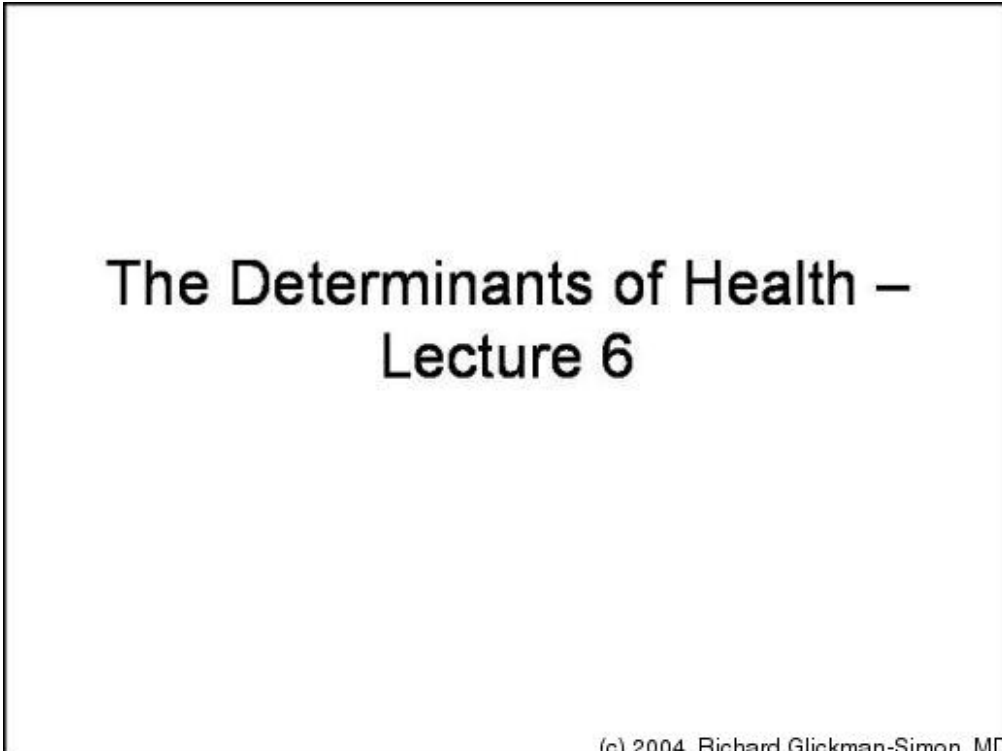


1.

Lecture 6 - Introduction Slide



The Determinants of Health –
Lecture 6

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2.

