



## Energy, Water, Waste Campaign

### How We Eat (Some Environmental Campaign Ideas)

It turns out that how we eat is also an environmental issue. Each of the following areas is a campaign in itself. Research and discuss some or all of these food issues with students, and decide where to focus an action project on how we can eat more sustainably. Use the campaign planning form to help you plan and implement your project.

- **Reducing Food Waste:** Food we buy and prepare doesn't always get eaten, and we throw away large amounts at home, at school and from our grocery stores. How can we reduce what we waste, and make better use of what isn't edible?
- **Eating Less Meat:** The amount of meat we consume has an impact on resource use, as producing meat uses a lot of food and water. Meatless proteins, like beans and lentils use fewer resources to grow, and are excellent proteins.  
**Eating Locally:** Eating foods that are grown near where we live reduces the distance that food is traveling to get to us. That is better for the environment because there will be fewer vehicle emissions compared to food that comes from a long way away. How do we find locally grown foods in our communities, and how can we encourage stores to stock these foods?
- **Gardening:** Growing our own food, in a home, or community, or school garden is something more and more of us are doing. How can we encourage people to create gardens and grow food to use in school, or at home?
- **Buying Organic Food:** Organic food production omits the use of pesticides and herbicides that can harm beneficial insects, and leach into our watersheds. Where can we find organic food in our communities, and how can we encourage people to buy it?

### Background Research and Resources

**Reducing Food Waste:** Food we prepare doesn't always get eaten, and we throw away large amounts at home, at school and from our grocery stores. How can we reduce what we waste, and make better use of what isn't edible?

- Do a garbage audit of school lunch waste to find out how much and what kinds of food are being wasted. Use the [Garbage sort](#) to help you figure out what to do with the edible food and compostable food you find.
- Survey a few grocery stores to find out what they do with food that is past its best by date, or fruit and vegetables that are bruised or misshapen.

**Eating Less Meat:** The amount of meat we consume has an impact on resource use as producing meat takes a lot of food and water. Meatless proteins, like beans and



lentils use fewer resources to grow, and are excellent proteins, but some of us need some help with finding tasty recipes for these foods.

- Research the footprint of some of the foods we eat.  
<http://www.ewg.org/meateatersguide/a-meat-eaters-guide-to-climate-change-health-what-you-eat-matters/climate-and-environmental-impacts/> has a ranking of the carbon footprints of a variety of foods including beef and lentils.
- Agriculture in the Classroom has a grade 4 Social Studies Unit called: Agriculture: The Heart of Saskatchewan's Past, Present and Future.  
[www.aipc.sk.ca](http://www.aipc.sk.ca)
- Research a number of ways we can get protein in our diets, and the impact growing those proteins has on our environment. Create a chart with the pros and cons of each.
- Challenge your self, your family, your class or your school to eat less meat. Try out several meatless recipes and decide which are your favourites. Then plan some actions that would reduce the amount of meat you eat each week.

**Eating Locally:** Eating foods that are grown near where we live reduces the distance that food is traveling to get to us. That is better for the environment because there will be fewer vehicle emissions, compared to food that comes from a long way away. How do we find locally grown foods in our communities, and how can we encourage stores to stock these foods?

- [www.seedmap.org](http://www.seedmap.org) has a number of resources about food security and case studies about climate change and where our food comes from.
- Where do the foods you love come from, and can you find substitutes made or grown in Saskatchewan? Make posters or presentations of this information to let everyone in the school know what you have learned. Challenge your class or school to eat local produce for two weeks.
- As a class, keep track of how many kilometers you save each time you eat something local. For example, the math below compares the kilometers that local carrots travel to carrots that come from California. Make a chart showing the distances, and the amount of fuel and CO<sub>2</sub> that were saved by making local choices.
- **Calculating fuel consumption:**  
A semi-truck uses 0.23 ml fuel/km, so fuel used is:  
.23ml fuel/tonne.km x distance (km) = ml/tonne of fuel.  
Compare - 1 tonne of carrots from California (3000km away)  
And 1 tonne of carrots from Rosetown (150km away)  
.23ml fuel/tonne.km x 3000km = 690ml of fuel per tonne CA carrots.  
.23ml fuel/tonne.km x 150km = 34ml of fuel per tonne SK carrots.



- **Calculating CO<sub>2</sub> emissions:**

Diesel fuel emits 2.7 kg CO<sub>2</sub> per litre.

690 ml fuel x 2.7 kg CO<sub>2</sub>/litre x 0.001 litre/ml = 1.9 kg CO<sub>2</sub> tonne CA carrots.

