

Introducing Drug Dynamics Using SD Models

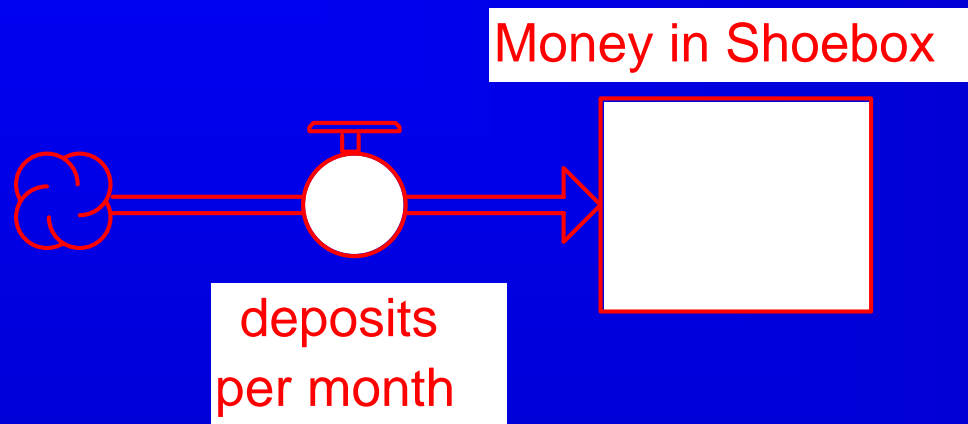
Diana Fisher

Portland, Oregon

diana.fisher2@frontier.com

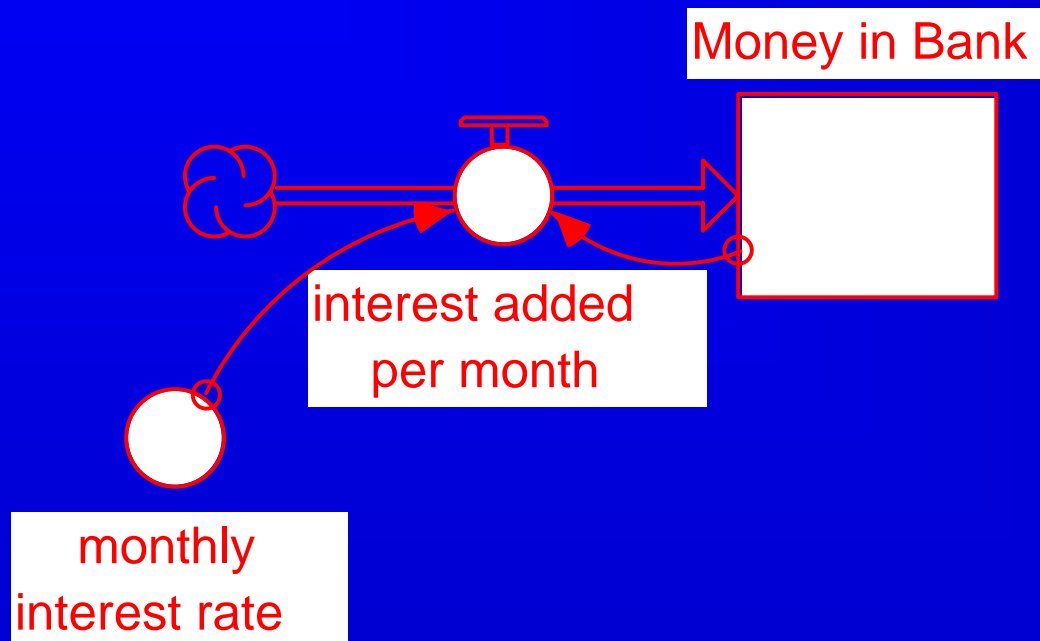
Linear Model

Constant Inflow or Constant Outflow

