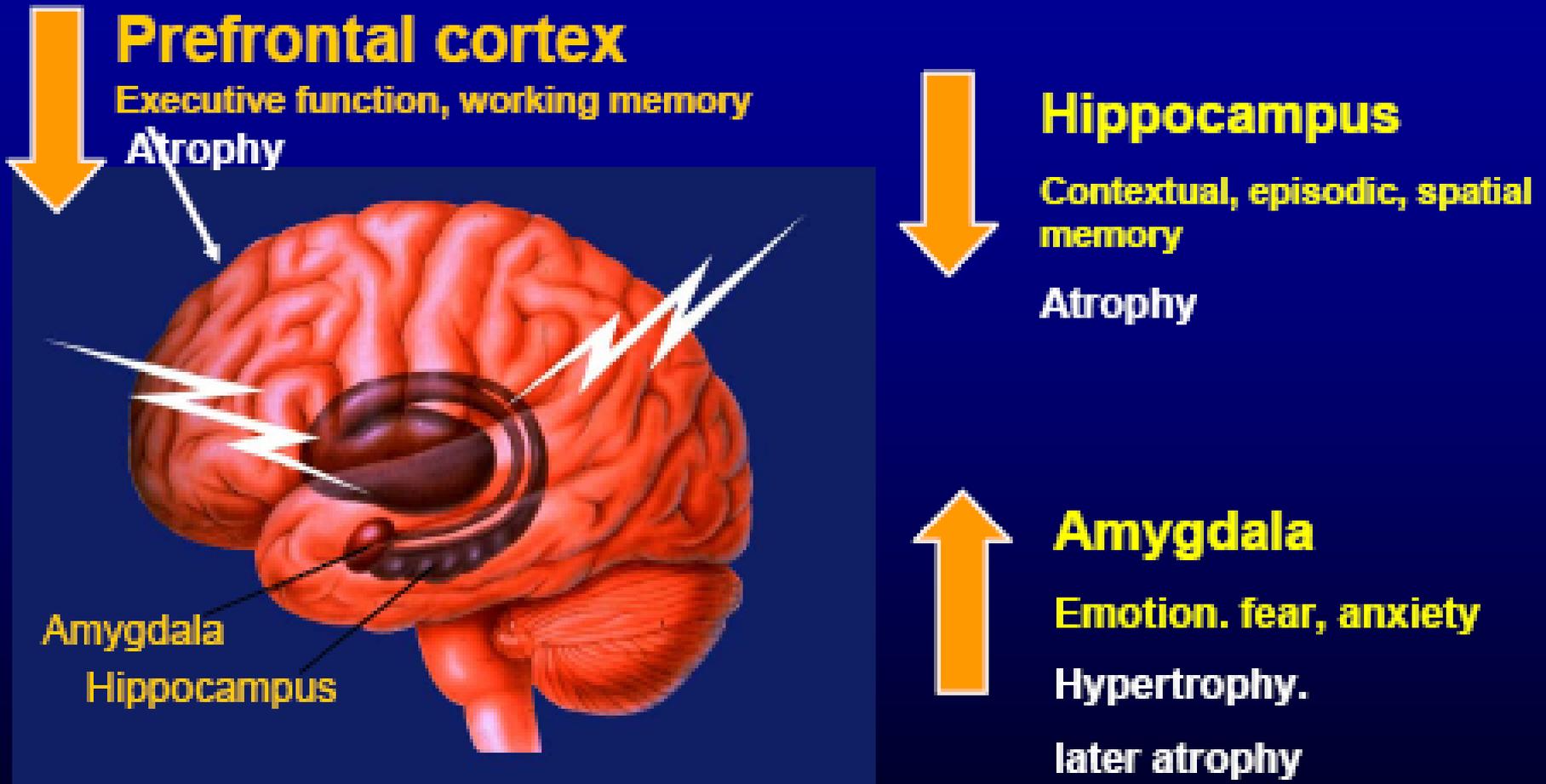




# CSF CRF CONCENTRATIONS IN DIFFERENTIALLY-REARED JUVENILE PRIMATES:

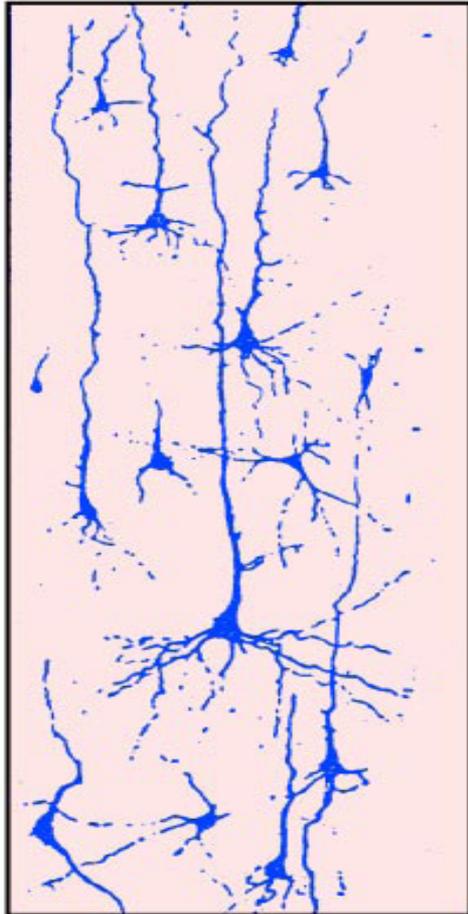


# The Human Brain Under Stress: key brain regions

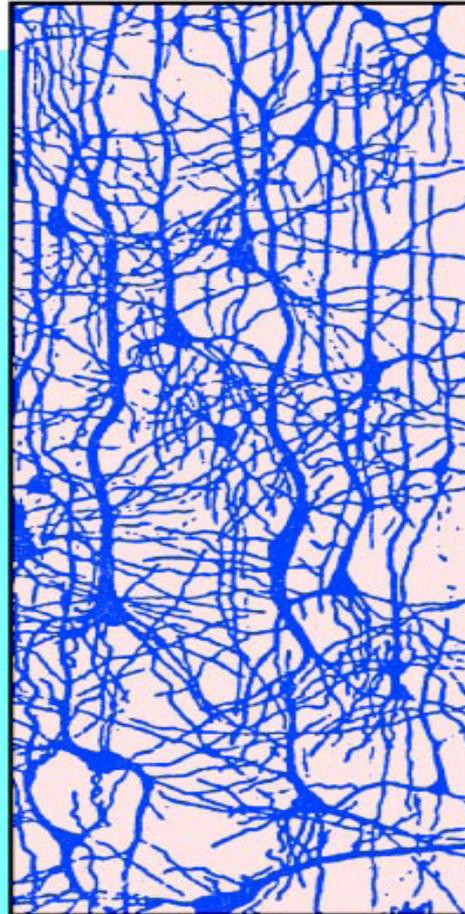


# What happens during early brain development?

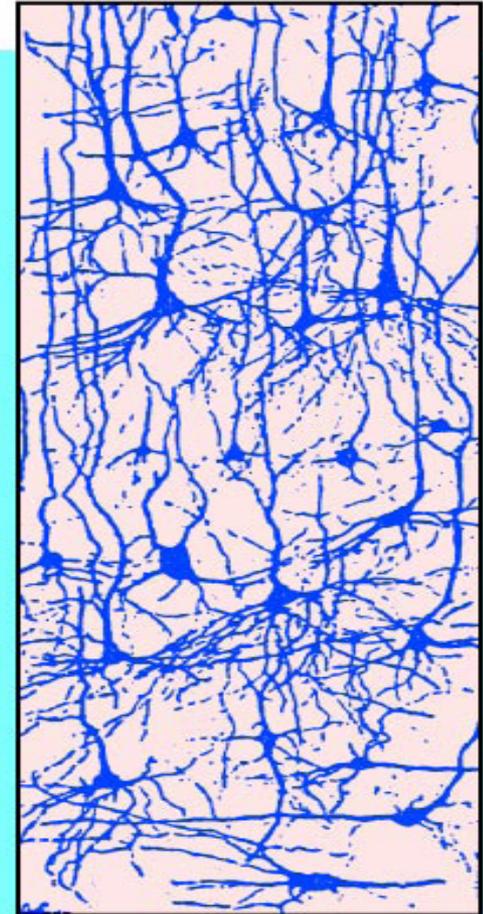
