Phenomenon: A Walk Around Bozeman



Guiding Question:

How did Mr. Andersen use interacting body systems to complete a walk around Bozeman?



Mr. Andersen used his smartwatch to gather information while going for a walk in Bozeman, Montana. The watch recorded the following information continuously throughout the walk.

Pace (minutes/mile)	Heart rate (Beats/minute)
Elevation (feet)	Time (minutes)
Blood Oxygen Saturation (%)	GPS Location

You will be using the evidence collected by the watch and your understanding of body systems to explain how Mr. Andersen is a system of interacting subsystems composed of groups of cells.

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Evidence 1: Map of Walk 3

Evidence 2: Elevation of Walk 3

Evidence 3: Heart Rate During Walk 4

Evidence 4: Oxygen Saturation During Walk 4

Evidence 5: Human Body Systems 5

Evidence 6: Organization of Body Systems 5

Evidence 1: Map of Walk

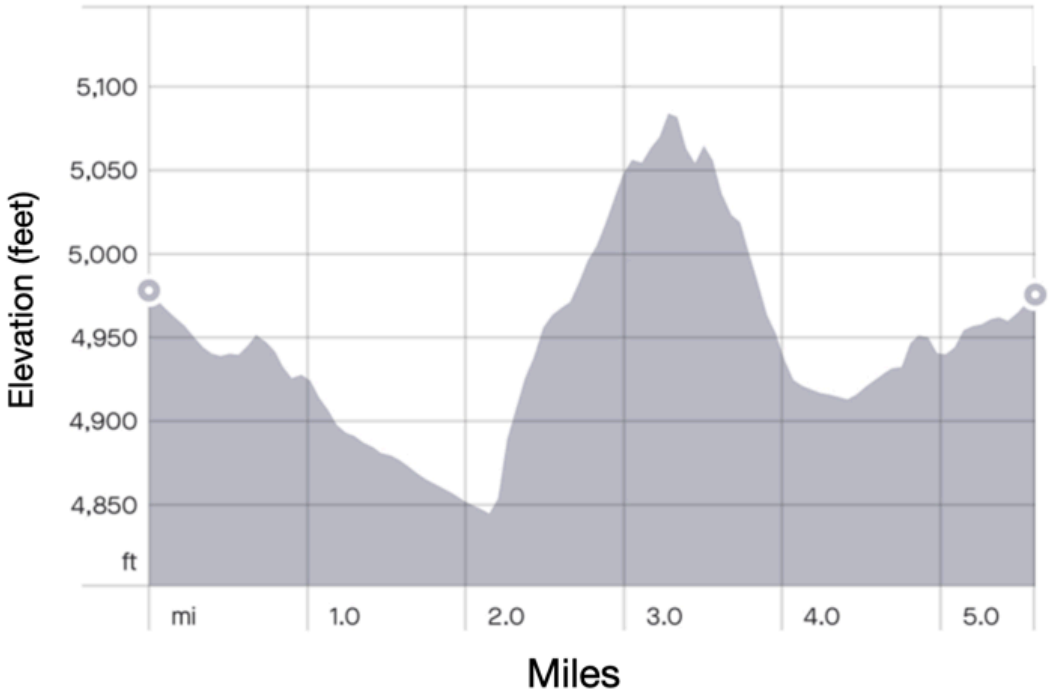


Afternoon Walk

Paul Andersen

Today at 1:00 PM

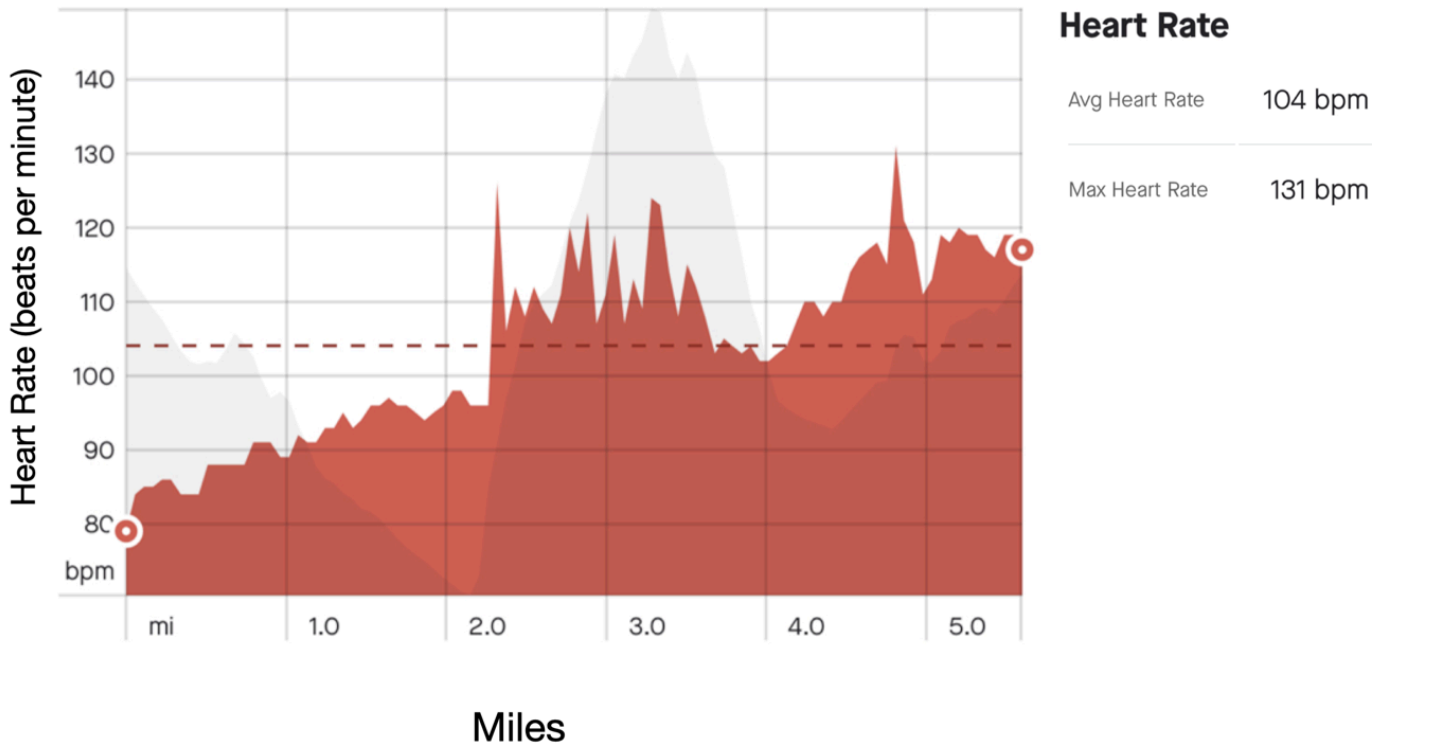
Evidence 2: Elevation of Walk



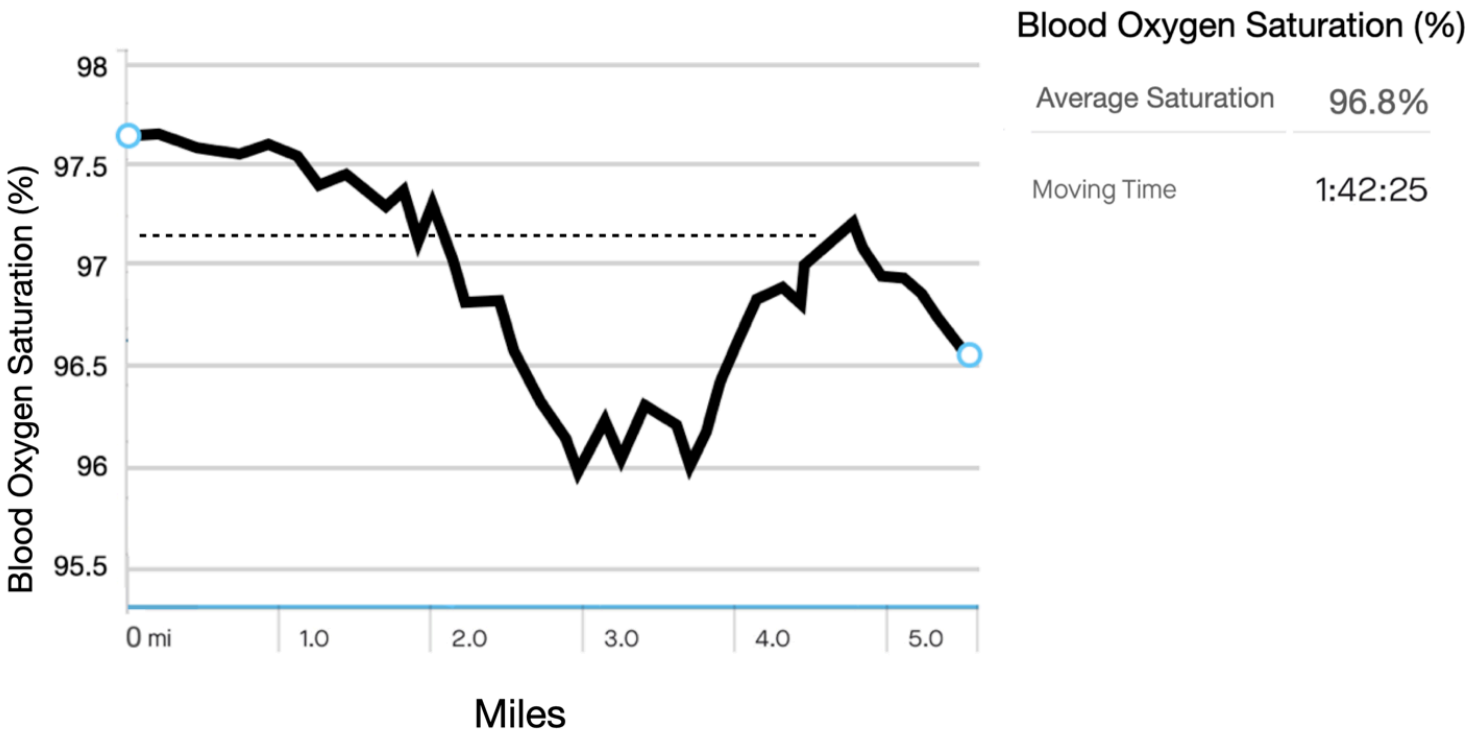
