

## How Many Miles Per Tortilla Do You Get?

How are batteries, gasoline, and tortillas alike? They all store energy. Of course, the energy they store is used in very different ways by different things. Cell phones can't run on gasoline and people can't run on batteries! But, even so, the energy stored in these different ways is really the same stuff!

We could compare the amount of energy stored in different kinds of fuel, and see, for example, how much gasoline it would take to operate a person (we don't recommend trying this!) or how many tortillas it would take to operate an automobile (we don't advise this either!).

Speaking of tortillas, when we start figuring up how much energy different kinds of substances can store, we find that food is very efficient. For fun, we could compare how many tortillas it would take to operate an automobile, a space shuttle, a very small and advanced robotic spacecraft, and you.

You are already familiar with automobiles and space shuttles. The spacecraft we will compare these with is called Space Technology 5. Three of these tiny craft will be launched into Earth orbit to test out their advanced, miniaturized, energy-efficient technologies.

So, how many tortillas would it take to operate each of these energy-users for one day? Space Technology 5—4.4 tortillas; human—14-20 tortillas; space shuttle—2,904 tortillas; automobile—12,192 tortillas! Now you know why cars are called tortilla guz . . . er, gas guzzlers!

Learn more about how energy is stored and enter a Space Place contest. All you have to do is design your own spacecraft using tortillas or create an original recipe using tortillas. To enter the contest, go to [spaceplace.nasa.gov/st5/st5\\_tortillas1.htm](http://spaceplace.nasa.gov/st5/st5_tortillas1.htm) .

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Caption: Space Technology 5 will fly three birthday-cake-sized spacecraft to test advanced, miniaturized, energy-efficient technologies in space.

