

Advisory Group on Prevention, Health Promotion, and Integrative and Public Health

April 12, 2012

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Vice President – Program Strategy



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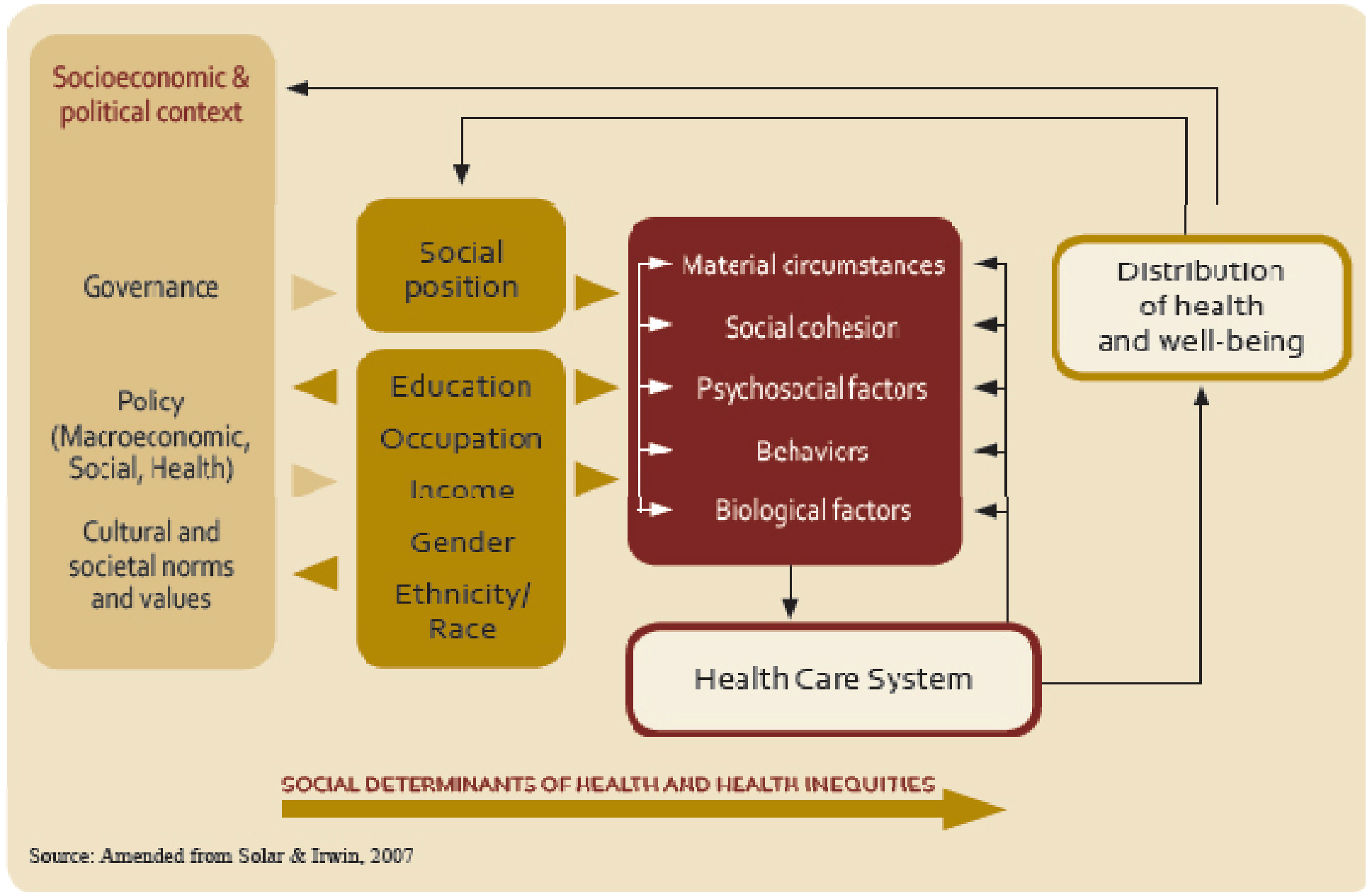
What is resilience?

Resilience is the process of adapting well in the face of adversity, trauma, tragedy, threats, or even significant sources of stress – such as family and relationship problems, serious health problems, or workplace and financial stressors. It means “bouncing back” from difficult experiences.