Elevation

Elevation Gain	340 ft
Max Elevation	5,089 ft

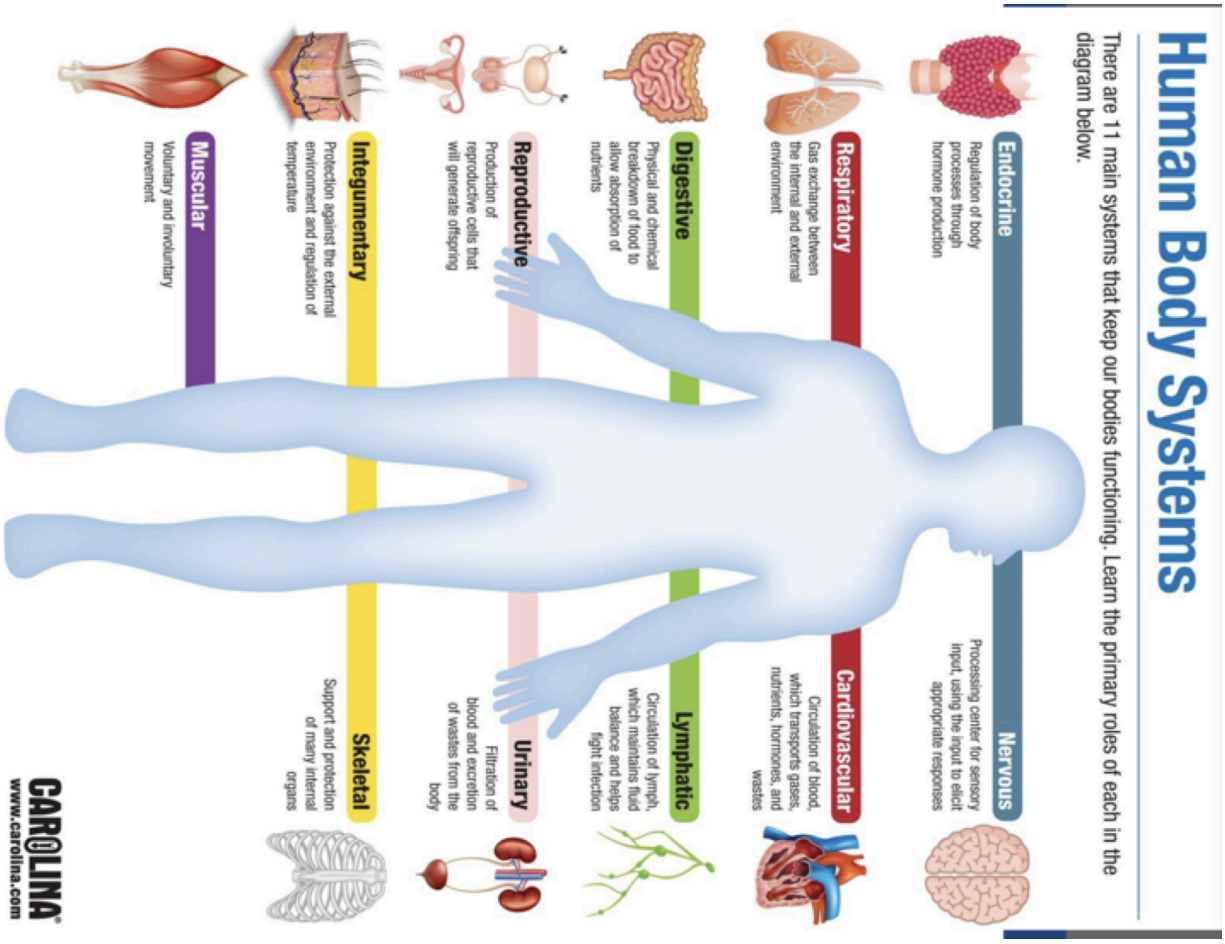
Evidence 3: Heart Rate During Walk



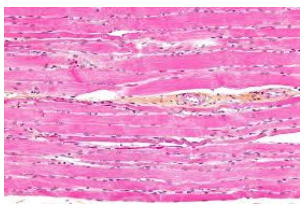
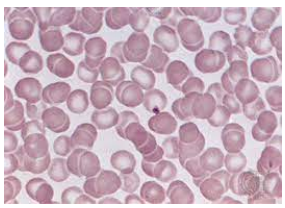
Evidence 4: Oxygen Saturation During Walk



Evidence 5: Human Body Systems



Evidence 6: Organization of Body Systems

Organism	Mr. Andersen		
Organ **system**	Muscular system	Circulatory system	Respiratory system
Organ	Calf muscle	Blood vessels	Lung
Tissue	Muscle tissue	Blood tissue	Lung tissue
Cell	Muscle cell 	Heart cell 	Lung cell 