Measuring Health

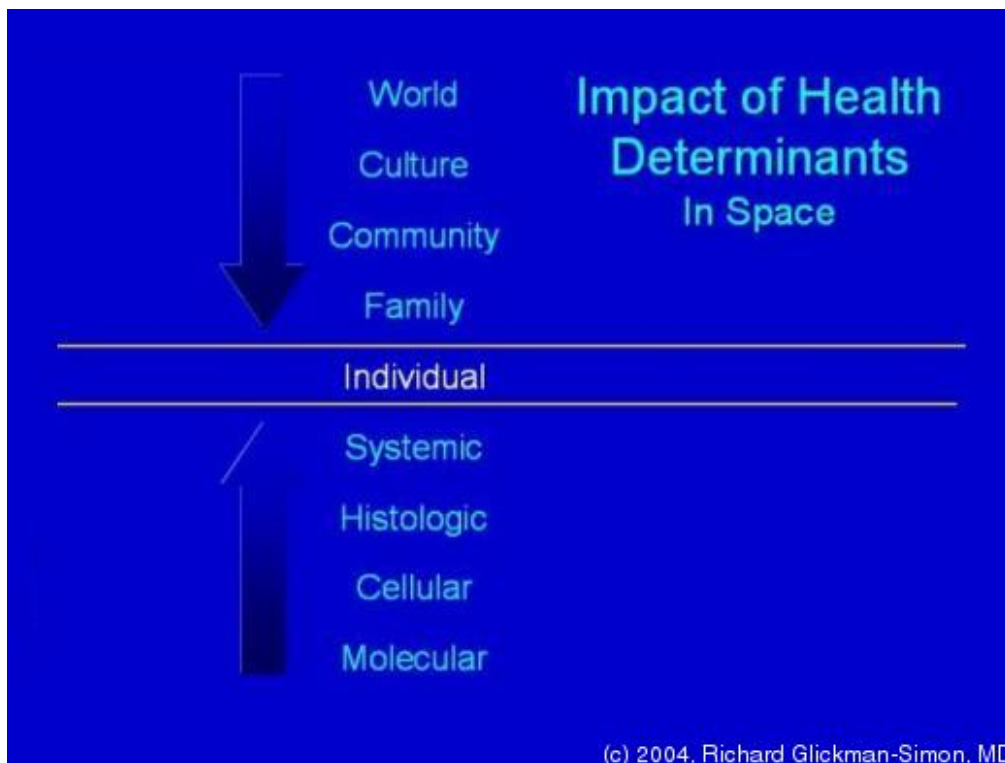


Measuring Health

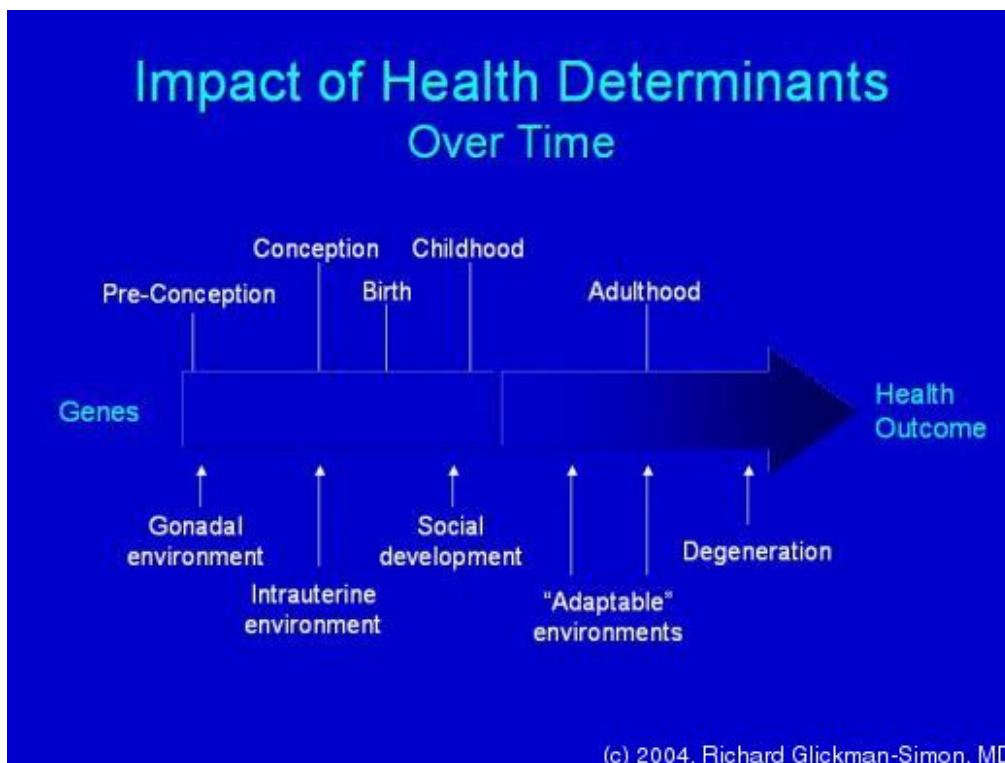
- Alive → Mortality
- Free of disease → Morbidity
- Able to function → Disability
- Feeling well → Quality of Life

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5. Impact of Health Determinants in Space



6. Impact of Health Determinants Over Time



7.

