# Origins of Exercise Physiology
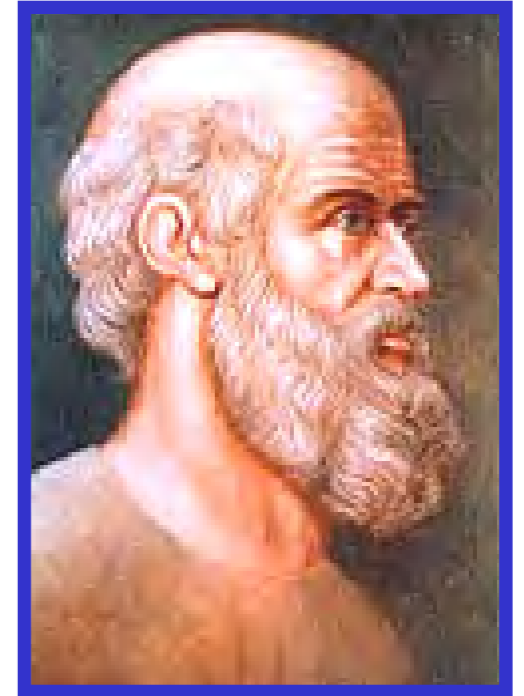
★Very influential M.D., Herodicus

  ✓Influenced Hippocrates
  (father of preventive medicine)

★Claude Galen (Rome): M.D. to gladiators

**Sports Medicine**

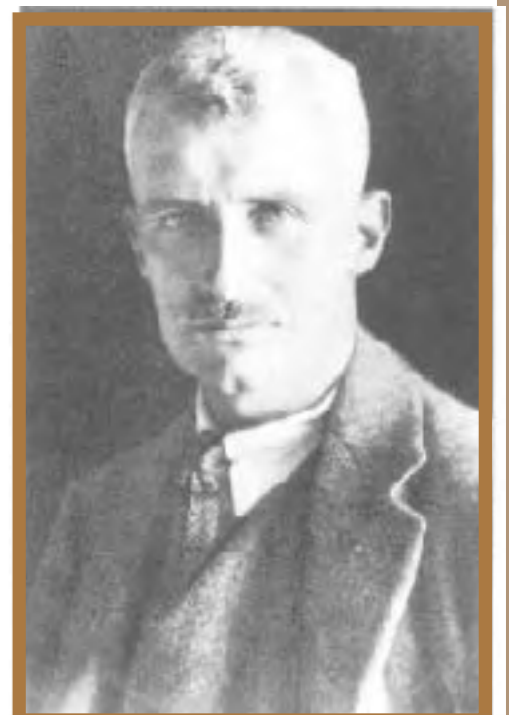# Early Pioneers

★ Archibald Hill (1921): energy metabolism

- ✔ Some of 1st studies with runners
- ✔ Nobel prize: production of heat in muscles
- ✔ How much $$ do you think he won?
- ✔ $18,332 US
- ✔ Would be about $450,269 today

# Harvard Fatigue Laboratory (HFL)

★Lawrence Henderson, M.D. founded in 1927 - 1947 (Lab produced 330 publications)

