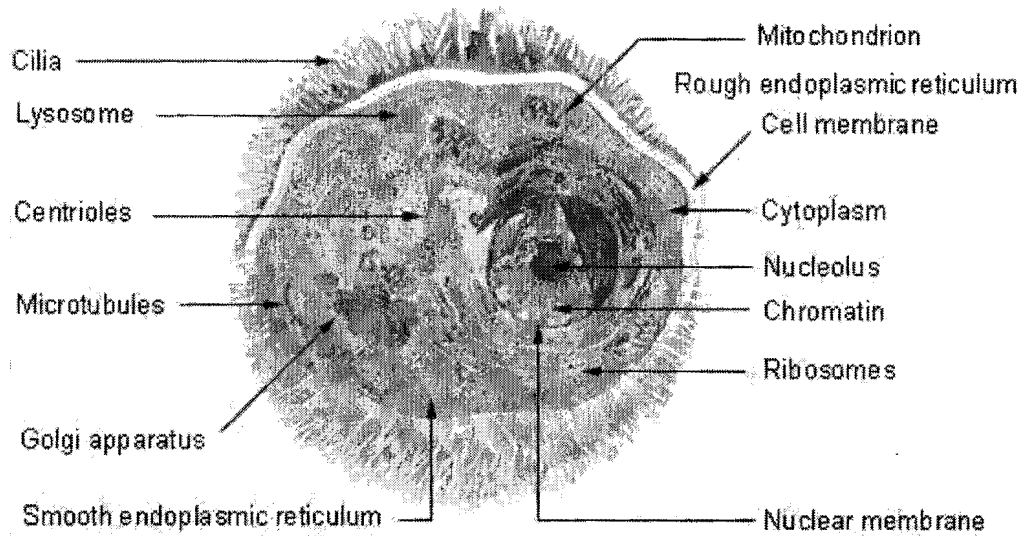


- **REC Recovery: Warm-up/Cool down**
- **EN1- Endurance System 1: Aerobic Base Pace**
  - 80% of maximum effort
  - 6 second Heart Rate of 12-14 beats
  - Interval rest periods of 5-10 seconds
- **EN2- Endurance System 2: Aerobic Threshold Pace**
  - About 85% of maximum effort
  - 6 second Heart Rate of 15-17 beats
  - Interval rest periods of 10-20 seconds
- **EN3- Endurance System 3: Anaerobic Threshold Pace/VO2Max**
  - Maximum volume of Oxygen uptake
  - Near 90% of maximum effort
  - 6 second Heart Rate of 18 minimum
  - Interval rest periods of 30 seconds to 1-second rest for every second of swimming
- **SP1- Speed System 1: Lactic Acid Tolerance**
  - Over 90% of maximum effort
  - 6 second Heart Rate of 18 minimum
  - Interval rest periods of at least 1-second rest for every second of swimming
- **SP2- Speed System 2: Maximum Lactic Acid Production**
  - 95-100% of maximum effort
  - 6 second Heart Rate of 18 minimum
  - Interval rest periods of 3-5 seconds rest for every second of swimming
- **SP3- Speed System 3: ATP/CP Training**
  - Faster than race pace
  - Sprints that average less than 10 seconds
  - Interval rest periods of 5-8 seconds rest for every second of sprinting

## Cell Structure



Mitochondria are sometimes described as "cellular power plants" because they generate most of the cell's supply of adenosine triphosphate (ATP), used as a source of chemical energy.