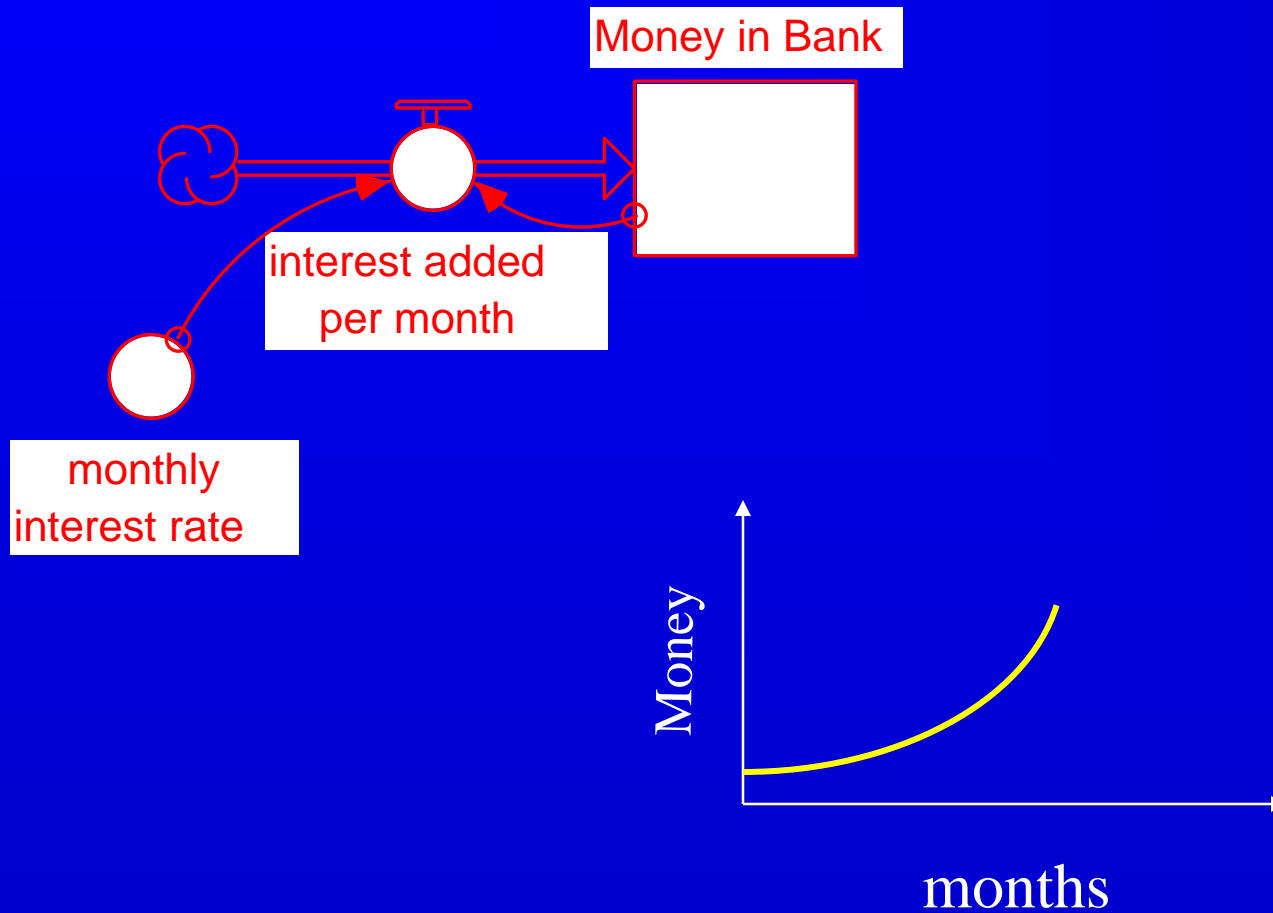


Exponential Model

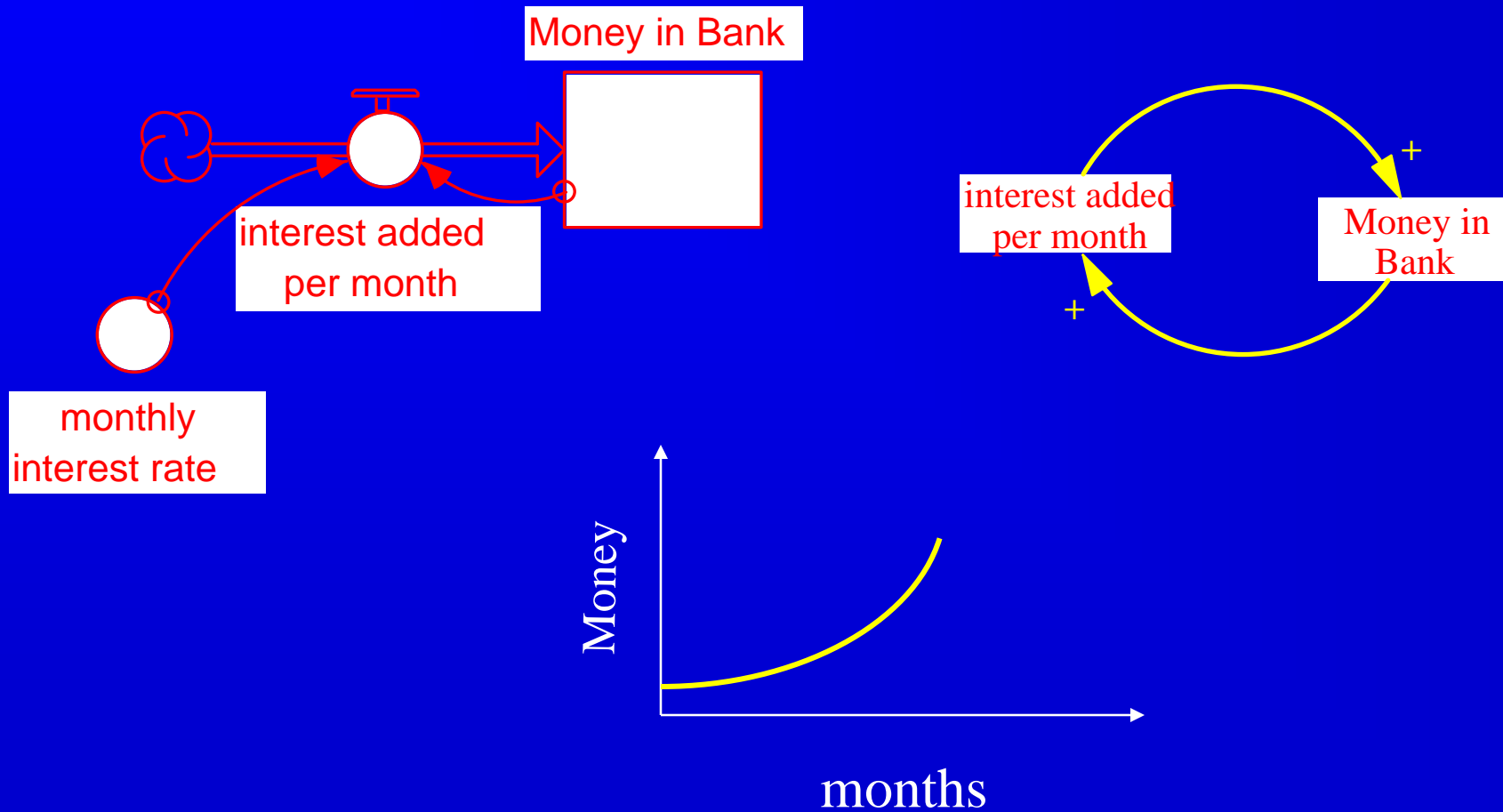
Growth/Decay is a percent of current amount.



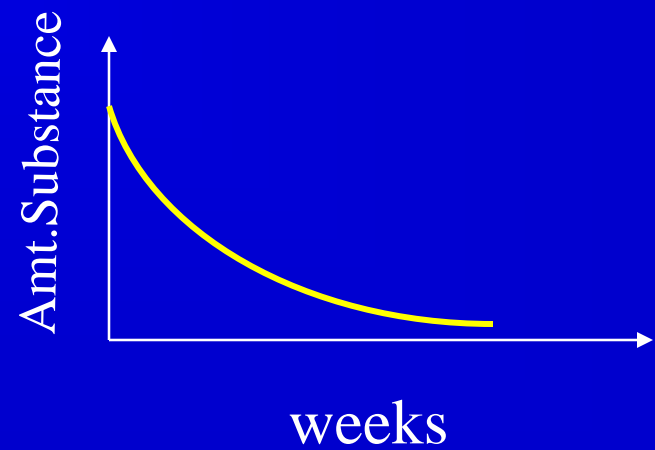
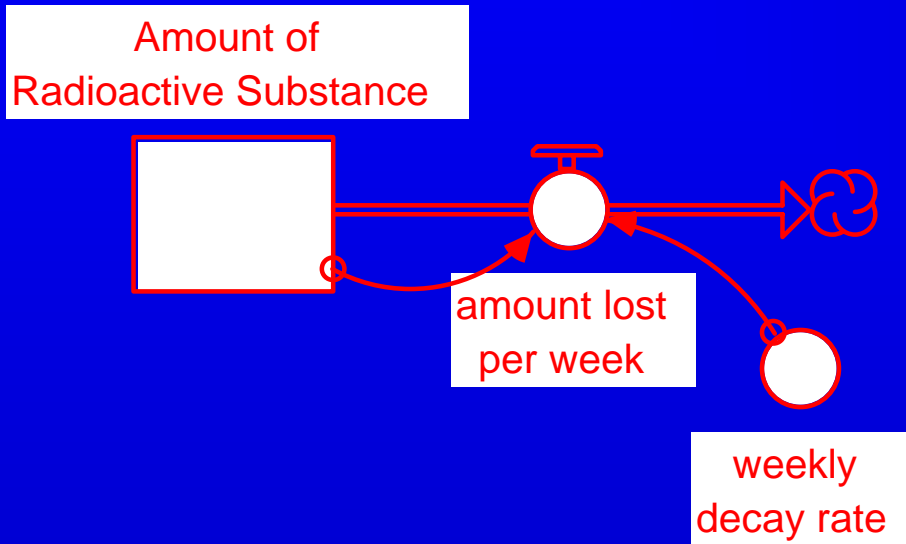
Exponential Model: Reinforcing Feedback



