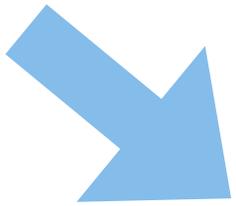


Bioenergetics Adaptations

Chapter 21 pp 427-431

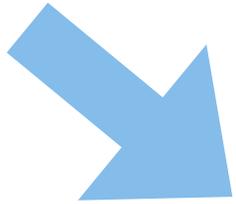
Anaerobic Training

- Improving ATP-PC system
 - short high-intensity intervals; 5-10 sec
 - power exercises
 - rest interval between 30-60 sec
- Result: increase PC stores and increase enzyme activity (i.e. speed of ATP-PC system)

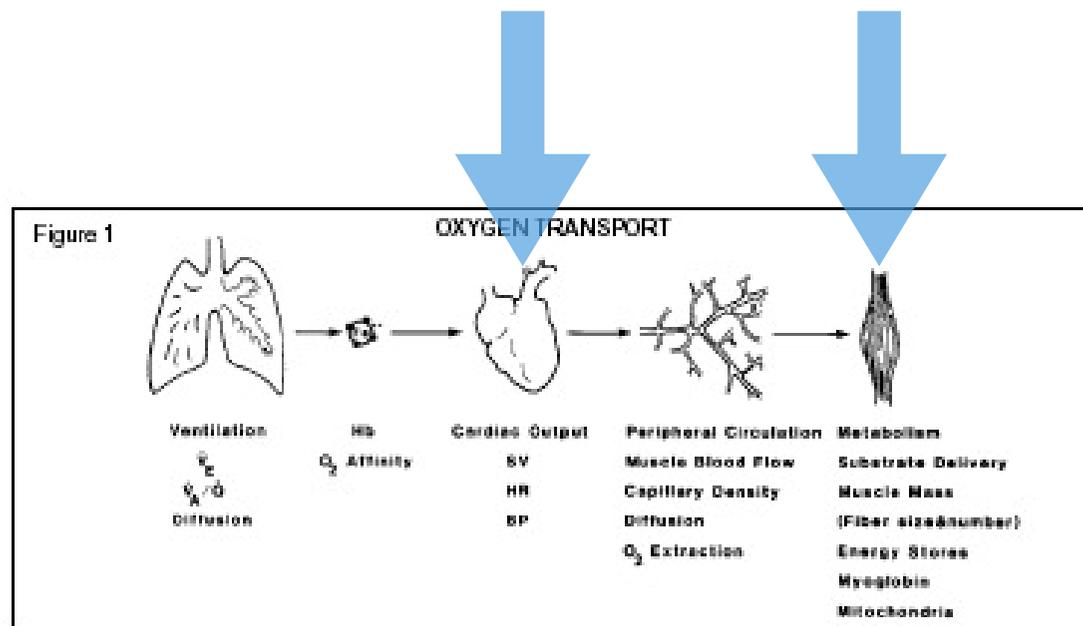


Anaerobic Training

- Improving Glycolysis
 - short high-intensity intervals; 20-60 sec
 - strength exercises
 - eventual glycogen depletion possible
- Result:
 - increase glycolysis enzyme activity
 - increase buffering of lactic acid