Genetic Determinism

Genetic Determinism

- Chromosomal abnormalities
- Single gene defects
- Genetic polymorphism

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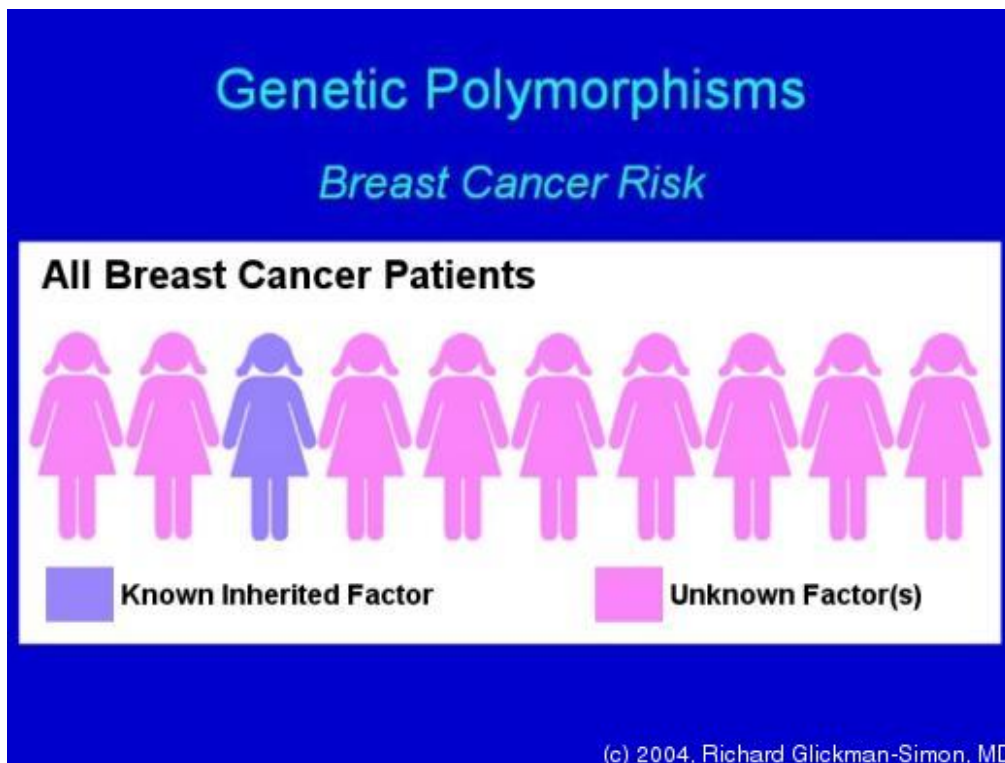
8.

