

Feed the World

Activity 1: Article

Students should be instructed to read **Feast or Famine: Meat Production and World Hunger** by Mark Hawthorne carefully.

Activity 2: Comprehension

Students should answer the following questions in order to heighten their comprehension of the issues surrounding world hunger:

Questions

1. The writer describes a picture he saw in a museum in Washington. What does the picture symbolise to him?
2. How is meat consumption linked to hunger?
3. What happened during the Ethiopian famine of 1984?
4. Why is the writer particularly worried about recent trends in meat consumption?
5. Why does the writer argue that it's better to grow soya beans than to raise cattle for meat?
6. What pun does the writer use?
7. What might someone from the meat industry say about growing grain and soya beans rather than meat?
8. What action does the writer think should be taken?

Background

There is more than enough food in the world to feed the entire human population, but millions of people still go hungry. By designing their own multiple-choice quizzes, students will explore the link between meat production and world hunger.

Learning Objectives

Children should learn the following:

- To explore the link between the meat industry and world hunger
- What it means to be a global citizen
- That local actions can have global implications

Accompanying Materials

Feast or Famine: Meat Production and World Hunger by Mark Hawthorne (student handout)



Activity 3: Multiple-Choice Quiz

1. Divide the class into teams. Teams could be named after different countries. Each team should prepare five multiple-choice questions (with three possible answers for each question) based on the content of the article and other Meat Free Monday issues. For example, they might come up with something like, "According to the United Nations, how many people go hungry every day? a) 14 million b) 500 million c) 854 million".
2. Once the questions are prepared, each team's members should choose a delegate to read out the questions for them. Give each team a small whiteboard, a whiteboard pen and 10 coloured counters.
3. The Team A delegate should ask the first question. Members of Team A should not participate, but all the other teams should write down a), b) or c) on their whiteboards. Depending on how confident they are about their answers, team members should then decide whether to risk one, two or three counters, and place these in the centre of the table. One member of each team should hold up their whiteboard. The Team A delegate should then announce the correct answer. The teams holding up the right answer double up the number of counters they risked. The teams holding up incorrect answers forfeit the counters.
4. The quiz continues in the same vein, with teams taking turns reading their questions. If a team runs out of counters, it can still take part but will only receive one counter for each correct answer. The aim is to accumulate as many counters as possible. When all the questions have been answered, the team with the most counters wins.

Extension Ideas

- Explain that The United Nations is meeting to discuss the problems that come with an increasing world population. Students should do further research and write a formal report about how everyone can be fed.
- Design a public-information poster highlighting the problems the world faces and ways that the public can help.
- Teach students how energy is transferred in an ecosystem. Demonstrate how to draw and explain food chains and webs. Focus in particular on a human vegetarian's and a human omnivore's food chains. Show students why it is more efficient to eat grain directly than to transfer the energy through animals (since only 10 per cent of the energy from the food that is given to animals is transferred up each level of the food chain and the rest is used to support respiration, growth, movement, etc.). Have students draw biomass pyramids and make graphs to compare land-use efficiency in beef, pork, milk, egg, wheat, potato and soya bean production.
- The Belgian city of Ghent promotes an official meat free day each week (Donderdag Veggidag), and initiatives such as Meat Free Monday (UK), Meatless Monday (USA) and Segunda Sem Carne (Brazil) advocate a similar reduction in meat consumption. There are also weekly meat free day campaigns in Argentina, Australia, Bolivia, Canada, Chile, Colombia, Croatia, Denmark, Estonia, France, Germany, Ghana, Honduras, Hong Kong, Hungary, Indonesia, Iran, Israel, Italy, Jamaica, Japan, Kuwait, Luxembourg, Malaysia, Mexico, Myanmar, Nepal, the Netherlands, New Zealand, Norway, Peru, the Philippines, Portugal, Russia, Slovenia, South Africa, South Korea, Spain, Sweden, Taiwan, Thailand, Togo, Turkey and the United Arab Emirates. Have students research and report on one of these campaigns. Discuss the similarities and differences between them.



Feast or Famine: Meat Production and World Hunger

By Mark Hawthorne, *American Chronicle*, 12 August 2008

Reproduced by kind permission of Mark Hawthorne.

Hanging in the Newseum in Washington, DC, is a photo that is about as heart-rending an image as you're likely to find anywhere. Taken by Kevin Carter for The New York Times in 1993, the photo depicts a starving Sudanese toddler crumpled on the ground, as if her stick-like legs could no longer bear the weight of her large head and swollen stomach, bloated from the malnourishment disease called kwashiorkor. While that alone is disturbing, what makes the tableau truly haunting is the vulture patiently waiting just a few feet behind the emaciated child. This photograph earned Carter a Pulitzer Prize and epitomized the toll famine is taking on developing countries around the world.