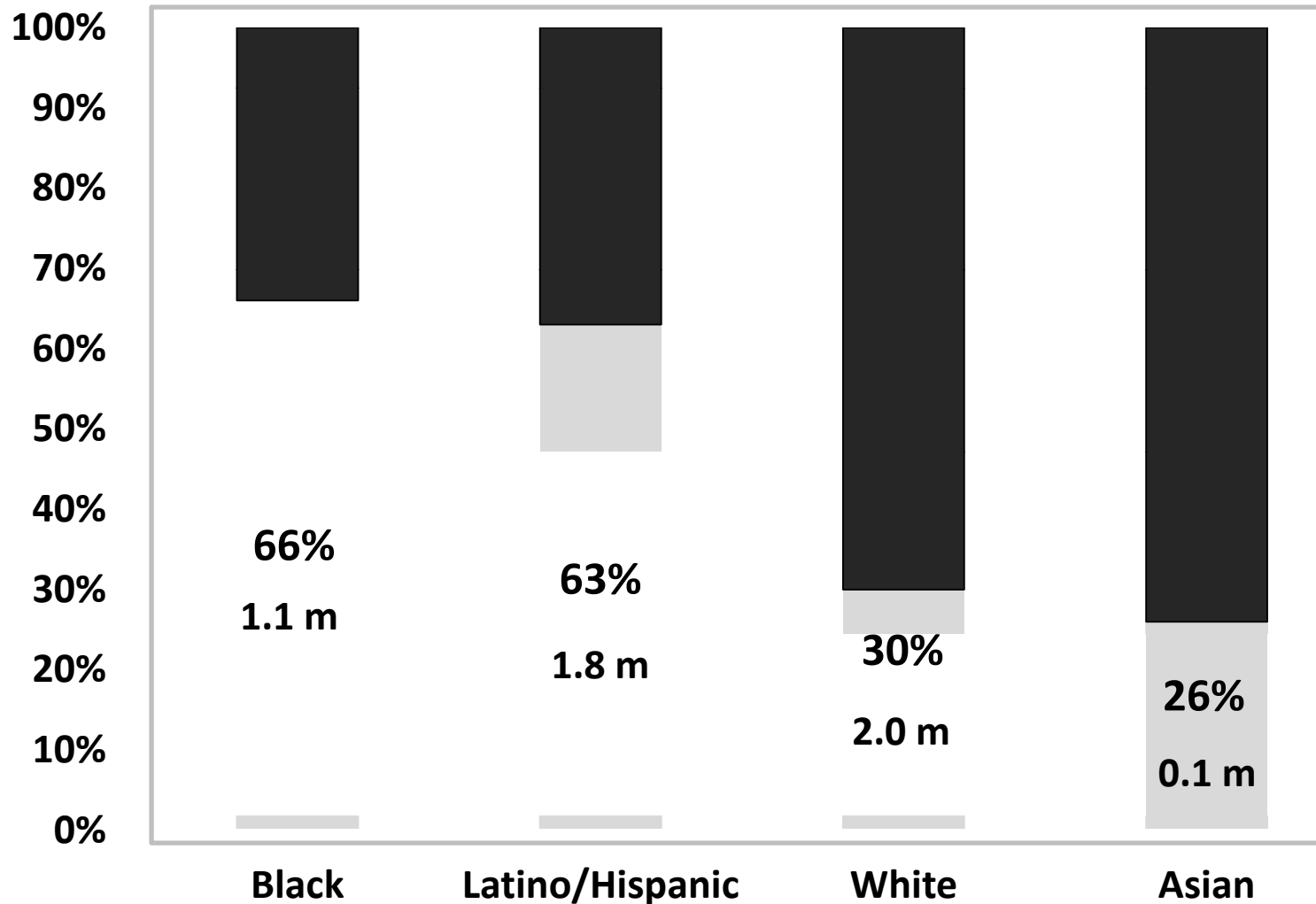
Resilience is not a trait that people either have or do not have. It involves behaviors, thoughts, and actions that can be learned and developed in anyone.

Source: American Psychological Association

Figure 2. World Health Organization's Social Determinants of Health Conceptual Framework [1]

