



Highly Commended

Science Writing

Year 3-4

Ella Wallace

Scotch College - Junior School



Science Writing - Food of the Future Ella Wallace, Year 3-4

3,2,1 blast off! "I never thought this day would come", exclaimed Ella disappointedly. Our spacecraft has just left Earth at a speed of about 39,600 kph.

We sadly have not looked after our planet, so we can't live on Earth any longer. In the year I was born, 2015, 193 countries came together to set 17 Global Goals. These Sustainable Development Goals were created by the United Nations to make the world a better place. Each goal focused on a different important issue. Humanity failed to achieve these goals.

Several of the Global Goals were related to human food. 'Life on Land' was Goal 15. Humans had livestock for meat. One major issue with livestock was over farming, where too many animals were raised in small spaces, leading to pollution and deforestation. Animal waste harmed water sources because it was not managed properly. The animals also produced greenhouse gases like methane, which contributed to climate change. Scientists and farmers researched sustainable solutions, including reducing resource usage, improving waste management, and explored alternative protein sources.

BANG! Our spacecraft has just separated from the rocket. We are now in cruise phase. Our trip to Mars will take about seven months and 480 million kilometres.

When we lived on Earth, there was an increasing number of people adopting vegan, flexitarian, or vegetarian diets. Scientists worked on creating new types of food, like lab-grown meat and plant-based alternatives to animal products. The scientists at base-camp on Mars are working on creating plant-based foods that look and taste like meat, eggs, and dairy products but are made entirely from plants. They use ingredients like soy, wheat, and peas to develop products such as veggie burgers, plant-based sausages, and dairy-free milk. These alternatives apparently provide similar flavours and textures to animal-based products while being more environmentally friendly and reducing the need for raising animals. The scientists predicted the food they were 'creating' was going to be 'food of the future'. We obviously can't raise animals on Mars! The 'food of the future' is being eaten by all human NOW.

Food scientists also explored protein-rich insects as a future food while we were living on Earth. Insects are no longer a 'future food' but our main source of protein now. Ants are one of my favourites. They contain between 13g of protein per 100g. Crickets contain between 23g and 65g of protein per 100g. Of all the major edible insects, mealworms contain the most protein – 24 grams per 100-gram serving. The lean beef I used to eat in my favourite dish, spaghetti bolognese, had only slightly more, with 26 grams. In my opinion, the best way to eat meal worms are lightly seasoned and roasted.

Duckweed, a small water plant, was also considered a 'food for the future'. While living on Earth, duckweed was eaten in some parts of Southeast Asia. I am sure it will become a common food in school lunches throughout schools on Mars.

It has lots of nutrients and grows fast, making it a great choice for sustainable eating. Duckweed doesn't need much space or resources to grow, and it can be harvested often. It's full of protein, vitamins, and minerals that our bodies need. Plus, it has a lot of fibre, which helps with digestion. Growing duckweed could be a good way to feed people without using up too much land or water. Scientists are still studying it more to see how it can help us have enough food in the future on Mars.

As we start living on Mars, science can help us figure out how to grow food there. Mars has limited resources and a tough environment, so we need new ideas. Scientists can use methods like hydroponics, aeroponics, and vertical farming to grow crops with less water and space. They can also change the genes of plants to make them stronger and more nutritious for Mars. With science, we can find ways to make sure we have enough food on Mars and stay healthy while we explore this new frontier. I hope we don't destroy this red planet; we call home.