34 ml fuel x 2.7 kg CO<sub>2</sub>/litre x 0.001 litre/ml = 0.092 kg CO<sub>2</sub> per tonne SK carrots.

- Find out the location of farmers' markets in your area. Are they open all year round or just during the growing months? Visit one to buy produce to make a meal for your class.
- Research Community Supported Agriculture (CSA). What is it, and are there farmers near you? How could a family make use of CSA?
- Survey one or two grocery stores in your area. What kinds of local produce do they carry? Is it clearly marked and easy to find? What local foods are available at different times of the year?

**Gardening:** Growing our own food in a home, community or school garden is something more and more of us are doing, but it doesn't come without some problems like weather conditions, weeds, and bugs.

- Does your school have a community garden on the grounds, or nearby where your class could grow some of your own vegetables?
- Is there a space on the school grounds that could be turned into a garden?
- More and more communities and schools are growing some food in gardens, and learning a lot about where to place them, how to build raised beds, and where to find containers to hold water and compost. Ask around for advice about where to start, and who can help. Agriculture in the Classroom has a number of resources on how to grow gardens, including their Little Green Thumbs program about growing indoors. [www.aipc.sk.ca](http://www.aipc.sk.ca). The Child Hunger and Education Program (CHEP) in the Saskatoon area, also supports community and school gardens with a number of initiatives. [www.chep.org](http://www.chep.org)
- Soup for lunch: Have each student bring one home grown or local food item to put in a soup. Make the soup and share it with the school.
- Use garden produce to plan, and make a harvest meal to share with parents and friends.

**Buying Organic Food:** Organic food production omits the use of fertilizers, pesticides and herbicides that can harm beneficial insects and leach into our watersheds. Where can we find food like that in our communities, and how can we encourage people to buy it?

- Find out the location of farmer's markets and whole food markets in your area. They are often a good source of organic produce, and there may be other producers in and around your community.
- Research Community Supported Agriculture, or local growing associations for information on organic foods.
- [www.environmentalsociety.ca](http://www.environmentalsociety.ca) has information on pesticide free gardening under the biodiversity heading.



## Curriculum Connections

**Grade 1 Social Studies DR1.3** Demonstrate awareness of human's reliance on the natural environment to meet needs, and how location affects families in meeting needs and wants.

**Grade 2 Social Studies RW2.3** Contribute to initiating and guiding change in local and global communities regarding environmental, social, and economic sustainability.

**Health Education USC2.2** Determine how healthy snacking practices influence personal health.

**Grade 3 Social Studies IN3.3** Illustrate examples of interdependence of communities.

**Grade 4 Social Studies RW4.2** Investigate the importance of agriculture to the economy and culture of Saskatchewan.

**Health Education AP4.1** Design and apply, with guidance, two four-day action plans that require communication related to healthy eating and physical activity, prevention/management of health challenges, negotiating disagreements, safety and protection, personal identity, and stressors.

**Grade 5 Science HB5.1** Analyze personal and societal requirements for, and impacts of, maintaining a healthy body.

**Health Education USC5.1** Analyze personal eating practices.**AP5.1** Design and implement, with guidance, two five-day action plans that embrace health opportunities or address health challenges related to personal eating practices, changes of puberty, impact of illness/disease, identity and well-being, violence, peer pressure, and self-regulation.

**Grade 6 Social Studies RW6.2** Contribute to initiating and guiding change in local and global communities regarding environmental, social, and economic sustainability.

**Grade 7 Social Studies RW7.3** Assess the ecological stewardship of economies of Canada and the circumpolar and Pacific Rim countries.

**Health Education DM7.8** Examine and demonstrate personal commitment in making health decisions related to blood-borne pathogen information, safety practices, harmonious relationships, food choices, interpersonal skills, and morality.**DM7.9** Examine health opportunities and challenges to establish personal commitment goal statements related to blood-borne pathogen information, safety practices, harmonious relationships, food choices, interpersonal skills, and morality.**AP7.10** Design, implement, and evaluate three six-day action plans that demonstrate personal commitment to responsible health action related to blood-borne pathogen information, safety practices, harmonious relationships, food choices, interpersonal skills, and morality.

**Grade 8 Social Studies RW8.1** Analyze the social and environmental consequences of living in the Canadian mixed market economy based on consumerism. **RW8.2** Assess the implications of personal consumer choices.

**Health Education USC8.6** Examine and assess the concept of sustainability from many perspectives, and develop an understanding of its implications for the well-being of self, others, and the environment.**AP8.10** Design, implement, and evaluate three seven-day action plans that establish multiple supports for responsible health action related to family roles and responsibilities, non-curable infections/diseases, violence and abuse, body image, sustainability, and sexual health.