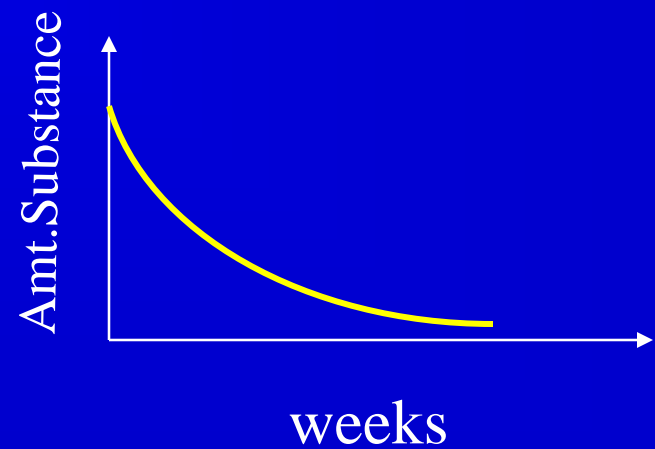
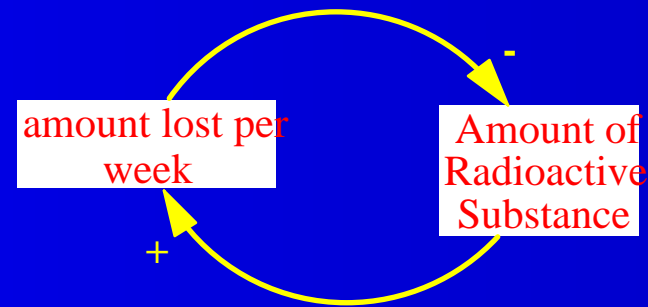
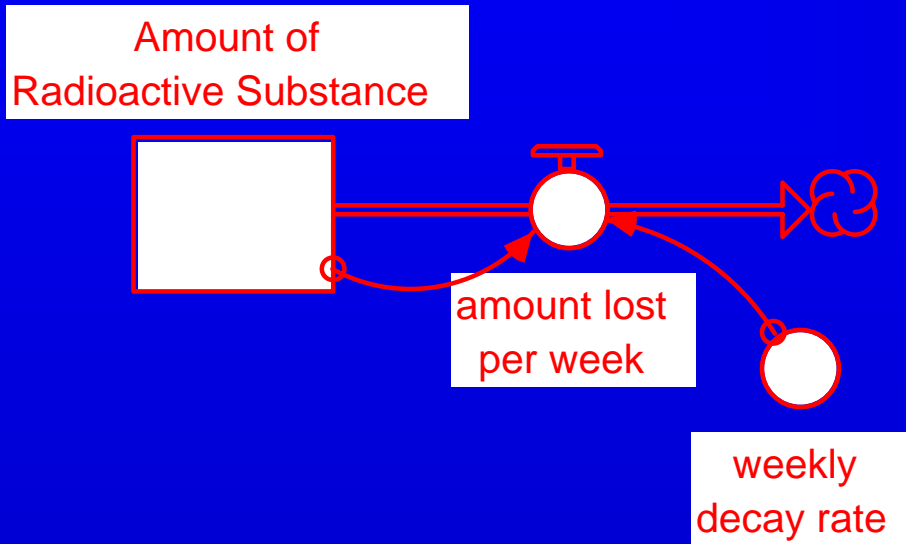
Exponential Model: Reinforcing Feedback