Aerobic Training



Aerobic Training

1. Long, slow distance training
2. High intensity, continuous training
3. Interval training

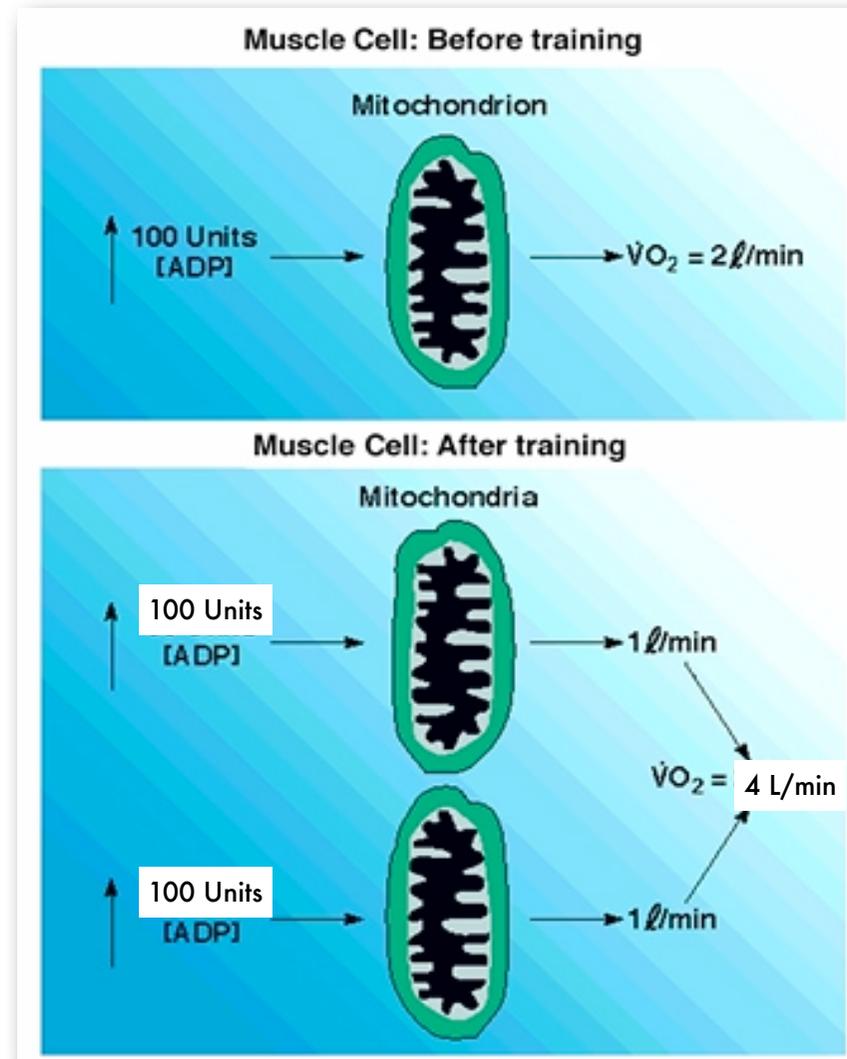


Aerobic Training

- LONG, SLOW DISTANCE TRAINING
- Lower intensity level ($\sim 70\%$ HRmax)
- Outcome
 - Increase capillaries
 - Increase myoglobin
 - Increase mitochondria