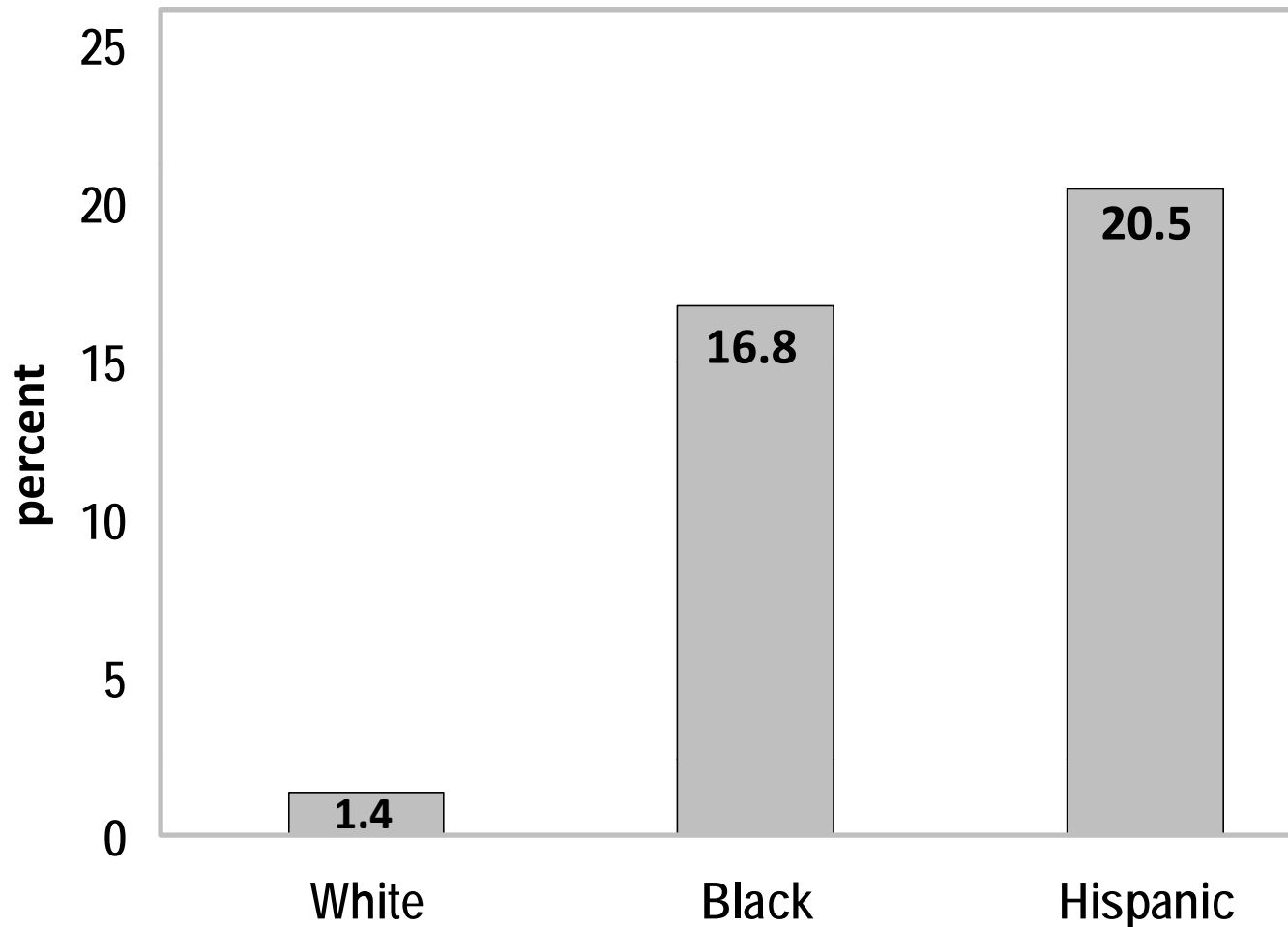


Percent & Number of Infants and Toddlers in Low-Income Families, by Race/Ethnicity



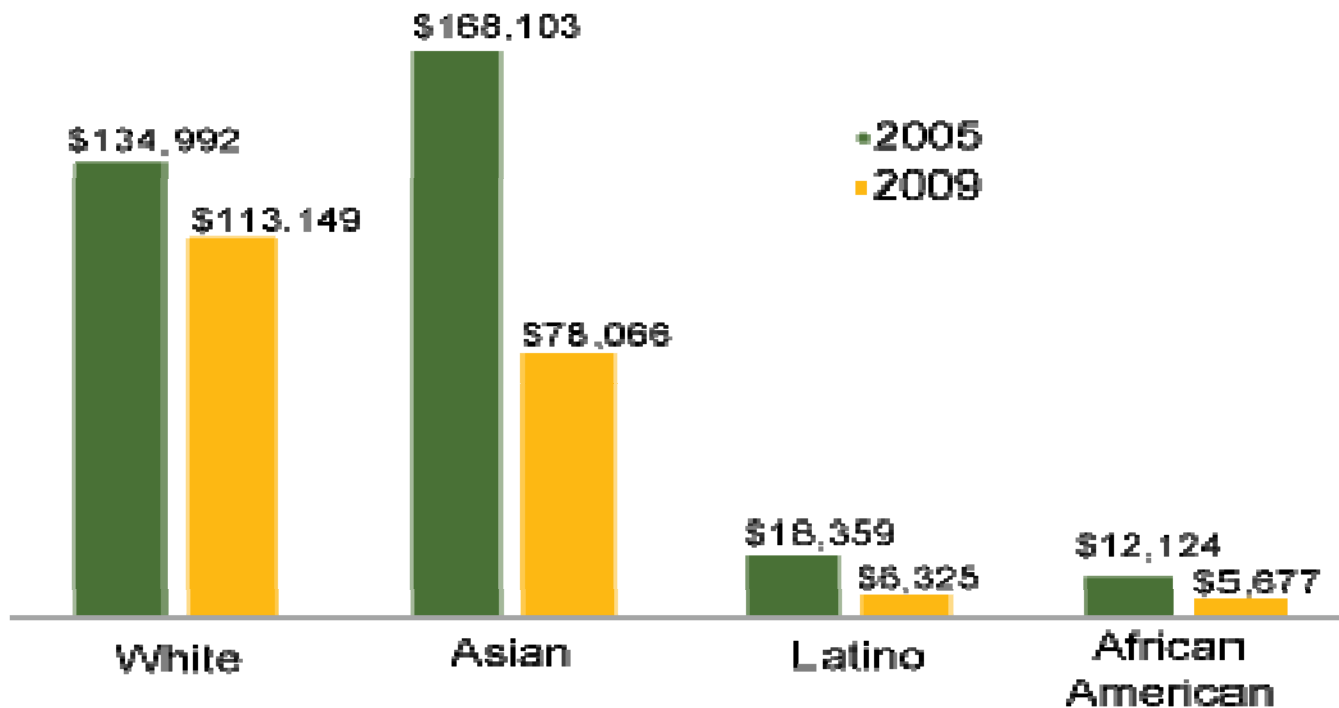
Source: Douglas-Hall, M. Chau, & H. Koball (2006). Basic facts about low-income children birth to age 3.
Retrieved online at [National Center for Children in Poverty](#)

Children experience double jeopardy when they live in BOTH poor families and poor neighborhoods