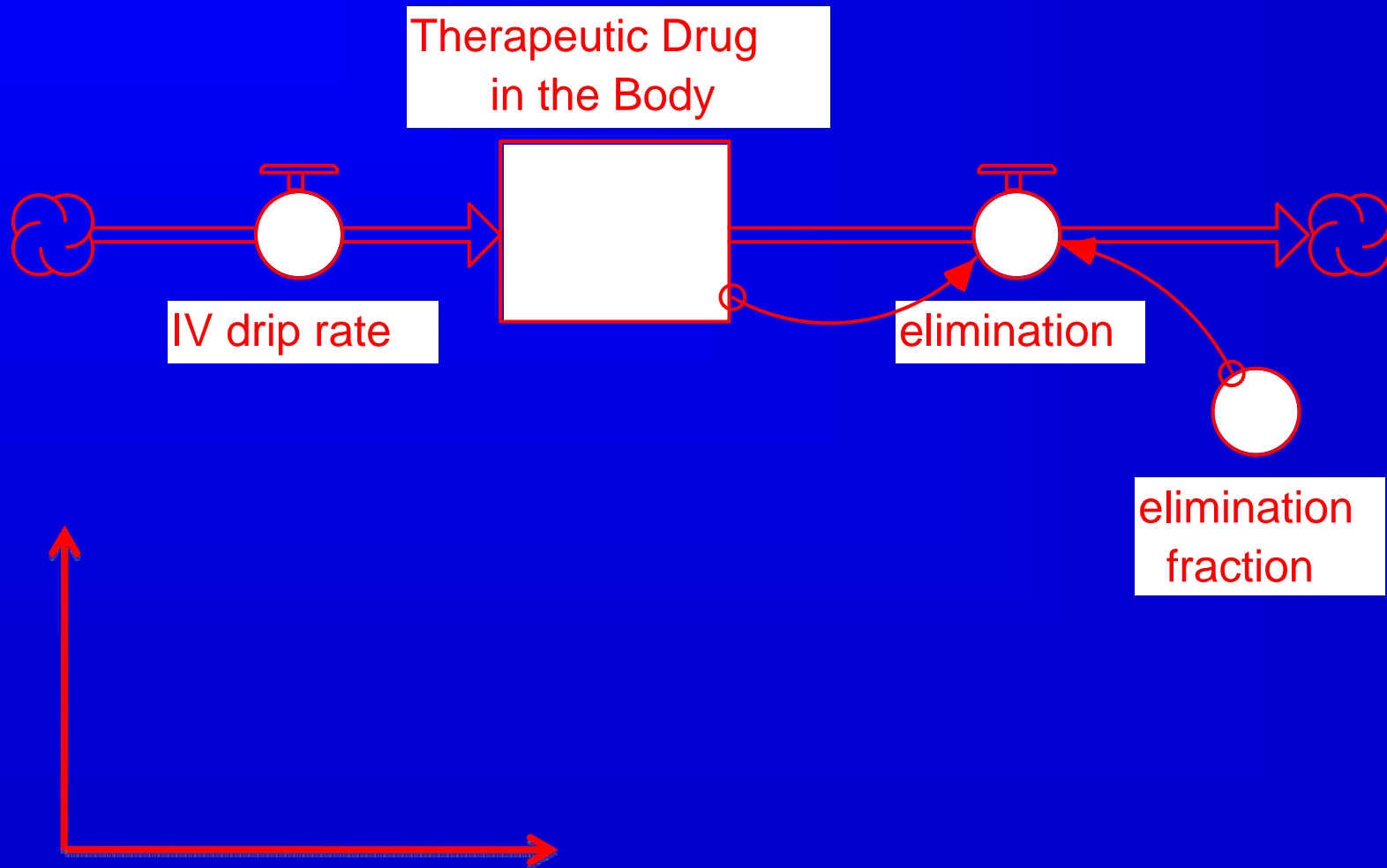
Exponential Model Balancing Feedback



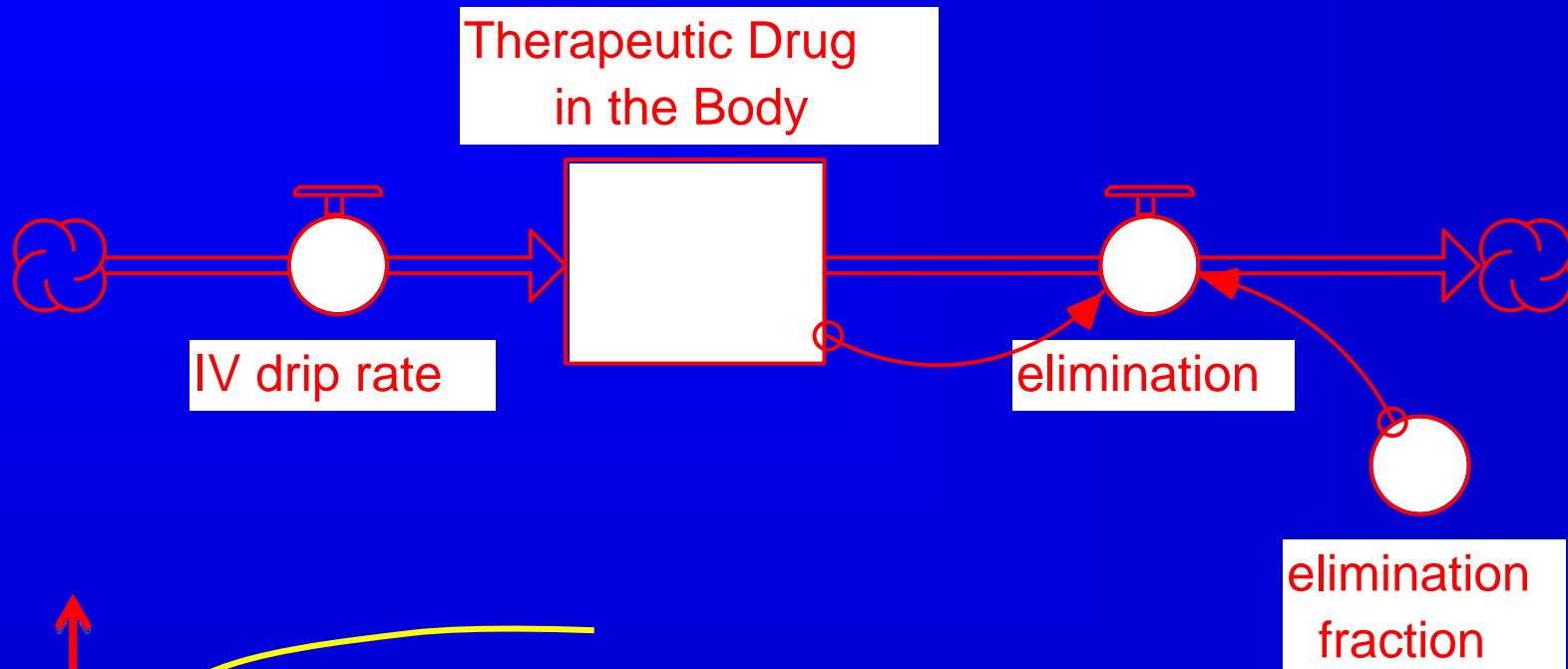
Exponential Model Balancing Feedback