Genetic Polymorphism

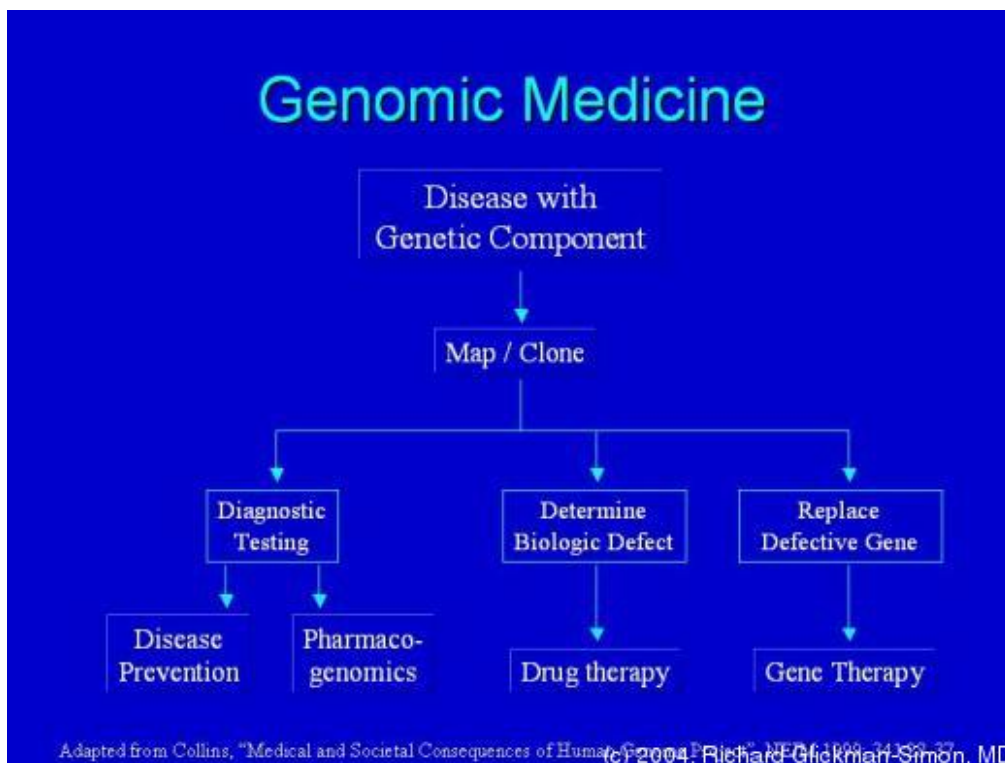
Genetic Polymorphism

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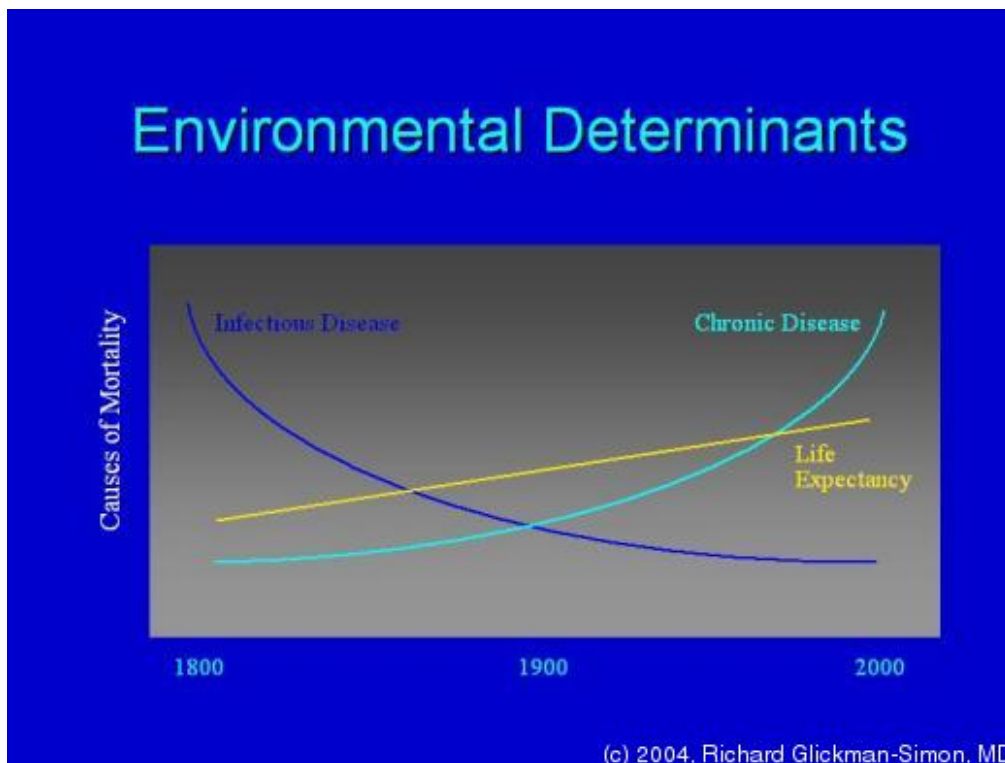
9. Genetic Polymorphisms Breast Cancer Risk



10. Genomic Medicine



11. Environmental Determinants



12. “Adaptable” Environments



13.

Society and Health



Society and Health

- Socioeconomic status
- Neighborhood
- Race
- Social integration

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14.

How do social factors translate into health outcomes?



How do social factors translate into health outcomes?