At Birth



6 Years Old



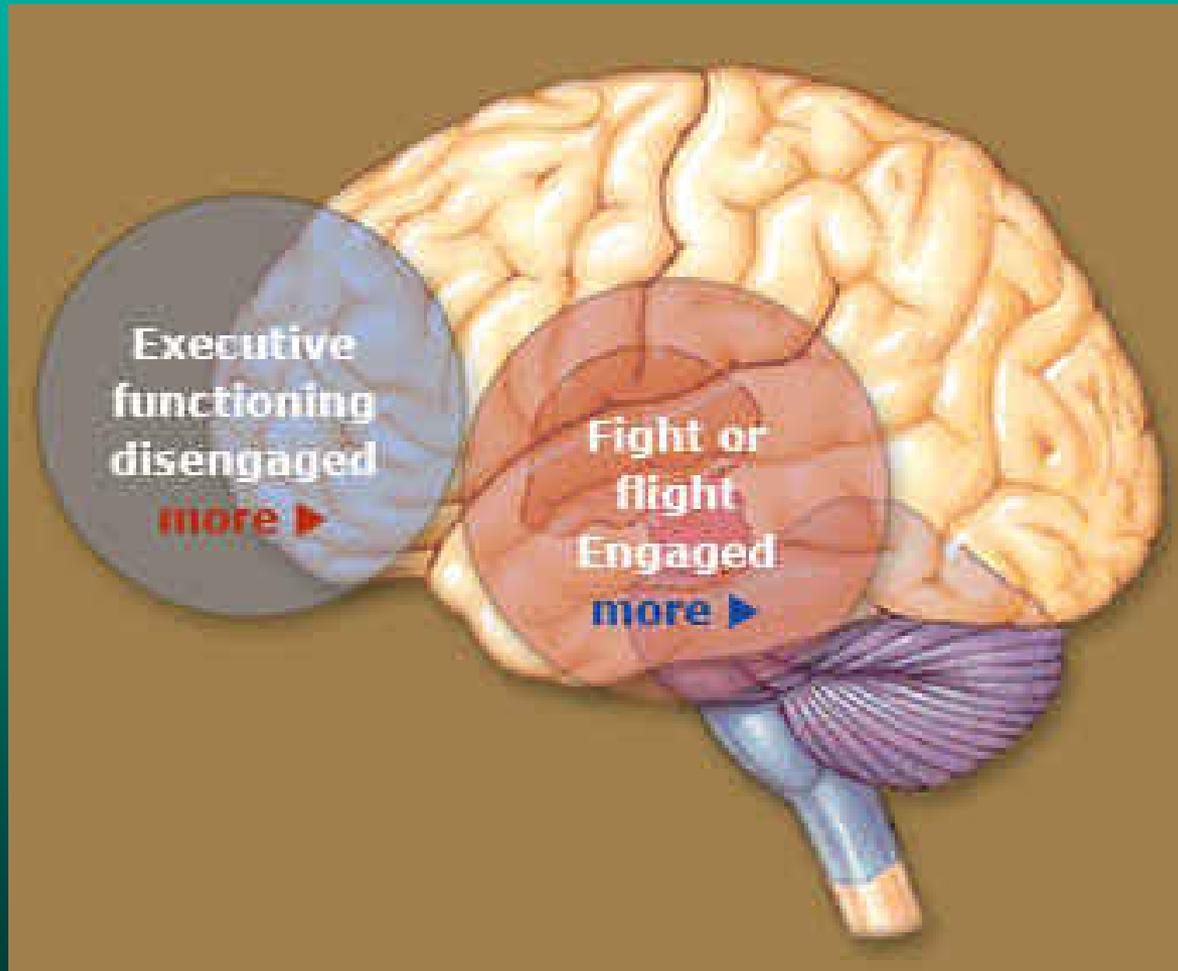
14 Years Old



Proliferation and decline in synaptic connections in children

# The stressed brain

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# Our current approach to health improvement

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- u Focuses on problems, needs and deficiencies in a community such as deprivation, illness and health damaging behaviours. It designs services to fill the gaps and fix the problems. As a result, communities can feel disempowered. People become passive recipients of services rather than active agents in their own lives