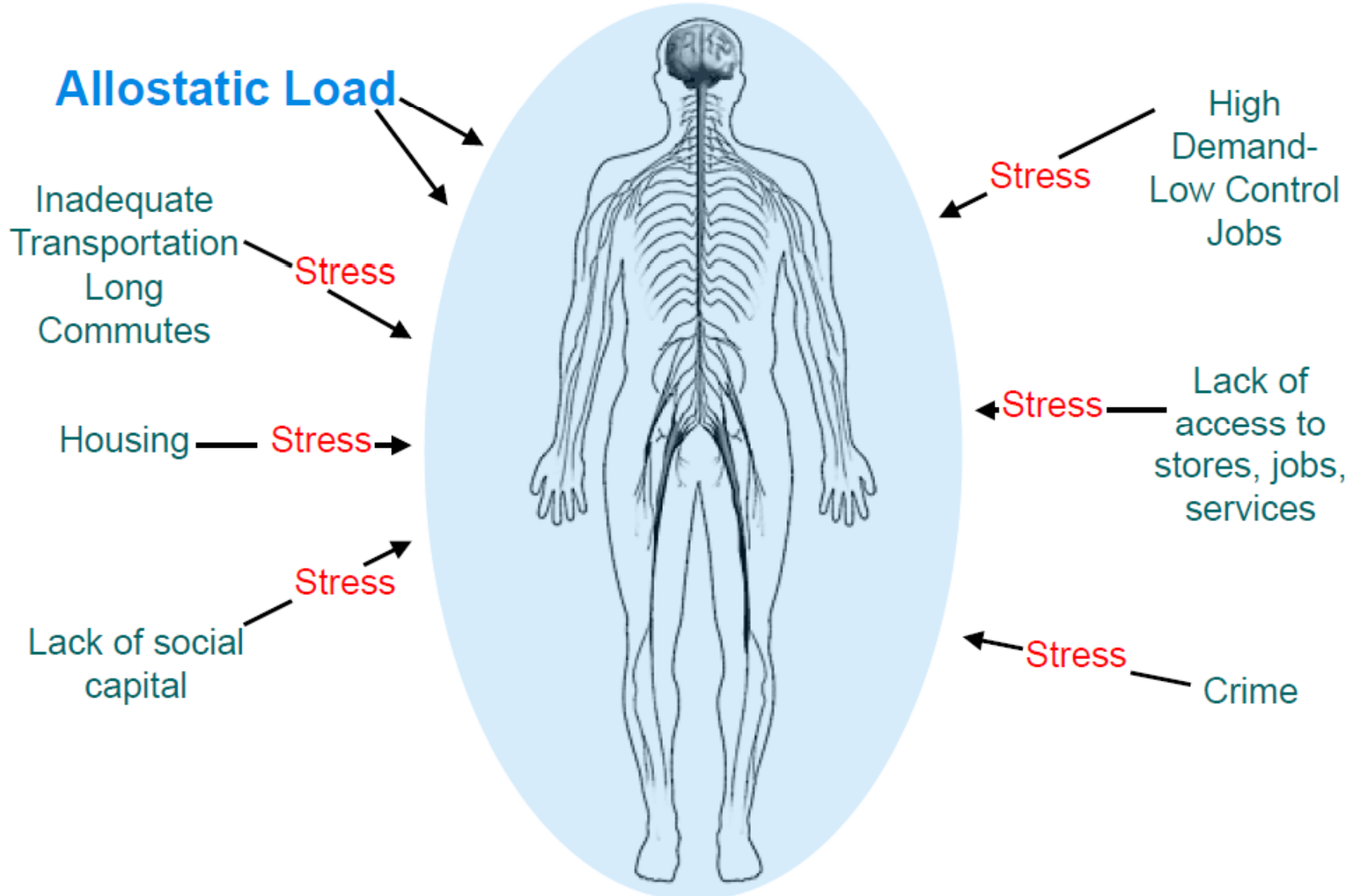
Disproportionate impact of the Great Recession on net worth by race-ethnicity (largely reflecting wealth held as housing equity)

