

Soc 103M

**Causation**

# Meanings of Causation

- *Idiographic Causes*
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- *Nomothetic Causes*
- - Counterfactual
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- *Synthetic Causal Explanations*

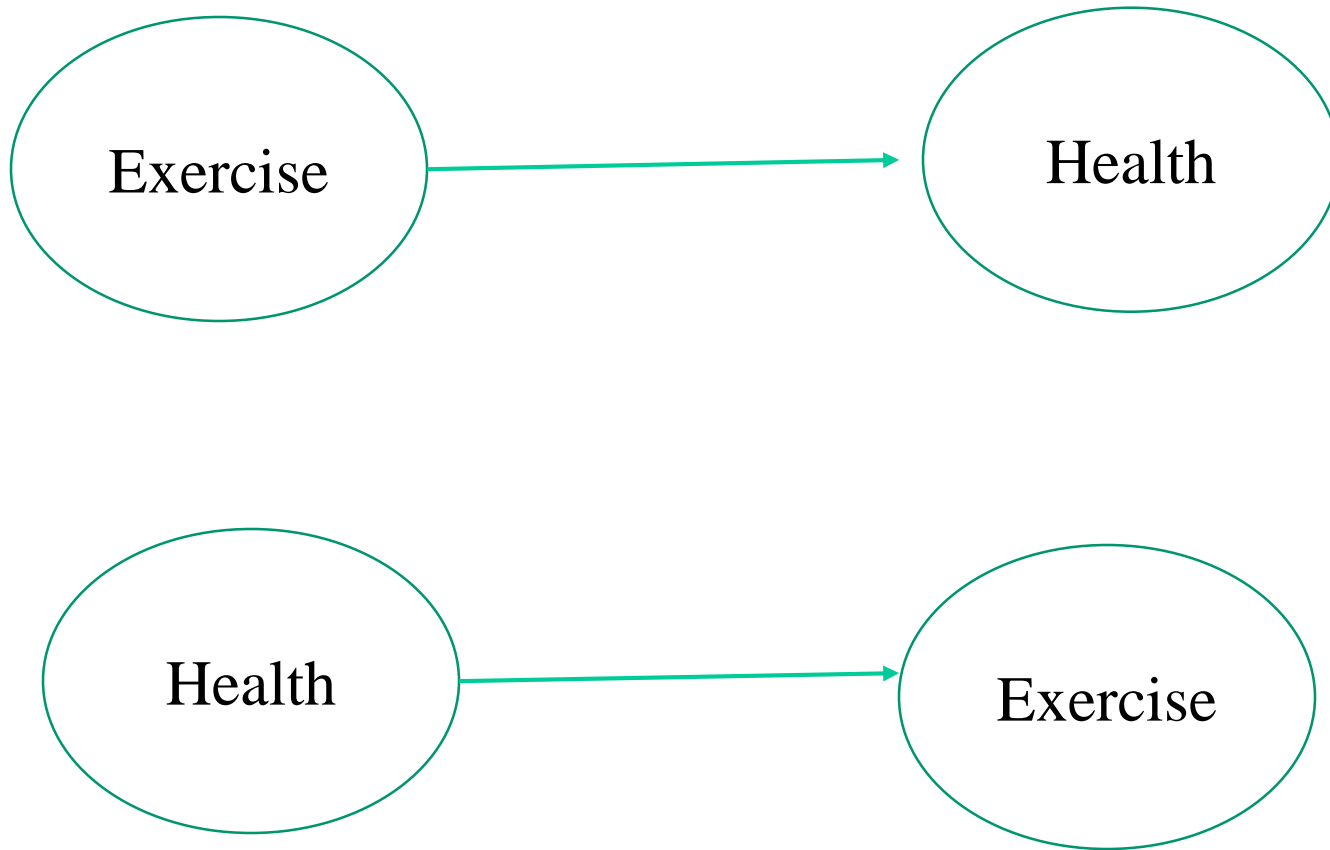
# Criteria for Causal Explanation

- **John Stuart Mill's 3 Main Criteria of Causation**
  - *Empirical Association*
  - *Appropriate Time Order*
  - *Non-Spuriousness (Excluding other Forms of Causation)*
- **2 Additional Criteria of Causal Explanation**
  - *Causal Mechanisms*
  - *Specifying Context*

