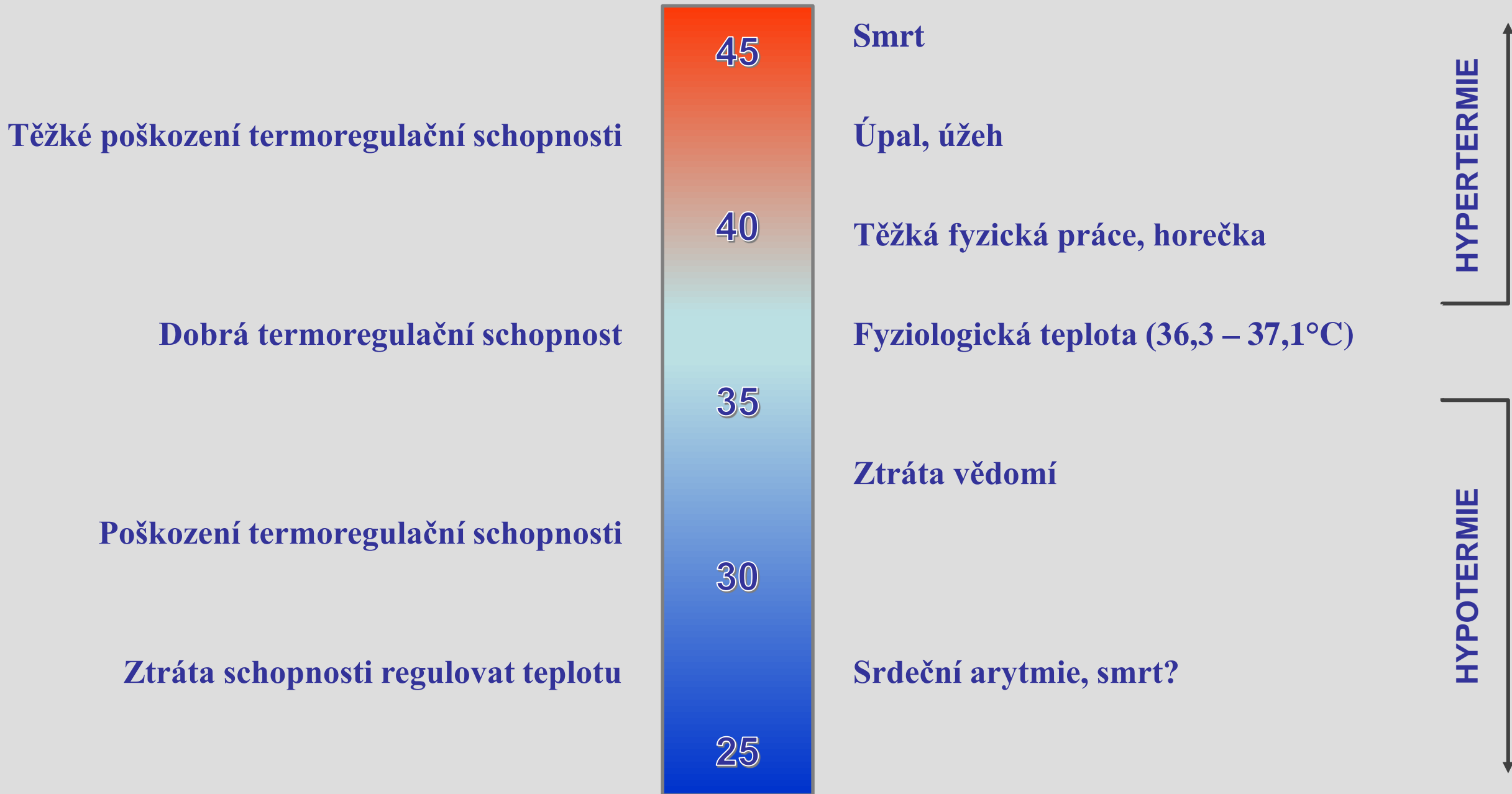
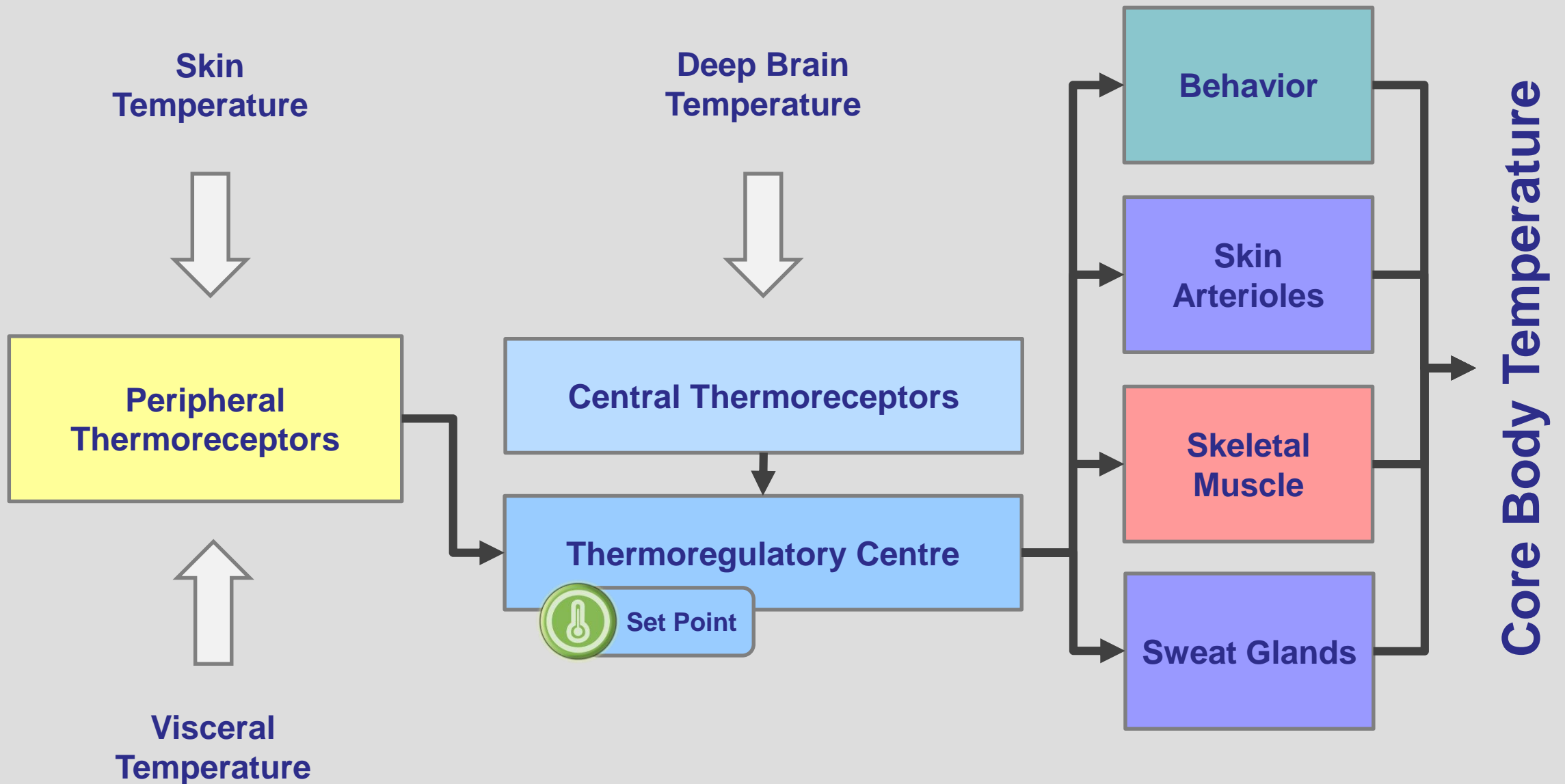