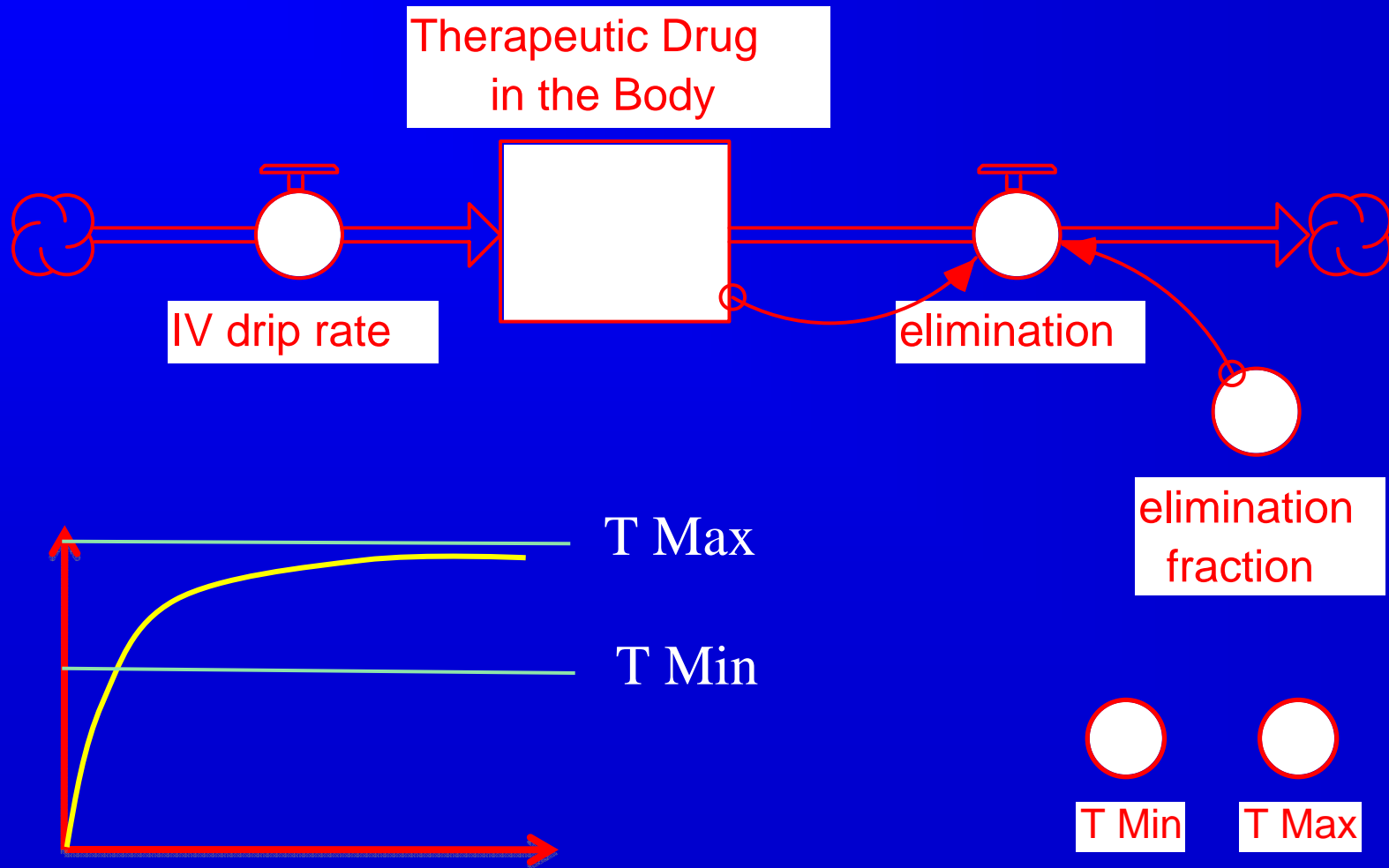
Combine Linear & Exponential



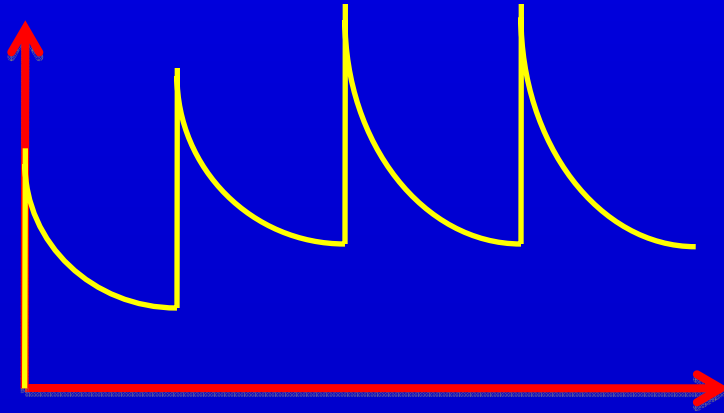
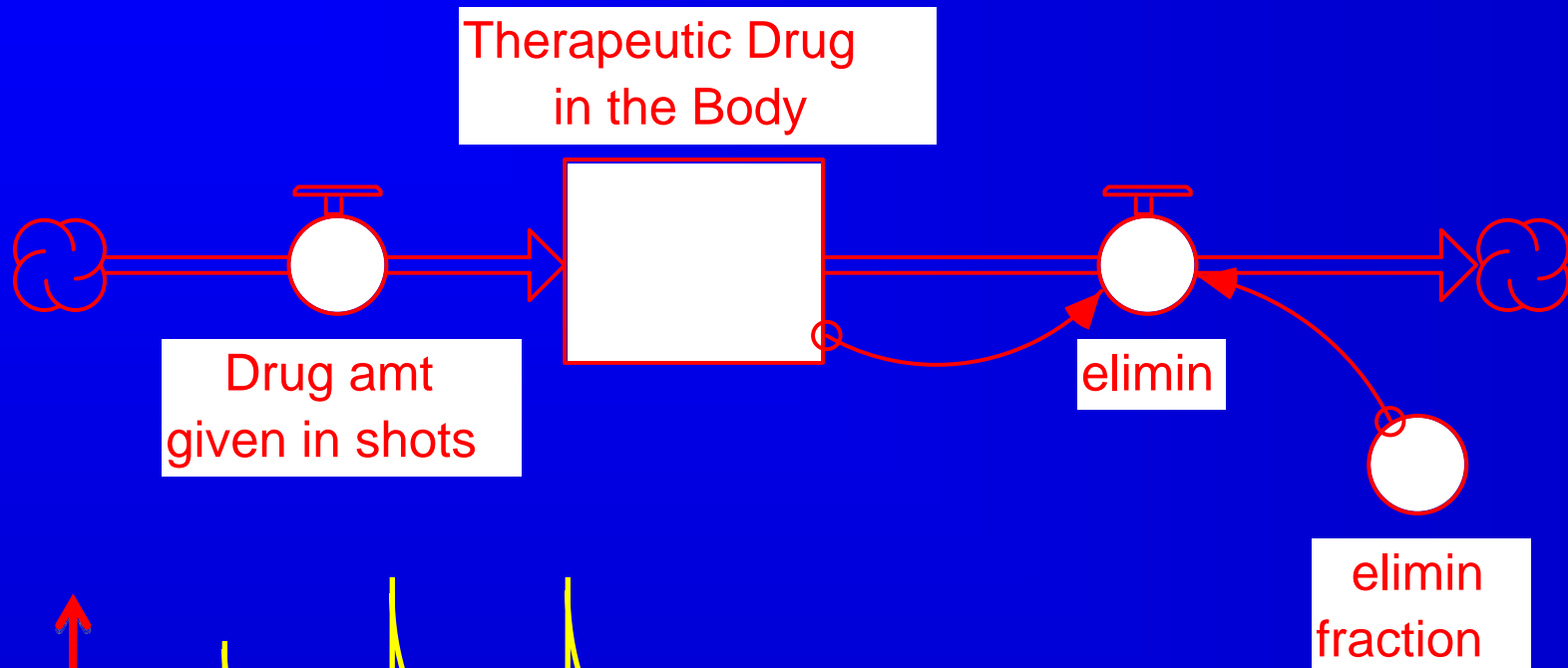
Combine Linear & Exponential