Change in Median Household Net Worth by Race/Ethnicity, US 2005-2009

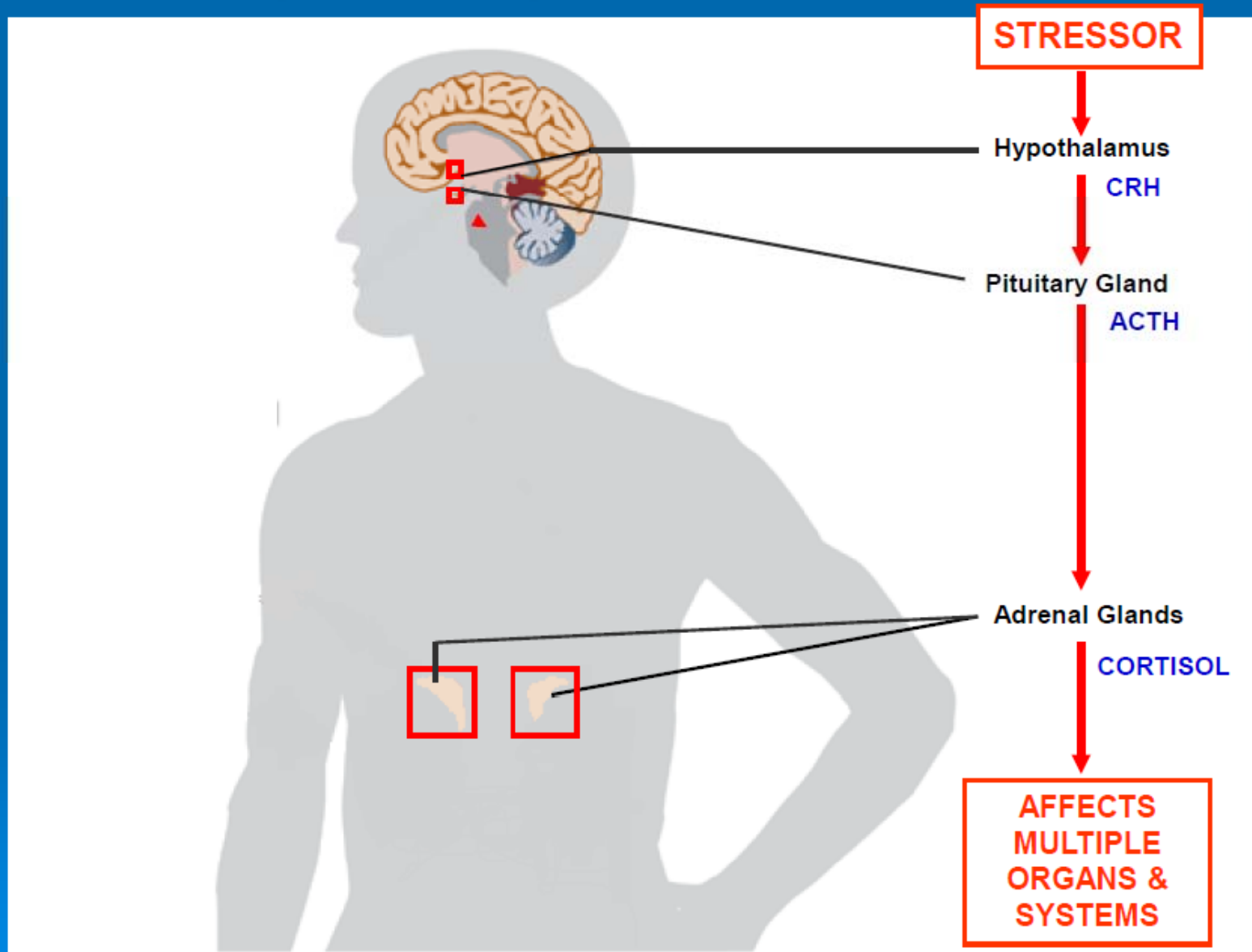


Source: Pew Research Center

When the external becomes Internal: How we