**TERMOREGULACE
A SYMPATICKÝ NERVOVÝ
SYSTEM**

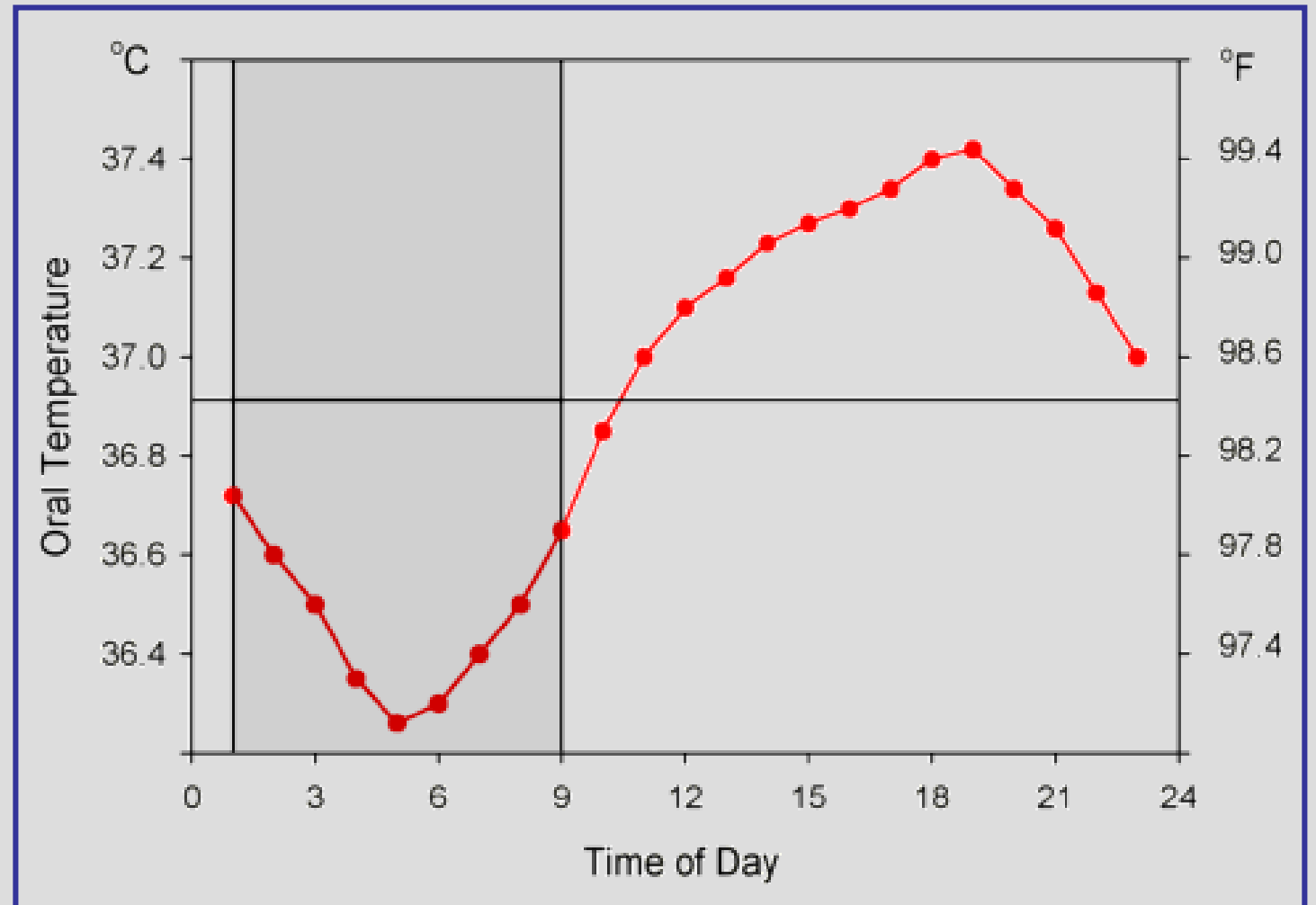


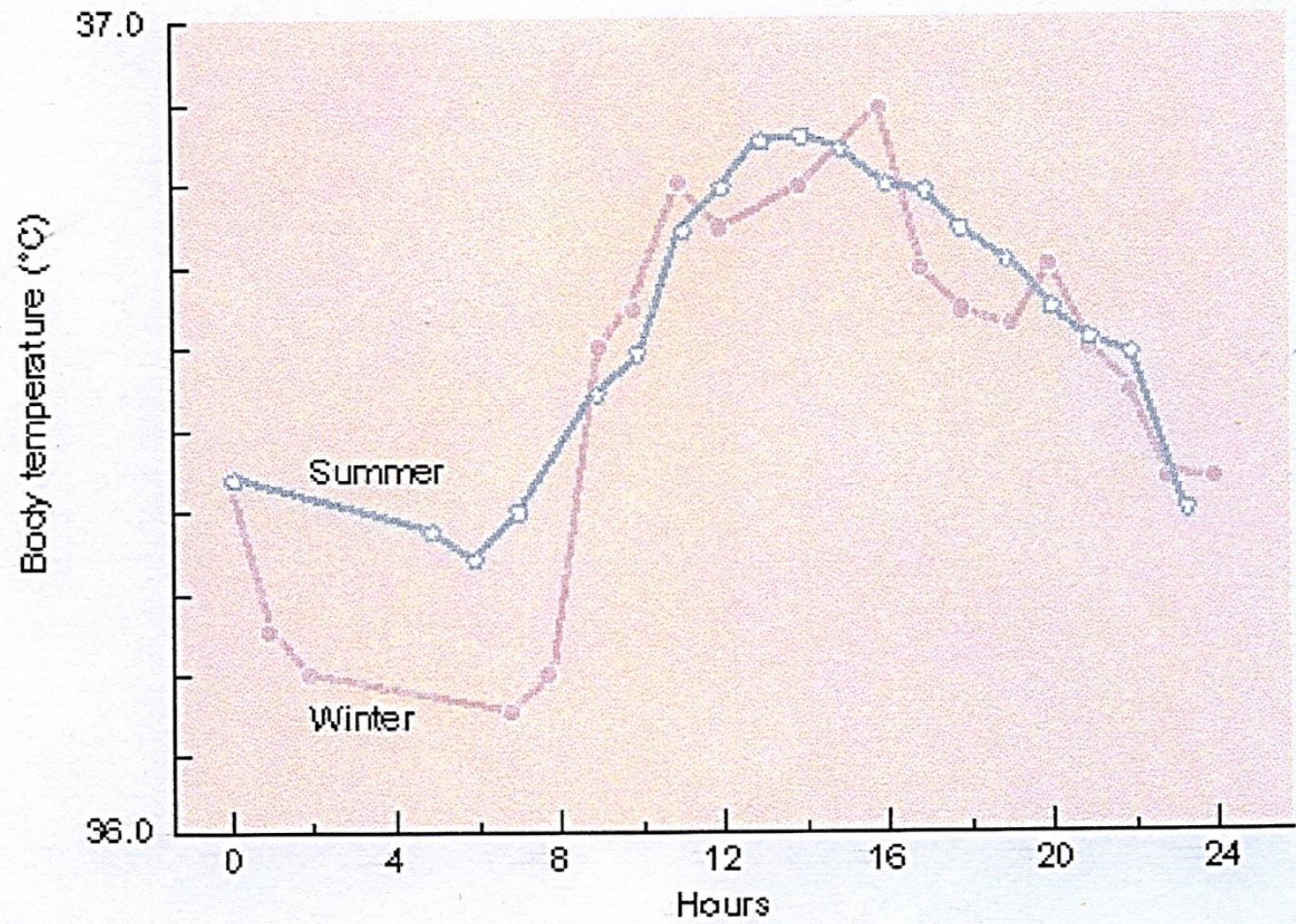
Ambient Temperature



Změny tělesné teploty jádra

- Cirkadiální rytmus
- Sezónní variabilita
- Menstruační cyklus
- Stárnutí

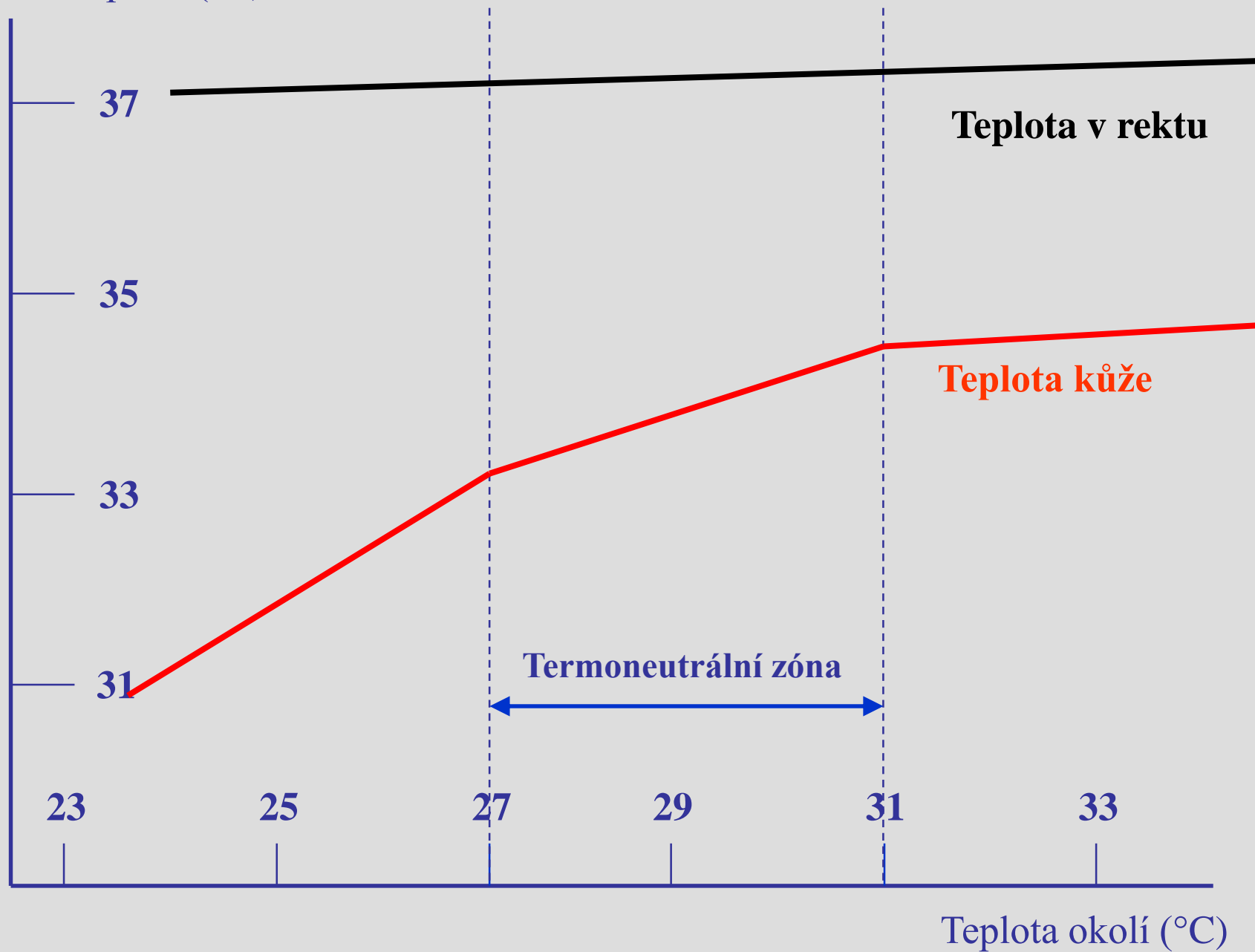




Měření tělesné teploty



Tělesná teplota (°C)



Teplota v rektu

Teplota kůže

Termoneutrální zóna

Teplota okolí (°C)

