

Norman Borlaug

1970

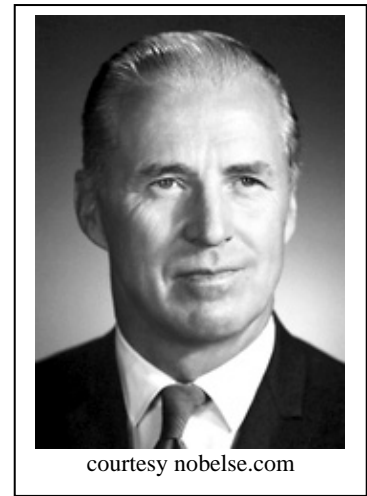
Food is the right of all who are born into this world.

Norman Borlaug was born in Iowa in 1914. He grew up on his grandfather's farm. His grandfather told him to always work hard and to help other people.

Borlaug went to college and learned about plants. He learned how to grow better **crops**.

In 1944 he went to Mexico. He had a farm where he learned to grow wheat that would not have **diseases** but grew strong.

He wanted to grow food to help feed all the hungry people of the world.



- **He was Born in 1914**
- **He grew up on a farm**
- **He grew wheat for hungry people**
- **He fed one billion people**
- **He worked in the fields with his students and visitors**

His new wheat was healthy. People planted it in Mexico, India, Pakistan, South America, the Middle East, and Africa.

Some people thought the new wheat might not grow. If it did not grow many people who planted it would go hungry. Farmers also wondered if the **chemicals** used to grow the crop could hurt humans.

Farmers wanted to grow more than one crop. This is called **Biodiversity**. If one crop does not grow there are others for people to eat.

In Mexico students from all over the world visited the farm to help Borlaug and learn about growing healthier crops. More than 2000 students have worked at this farm from sixteen different countries. After they worked on

the farm they went back to their country to share what they had learned. This is the way Norman Borlaug helped the world be more peaceful. He said that people who were not hungry would not want to fight in wars.

Dr. Borlaug worked on growing better crops until 2007. He has a new crop called **triticale**. Triticale is wheat and **rye** mixed together. He worked at his farm until he was 90 years old.

Borlaug was awarded the 1970 **Nobel Peace Prize** for his work in feeding the world.

He has saved more than one billion lives.

Many countries have thanked him for helping them grow better crops. Canada, India, Mexico, Norway, Pakistan, and the United States have given him awards. In 1968 the people of Mexico named a street after him.

At his farm in Mexico he slept on the ground in old sheds, hitched rides and made tractors from broken-down parts. Borlaug worked in the fields with his students and met important visitors there.

In 2008 Dr. Borlaug worked with President Jimmy Carter to help feed countries in Africa.

Suggested Classroom Activities Norman Borlaug

Questions

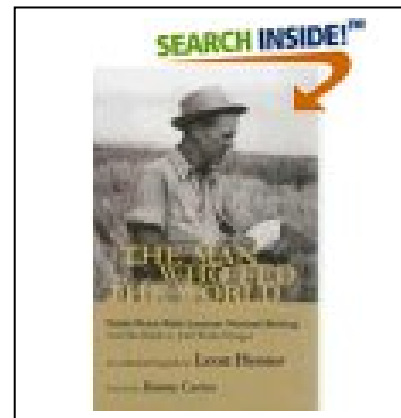
1. What did Borlaug's grandfather tell him? Did he listen to his grandfather?
2. What did Borlaug do at the farm in Mexico?
3. How does food help bring peace in the world?
4. How did Borlaug share his ideas about food?

Vocabulary

1. Crops
2. Disease
3. Chemicals
4. Biodiversity
5. Triticale
6. Nobel Peace Prize

Read Together

[The Man Who Fed the World: Nobel Peace Prize Laureate Norman Borlaug and His Battle to End World Hunger by Leon Hesser \(Hardcover - Aug 1, 2006\)](#)



[Feeding Minds, fighting Hunger](#)

This is a project developed to teach about hunger.

Objective 1: To understand the food system that feeds people

Materials

Miguel got sick and could not care for the plants, the truck to the city broke down and the tomatoes spoiled, etc.). The teacher can lead a discussion about the ultimate effects of a breakdown at any stage of the food system on the food supply of a community.

Activities

- * Ask the children where we get our food. (If they say a market or the grocery store, ask them where do the markets and grocery stores get the food?) Tell them the food starts with the farmer.
- * Now tell the children that you are going to read a story about a farmer and his tomatoes. Ask them to think about all of the things that might happen to the food before it is eaten. Read *The Story of Miguel's Tomatoes* out loud to the children.

