

The Food Security Budget Game

Description: Through this activity students will learn about food security and some of the causes of food *insecurity* both globally and at home. Then students will explore how food fits into a household budget through a simulated exercise. Students will get a chance to explore how some real-world challenges can affect the budgets and food choices of families.

To begin...

What is Agriculture?

A definition we frequently use is 'Growing something like crops or producing something, like animals, that we can use to help meet our needs. Agriculture reaches far beyond the farm and includes interests such as science, engineering, banking, marketing'. We often categorize the needs met through agriculture as 'the 4 Fs' of agriculture.

Food – what people eat

Feed – what we are feeding to animals

Fuel – some types of seeds or the non-edible portions on plants can be used to create fuels such as ethanol

Fiber – we use fibre to create materials for goods such as cotton for clothing or flax for linen paper used in making money

The focus of this activity is **food**.

What is food security?

"Food Security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life." - 1996 World Food Summit (FAO, 2008)

Above is the definition given by the United Nations World Health Organization. There is a lot of information packed into that statement.

- By **all people** they mean not just the wealthy or powerful, but that everyone has access to food

- At **All times** means if you have enough food occasionally but it is not the usual circumstance, you wouldn't be considered food secure
- **Physical and Economical** access means you can financially afford enough safe, nutritious food but that you also have means of acquiring it
- **Safe food** means that you can be confident that the food hasn't been contaminated by pathogens, chemicals, physical objects etc. and that eating it won't negatively impact your health.
- **Nutritious food** means that you will get the nutrients- the vitamins, minerals, carbohydrates, fats and proteins that your body needs
- **Dietary needs** are all the things that our bodies can't produce, but we need them to live, so we must get them through our diet. These are things like energy, amino acids, fatty acids, mineral and vitamins. The amounts and types that each person needs depends on things like gender, size, age, level of activity, chronic disease, etc.
- **Food Preferences** are the things we like to eat or things that align with our personal and religious beliefs. For example, access to protein through pork products is okay for some people, but not if you practice a faith that disallows it.
- An **active and healthy life** means that you are eating enough food to meet the energy and nutrients required for people to grow, learn, play, heal etc. not just stay alive.

What can cause food insecurity?

- **Financial Access** is a way of saying that you don't have enough money to buy the food that you need. This is a common barrier and often the most common in developed countries.
- **Physical Access** refers to ability to get the food. **Transportation** can include getting the food from the farm to market or getting food from the market to the consumers. For example, poor roads in a rural area of a developing country may make it difficult for farmers to sell their crops. Living in a core neighborhood of a major city often means that groceries stores are far away. If you don't have a car, you may need to walk, ride a bike, take the bus, hire a taxi or arrange a ride in order to get food. **Storage** is a challenge at the production level in some places. Harvested crops are usually stored in bins in Canada where they are protected from

weather and pests, however, globally speaking, not all farmers have access to safe storage for their harvests. Grain stored outdoors is subject to weather, contamination, pests and ultimately reduced quality. **Geography** can be a factor in food security due to increased cost and storage/transportation requirements. Northern or remote communities pay much more for their food and are vulnerable to shortages and access. **Conflict** poses a challenge when either transportation methods are blocked, or food is held by powerful parties in order to control the people. **Weather** may interfere with the ability to grow or transport food.

- **Increased demand for food**- as population increases and the economies in developing countries improves, so does the demand for food, especially meat. Sometimes meat is produced on marginal land, but sometimes good farmland is converted to pastureland for animals which can have ripple effects in supply.
- **Arable land** is land that is suitable for growing crops and only about 3-5% of the Earth's surface is arable. It is being lost to urbanization (larger cities) and sometimes environmental factors.
- The number of farms is shrinking so farmers must be more efficient in order to produce enough food. Use of different **technologies** allow farmers to farm more land or improve their yields while decreasing inputs. Technologies include things like automated equipment, computerized processes, drone scouting and modified seed. Not all consumers believe that technology should have a role in food production so producers may be limited by market trends. Not all farmers have access to technology do to financial or geographic limitations.
- A **safety breach** at any level during production, shipping, storage or even at the home can cause food loss and may lead to insecurity. This can include physical, chemical or microbial contamination, improper handling conditions, etc.
- **Food Loss** refers to any food that is lost in the supply chain between the producer and the market. This may be the result of pre-harvest problems, such as pest infestations, or problems in harvesting, handling, storage, packing or transportation. Some of the underlying causes of food loss include poor infrastructure, markets, price mechanisms or even the lack of legal frameworks. Tomatoes crushed during transport because of improper packaging is one example of food loss.
- **Food Waste** typically occurs at the consumer level and refers to the discarding or alternative (non-food) use of food that is otherwise safe and nutritious for human consumption. Food is wasted in many ways:

- Fresh produce that deviates from what is considered optimal in terms of shape, size and color, for example is often removed from the supply chain during sorting operations.
- Foods that are close to, at or beyond the “best-before” date are often discarded by retailers and consumers.
- Large quantities of wholesome edible food are often unused or left over and discarded from household kitchens and eating establishments, like restaurants.