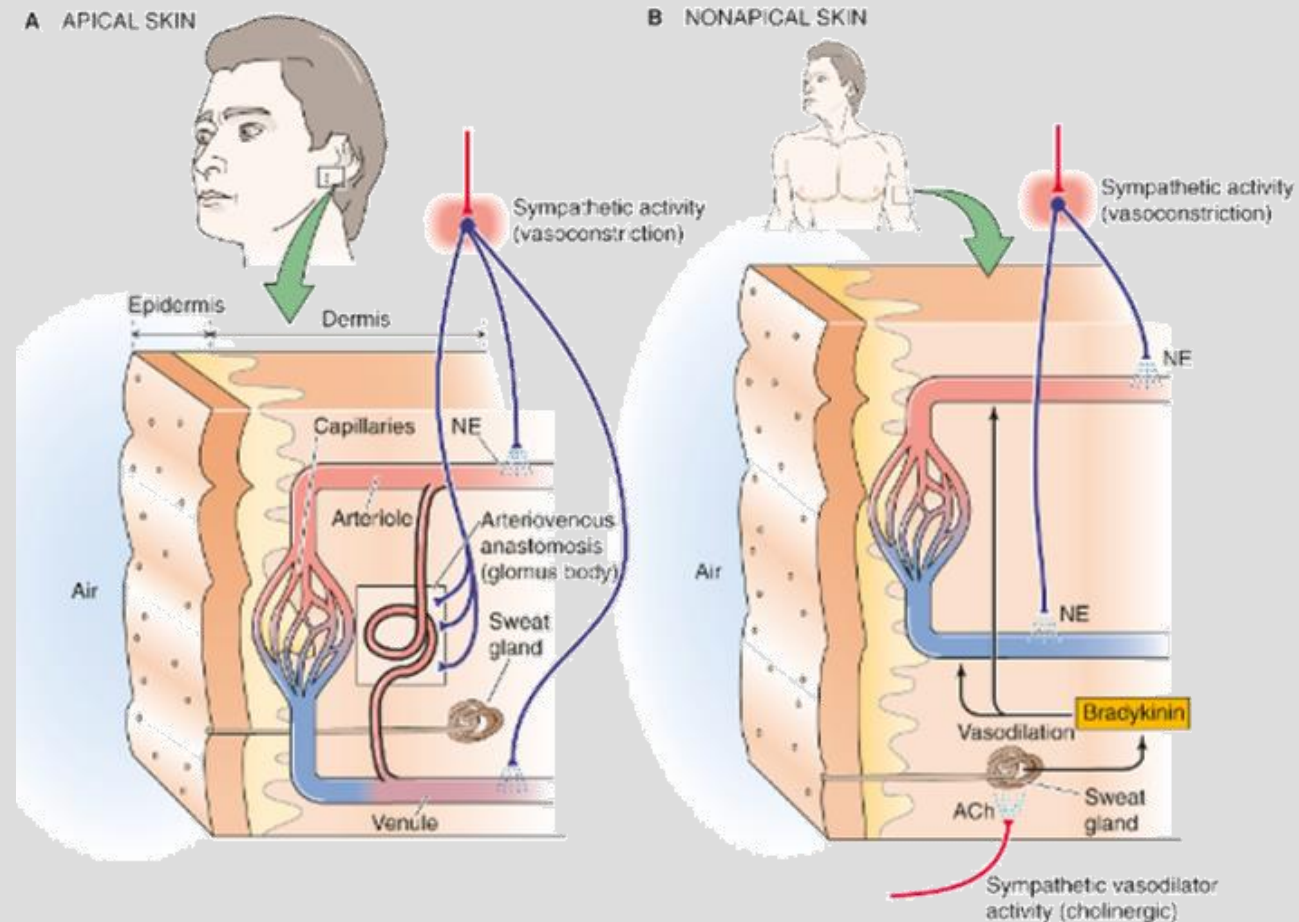
Regulace průtoku krve v kůži

- Kůže akrálních částí těla

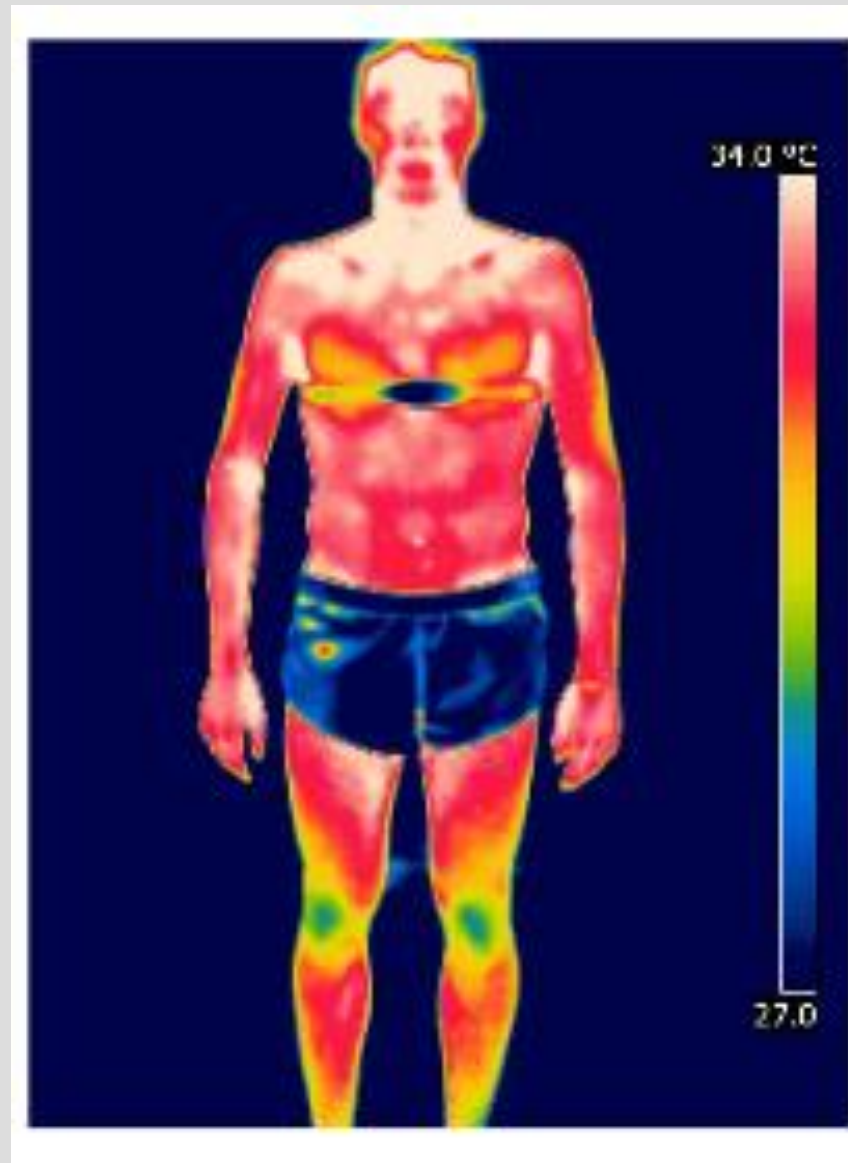
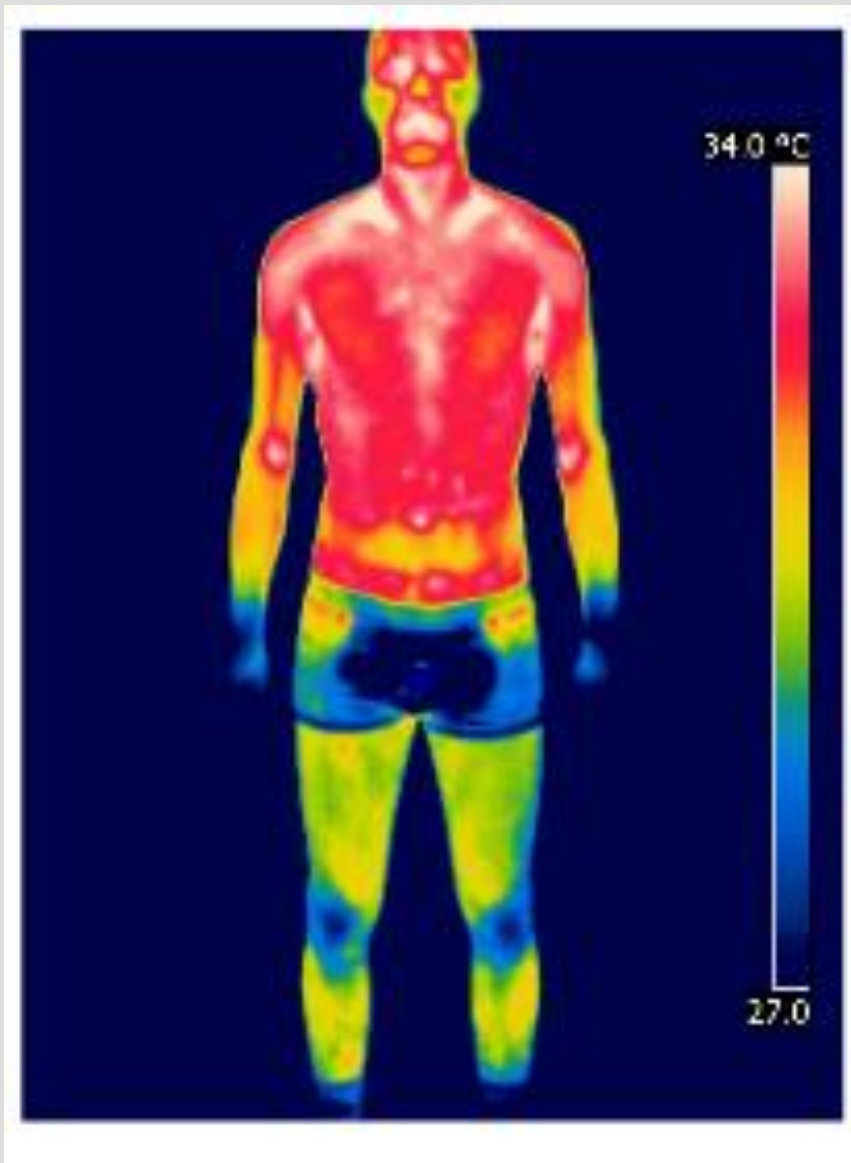
- a-v anastomózy
- vazokonstrikce: sympatikus (NA- α 1)
- vazodilatace: pasivní

- Kůže neakrálních částí

- vazokonstrikce: sympatikus (NA- α 1)
- vazodilatace: sympatikus (Ach-?)



Celotělová termografie

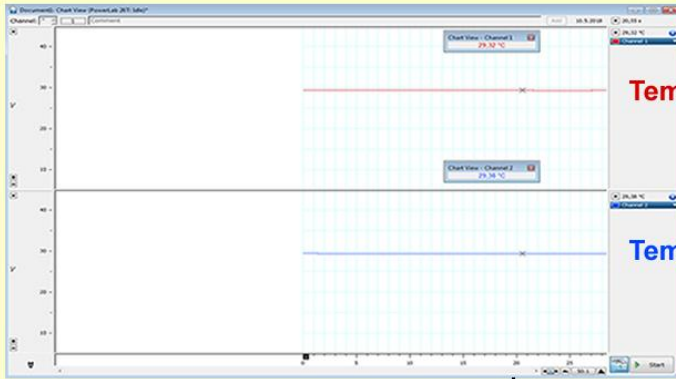


Termografické snímky dvou sportovců.

Journal of Physics: Conference Series
655 (2015) 012062
doi:10.1088/1742-6596/655/1/012062