Discussion

Hold up the picture *Steps in the Food System*. Tell the children that there are five major steps that must happen for food to be available.

- * Getting ready to grow food
- * Growing the food
- * Moving food from the field
- * Processing, selling or storing the food
- * Preparing and eating the food.

The Story of Miguel's Tomatoes

Ask the children to think about these food system steps in the story about Miguel and his tomatoes.

Getting ready to grow food:

- * What did Miguel need to begin growing his tomatoes? Seeds, fertilizer, a plough and land.
- * What would happen if these were not available? Could Miguel grow tomatoes without these supplies?

Growing the food:

- * What did Miguel need for the tomatoes to grow? Sunshine, rain, his hands to work, weed and care for the tomatoes (labor), understanding of growing food, the land and agriculture (education/knowledge).
- * Could Miguel's tomatoes have grown if these were not available?

Moving food from the field:

- * Where were Miguel's tomatoes moved to after he and Ana picked them?
- * Some were taken to Miguel and Ana's house to be eaten for dinner or to put into jars to store.
- * Miguel took the rest to the village market in a cart.
- * At the village market they were loaded into a truck and taken to the city.
- * Some were taken to the city market.
- * The rest were taken to the food processing factory.
- * How far did the tomatoes travel for Miguel and Ana's dinner?
- * How far did the tomatoes travel to get to the city? How did they make this journey? (Miguel's cart, Pedro's truck).
- * What would happen to the tomatoes if the cart or truck broke down on the way?

Processing or selling the food:

- * How did Ana process the tomatoes?
- * How did Miguel sell his tomatoes?
- * How did Pedro re-sell the tomatoes?
- * What happened to the tomatoes at the food processing factory?

Eating the food:

- * Discuss how people need money to buy food unless they grow their own as Miguel and Ana do.
- * Discuss how people must understand how to use the food safely and choose foods that keep them healthy.
- * Discuss the problems that could arise with each of the above steps and how the food would then not be available for people to eat.
- * Discuss the difference between the foods that were eaten directly by Miguel and Ana from their field and the tomatoes that came back in a can.

Picture: Steps in the Food System

Story: The Story of Miguel's Tomatoes

Concept: The system that provides us with food involves many steps

Content

Steps involved in the food system include:

- * Getting ready to grow food
 - * Growing the food
 - * Moving food from the field
 - * Processing, selling, or storing the food
 - * Preparing and eating the food.
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- * Each of these steps involves many processes and considerations. And each process may involve many people, such as bankers, agriculture suppliers, extension workers, farmers and farm workers, truck drivers, food handlers, millers, bakers, as well as different conditions, such as weather, roads and economic and political stability. This complexity makes our food supply vulnerable.
 - * The number of steps involved and the processes in each step depend on the specific situation for each community and family.
 - * Local food systems, including home gardening and small farms, may decrease the complexity of the processes involved, or even eliminate steps such as moving, processing or selling. Home gardens can increase family security by providing sufficient food for the family, as well as income from garden surplus.
 - * However, even a home garden may depend on other people to supply certain needs such as seeds, tools, fertilizer, milling of grain or rental of land and farm equipment. And all farms are vulnerable to weather conditions.
 - * The Story of Miguel's Tomatoes is designed to trigger discussions about each of the steps in the food system. It can be read to younger children to illustrate how food is grown, transported and processed.
 - * Older children can read the story alone or in groups. The discussion can be more detailed for older children, and include asking them to imagine all of the additional processes involved with each step in the journey of the tomatoes and what would happen if things went wrong (no rain,

Resources

<http://macserver.independence.k12.ia.us/~jlang/Education/HSLesson.htm>

This is the resource page for the activity above.

<http://macserver.independence.k12.ia.us/~jlang/Education/NormanBorlaugResources.htm> Borlaug quotes, facts, and information

<http://macserver.independence.k12.ia.us/~jlang/Education/BorlaugIntro.htm>

Exploring the Life and Science of Norman Borlaug – Nobel Peace Prize Recipient and Native Iowan

<http://www.worldfoodprize.org/> The World Food Prize home site

<http://macserver.independence.k12.ia.us/~jlang/Education/EducationalActivities.html> The Norman Borlaug heritage foundation

http://www.oxfamamerica.org/whatyoucando/act_now/fast Oxfam world hunger site

http://nobelprize.org/nobel_prizes/peace/laureates/ Nobel Peace Laureates