

# Loaves in space: New technology allows baked bread at zero gravity

Wednesday 6 December, 2017

There are many reasons why going into space on a rocket ship is an attractive proposition, but up until now, baked goods weren't one of them.

Of course, that is because of the dangers of stray crumbs and high temperatures at zero gravity; up until now, bringing breaded products would have been far too risky a proposition for astronauts.

However, that may be all about to change, as a team of scientists are hoping to make life on board space stations a great deal tastier by allowing astronauts to bring crumbless bread aboard.

A group of geniuses in Bremen in Germany are working on creating crumbless bread rolls, so hungry folks on the international space station can enjoy the luxury of freshly baked bread.

The company behind this ambitious project is called 'Bake in Space'. They are hoping to redo how food is created for those going outside of our atmosphere.

Their ultimate goal is to provide the grub for a manned-mission to Mars, but for now, they will settle for providing folks on the ISS with warmed-up rolls that were baked here on earth. That's not a crumbly idea at all!

Bake in Space have teamed up with the culinary-clever-clogs at the Technology Transfer Centre in Bremerhaven, a research institute which focuses on food, health and environment. Between the pair of them, they have come up with the idea of crumbless rolls for space.

Florian Stukenborg, from the TTC, detailed some of the process to journalists earlier this week. He said: "We're working on the basis of a perfectly normal [pretzel-type] dough. [However] In space, like on an airplane, things taste different."

He also told the media that the bread will last around a half year and will be able to be heated by space stations' low heat ovens.

One downside is that the bread will take much longer to cook in space, because astronauts cannot take it out of the oven until the appliance is completely cool. This is to prevent the dangerous escape of heat into the station.

"It might sound trivial, but it's a quality-of-life boost for the astronauts up there," said one of the TTC researchers. If you thought waiting for your food to be ready was tedious, imagine doing it in space!

It may be a massive improvement in the quality-of-life, but they are also the most expensive bread rolls in history. It is estimated that the cost of bringing the rolls to the ISS lies somewhere between 1.5m and 3m euros.

Still, as anybody who has ever been stuck on a gluten free diet knows, it may be worth it.

## Media:



## Related Sectors:

Main News ::

## Related Keywords:

Space :: Bread :: Moon :: Mars ::  
Spacecraft ::

## Scan Me:



## Company Contact:

—

### Greg Bush

E. [greg.bush@pressat.co.uk](mailto:greg.bush@pressat.co.uk)

W. <https://www.pressat.co.uk>

## Additional Contact(s):

Greg Bush is currently working as the Deputy Editor for Pressat's food and business desk. Previously wrote for the Financial Times and Italia Media. He also spent time as a reporter for Dow Jones.

[View Online](#)

## Additional Assets:

**Newsroom:** Visit our Newsroom for all the latest stories:

<https://www.gregbush.pressat.co.uk>