★1st and only Director: David B. Dill: a biochemist

# Scandinavian Influence

✓ Per-Olof Astrand

  ✓ Endurance capacity studies

✓ Bengt Saltin

  ✓ Muscle metabolism





✓ Jonas Bergstrom

  ✓ biopsy needle

# Bits and Pieces

★1st scientific conference: 1967 ACSM
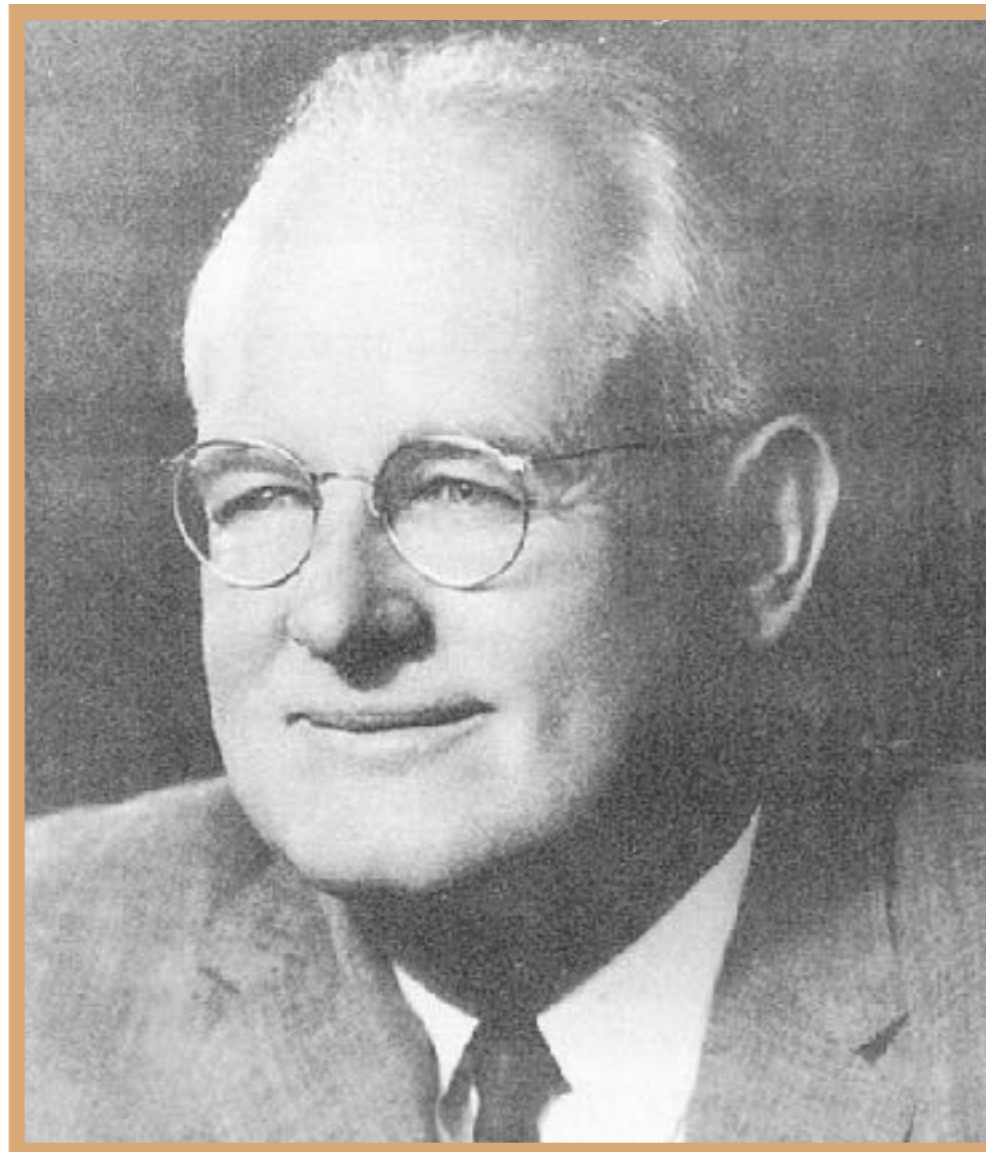
★Albert Behnke, M.D., father of body composition

# Bits and Pieces cont.

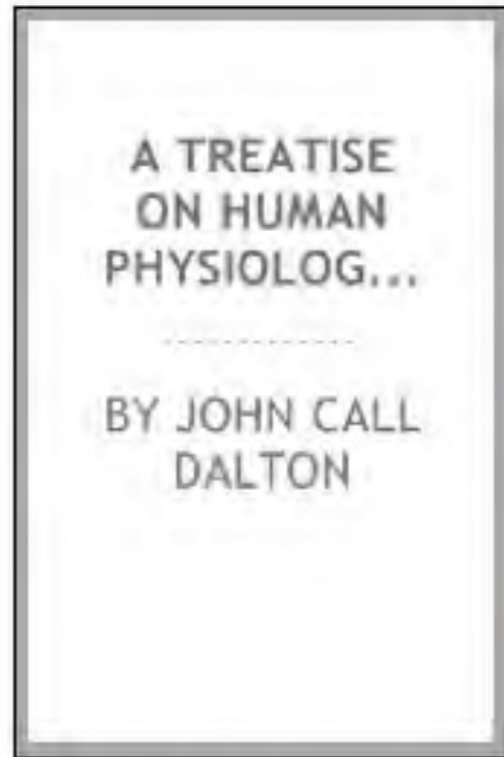★Physical Fitness Movement:
Thomas K. Cureton (1901-1993)

# J.C. Dalton, M.D. (1860)

A TREATISE
ON HUMAN
PHYSIOLOG...

BY JOHN CALL
DALTON

## Visionary of Exercise

# J.C. Dalton, M.D. (1860)

"Muscular exercise of the body, in order to produce its proper effect, should be regular and moderate in degree."

" It is not good for any person to remain inactive during the greater part of the week, and then be excessive on a single day"

"Walking is one of the most useful kinds of exercise... easy, moderate walking works nearly all the muscles"

"The exact quantity of exercise is not precisely the same for different persons, but should be measured by its effect"

"The object of exercise is not mere acquisition of strength, but the proper maintenance of general health"

# What is the historical root of "progressive overload" in exercise?



Milo - Five-time Olympic Wrestling Champion

# What is a 'Risk' Factor?

★ Something capable of provoking ill health

## What are some examples?

Tobacco use
High cholesterol

High blood pressure
Obesity
Poor diet