

When he isn't cycling, Andy likes to solve maths problems	Andy's bicycle has holders which carry up to three 1-litre water/drinks bottles	Andy's options for on-the-road snacks are: bananas, energy bars, energy gels, cheap cereal bars or energy drinks.	Andy does not want to consume more than 250 kcal an hour on rides of less than 5 hours	500 ml of energy drink contains 190 kcal and costs £1.39
A big meal contains approximately 800 kcal	1 mile = 1.61 km	A REALLY BIG meal contains approximately 1000 kcal	An energy bar contains 220 kcal, costs £1 and weighs 65g	A pack of energy gel contains 110 kcal, costs £1 and weighs 42g
An average adult male who does not do lots of physical activity needs 2500 kcal a day	A cheap cereal bar contains 100 kcal, costs 16p and weighs 25g	1 kcal = 4.19 kJ	Andy's cycling jersey has 8 pockets. Each pocket holds 1 banana, 1 energy bar, 3 energy gels or 2 cheap cereal bars	A banana contains 120 kcal, costs 10p and weighs about 120g
Andy likes to eat a big meal before a short training ride . The energy for this meal is released during his ride	Andy cycles at 14 mph on rides that take more than one day	Andy is a 20-year-old man	On a ride that takes several days, Andy eats three REALLY BIG meals a day: in the morning, after he finishes cycling, and in the evening	As well as his meals, Andy can have up to 1000 kcal of off-the-road snacks a day if he needs to
Andy drinks about 500 ml of fluids per hour of cycling	The distance from Land's End to John o' Groats is 1407 km	On the road, Andy can stop to re-fill his bottles (with water only). He doesn't want to do this more than once every two hours	Andy won't be able to top-up with snacks or energy drinks while on the road	Andy does not want to consume more than 350 kcal an hour on rides of more than 5 hours
Andy doesn't like to average more than 7 hours of cycling a day on rides that take more than one day	Andy uses about 100 kJ of energy to cycle 1 km (in addition to his normal energy use)	A typical short training ride is 2 hours long	Andy cycles at 19 mph on rides that take less than one day	Andy doesn't eat anything while cycling that he can't carry in his pockets