TEMPERATURE MEASURING SETUP

Task 1



Temp. sensor 1

Temp. sensor 2



Box with ice

Right arm

Temp. sensor 2

Temp. sensor 1

PowerLab system

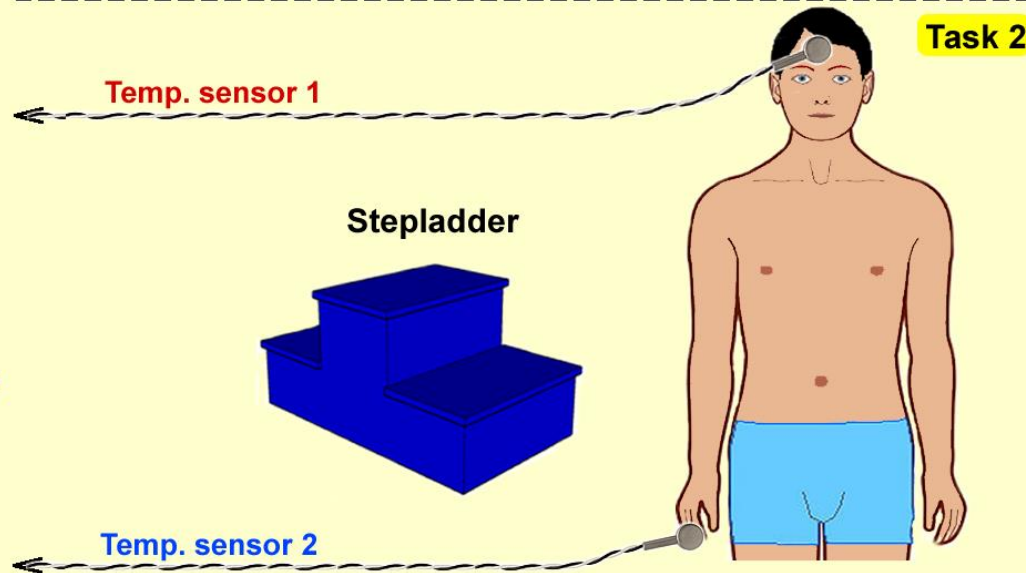


Temp. transducer 1



Temp. transducer 2

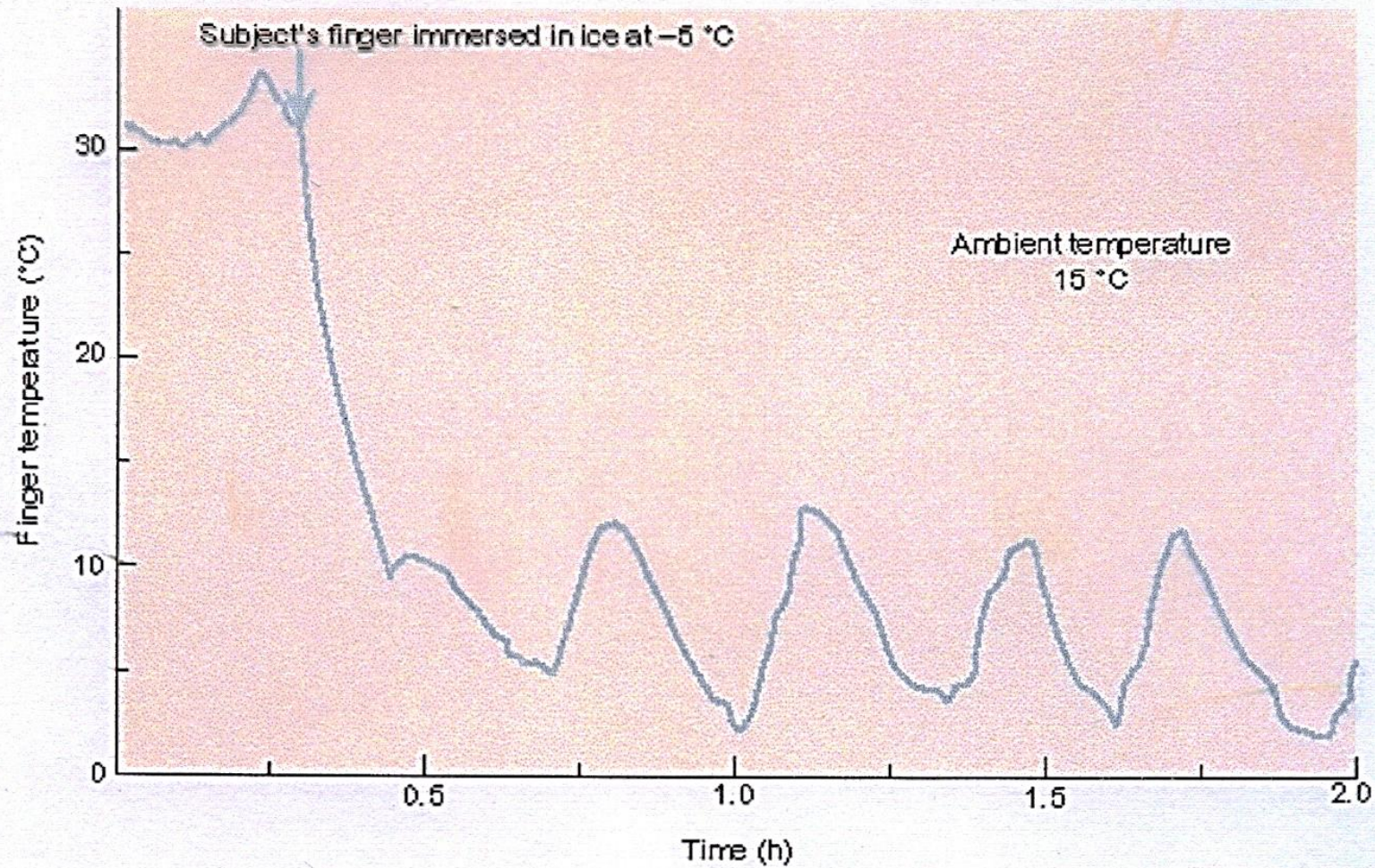
Task 2



Temp. sensor 1

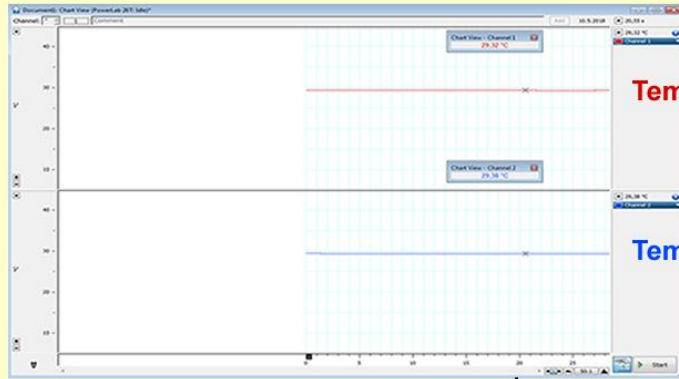
Stepladder