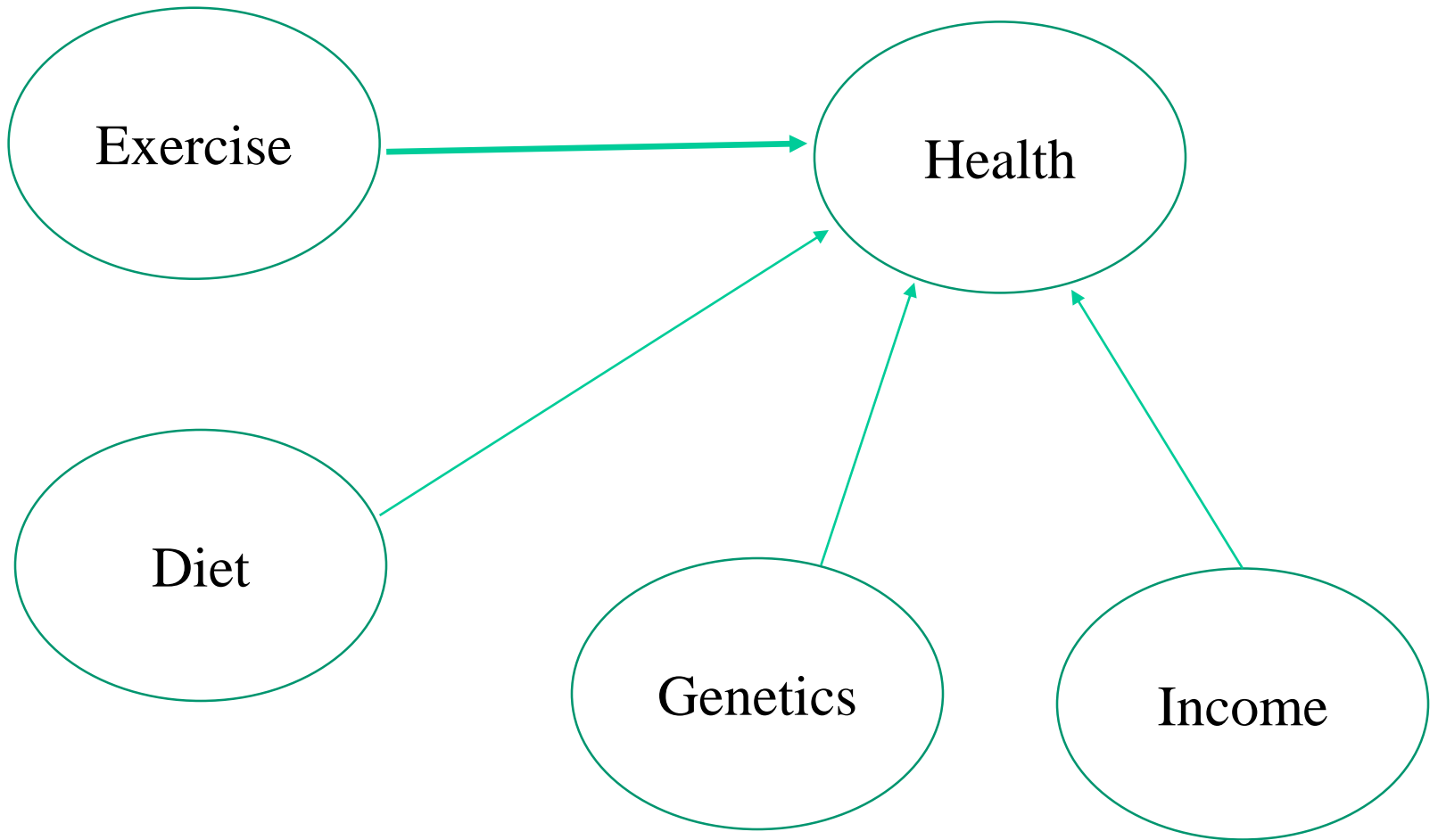
# Question

- Suppose you find that people who exercise a lot are healthier and conclude that exercise is good for your health.
- Someone comes and points out unhealthy people are less eager and able to exercise and healthy people just enjoy exercise more. Exercise does not make you healthier but other factors do (e.g., genetics, exposure to viruses, diet).
- Which one of the causal criteria is not fulfilled according to your critic?
  - A. Empirical association
  - B. Appropriate time order
  - C. Non-spuriousness