# Health Assets

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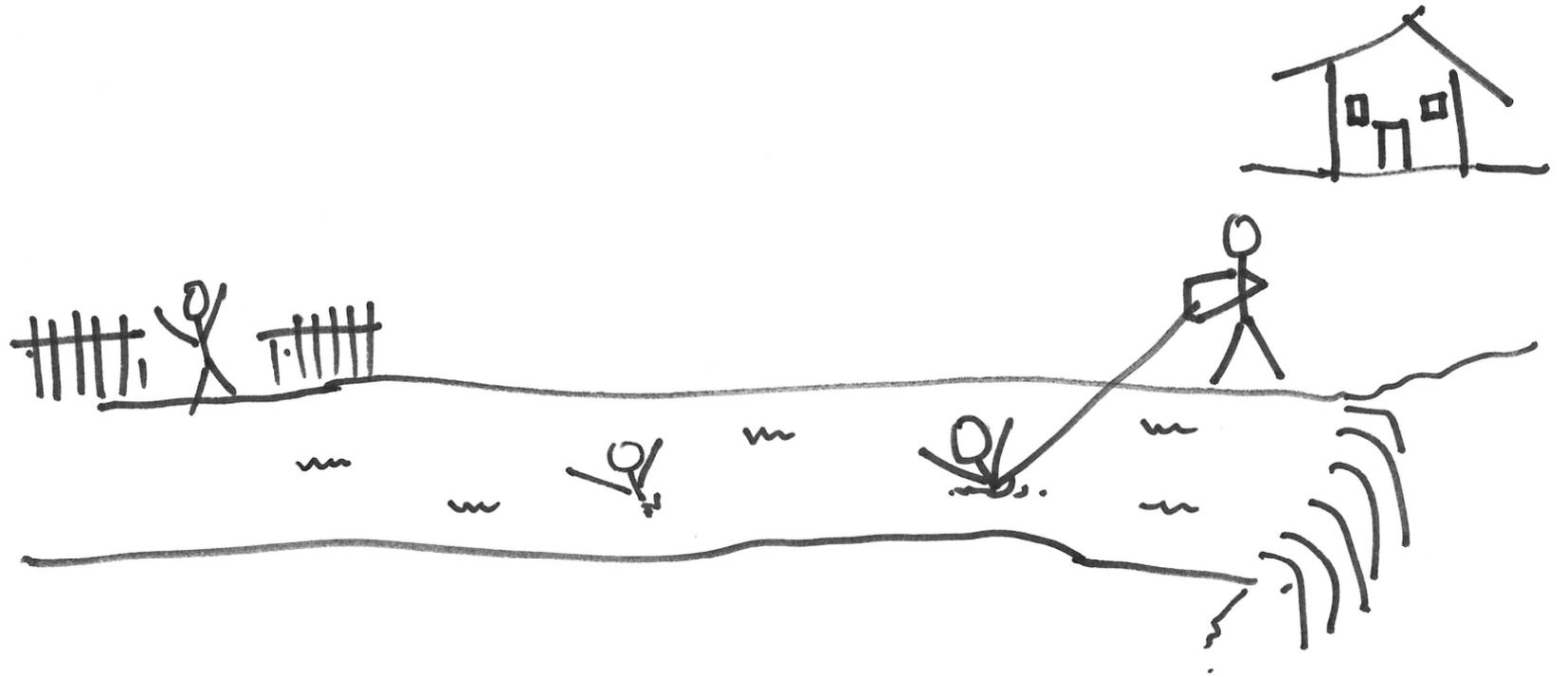
- A health asset is any factor or resource which enhances the ability of individuals, communities and populations to maintain their health and sustain wellbeing. The assets can operate...as protective and promoting factors to buffer against life's stresses

Morgan and Ziglio 2009

# Social circumstances and health

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# The Asset Approach

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- u Identifies and makes viable the health assets in a community
- u Sees citizens as co-producers of their own health rather than passive recipients of services
- u Supports individuals health and wellbeing through enhancing skills for resilience, relationships, knowledge and self esteem
- u Promotes community networks that can provide caring and empowerment

# When people care enough to act

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- u There are unrecognised capacities in every community. Find them and provide opportunities for people to offer them
- u Relationships build a community. See them, build them and utilise them
- u Citizens are at the centre. Engage them as actors, not recipients

# When people care enough to act

---

- u Leaders involve others as active members
- u People care about something. Find out what motivates individuals
- u A listening conversation is the way to discover what motivates people
- u Asking questions rather than giving answers invites stronger participation