Less food and food waste would lead to more efficient land use and better water resource management with positive impacts on climate change and livelihoods.

THINK & ANSWER

What might be some barriers to food security here in Saskatchewan?

How do barriers differ between urban, rural and remote (far northern, island) communities?

What could you do if you were food insecure?



Budget Planning Game Directions

1. Give each participant or group a [budget planner](#) sheet.
2. Cut out and assign at random one of the [context cards](#).
3. Use the given context to help fill out the budget planner. Decide how the context affects the choices you make in terms of spending. Pay attention to your food choices.
4. Cut out and assign at random one of the [Twist of Fate cards](#).
5. Using the Twist of Fate adjust your planned budget accordingly. Pay attention to where you might be making changes.
6. Answer the questions below.
7. Feel free to repeat the budget planning game with different context and twist of fate cards as many times as you wish.

What did you decide to cut from your budget? Why? Did you opt for any creative solutions? Was it a challenge to work within the budget?

How does this activity compare to the lives of people in your immediate community, the province and the world?



Typing it all together...

Using a budget helps to forecast expenses and prioritize purchases so that there is money reserved for food. Making choices such as house brand over name brand may help to increase the amount of money available.

Making a weekly meal plan, sticking to a grocery list, using up leftovers for lunches or buying in bulk and sharing are ways to reduce wasted food and help the food purchased stretch a little further.

Donating food or money to the local food bank or soup kitchen can help neighbours when they are in need.

Food Security

Budgeting Activity



Group Name:

ITEM	CHOICE	COST	CHECK YES	TOTAL
Rent (includes utilities)	2- Bedroom Apt	\$900		
	3- Bedroom Apt	\$1200		
	4- Bedroom House	\$1600		
Groceries	Fresh Fruit and Vegetables	\$80/person		
	Canned Fruit and Vegetables	\$50/person		
	Frozen Fruit and Vegetables	\$40/person		
	Meat	\$50/person		
	Grains/Bread	\$40/person		
	Eggs/Cheese	\$40/person		
	Dessert	\$10/person		
Transportation	Car	\$200		
	Bus pass	\$50/person		
Phone	Cell phone	\$50		
	Home phone	\$60		
Internet		\$60		
Childcare		\$250/child		
After school care		\$100/child		
After school activity		\$50/child		
1 Sport		\$50/child		
Movies		\$20/person		
Dining Out		\$20/person		
Other Expenses				
Other Expenses				
Twist of Fate Card				
Total				

Income \$3000

- You are a family of four
- You must include child care for one child (\$250)
- Both parents need transportation and the family needs at least one car



Income \$2000

- You are a family of four
- You need a car for groceries because you live on the outskirts of the city
- Medical expenses cost an extra \$100/month



Income \$4000

- You are a family of four
- You must include child care for one child (\$250)
- Both parents need transportation and the family needs at least one car



Income \$4500

- You are a family of four
- You have one child in child-care (\$250)
- Each parent needs a car for work
- You must pay for afterschool care for one child (\$100)



Income \$3500

- You are a family of four
- You need a car for groceries
- You must include child care for one child (\$250)
- You have medical expenses of \$150/month



Income \$4500

- You are a family of four
- You must pay medical insurance (\$200)
- Each parent needs transportation
- One parent is taking classes at night. Add \$200 expense.



Twist of Fate

You have registered for a course needed for your job. You need to budget for an extra \$150 this month.



Twist of Fate

You have an unexpected medical expense. Budget for an extra \$100 this month.



Twist of Fate

Your car insurance is due. Budget for an extra \$200 this month.



Twist of Fate

You were invited to a birthday party. Budget an extra \$50 for a gift this month.



Twist of Fate

Your car needs a repair. Budget \$300 to fix, or if possible obtain a bus pass.



Twist of Fate

It's been an especially cold winter. Budget an extra \$100 for utilities.



Twist of Fate

Your child is going on a field trip. Budget an extra \$50 for the cost.