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15. Stress Defined

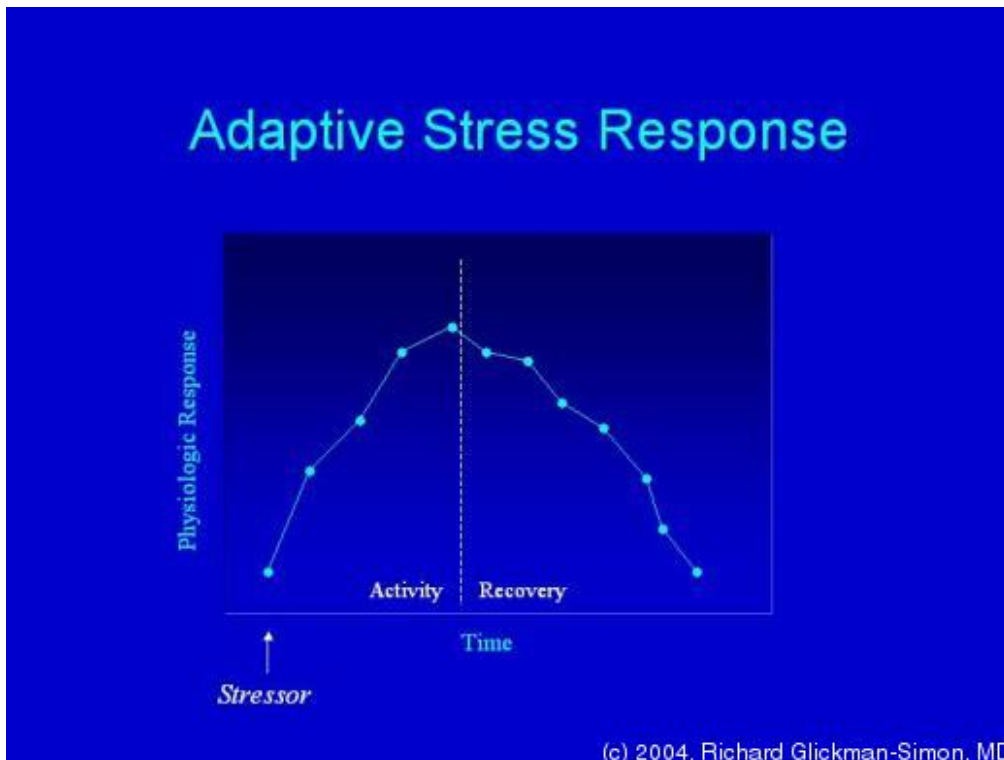
Stress Defined

A threat to physical or psychological well being,
real or imagined, that an organism feels incapable
of coping with.

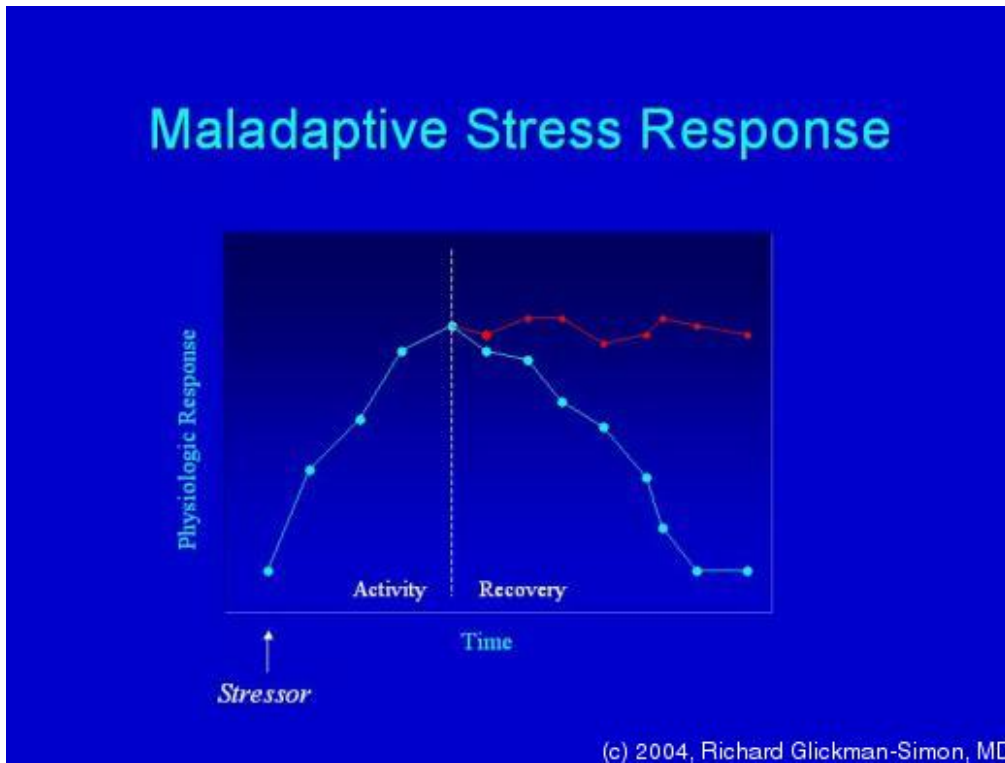
A stress response is the combined physiologic
and behavioral changes associated with that
threat.