Temp. sensor 2



Lewis (1930):
„hunting reaction“

TEMPERATURE MEASURING SETUP



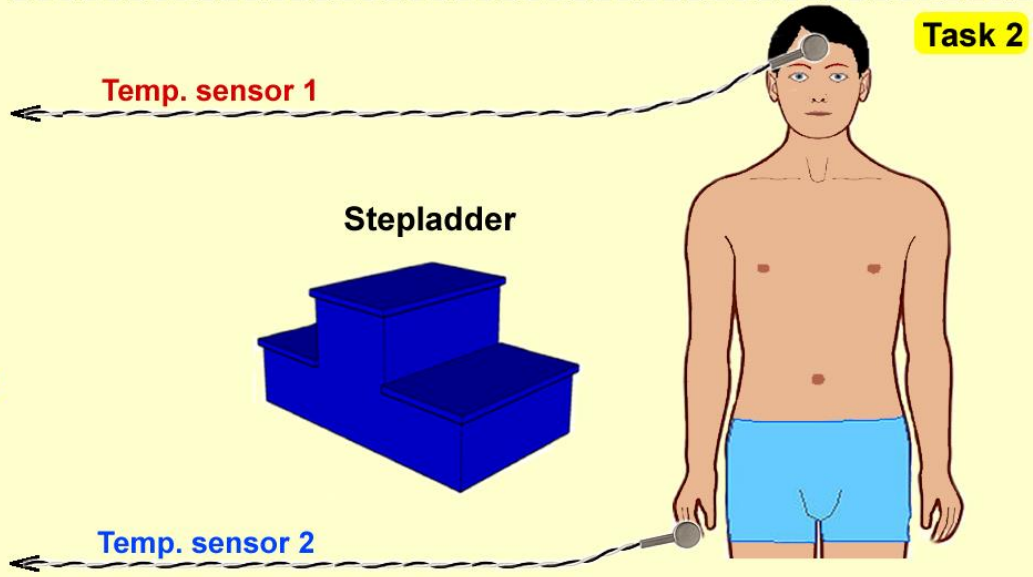
PowerLab system

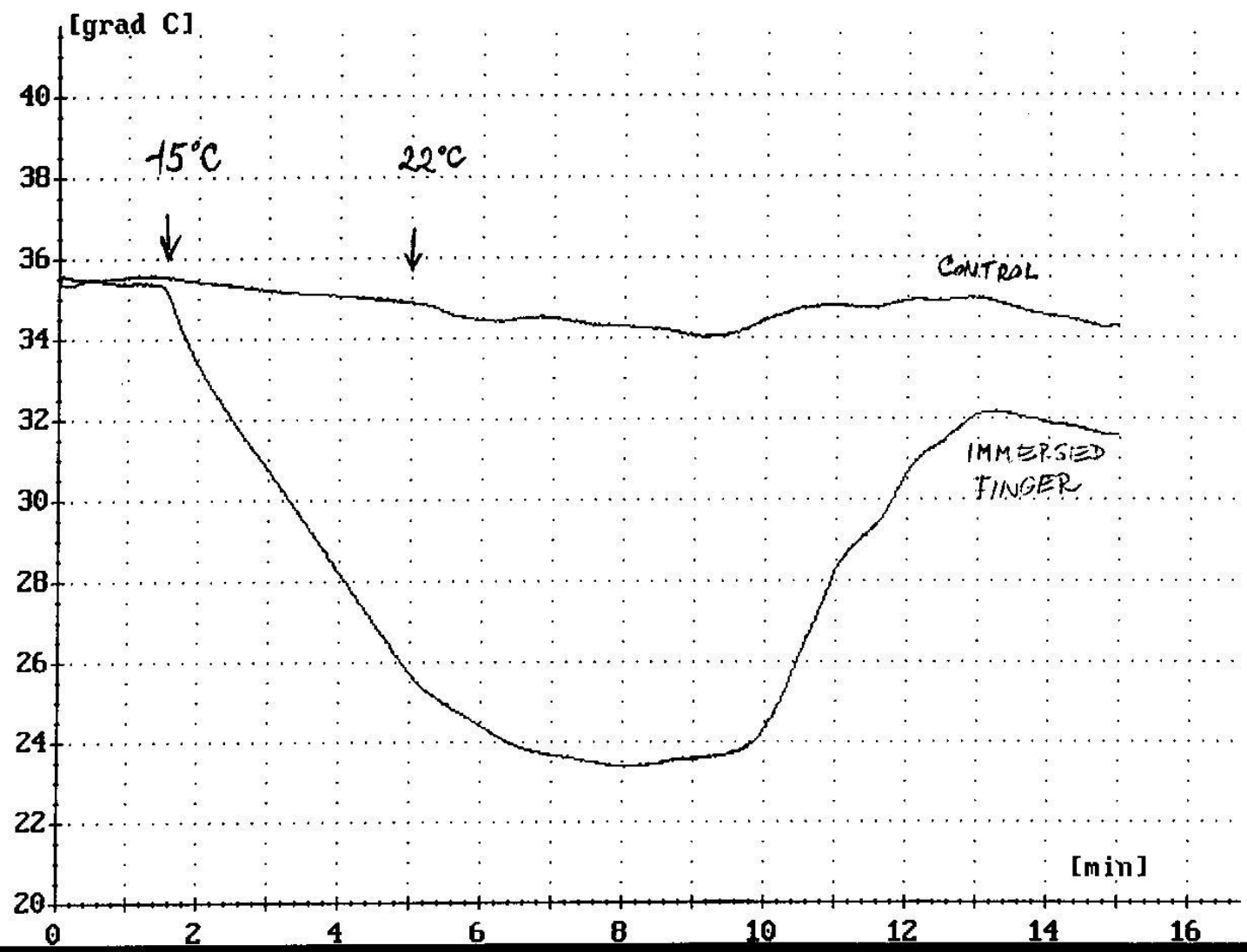


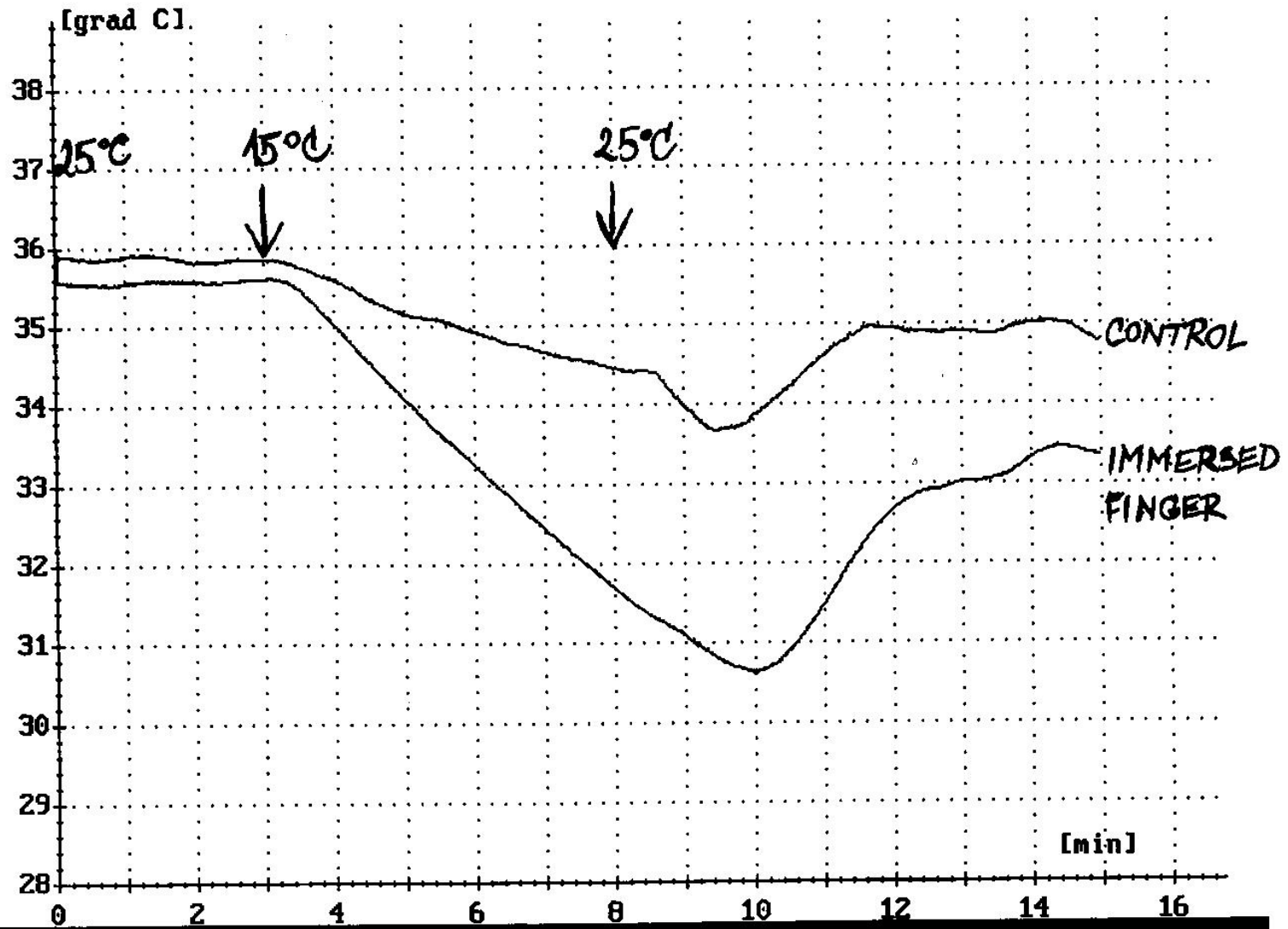
Temp. transducer 1



Temp. transducer 2

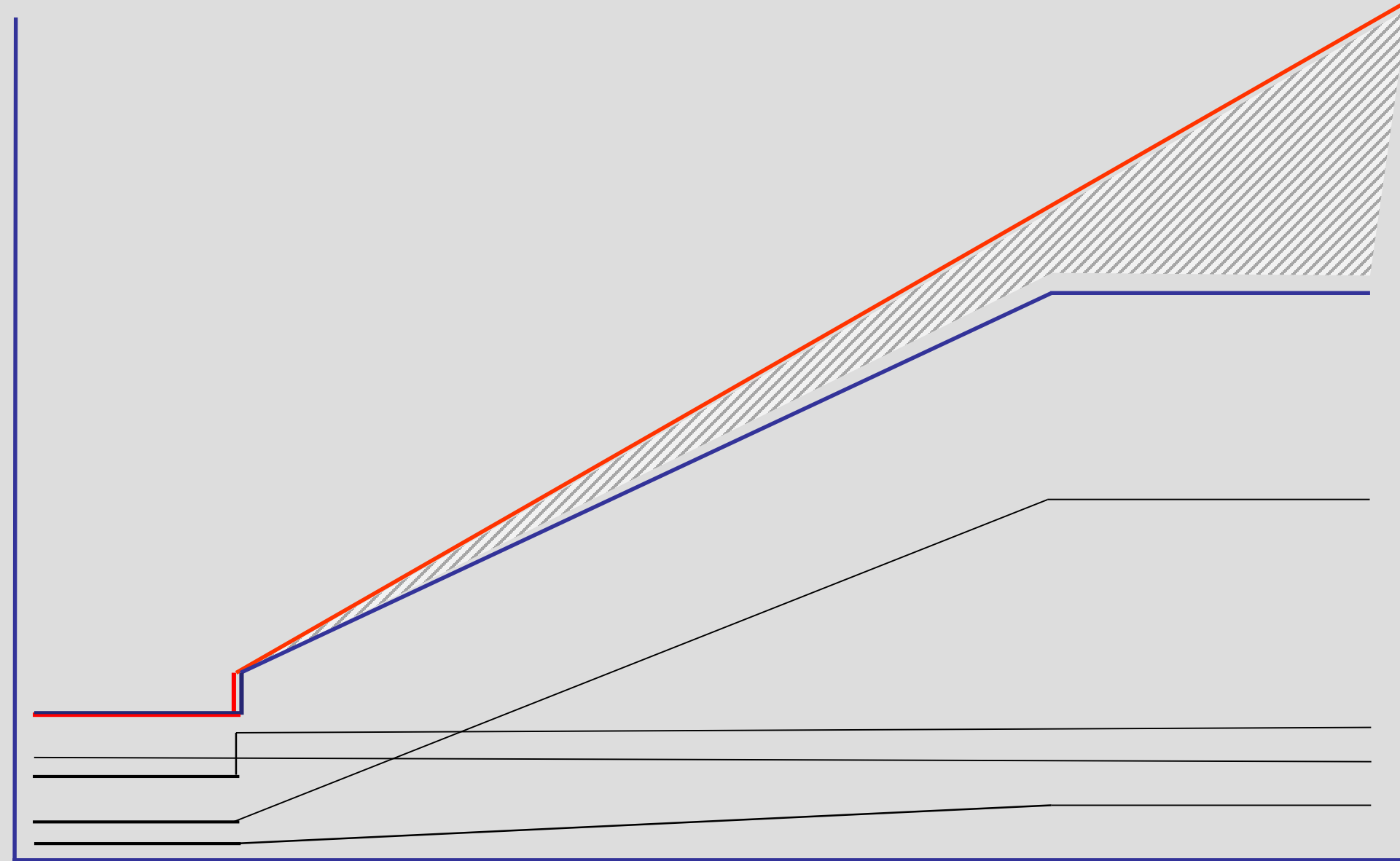






Energetic exchange (kcal/h)