Long Slow Distance Training

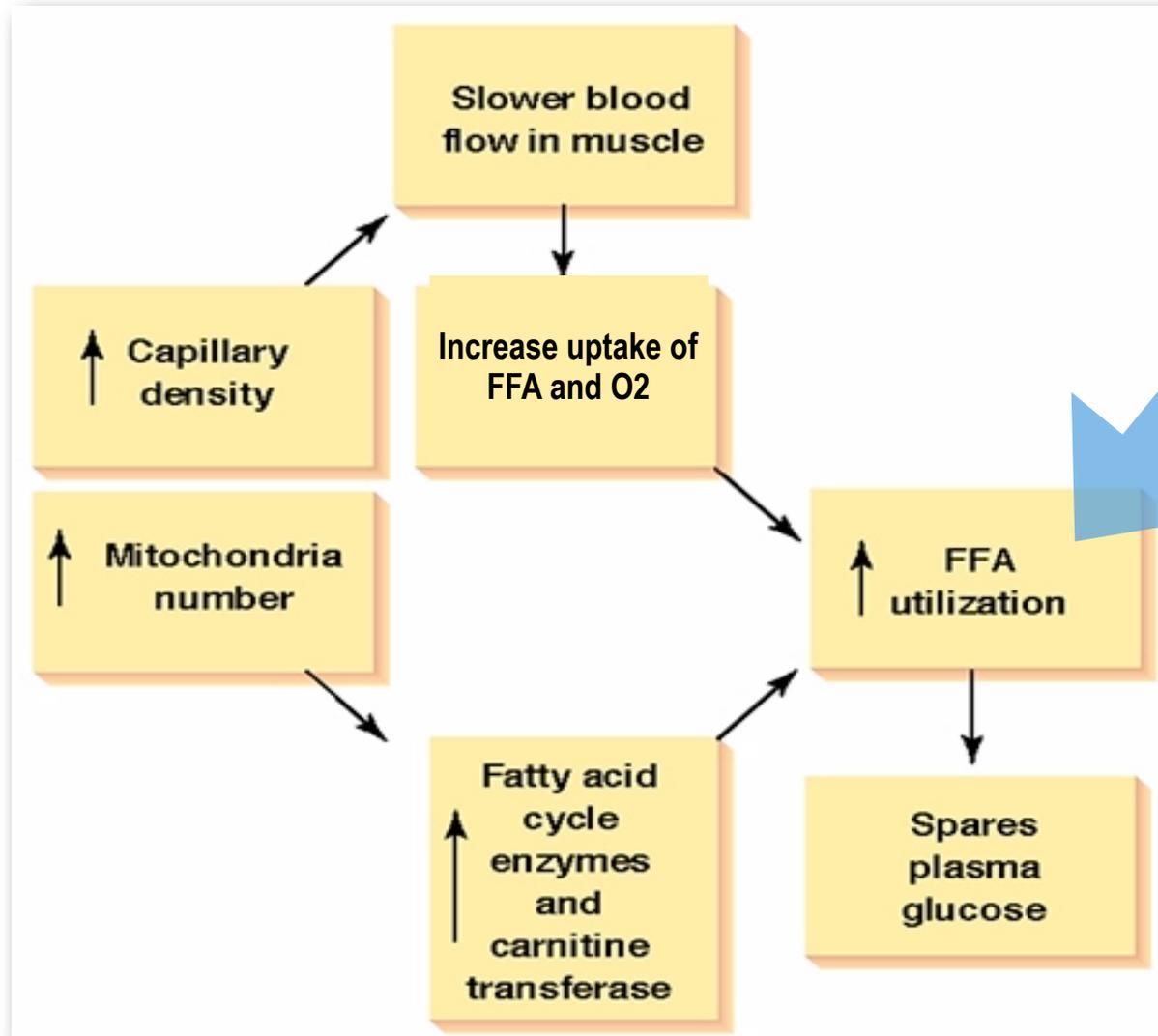


Long Slow Distance Training

What affect does aerobic training have on fat utilization?

Why?

Long Slow Distance Training



Long Slow Distance Training

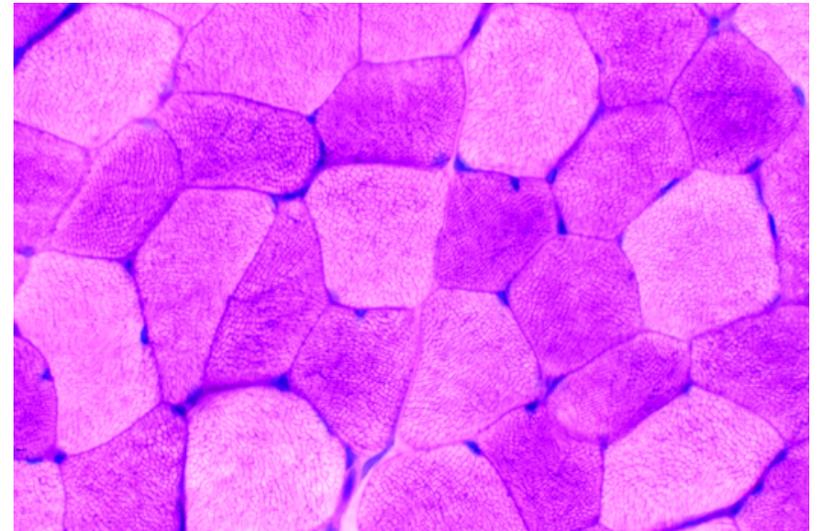
What affect does aerobic training have on glycogen levels?

What affect does aerobic training have on glycogen utilization?

Why?

Increase fat oxidation

Why is this significant?

