



Mars Bar Challenge!

Challenge: How far can you walk on a Mars Bar?

When you are hiking you should carry emergency food.

What is the best emergency food when out in the mountains

Pack a rucksack for a hike then weigh yourself and the rucksack.

Check your mass (weight) with rucksack.....kg

Use the table to calculate the energy you would use for fast walking.

Your weight with rucksack x energy for fast walking

=x.....=..... kJ/h energy used in 1 hour

= kJ/h energy used in 1 hour ÷ 60min.=..... kJ/h energy used in 1min

Energy Use for Various Activities

ACTIVITY	ENERGY (kJ/kg/h)
Sitting quietly	1.7
Standing relaxed	2.1
Vacuuming	11.3
Walking rapidly	14.2
Running	29.3
Swimming	33
Rowing in a race	67

Check the energy content of the different foods

Mars bar.....kJ/100g.....kJ per serving

Pie.....kJ/100g.....kJ per serving

Dried fruit.....kJ/100g.....kJ per serving

Which food will give you enough calories for 1 hour

Think about what might happen if it was a hot day.

Using your results and Naismiths rule of 5km/hour how far can you walk on a mars bar

Calculate how long the energy from a mars bar will last:

Energy from one serving of mars bar \div kJ/h energy used in 1min: \div =min

Calculate how far you can walk on mars bar:

Walking speed multiplied by how long the mars bar will last = 0.083km/min x.....min=km

Now consider how healthy the foods are. Look at the fat, saturates, salt and sugar

Which is the healthiest energy source?