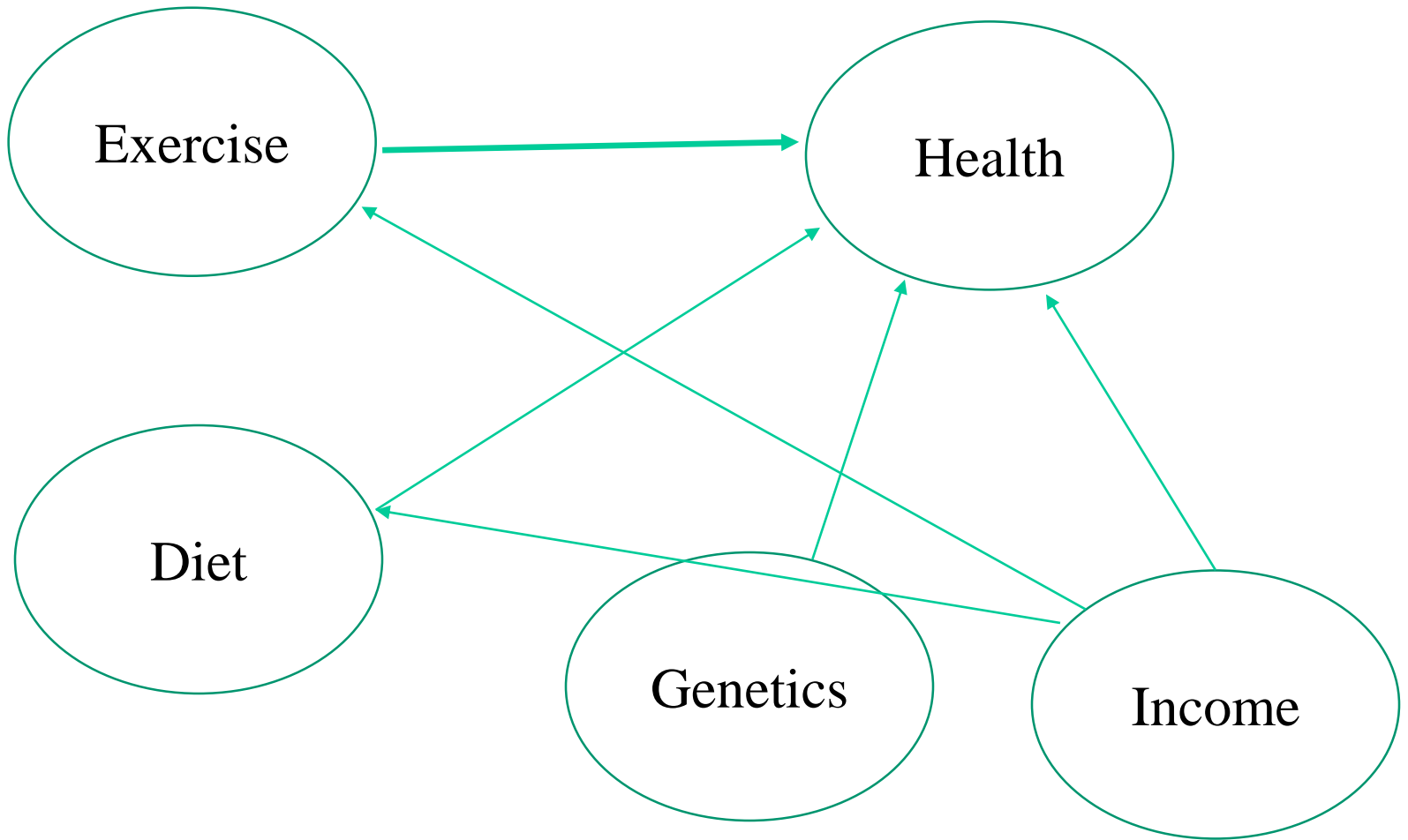
# Visualization



# Multi-casual model



# Multi-casual model



# Multi-casual model with two-way causal paths