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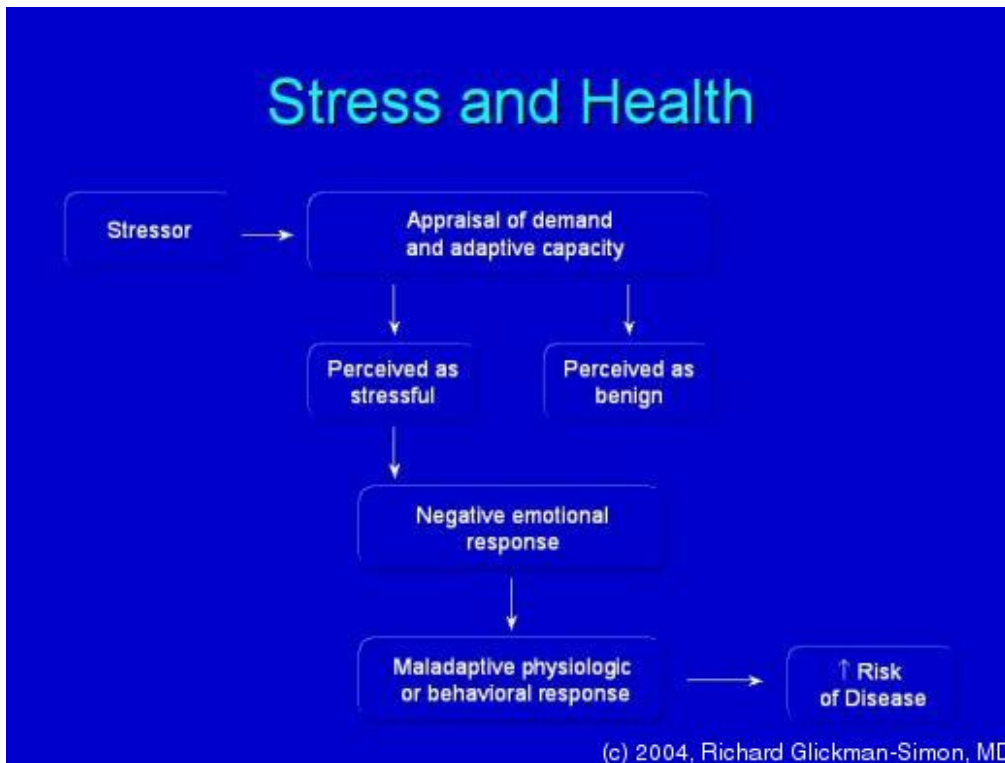
16. Adaptive Stress Response



