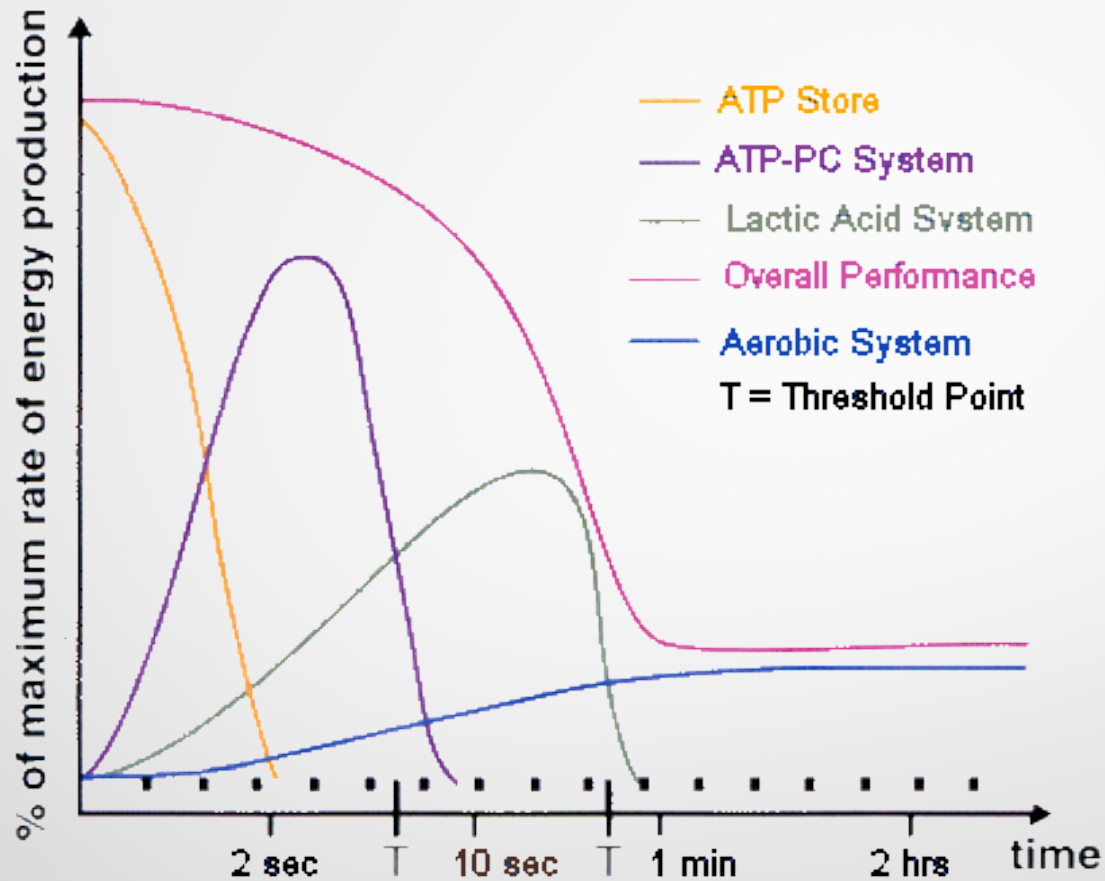


Introduction to Exercise Physiology Practical 8 – Anaerobic endurance

Learning Objectives

- To understand the measurements involved in anaerobic capacity
- To observe and perform an anaerobic Wingate Monarch test
- To perform another anaerobic test (calf raise test) to understand the effect of lactate on the musculoskeletal system
- To be able to record data on excel documents accurately and understand the effects of the measurements you have taken.

Energy Requirements during exercise



Aerobic V Anaerobic



Anaerobic Power Tests

- Wingate Originated in 
- Been utilised as a measure for anaerobic power for over 40 years
- The values produced include:
 - Peak power - highest power level averaged over a 5 sec period during the test
 - Mean power - average power during the entire 30 sec
 - Power drop off – the amount of power lost through the 30 sec period
- Modified methods of collecting anaerobic power data.

Determining anaerobic power output

- Two minute warmup on Watt Bike
- Peak Power 6 sec test.
- Subject at the command “GO”, begins pedalling as fast as possible.
- Document the power output
- Rest for 20sec and Repeat for 7 repetitions
- Notate results onto excel document

Mean Leg Power v Counter Movement Jump

- Take a values from the peak 6 sec tests and create a mean of the values .
- Undertake a counter movement jump on the force plate and compare the results.

Task

Record all your results on the excel document under a separate
TAB

Produce a graph to show results plotting Power (w/kg) versus
number of repetitions

Explain why the results showed what they showed?

Was there any relationship between anaerobic endurance and
leg power?