# When people care enough to act

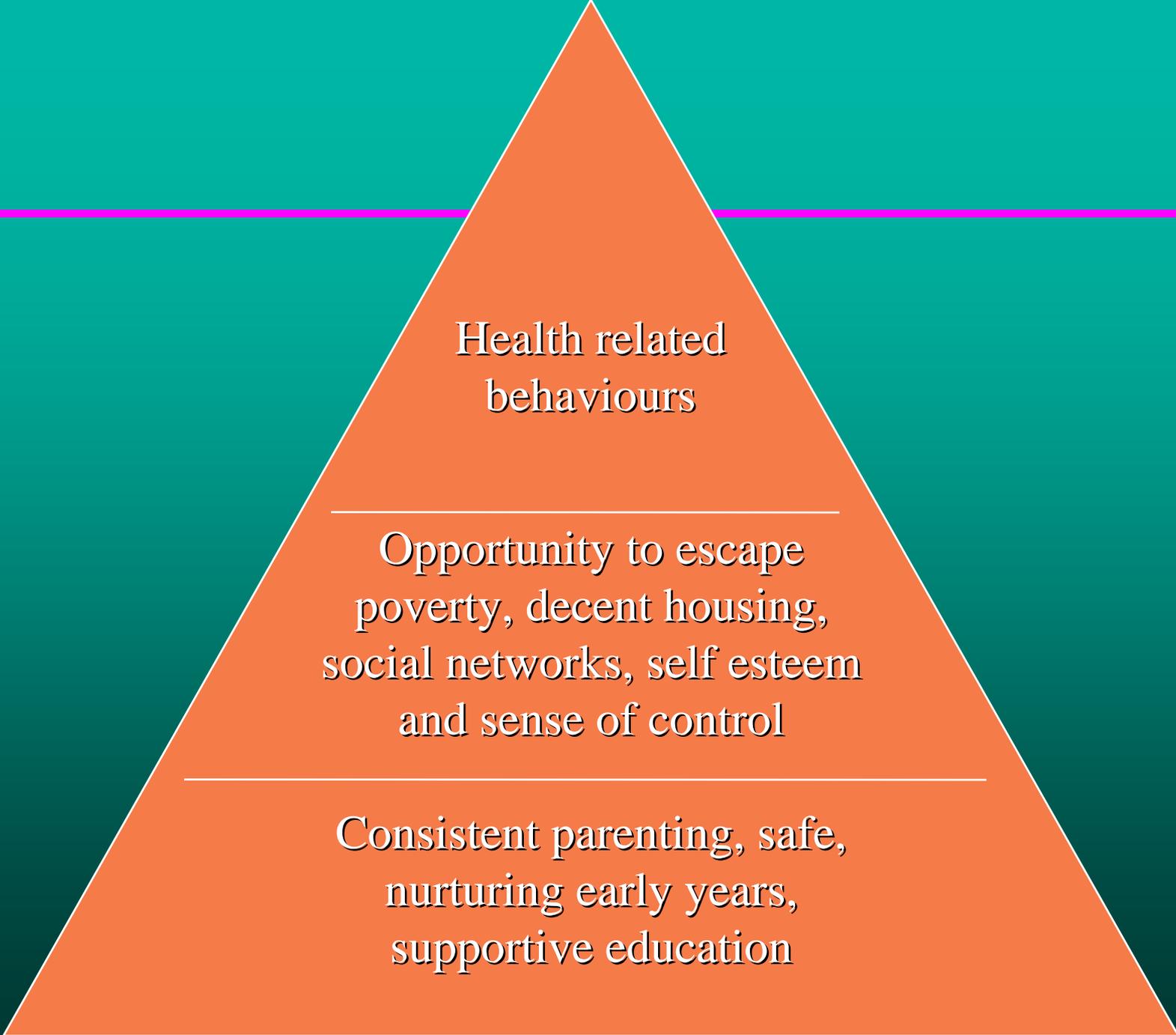
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- u Institutions have reached the limit of their problem solving potential. They are stretched thin and need more skilful engagement with communities
- u They are servants. Ask what people need, offer help, step back, create opportunity for action

# Beacon and Old Hill Estate (Falmouth)

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- u Between 1996 and 2004....
  - Crime down by 50%
  - Post natal depression down by 70%
  - Unemployment down by 70%
  - Child protection registrations down 65%
  - Teenage pregnancies down from 14% to <1%



Health related  
behaviours

Opportunity to escape  
poverty, decent housing,  
social networks, self esteem  
and sense of control