Total heat production



Total heat loss

Evaporation:
Skin and lungs

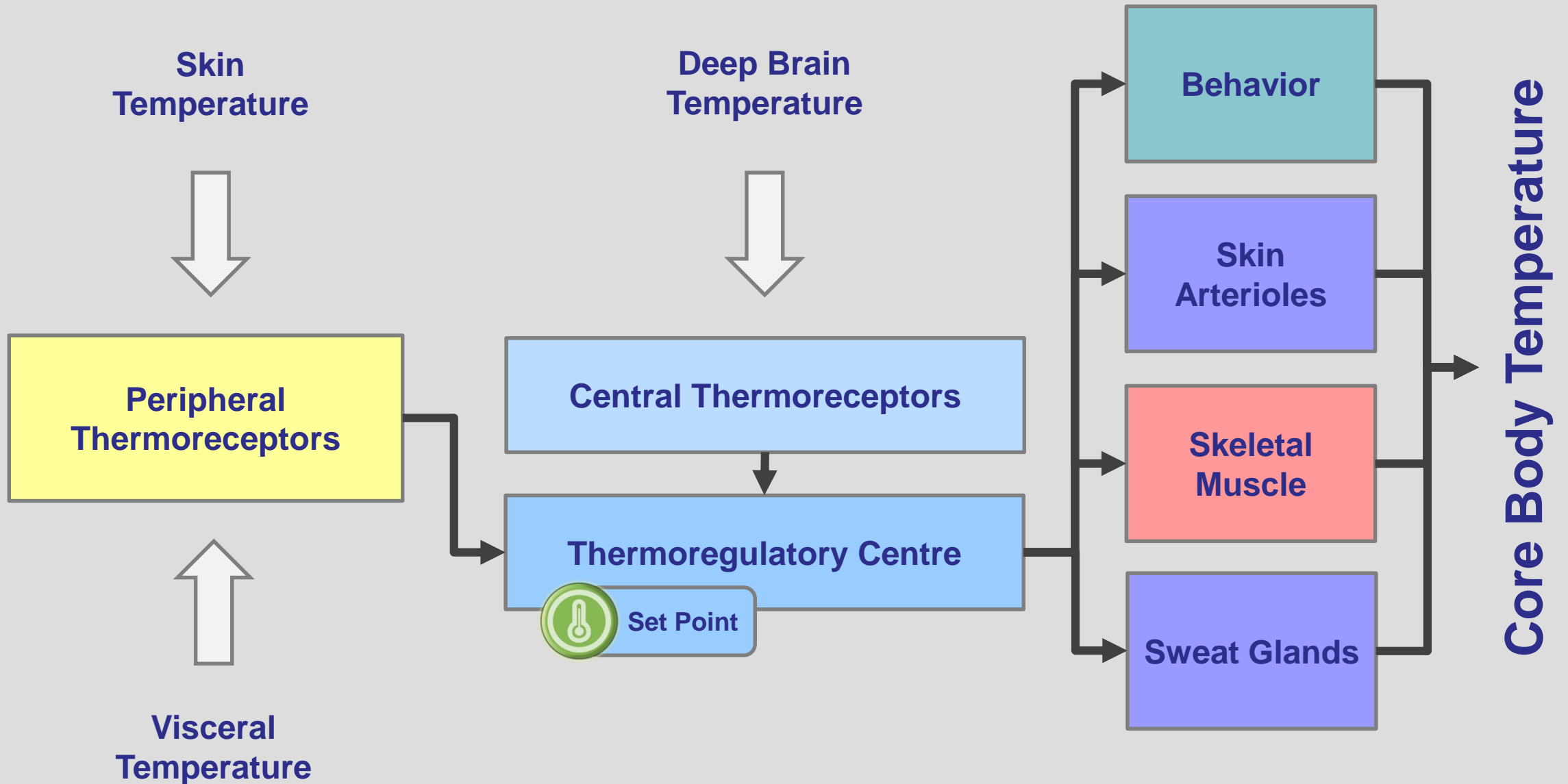
Convection
Radiation, Conduction
Convection - expired air

Rest

Exercise

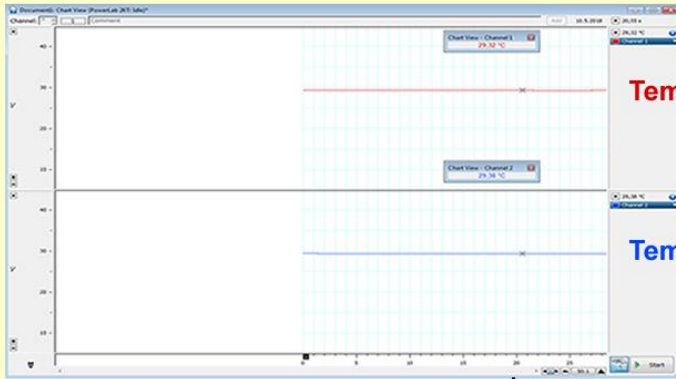
Exercise (J)

