

### ACTIVITY 0.3 SPACE DINNER

From the Pre-launch Chapter of  
the Principia Space Diary

#### LEARNING LEVEL

KS1, KS2, P1-4

#### CURRICULUM LINKS

- Science – Healthy eating, nutrition, food groups
- SMSC – Making choices
- British Values – Individual liberty
- Literacy (if using additional resources): Reading a variety of texts, select and retrieve information, using information

#### RESOURCES REQUIRED

- Coloured pens
- Eatwell Plates via NHS website
- For younger children: Shopping basket and food
- For older children: Fact sheet on food types

#### Background to this Activity

Astronauts need to consume sufficient energy (calories) in space to work effectively and maintain good health. Calcium and vitamin D are vital with their beneficial effect on bones, as a low-gravity environment can lead to poor bone health. Many astronauts simply do not consume enough calories because of lack of time and their demanding work schedules.

Fluid shifts mean that astronauts get a 'stuffy head' and they feel like they have a cold. This means that food tastes blander in space than on Earth.

Meals are frequently made of dehydrated and tinned food and fresh fruit is a luxury. The foods need to be easily and safely stored and must not create crumbs that could get into the special equipment on board the ISS. Dried strawberries from breakfast cereals, coffee granules, coated chocolate, foil carton drinks are all examples of foods that have been in space. NASA's fact sheet *Food For Space* covers food preparation in space and space-friendly foods: <https://www.nasa.gov/audience/formedia/presskits/spacefood/factsheets.html>

Check out the Great British Space Dinner competition by the UK Space Agency (<https://principia.org.uk/activity/the-great-british-space-dinner/>), which invited children from across the UK to help Tim choose some special menus that were prepared by celebrity chef Heston Blumenthal.

#### Running the Activity

Download the Eatwell Plate from the NHS website: <http://www.nhs.uk/Livewell/Goodfood/Documents/The-Eatwell-Guide-2016.pdf>

**KS1:** Set up the classroom as a shop with different food (for each group) in different parts of the room. Students can "shop" for items to include in their space dinner and draw what they choose.

**Lower KS2:** Use the Eatwell Plate to choose and design a meal incorporating each food group.

**Upper KS2:** As above, plus ask them to link their meal to each of the seven food groups. Use the resources provided with the **Extension** exercise for this activity (available on the website).

**ZAP!** This activity has a Zap code so students can use a mobile or tablet to join Tim for breakfast as he shows you how to make scrambled eggs on the Space Station! For instructions on how to use the Zap code, see the activity page of the [Principia Space Diary](http://principia.org.uk) website.