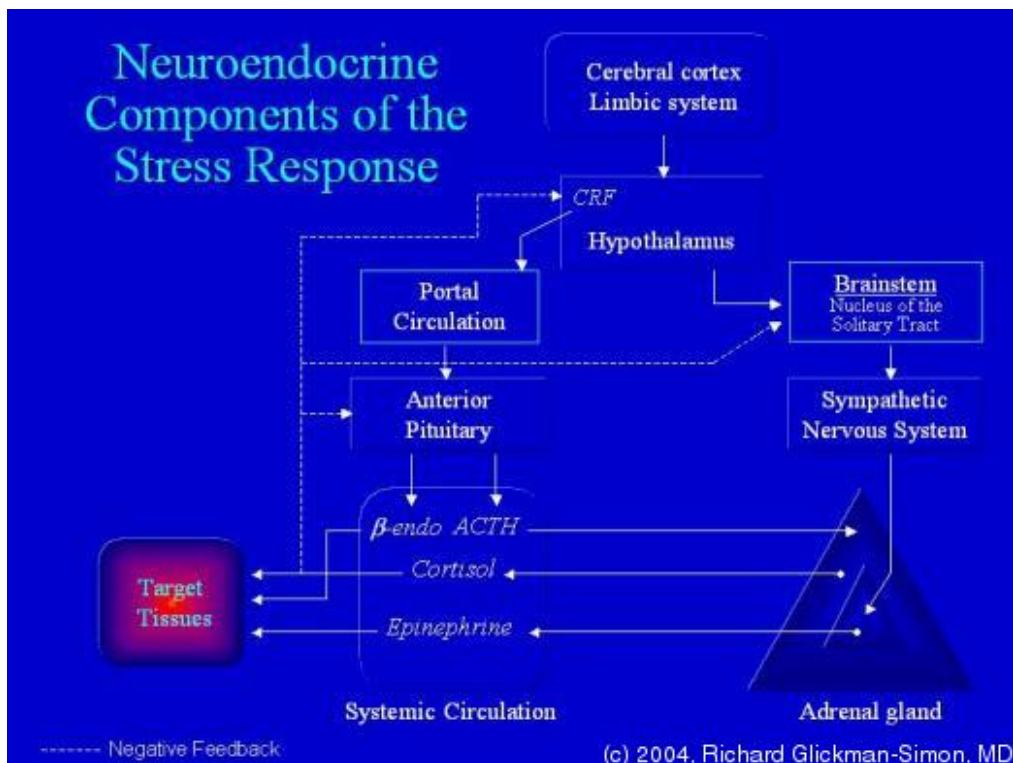
17. Maladaptive Stress Response



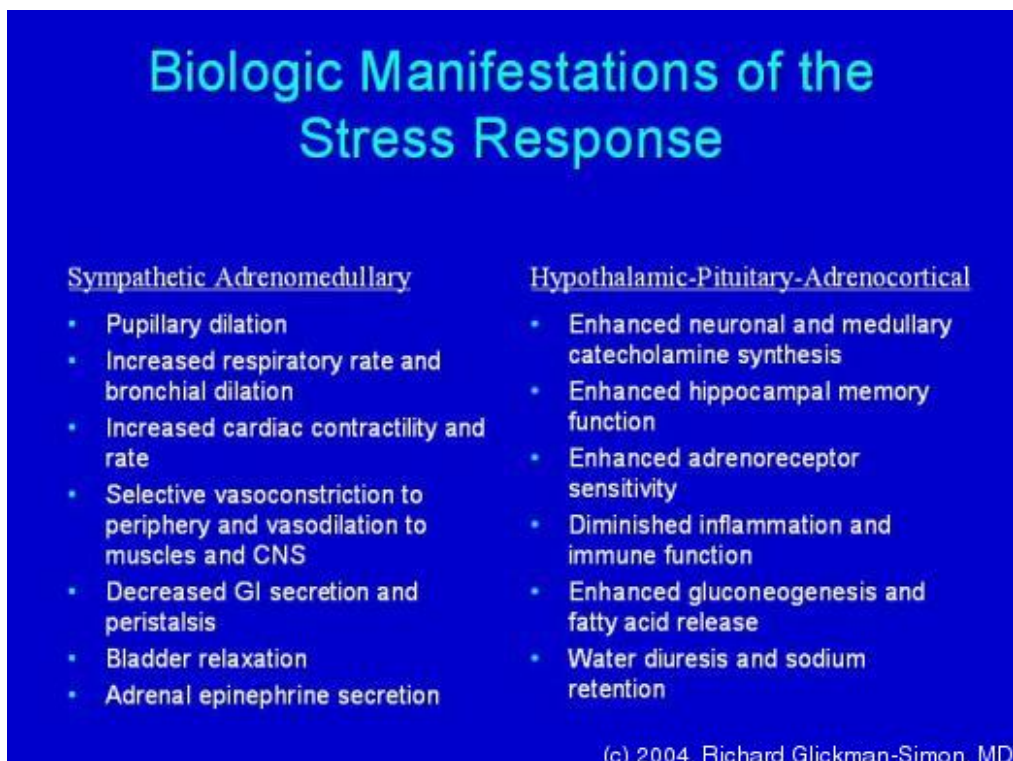
18. Stress and Health



19. Neuroendocrine Components of the Stress Response



20. Biologic Manifestations of the Stress Response



21. Chronic Stress and Health

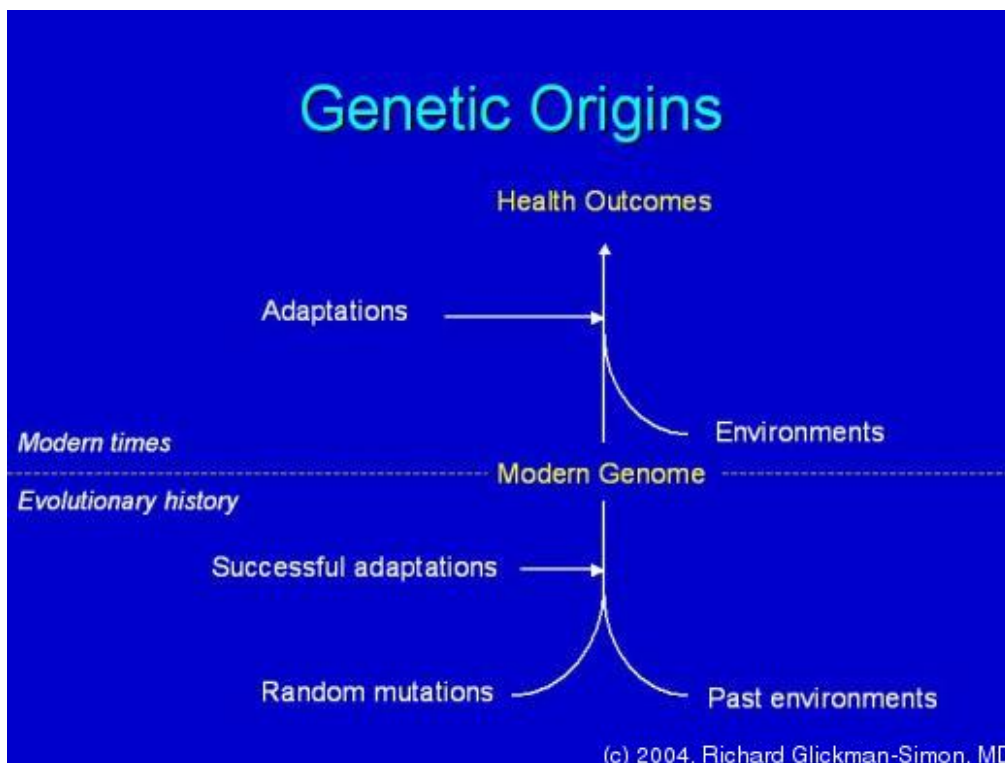
Chronic Stress and Health

Allostatic Load

The accumulated physiologic costs of chronic exposures to fluctuating levels of neuroendocrine responses caused by environmental challenges that an organism perceives as stressful.

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22. Genetic Origins



23.

Case Continued

Case Continued

Mr. Emerson continues to see you for the next year or so, during which time you monitor his lab tests and adjust his medications. He then disappears, only to return several years later by ambulance. He was found unconscious in an alleyway. His breath smells of cigarettes and alcohol. His blood pressure is now 200/120 mmHg, and you quickly determine he has suffered a stroke. You manage to contact his ex-wife who says she hasn't heard from him since he lost his job about six months ago.

You admit him to the hospital where two days later he has another, more massive stroke and dies. The official cause of death: "cerebrovascular accident".

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24.

What killed Mr. Emerson?

What killed Mr. Emerson?

```
graph LR; U[Underlying] --- P[Proximal]; P --- S[Stroke]; U --- U1[Childhood deprivation]; U --- U2[Social Isolation]; U --- U3[Racism]; P --- P1[Chronic Stress]; P --- P2[Mental illness]; P --- P3[Tobacco]; P --- P4[Alcohol]; P --- P5[High fat diet]; P --- P6[Hypertension]; P --- P7[Atherosclerosis];
```

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