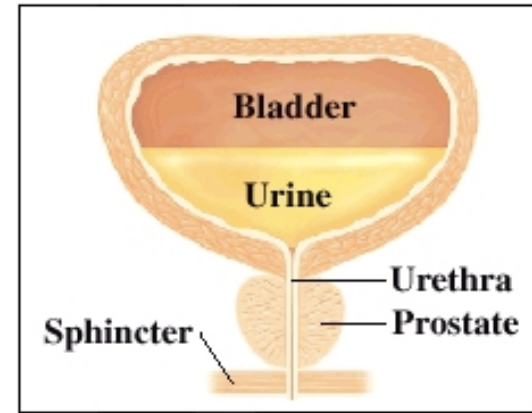


Topic	Specific heat capacity	Level	GCSE (or any course for students aged 11-16)
Outcomes	1. To use the specific heat capacity of water to calculate energy transferred in joules.		
Information for teachers	<ul style="list-style-type: none">• These questions could be used after students have become confident at using $\Delta E = m \times c \times \Delta\theta$ for solving simple problems.		

1. The male bladder can hold up to 600 cm³ of urine at 37 °C. How much energy does a person 'lose' if they go for a pee? Would their body cool down, warm up or stay the same afterwards?



	Per 36g serve
Energy	694 kJ 165 cal
Protein	1.1 g
Fat	
-total	6.2 g
-saturated	3.0 g
-trans	<0.1 g
Carbohydrates	
-total	25.7 g
-sugars	20.8 g
Sodium	52 mg
Fibre	0.5 g

2. You drink 800 cm³ of cold water at a temperature of 10°C. How much energy is needed to warm this water up to reach body temperature?

What mass of Mars Bar would you need to eat to provide this energy?