Consistent parenting, safe,  
nurturing early years,  
supportive education

Health related  
behaviours

Worthwhile

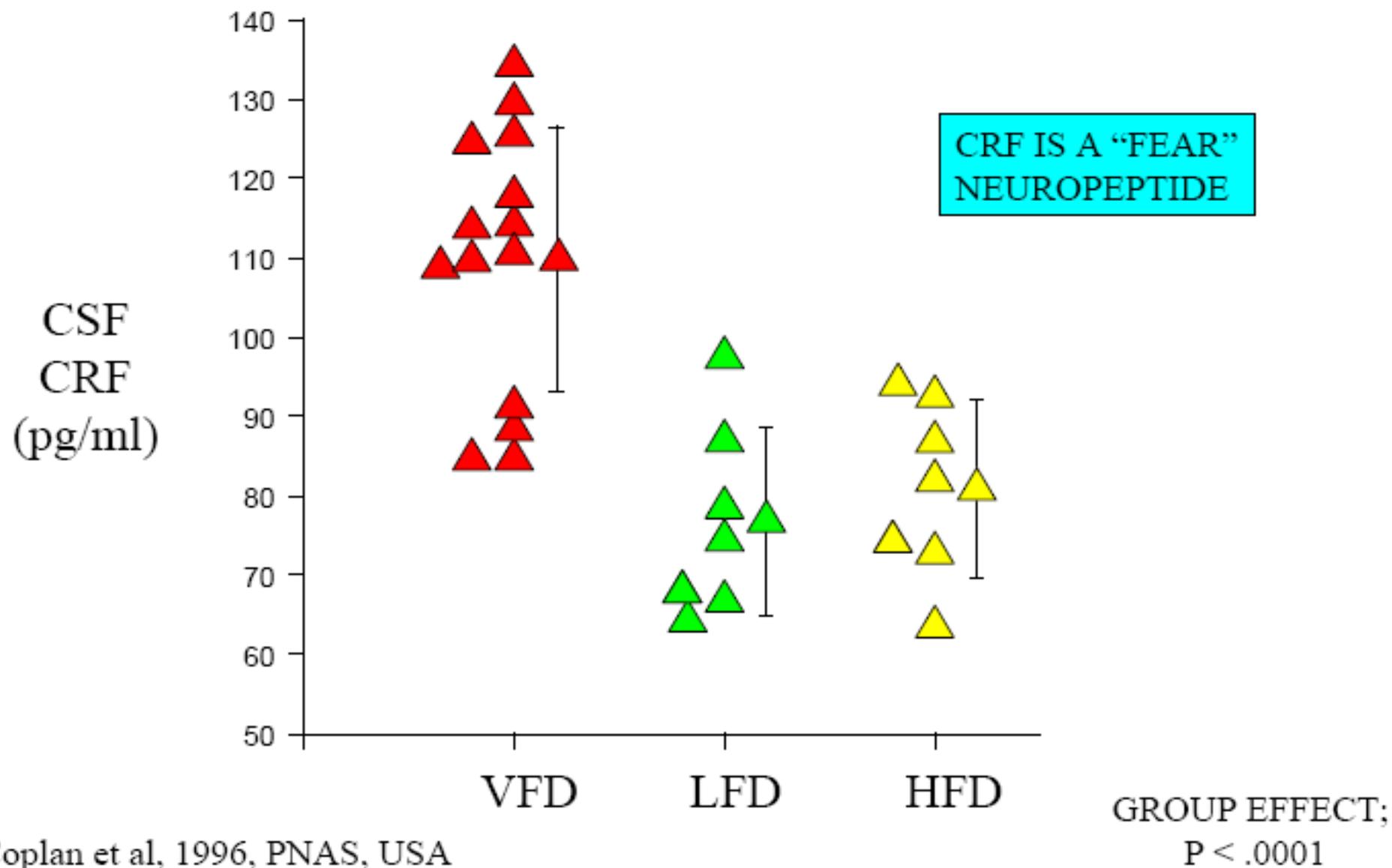
Opportunity, decent  
housing, social networks,  
self esteem and sense of  
control

