

<b>Title</b>	<b>A healthy multicultural meal for your school</b>
<b>Subject(s)</b>	Mathematics, Biology
<b>Learning goal(s)</b>	In this project students design a healthy, multicultural meal for their school. Either for the 'canteen' or for a festive occasion in the class or the whole school. They decide on the criteria for healthy, multicultural and also take the costs into account and they reflect on the world food situation. The project consists of five activities.
<b>Time</b>	One or two lessons (of 50 minutes)
<b>IBL</b>	<p>The activity asks for IBL:</p> <ul style="list-style-type: none"> <li>- It's a <i>whole</i> (unstructured) task; students investigate for example: which cultures are represented in their school/class, what kind of meals are common, what we mean by 'a healthy meal' etc.</li> <li>- They decide on which healthy, multicultural dishes they want to offer and find out how much of each ingredient is needed and what the costs are.</li> </ul> <p>As a teacher, you will need to decide on what expects you want to offer more structure, guidance and help.</p>
<b>Achievement</b>	Collaborating on an open and rich task allows for diversity in the ways of working as well as in the level of achievement. Students can discuss and supported ach other and/or divide tasks according to preference, ability etc.
<b>Context</b>	Food is a rich context, close to students' own daily lives.
<b>Culture</b>	What we eat is partly dependent on where we live and on the cultural heritage. In a culturally diverse classroom/school students may have different eating habits, rules and tastes.
<b>Fundamental Values</b>	Respect – getting to know and respect different eating habits, tastes and dishes.
<b>SSI/RRi</b>	Hunger; food shortage; the costs of meat (in terms of grain); animal welfare. See activity: Can the earth feed us?

## Lesson outline

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### *Orientation*

- Introduce the context, show a video for example: 'school lunches around the world'. Present the task and form small groups.

### *Working in groups and whole class*

- Have students work for about 15 minutes to get an idea of what needs to be done and make a first plan.
- Discuss questions and other issues briefly with the whole class to make sure every group can continue.

Have the groups work according to their plan. Support groups as needed, focus on the process. You may want to supply hints.

- Plan whole class moments to discuss the progress, address any questions/problems and share results. Here you can include other (supporting) activities.

### *Presenting and evaluating*

Present and discuss results and evaluate the activity.

## A healthy multicultural meal for your school



### Introduction

In this activity you will, in a small group, design a healthy, multicultural meal for your school. First you will need to do some research.

- What is meant by a healthy meal? What makes a meal healthy?
- What is multicultural in our school?
- What are common meals in different cultures?

Next you will need to decide on your meal

- What dishes will be in your meal?
- What ingredients are needed and how much of each?
- What does your meal cost?

In the end, you may want to check for other issues:

- Are there students in your school for whom this meal is not suitable?
- Is the meal healthy?
- Is the meal animal friendly?

In this worksheet, you will find some help to guide the activity. Discuss with your teachers which of these activities you will do and when.

### Activity 1 - lunches in class

Conduct a small survey about what students at your school eat for lunch:

1. What do you normally eat for lunch?
  - At home?  
.....
  - At school?  
.....
2. How do you like the food? [on a scale of 1 – 10]
3. Is it a healthy meal? [on a scale of 1 ....10]
4. What makes a meal healthy? List as many aspects you can think of.

Collect the answers of all students in your class.

Note differences and similarities.

What may be the cause for differences?

Summarize the results for questions 2, 3 and 4 in a small report using diagrams.

## **Activity 2 – food and cultural background: school lunches around the world**

All around the world eating habits are different. The time people eat may differ, the meals are different, some foods may not be allowed, with whom they eat may be different, the tools (cutlery, plates, pots, etc) people use may differ, etc.

Watch the video.

What does this tell you about differences between countries and cultures?

In your class/school find out what different cultures are represented?

Are eating habits connected to these cultural backgrounds?

To find this out make groups of students with similar cultural eating habits.

In these groups write down, what the eating habits are? Are their specific rules about what food you can or cannot eat? Choose one typical dish.

Combine this into a poster,

Present posters in class. Discuss in class which dishes will be used in your healthy meal.

### Activity 3 – healthy meals

Read a text<sup>1</sup> about healthy food and study the picture with food groups.

Example of a text:

source: <https://www.betterhealth.vic.gov.au/health/healthyliving/food-variety-and-a-healthy-diet>

Food variety means eating a wide variety of foods from each of the five food groups, in the amounts recommended. Eating many different foods helps maintain a healthy and interesting diet which provides a range of different nutrients to the body. Eating a variety of foods promotes good health and can help reduce the risk of disease.

The five food groups are:

- vegetables and legumes/beans
- fruit
- lean meats and poultry, fish, eggs, tofu, nuts and seeds, legumes/beans
- grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties
- milk, yoghurt, cheese and/or alternatives, mostly reduced fat.



Foods are grouped together because they provide similar amounts of key nutrients. For example, key nutrients of the milk, yoghurt, cheese and alternatives group include calcium and protein, while the fruit group is a good source of vitamins, especially vitamin C.

Use this information to check if your meal is healthy.

Also take into account the nutritional value and the energy (KJ or Kcal).

<sup>1</sup> Use a website from your own country and connect this to texts from your Biology curriculum

### **Activity 4 – presenting your meal**

Calculate the costs, using information from shops, folders etc.

If possible: prepare the dishes and do a taste testing round.

Present your meal on a poster or flyer or menu.

Make photos of the dishes.

Include other information you think is useful.

## Activity 5 – how about the world food situation

Although your meal is healthy, tasteful and multicultural, there may be some issues considering the world food situation.

Read the text below and answer the question in your small group.:

1948 the American ecologist William Vogt wrote the book: Can the earth feed us? The author was concerned that the global population was so big that they were right next to the border to have an adequate food supply. He argued that we need to stem population growth, otherwise there would be a disaster. It is 72 years ago William Vogt wrote this. At that time, the world's population was about 2 billion. We are now 6.48 billion.

The question of human's food supply is still under discussion. In the textbook, Medan Jorden Snurrar, for Natural Science A is a chapter called: Enough food? When the textbook was written, the number of people on earth has passed 6 billion. Below is quoted a paragraph from the chapter.

**"Meat or vegetables**  
*Most people in the world are vegetarians. The main crops are wheat, rice, corn and potatoes. Eating meat is one of the rich Western diets, and this is questionable from an environmental perspective. Cattle herds in the world use larger and larger land-areas, more water and energy. An increasing proportion of the world's cereal production is used to feed animals. But the animals have a low efficiency. When the grain is passing pets, is 96% of the calories lost and only 10% of the protein from the grain remains in the animal. Conclusion: the more animal products mankind eats, the less people can be satisfied "(Medan Jorden Snurrar, 2000, page 77)*

1. Discuss the paragraph, meat or vegetables together and try to come up with / understand what the authors mean.
2. The authors state that it is questionable from an environmental point to eat meat. Discuss if / why it is questionable from an environmental perspective, based on your knowledge in for example ecology and environment.
3. Is the conclusion coherent: "The more animal products mankind eats, the less people can be satisfied!?" Discuss.
4. Imagine that a political party in the Town has suggested that it should be served more vegetarian food in the Towns schools, for environmental reasons. You are now a participant in the Towns city council and shall decide in the issue. First consider what you as an individual think. Then have a discussion / debate on the issue to finally come up with a decision. Does this decision have implications for your meal? What is your plan?