Ambient Temperature



TEMPERATURE MEASURING SETUP

Task 1



Temp. sensor 1

Temp. sensor 2



Box with ice

Right arm

Temp. sensor 2

Temp. sensor 1

PowerLab system

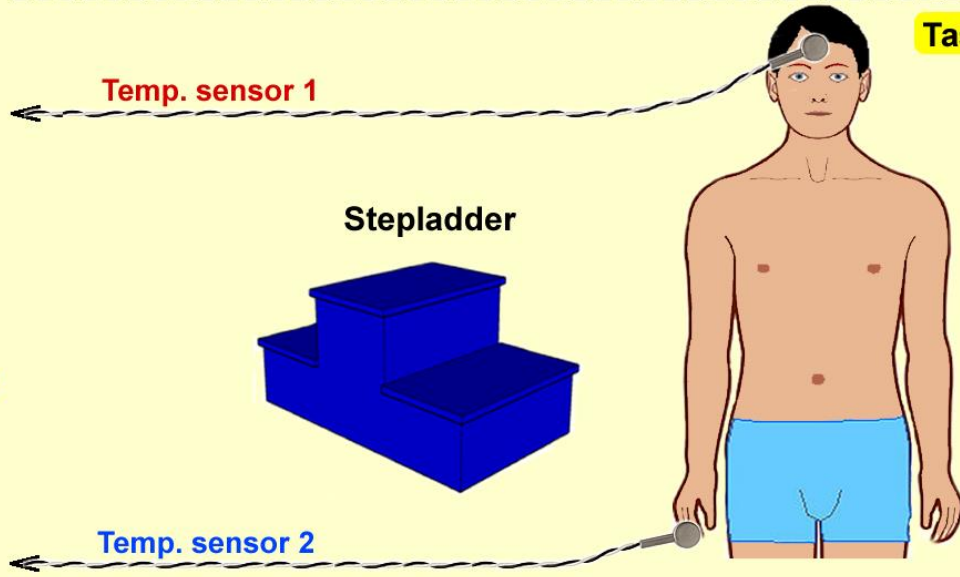


Temp. transducer 1



Temp. transducer 2

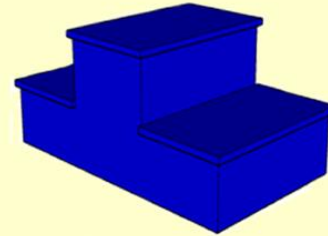
Task 2

