

The Astronaut's Cookbook: Tales, Recipes, and More

By Charles T Bourland and Gregory L Vogt

Reviewed by Dean Madden, National Centre for Biotechnology Education, UK

The question that astronauts are most frequently asked is 'How do you go to the toilet in space?' This rather puts the cart before the horse because the next most popular questions concern the other end of the alimentary canal: 'How do you eat in space?', 'What does the food taste like up there?', and 'How do you cook it?' *The Astronaut's Cookbook: Tales, Recipes, and More* is an engaging book that provides answers to all of these questions, but, more importantly, also gives instructions for making authentic space cuisine in your own kitchen – including 'Skylab butter cookies', 'space shuttle black beans' and 'Leroy Chial's Chinese cold peanut noodles'.

Spaceflight seems so commonplace these days that it is easy to forget that when people first ventured beyond Earth's atmosphere, it was not even known whether they would be able to eat and swallow under conditions of microgravity. Since then, space-food technologists have had to overcome numerous problems, many of them unexpected. *The Astronaut's Cookbook* juxtaposes fascinating tales about these technological challenges with recipes. For example, the first astronauts to walk on the Moon suffered from potassium deficiency, which sometimes led to heart arrhythmias. The solution was to add potassium to the orange-flavoured drink that they sucked through a tube inside the helmet of their spacesuit. This worked

well until Apollo 16 astronaut Charlie Duke accidentally spilt the drink inside his helmet. The result could have been catastrophic had the highly conductive solution come into contact with electrical cables. Since then, only pure water has been allowed inside spacesuits.

One of the authors of *The Astronaut's Cookbook*, Charles Bourland, spent 30 years developing food for the US National Aeronautics and Space Administration (NASA) and solving problems like this one. Co-author Gregory Vogt was once a NASA education specialist, a science teacher and an author of numerous educational publications. Given the US background of both authors, it is unsurprising that the book's principal focus is on American astronauts' food; consequently there are numerous references to processed food products that are available only in America (such as 'Cugino's Veggie Weggie DIPZ Mix'). A little ingenuity, however, will allow European readers to find reasonable equivalents of the products mentioned.

This book should appeal to teachers and secondary-school students of all ages. Science and food technology teachers should be able to use it to develop stimulating educational activities that introduce aspects of product development, evaluation and processing methods.

Details

Publisher: Springer, New York
Publication year: 2009
ISBN: 9781441906236

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