Internalize our environment



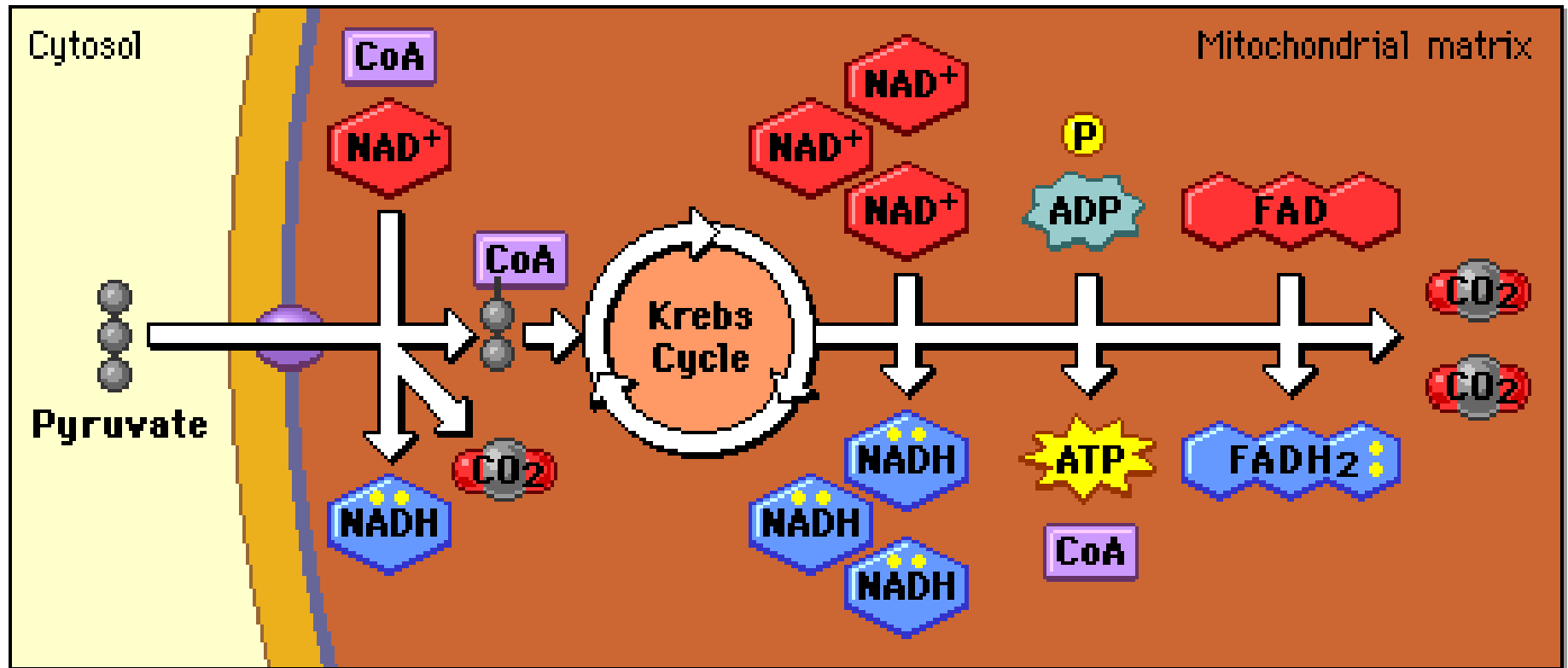
Stress pathway from brain to body



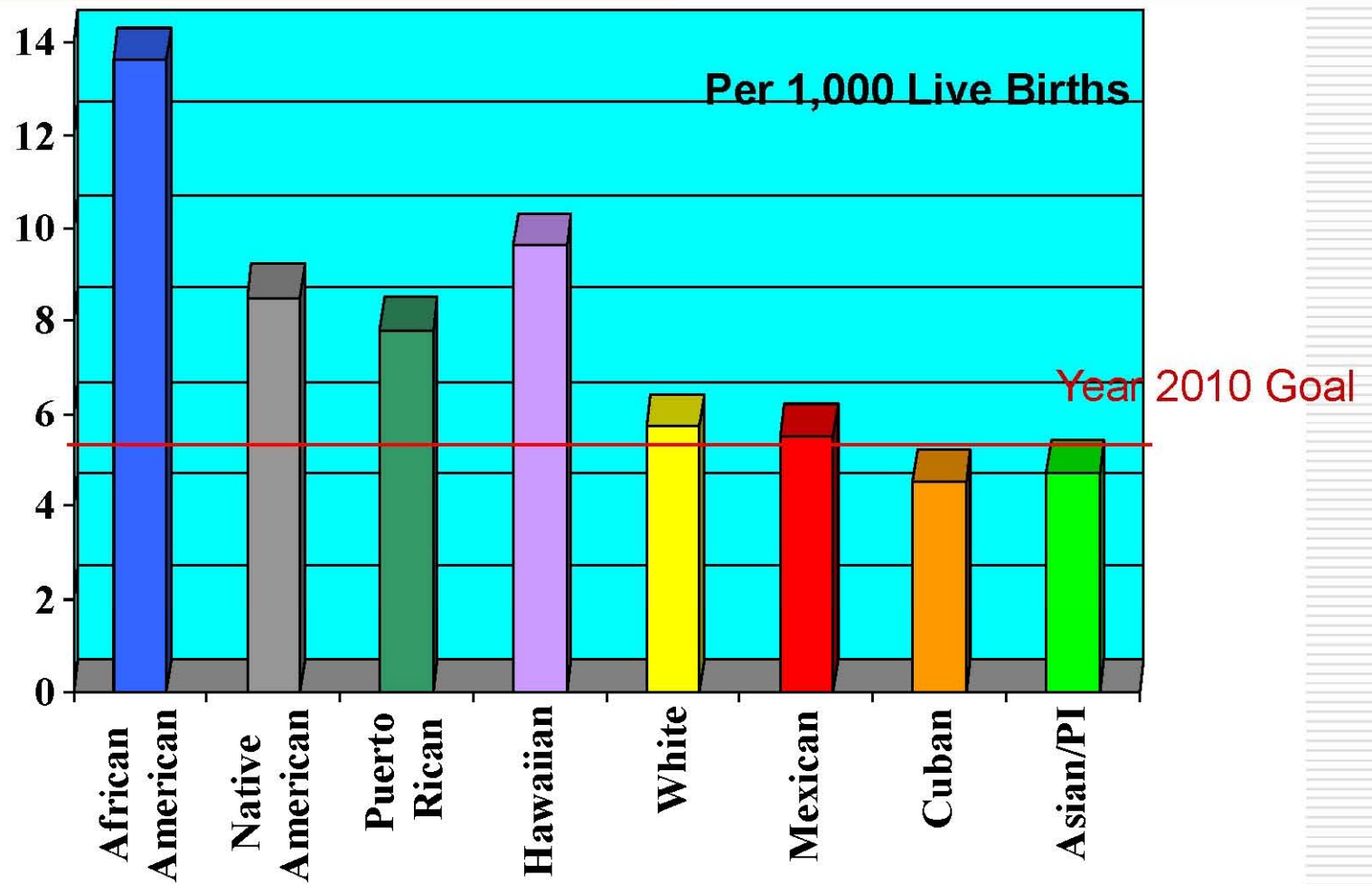
The Food Continuum and Health Equity