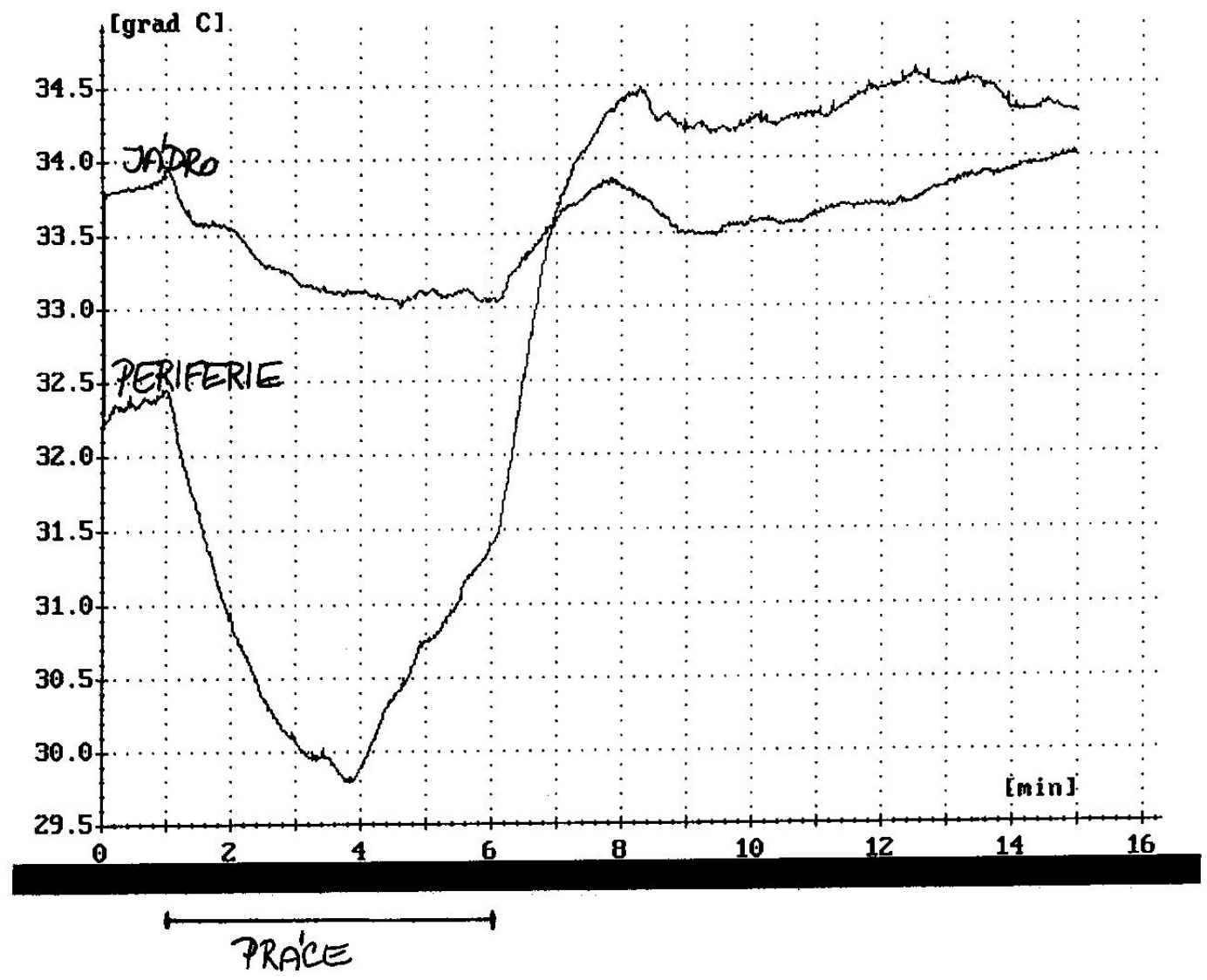


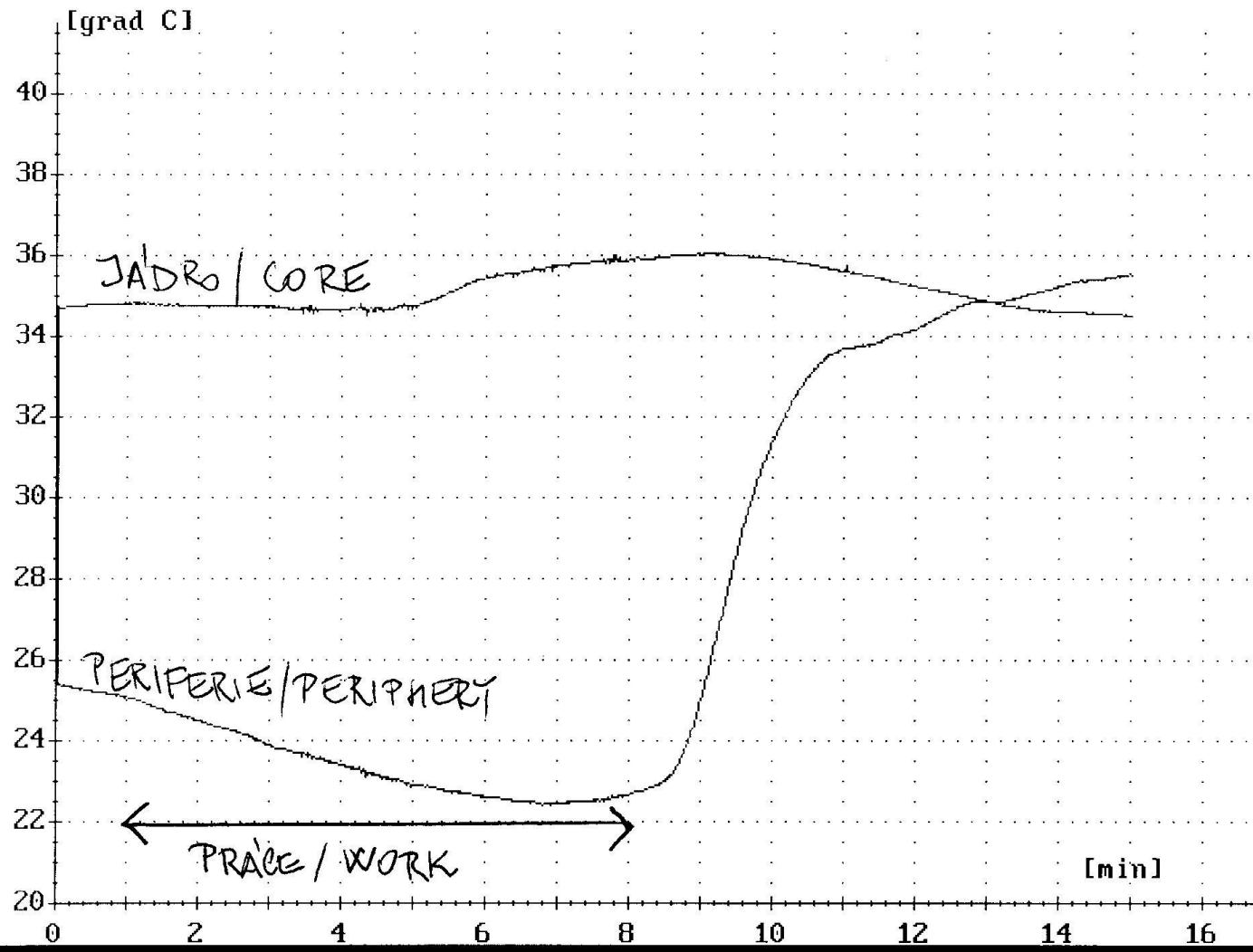
Temp. sensor 1

Temp. sensor 2

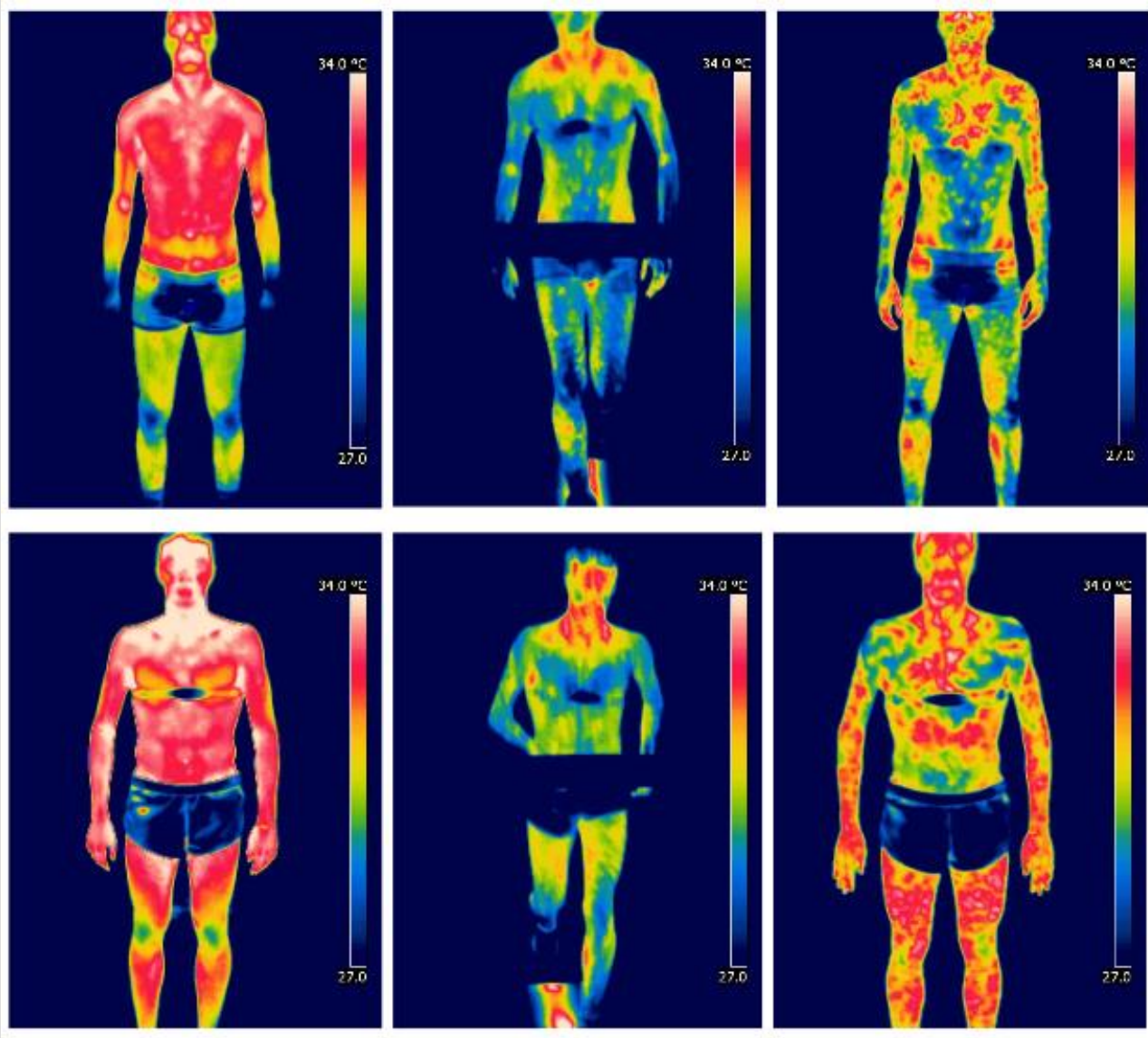
Stepladder







Celotělová termografie



Termografické snímky dvou sportovců před, během a po fyzické aktivitě.

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