Tragically, of course, hunger has only become an even graver issue in the last 15 years – a point made clear in a report released July 29 from the Center for Strategic and International Studies (CSIS). Recommending urgent action for long-term relief, the CSIS report calls for "a strategic U.S. approach to the global food crisis."

"Food crisis," however, implies some recent, short-term cause and effect, when in fact the "perfect storm" of rising energy costs, grain hoarding, government subsidies, drought and the demand for biofuels diverts attention from an entrenched industry and a remedy neither the CSIS nor many social activists want to contemplate: eliminating meat production.

"Whoa!" you say. "Don't take away my steaks and cheeseburgers." Meat-eating is such an ingrained aspect of Western culture that proposing its demise, even to save the world, deserves some discussion. Fair enough.

The United Nations estimates that 854 million people – nearly 13 percent of the world's human population – go hungry every day. And the problem is only getting worse. Josette Sheeran, executive director of the UN's World Food Program, says, "The world's misery index is rising."

So is our hunger for meat. As Gene Baur observes in "Farm Sanctuary: Changing Hearts and Minds About Animals and Food," in 1950, 50,000 farms produced 630 million "meat" chickens in the United States. By 2005, the U.S. had 20,000 fewer farms – but they were producing 8.7 billion chickens for meat. That's a lot of chicken feed. In fact, every year industrial animal factories in the U.S. feed 157 million metric tons of legumes, cereal and vegetable protein to livestock, resulting in 28 million metric tons of animal protein for human consumption. Nutritious plant-based food that could feed humans instead goes to feed animals in a very inefficient use of resources.

Jeremy Rifkin, president of the Foundation on Economic Trends in Washington, DC, states it succinctly: "People go hungry because much of arable land is used to grow feed grain for animals rather than people." He offers as one example the

Ethiopian famine of 1984, which was fueled by the meat industry. "While people starved, Ethiopia was growing linseed cake, cottonseed cake and rapeseed meal for European livestock," he says. "Millions of acres of land in the developing world are used for this purpose. Tragically, 80 percent of the world's hungry children live in countries with food surpluses which are fed to animals for consumption by the affluent."

The demand for meat has been especially dramatic in developing countries. "China's meat consumption is increasing rapidly with income growth and urbanization, and it has more than doubled in the past generation," says Rosamond Naylor, an associate professor of economics at Stanford University. As a result, land once used to provide grains for humans now provides feed for chickens and pigs.

The USDA and the United Nations state that using an acre of land to raise cattle yields 20 pounds of usable protein. If soybeans were grown instead, that same acre would yield 356 pounds of protein. Animal agriculture also wastes valuable water resources. Population biologists Paul and Anne Ehrlich note that a pound of wheat can be grown with 60 gallons of water, whereas a pound of meat requires 2,500 to 6,000 gallons.



Here's another way to look at it. According to the aid group Vegfam, a ten-acre farm can support 60 people growing soybeans, 24 people growing wheat, ten people growing corn and only two people producing cattle. Reducing meat production by just ten percent in the U.S. would free enough grain to feed 60 million people, estimates Harvard nutritionist Jean Mayer. Sixty million people – that's the population of Great Britain, which, by the way, could support 250 million people on an all-vegetable diet.

Not surprisingly, the meat industry has a beef with these statistics. They say, for example, that the grains and soybeans fed to farmed animals are not of the high quality that humans would expect to eat (tell that to a starving child). Yet it's difficult to dispute the fact that animal agribusiness uses land and water that could be used to grow plant foods for human consumption.

As Rifkin observes, it is ironic that millions of consumers in developed countries are dying from diseases of affluence such as heart attacks, diabetes and cancer, brought on by eating animal products, while the poor in the Third World are dying of diseases of poverty caused by being denied access to land to grow food grain for their families.

"We are long overdue for a global discussion on how to promote a diversified, high-protein, vegetarian diet for the human race," says Rifkin, whose book "Beyond Beef: The Rise and Fall of the Cattle Culture" addresses the moral paradoxes of eating meat.

Are those steaks and cheeseburgers really worth all the lives



they take – human and non-human? It would be naïve to think the world will go vegetarian overnight, or even in a few decades. But looking at Carter's powerful photograph, I can't help but believe we have been woefully mistaken in how we treat those with whom we share this planet. If we hope to bequeath a sustainable world to future generations, we'll have to shake loose this meat-produced disaster and embrace a kinder way of living.