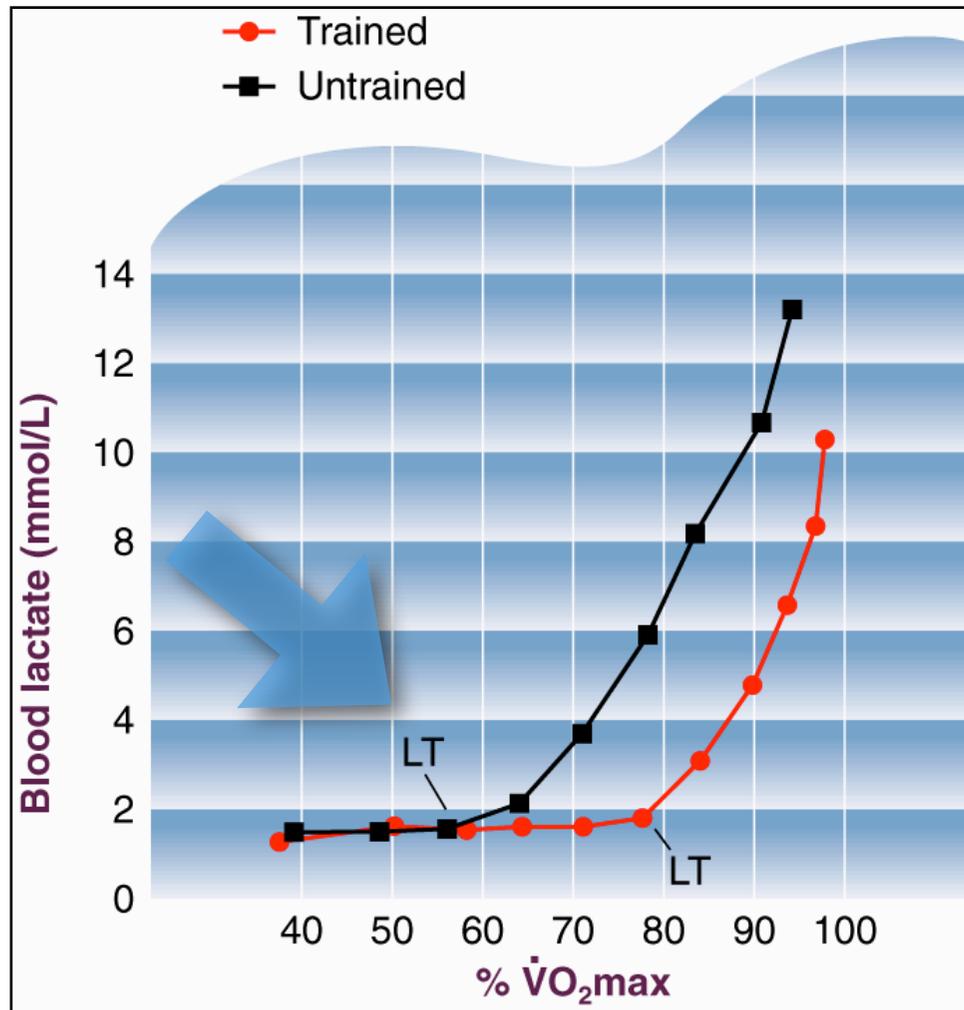


Aerobic Training

- HIGH-INTENSITY, CONTINUOUS TRAINING
 - Increase lactate threshold
 - Increase lactate removal
 - Decrease lactate production



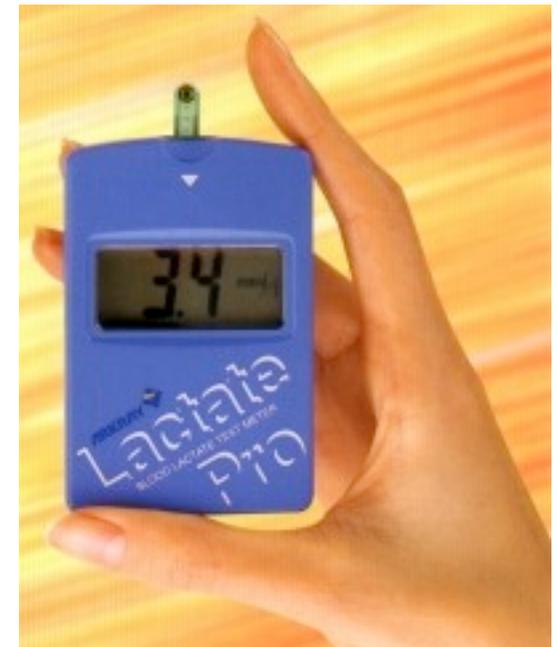
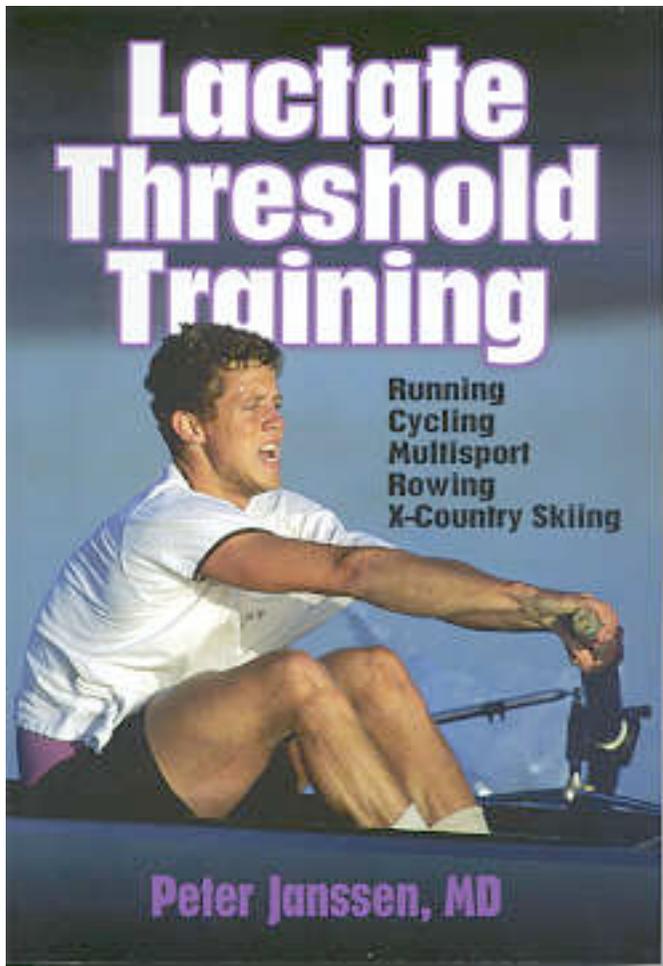
High Intensity, Continuous Training



High Intensity, Continuous Training

Decrease lactic acid production. Why?

Lactate Monitoring



Lactate Monitoring