Manageable

Consistent parenting,  
safe, nurturing early years,  
supportive education

Comprehensible

# CSF CRF CONCENTRATIONS IN DIFFERENTIALLY-REARED JUVENILE PRIMATES:



# Attachment theory

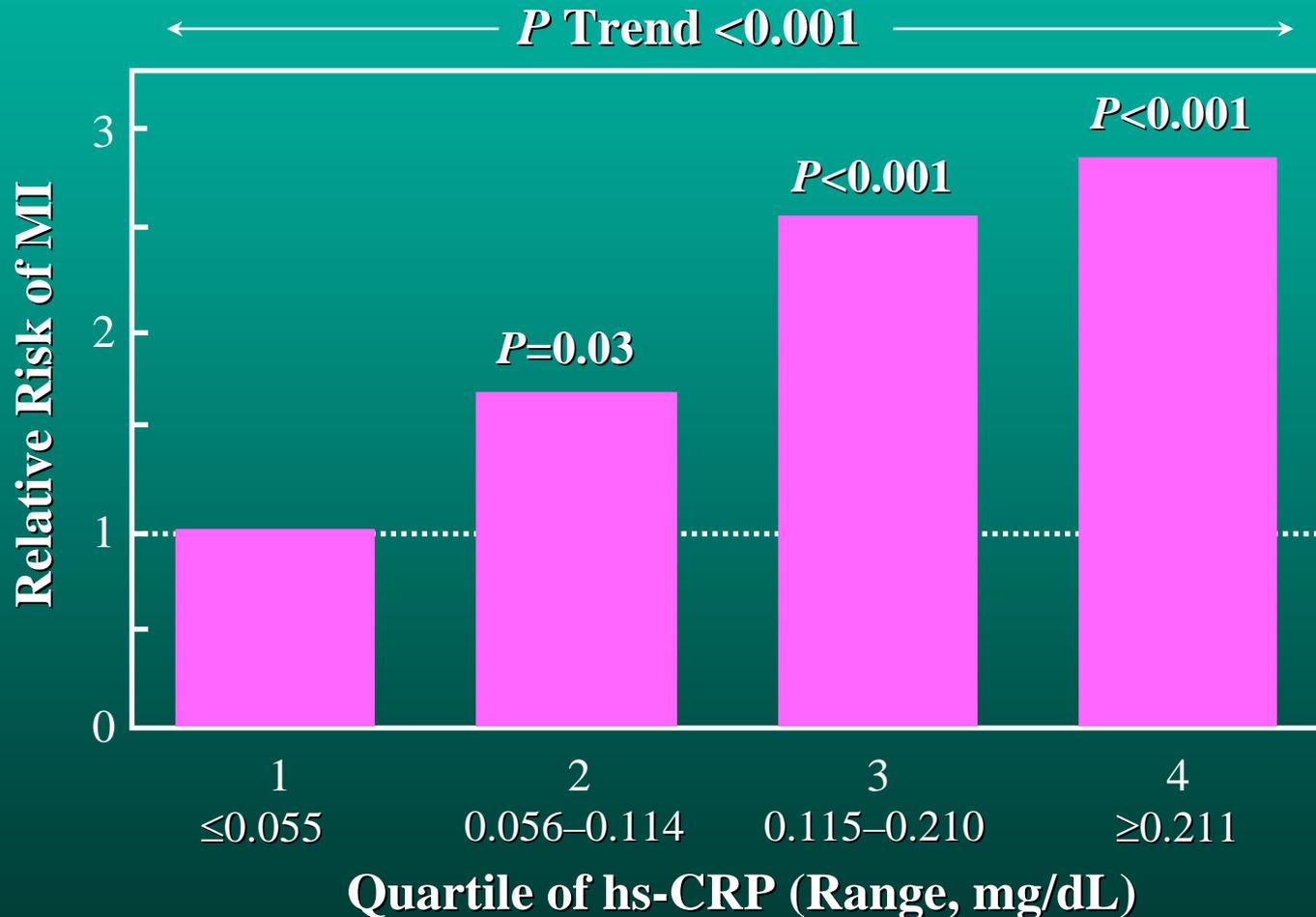
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- u Ainsworth
  - Deep emotional connection that infant develops with primary caregiver
  - Reflects an “internal working model” expressing the infant’s expectations of parental behaviour in meaningful situations
  - Basis for development of later relationships
- u Increasingly recognised as determinant of later emotional, cognitive and social outcomes