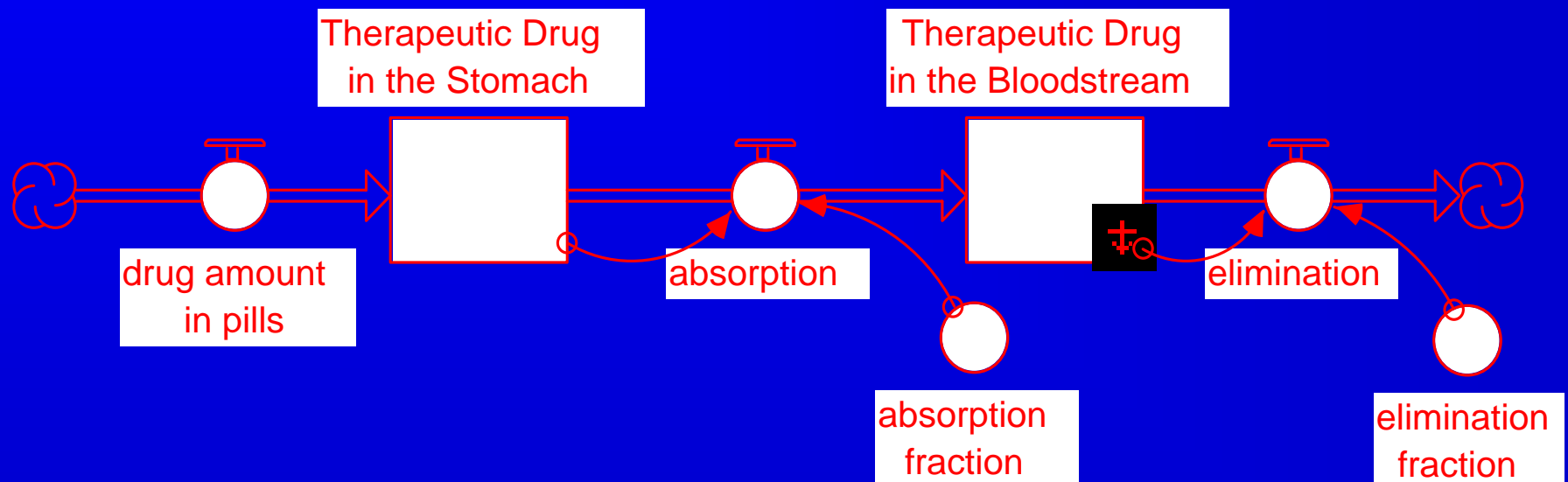
Combine Linear & Exponential



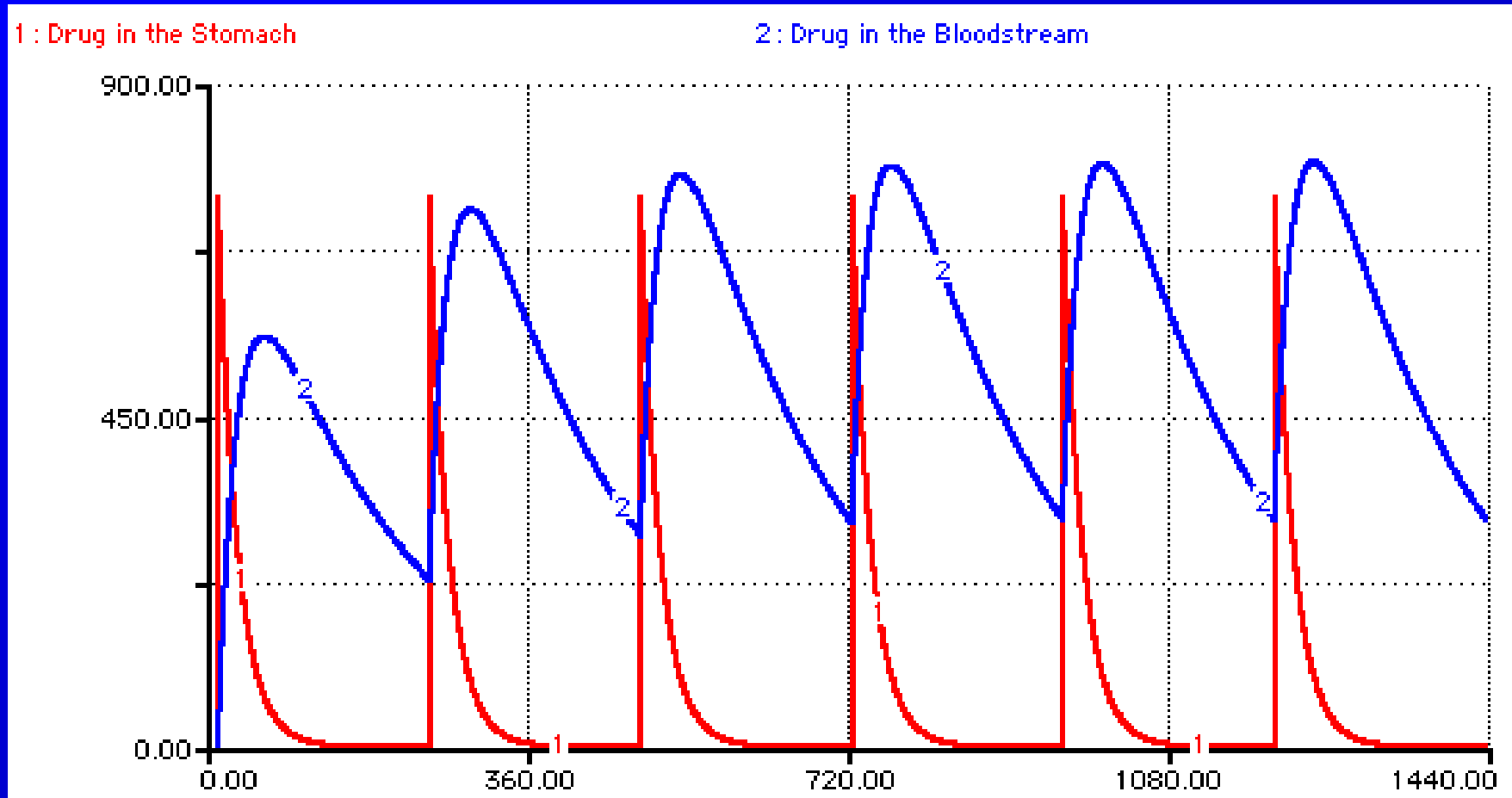
Combine Linear & Exponential



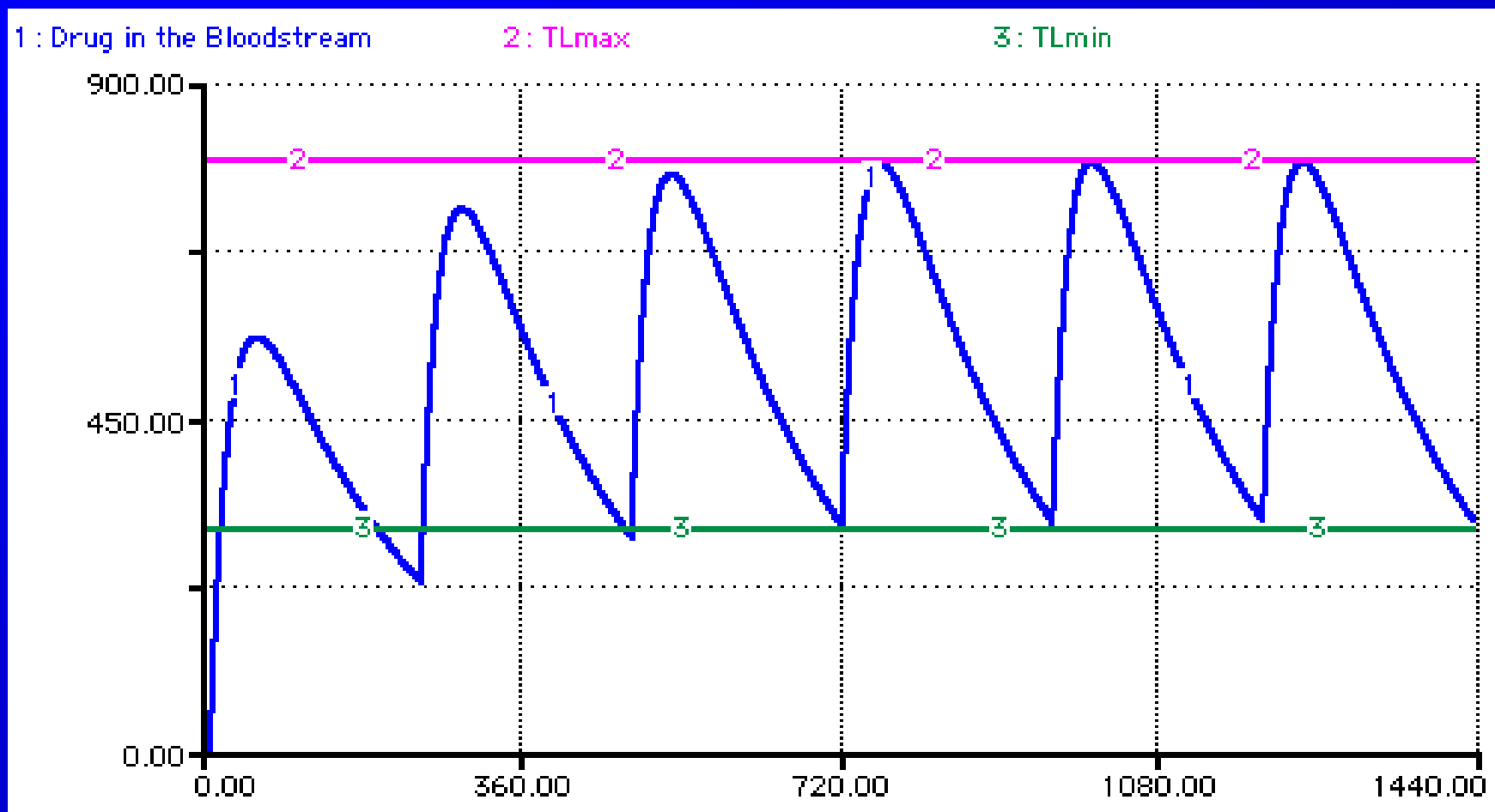
Extend Drug Model



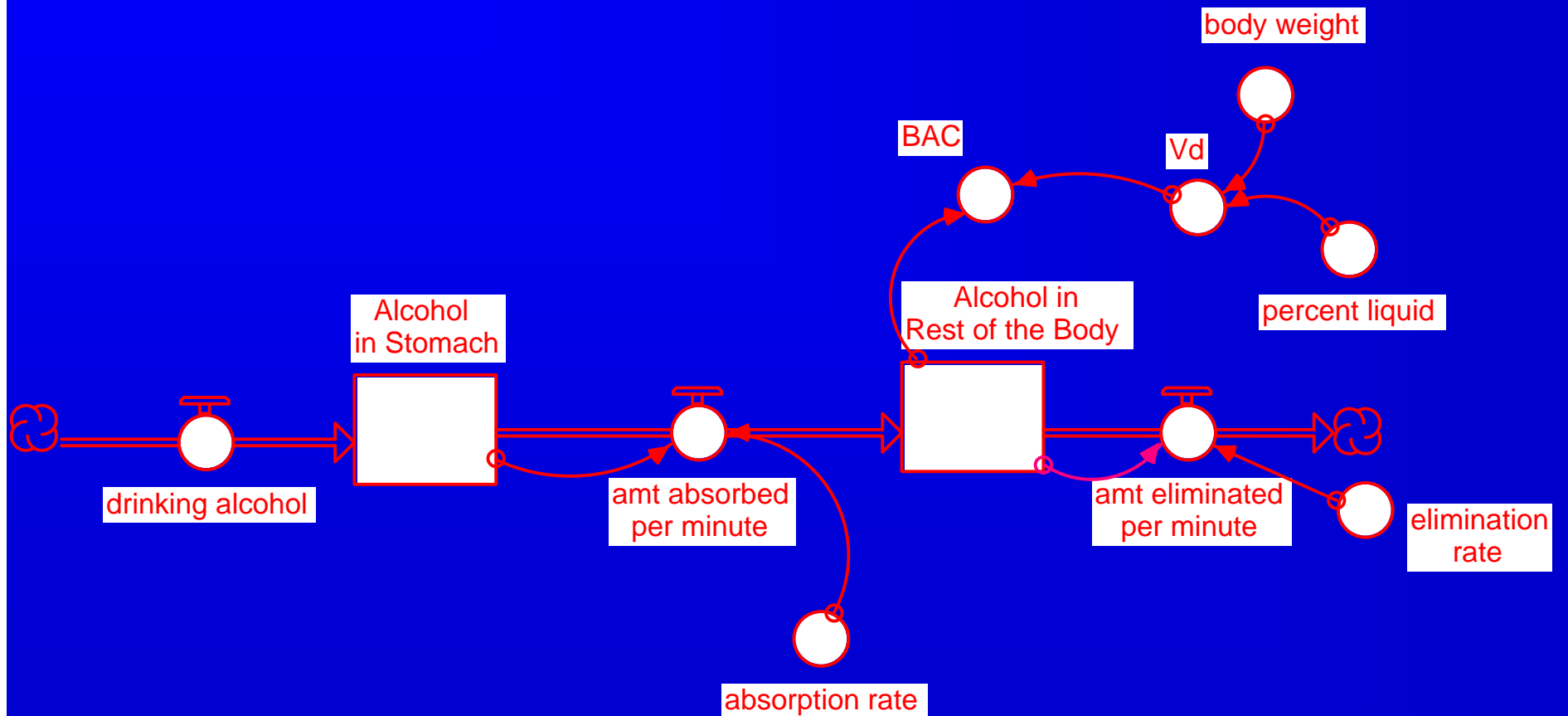
More Interesting Graphs