Cellular Energy Requires Key Nutrients



Racial & Ethnic Disparities Infant Mortality



NCHS 2008

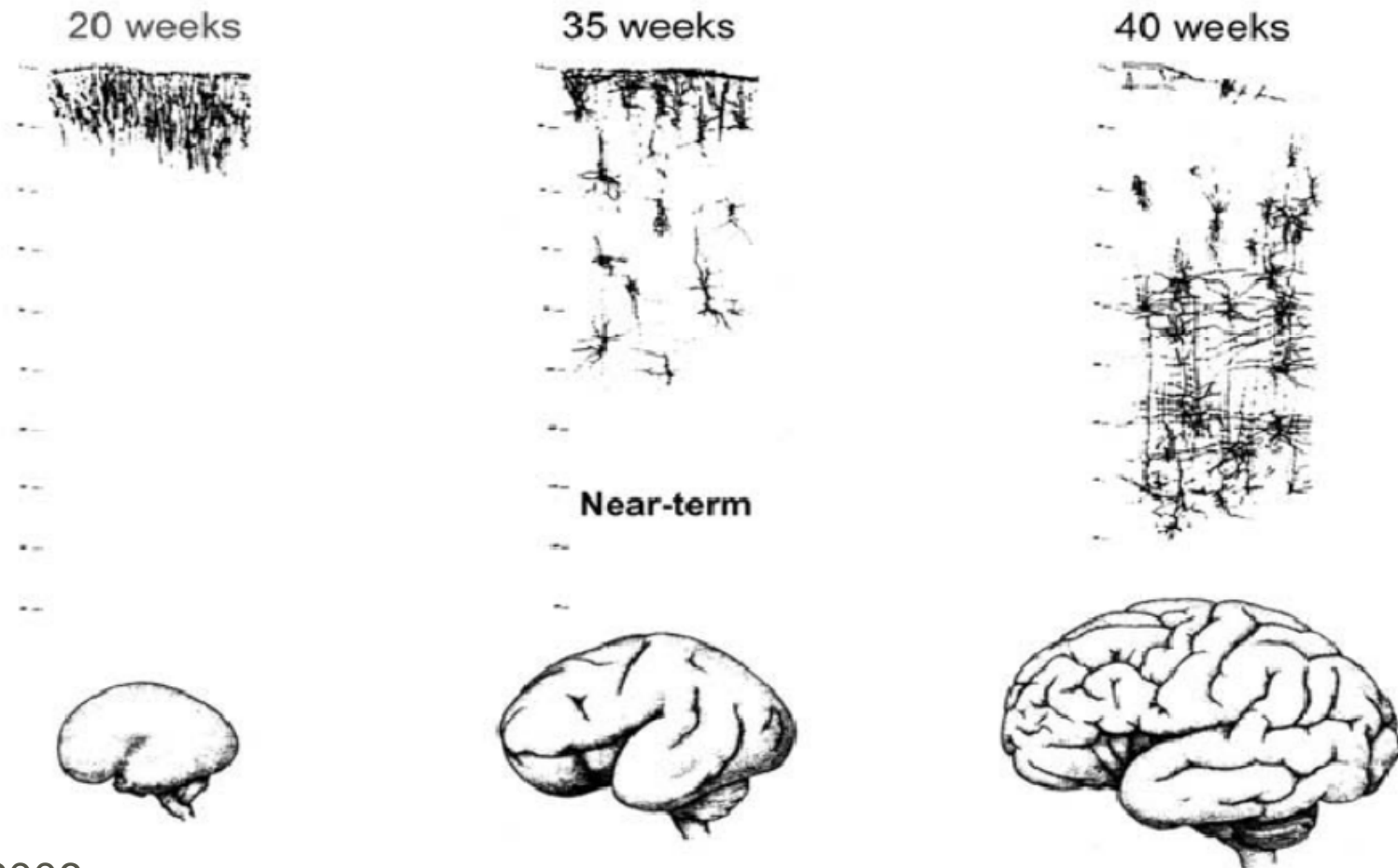
What Do We Mean by Improving Birth Outcomes?

