

<b>Topic</b>	Healthy and balanced diets	<b>Level</b>	Key Stage 3 (or any course for students aged 11-14)
<b>Outcomes</b>	<ol style="list-style-type: none"><li>1. To understand the term balanced diet</li><li>2. To state the main nutrients in food</li><li>3. To calculate the amount of nutrients in different foods by extracting information from tables</li><li>4. To evaluate the healthiness of a meal</li></ol>		

**Instructions for the teacher:**

*This activity is a great opportunity to get students working in groups to evaluate what is meant by a healthy and balanced diet.*

*Students calculate the nutrient content of different foods in a snack box and then consider whether the food is healthy or not. Students then use this information to evaluate the healthiness of the snack box and design their own, healthier alternative. This could be a good opportunity to develop presentation skills.*

**Progress:** further biology teaching resources are available here:  
<http://thescienceteacher.co.uk/biology-teaching-resources/>

## A healthy snack box?

**Background:** you work for an airline called *Lux Air*. You have been asked to evaluate the healthiness of their 'Feel Great Snack Box'. You will need to look at each item of food and provide a brief report of your findings.



To help you write your report you are going to first use the food labels **and** your own knowledge to complete the table below.

Nutrient	1 x Chocolate chip cookie (35g)	Smoked corn snack (50g)	2 x Gluten-free wholegrain crackers	Natural almond and apricot bar (25g)
Energy				
Fat				
Carbohydrate				
Protein				
Vitamins				
Minerals including salt				
Fibre				
Do you think this food is healthy? Explain your answer.				

**Report on your findings.** *Do you think the Feel Great Snack Box is healthy? Do you think the name or packaging is misleading? Use your own knowledge and information from the table to support your answer.*

The airline has asked for you to come up with a healthier alternative to the Feel Great Snack Box. Using your own knowledge, the table and any other research sources, design your own, healthier alternative. You must clearly show what foods and nutrients it contains and your box must meet the following criteria:

1. Not cost more than £5.00
2. Contain food that has a shelf life of at least one month
3. Comprise a 'healthy' balanced diet
4. Contain **one item** from the Feel Great Snack Box

## Food labels for the Feel Great Snack Box

Nutritional Information for Whole Grain cracker	Typical Values	
	Per cracker	Per 100g
Energy	110kJ 26kcal	1922kJ 460kcal
Fat	1.0g	16.8g
of which saturates	0.4g	6.6g
Available Carbohydrate	3.4g	58.9g
of which sugars	0.1g	1.8g
Fibre	0.4g	7.6g
Protein	0.6g	10.6g
Salt	0.10g	1.80g

Typical Values for chocolate chip cookies	Per 100g
Energy	2133 kj
Carbohydrate	73.2 g
- sugar	35.6 g
Protein	3.7 g
Fat, total	23.3 g
- saturated	13.9 g
Fibre	2.5 g
Sodium	0.6 g
- as salt	1.4 g

Nutrition Information for the Smoked corn snack	Per 100g	Per 18g
Energy	1949KJ 464Kcal	351KJ 84Kcal
Protein	8.0g	1.44g
Carbohydrates	72.0g	12.9g
Sugars	0.79g	0.14g
Fat	15.3g	2.75g
of which Saturates	3.0g	0.54g
Fibre	4.3g	0.77g
Salt	1.7g	0.3g

**Ingredients:** Corn, Sunflower Oil, Sea Salt, Natural Smoked Flavour (smoked paprika, powdered onion, powdered garlic). Vegetarian Friendly, Gluten and GMO Free

Natural almond and apricot bar	per 100g
energy	1893.0 kj 451.0 kcal
fat	25.2
of which saturates	17.7
carbohydrate	49.7
of which sugar	15.4
fibre	4.5
protein	5.9
salt	0.02