The Physiology of Life & Death

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Introduction
- KISS Principle
- Definition of Life
- Definition of Dying

Etiology of Life
- Aerobic metabolism
  - Energy production
    - Electric
      - Electrons
    - Gasoline
      - motion
    - Adenosine triphosphate phosphate
      - ATP
  - Outcome of energy
    - Homes
    - Cars
    - Bodies
- Support of life
  - Circulatory system
    - Pump
    - Fluid
    - Highways & byways
  - Fick Principle
  - Blood
    - Oxygen carrying capacity
    - Repair mechanism
    - Oncologic pressure

Etiology of Dying
- Reduction of life support
- Assessment of dying
  - Loss of energy production physiology
    - Heat
      - Skin temperature
      - Core temperature
      - shivering
  - Physiology
    - Brain
    - Tissue cells
    - muscles
Triangle of death

- Secret of stopping death
  - Resuscitation in the US
    - Reanimation in Europe
  - Maintenance of energy production
  - Sustain/restore aerobic metabolism
  - Distribution of ATP

Resuscitation/reanimation

- Delivery of oxygen
  - Pump
  - Fluid

  - Replenishment of lost fluid
    - Requirements of fluid
      - Oxygen delivery
      - Repair of holes
      - Oncotic pressure
  - Oxygenation transportation
    - Flow
    - Red Blood cells
      - Resupply

- Overhaul of highways
  - Control loss
  - Open up detours
  - Repair of defects & blockage

Summation