- ☞ Healthy birthweight (5.5 lbs or greater)
- ☞ A full-term birth (~38 weeks or greater)
- ☞ Exclusive access to Mother's Milk



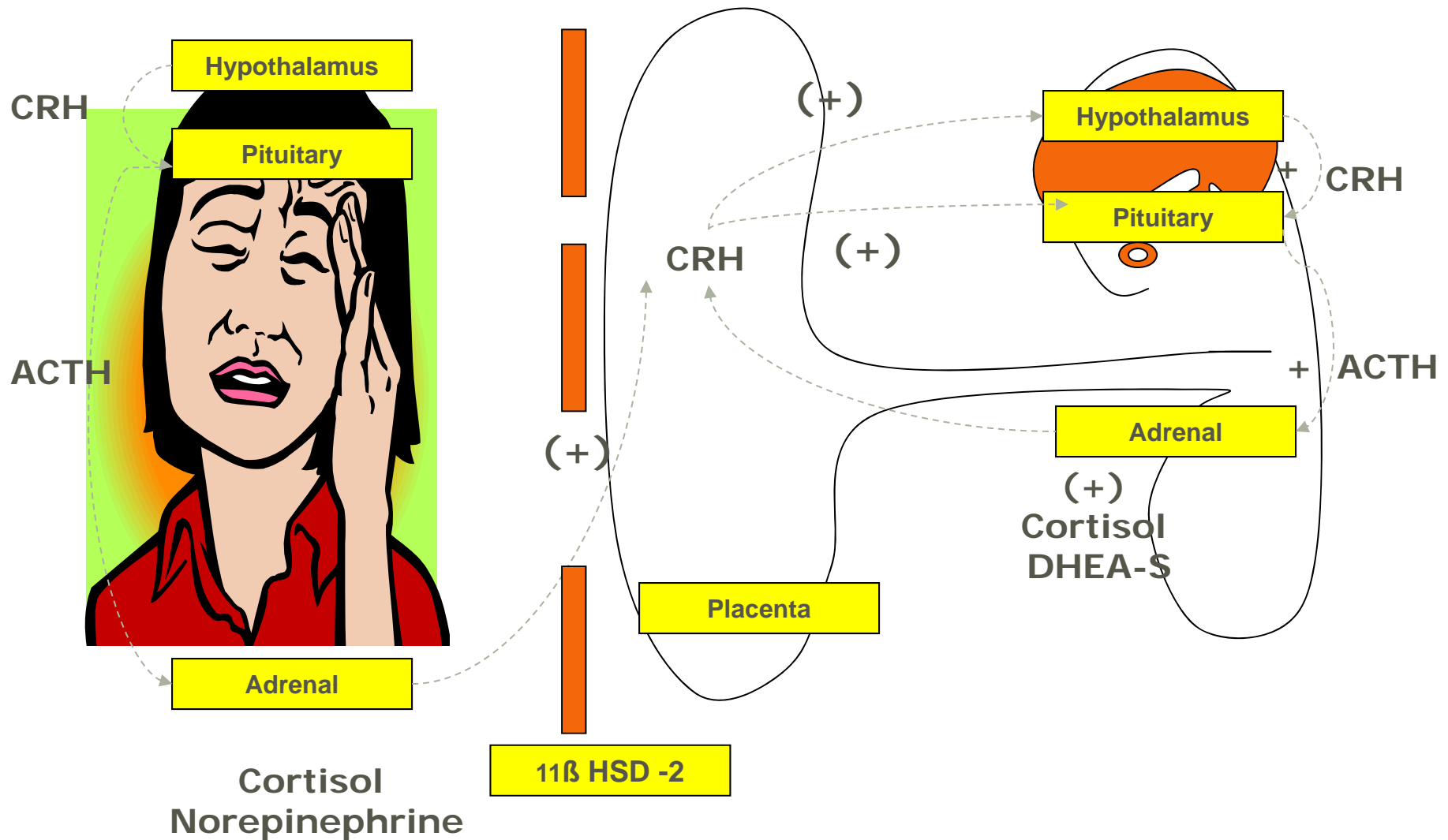
Human Brain Growth in Gestation

Development of the Human Cerebral Cortex



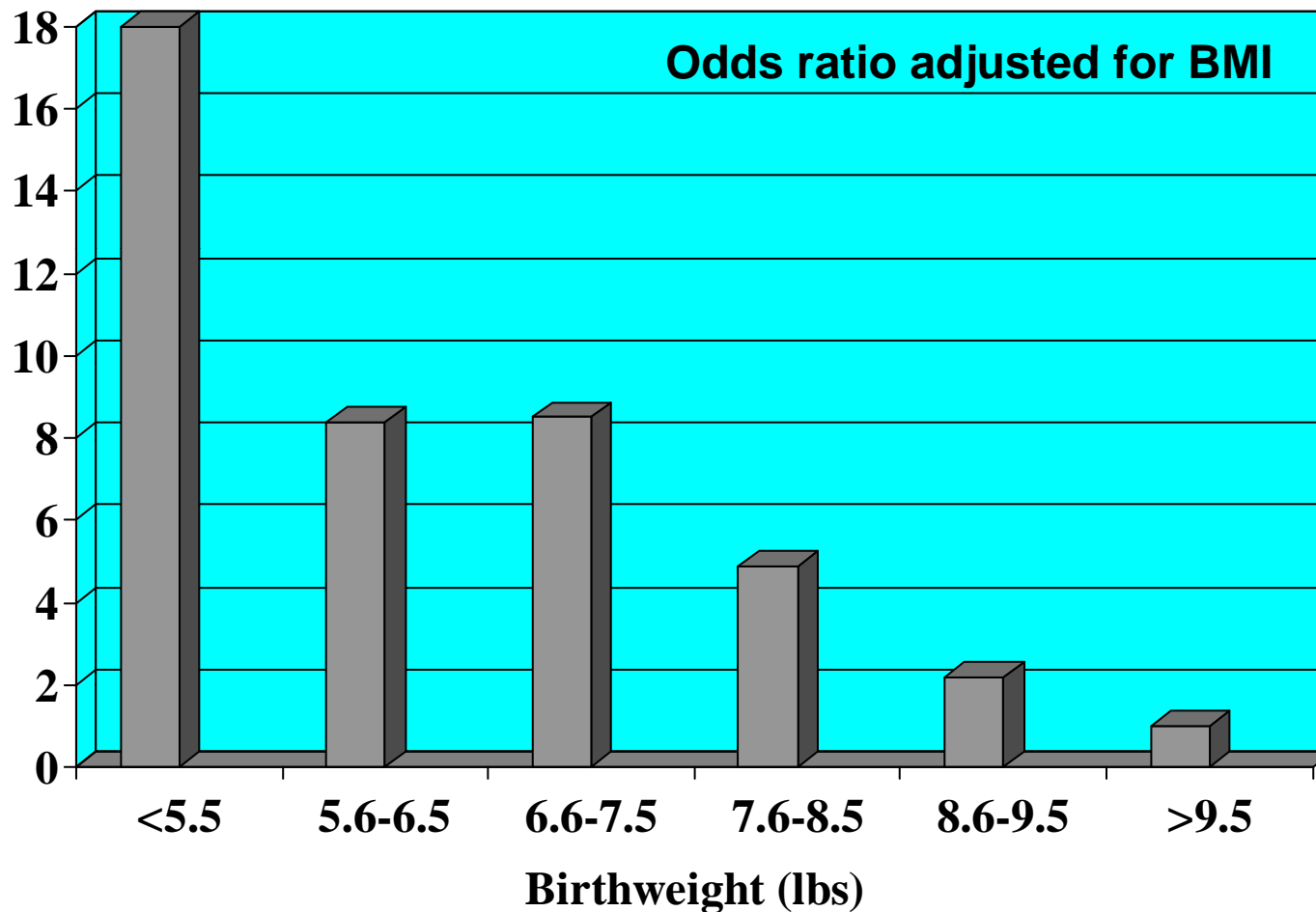
Maternal Stress & Fetal Programming

Does Stress Cross the Placenta?



Barker Hypothesis

Birthweight and Insulin Resistance Syndrome



Barker DJP, Hales CN, Fall CHD, Osmond C, Phipps K, Clark PMS. Type 2 (non-insulin-dependent) diabetes mellitus, hypertension and hyperlipidaemia (Syndrome X): Relation to reduced fetal growth. *Diabetologia* 1993;36:62-67.

Reduced Low Birthweight by 50%

- After 5 ½ years of operation, the DFC outcome data showed substantial lowering of preterm birth, low birthweight and cesarean section rates:

African American Population		
	DC (2002 Final)	FHBC (2003-2005)
Preterm birth < 37 weeks	14.2%	9.0%
Low birthweight	14.6 %	7.0 %
Cesarean section	29.0%	15.3%

These data have been demonstrated to be statistically significant by epidemiology and biostatistics faculty of the School of Public Health at the University of North Carolina

**Community & Civic
Engagement**

Racial Equity

**GOAL:
Educated Kids
Success By Third Grade**

.....
Increase the number of
children who are
reading-and-math proficient
by third grade.

**Whole Child
Development**

**GOAL:
Healthy Kids
Healthy Birth Weight
and Optimal Development**

.....
Increase the number of
children born at a healthy
birth weight and who
receive the care and healthy
food they need for
optimal development.

**GOAL:
Secure Families
Children and Families at 200%
Above Poverty**

.....
Increase the number of
children and families living
at least 200% above the
poverty level.