Teaching Youth Social Action through Science

Science is an area which provides opportunities to embed healthy habits within the National Curriculum. In particular, nutrition and digestion focuses on the content of a healthy human diet and the consequences of imbalances in the diet.

Key Stage 3

Students can explore environmental issues linked to food production around the world, for example, deforestation to make way for livestock

- Production of methane by cattle
- Droughts leading to crop failures and starvation/famines
- Pesticides cause declines in populations of bees and other important pollinators
- Organic farming leads to improvements in conditions for wildlife

Interpret and make calculations from nutrition labels

- How does the food we eat help us academically and physically?
- Investigate the link between nutrition and energy
- What are the consequences of imbalances in the diet, including obesity, starvation and deficiency diseases

Name the components of food and describe what each component is needed for in the body.

- Create a healthy eating guide to share with parents/carers
- Investigate the link between food and energy how do we ensure everyone has a healthy diet

Calculate energy requirements for different activities

- What do you need to eat if you are training for a sport?
- What do you eat if you are revising for a maths test?
- How can we ensure every child is eating such a balanced diet?

Key Stage 4

Young people can use the following topic within science to link to Youth Social Action Projects:

Food security and farming

- Investigate some of the biological factors that can affect levels of food security.
- Investigate some of the ways farming methods can increase levels of efficiency of food production.
- Investigate methods to improve the efficiency of food production. What can we learn from this?

Possible Projects

Such as eating insects or drinking plant-based milk alternatives – and the importance of ensuring that these solutions enable humans to maintain a balanced diet.

- Links can be made to the food miles of different foods we eat and the environmental benefits of eating locally-grown produce. Links to Healthy Habits Diet
- "Bush Tucker Trial" Create a creepy crawly menu based on alternative foods. Would you try this? Links to Food Technology. Imbalances in the diet include obesity, starvation and deficiency diseases

Teaching Youth Social Action through Design Technology Cookbook (link to Gateway Festival and OAT WeWillCook)

Art Students learn about nutrition while developing their creativity.

7	Describe the feeling of having good health and good nutrition through art; Can you create art using fruit and vegetables?
8	Students create a visual representation of a healthy body on a healthy planet through art.
9	Students create an advertisement promoting the importance of adopting healthy eating behaviours.