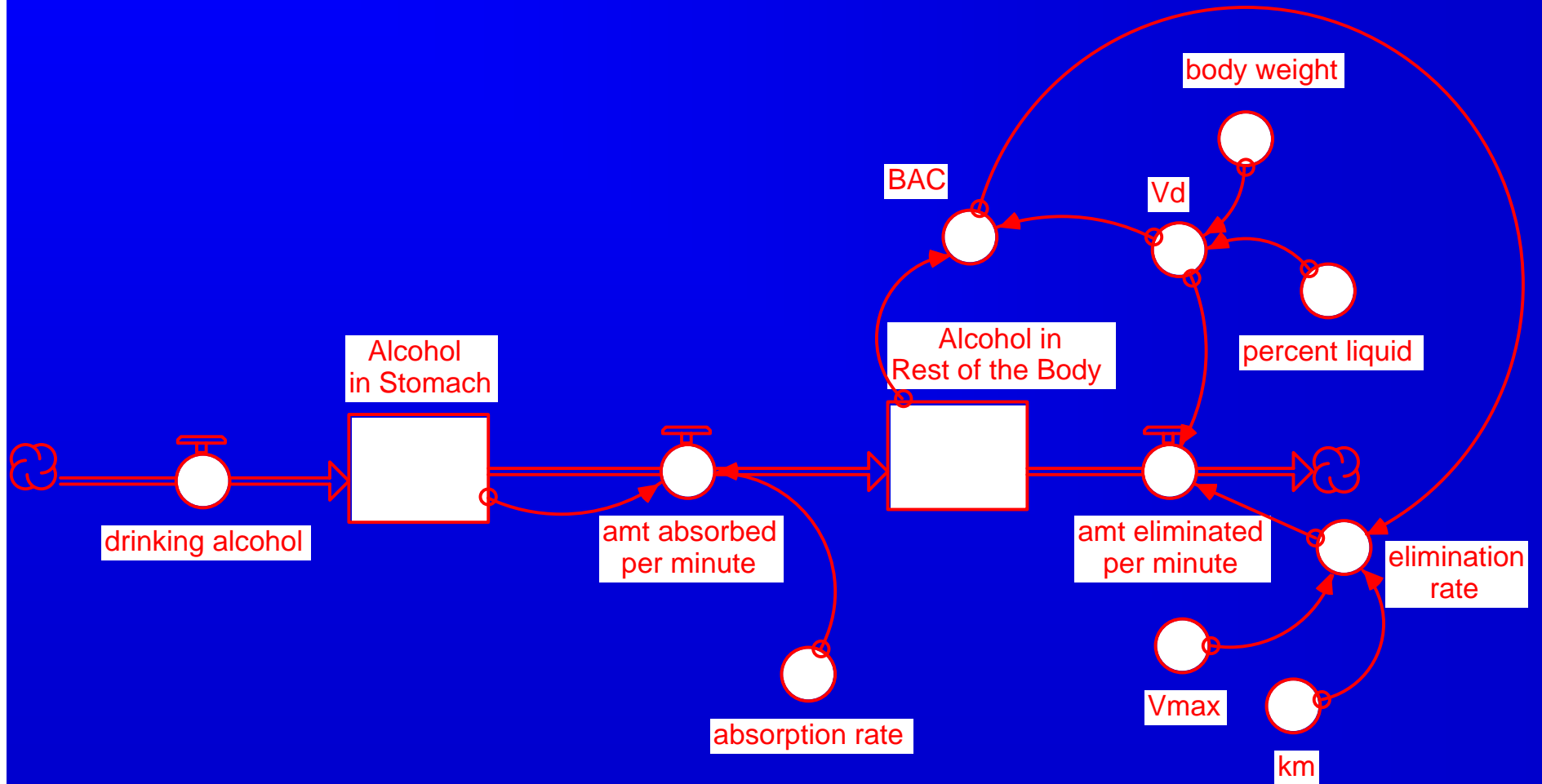
More Realistic Interpretations



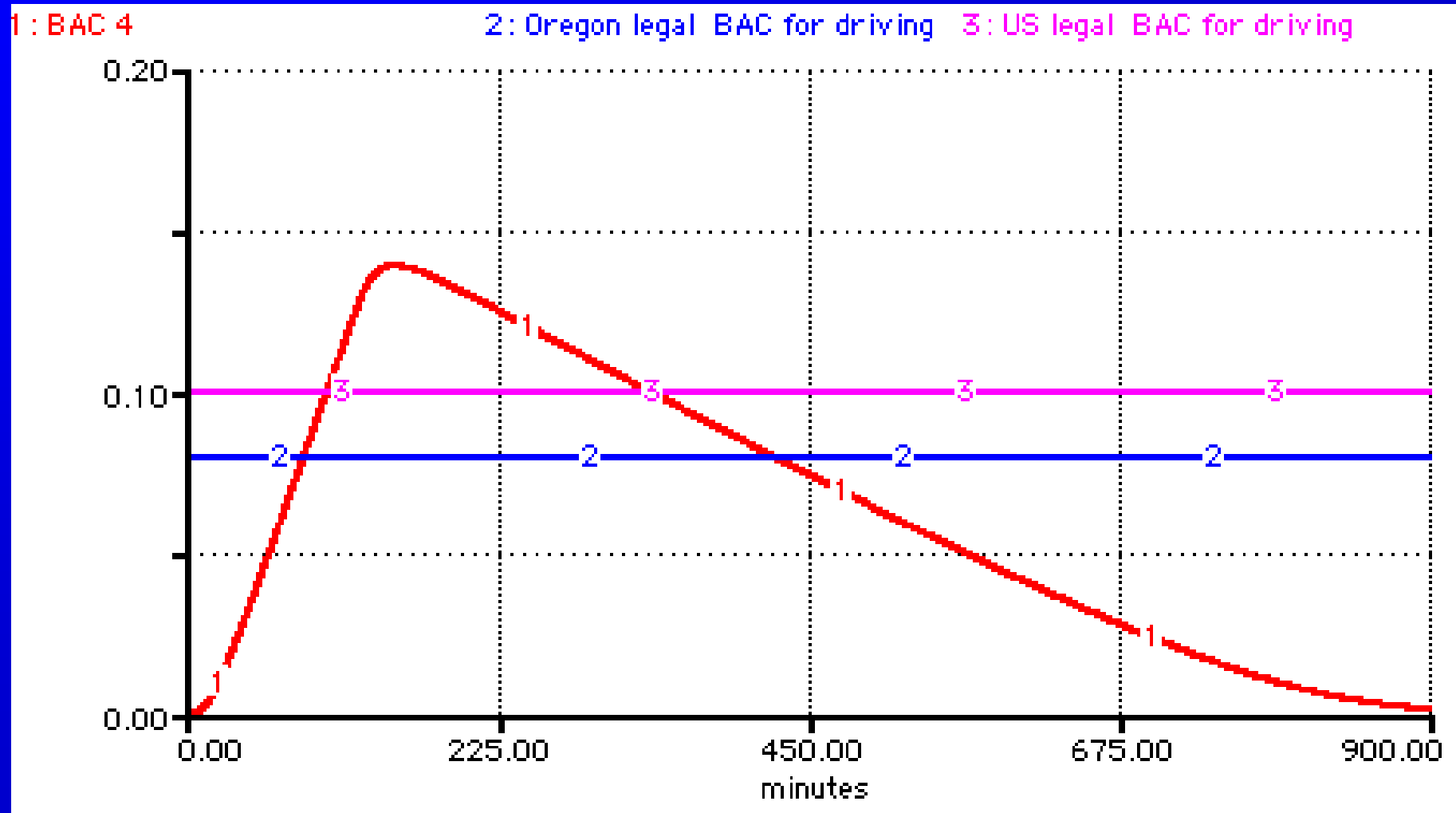
Alcohol Consumption Model



Alcohol Consumption Model



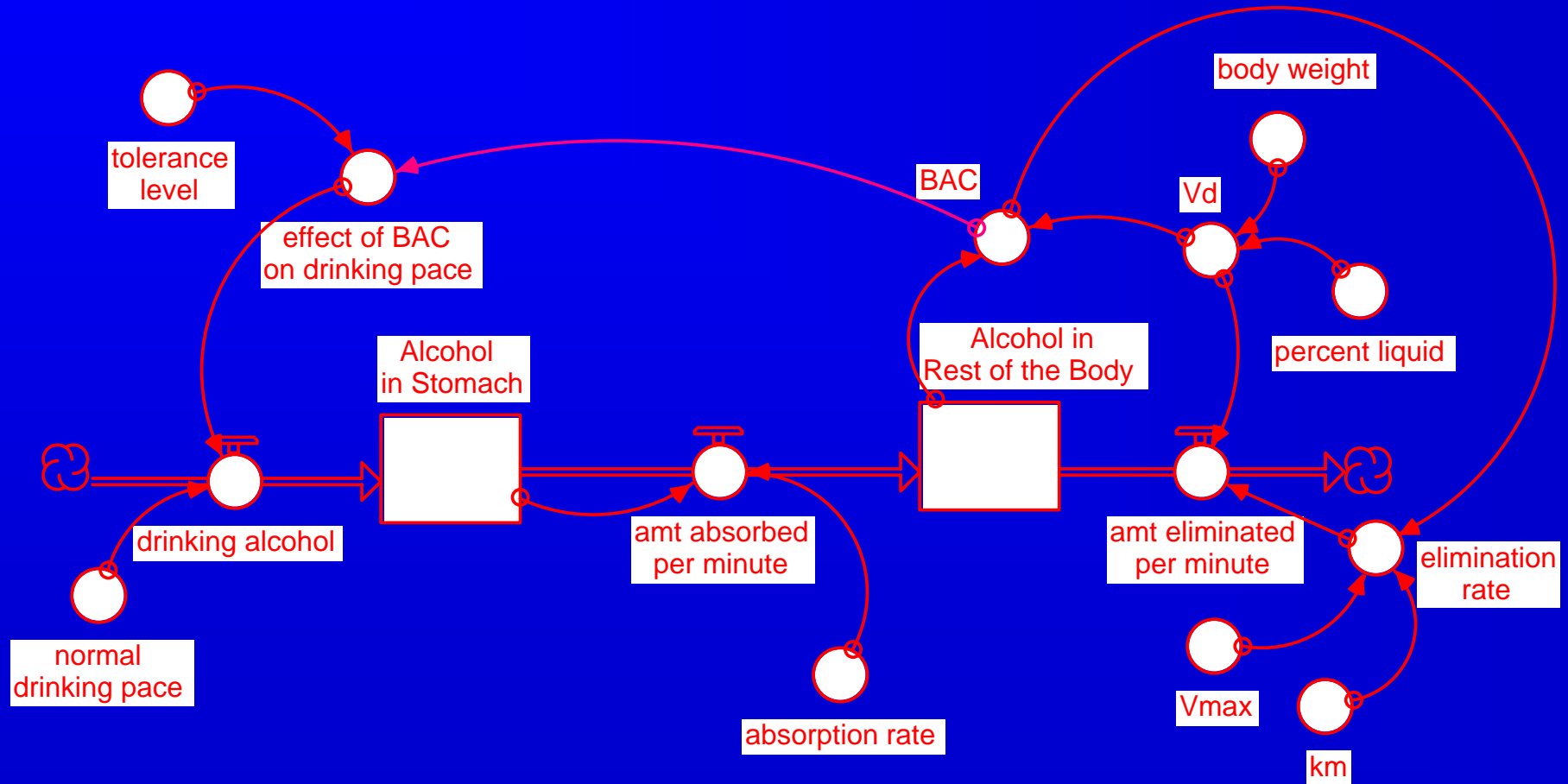
Alcohol Consumption Model



Alcohol Consumption Model

- ♦ Testing different body weights
- ♦ Testing type of alcohol
 - ♦ carbonated, concentrated, both
- ♦ Testing food in stomach or empty stomach
- ♦ Testing male vs female
- ♦ Testing social drinker vs alcoholic
- ♦ Testing different drinking patterns.

Alcohol Consumption Model



Thank You