

Answer on question #56530, Physics / Other

Question a person decides to lose weight by eating only cold food. a 100 g piece of apple pie yields 1500 kJ of energy when eaten. if its specific heat is 1.7 kJ/kg degrees celsius, how much less energy is its energy component at 5 celsius than at 25 degrees celsius

Solution The difference in energy is

$$\Delta Q = cm\Delta T = 1.7 \cdot 0.1 \cdot (25 - 5) = 3.4 \text{ kJ}$$