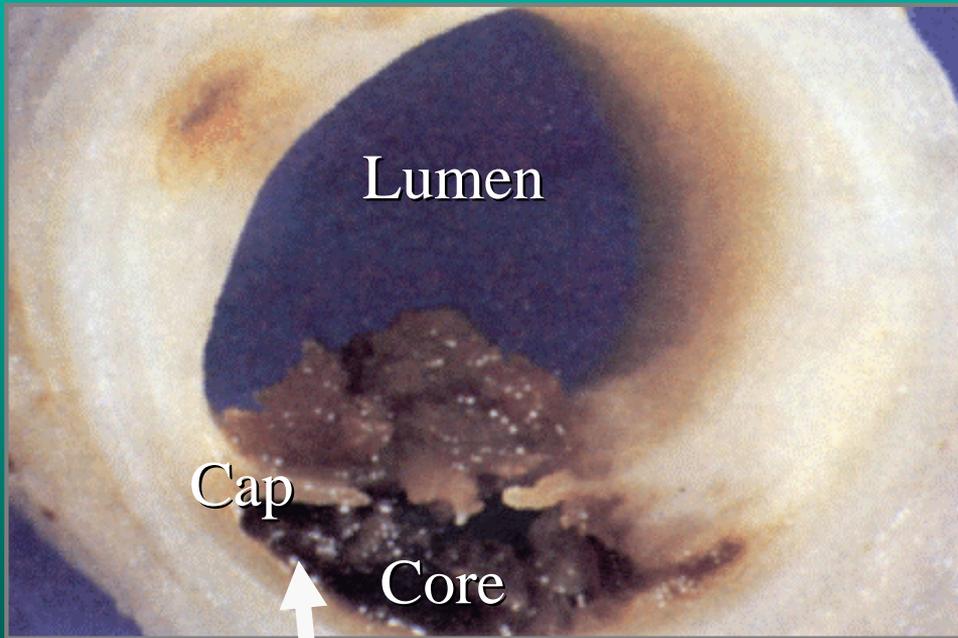
# Inflammation and socioeconomic status

	Depcat	% smokers	CRP (median) mg/dl	
			Never-smokers	Smokers
affluent	1	36.8	0.71	1.42
	2	35.9	1.00	2.34
	3	39.1	1.11	2.25
	4	44.1	1.21	2.44
	5	46.6	1.13	2.53
	6	49.3	1.25	3.07
deprived	7	55.5	1.48	3.29

# hs-CRP and Risk of Future MI in Apparently Healthy Men



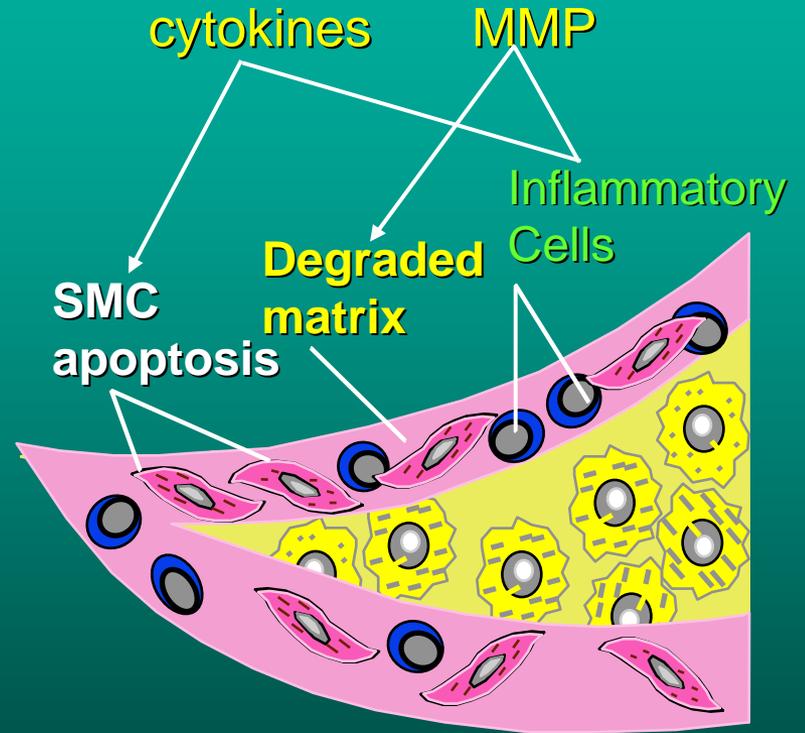
# Inflammation in plaques



Inflammatory cells



MMPs, IL-6,  
IL-15, IL-18, CRP



Unstable Thin Fibrous Cap

