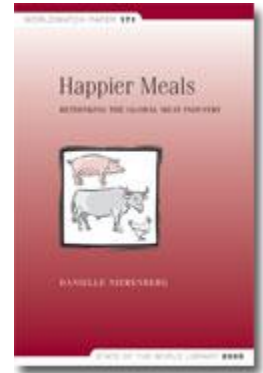


Worldwatch Paper #171: Happier Meals: Rethinking the Global Meat Industry

September 2005
Danielle Nierenberg
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91 pages

In *Happier Meals: Rethinking the Global Meat Industry*, Worldwatch researcher Danielle Nierenberg documents the harmful effects of factory farming in both industrialized and developing countries and explains the range of consequences for the environment, human health and communities. From transmission of disease and loss of livestock diversity to hazardous and unsanitary processing methods, this book shows clearly why factory farming is an unsafe, inhumane, and ecologically disruptive form of meat production.

On the brighter side, *Happier Meals* tells you how you can make a difference by supporting local, organic, or pasture-raised animal products; embracing alternative production methods; or including a few vegetarian meals a week to help ensure that meat is made better for people, the environment, and the animals themselves.



Sample Figure from *Happier Meals*.

FIGURE 4

The Ins and Outs of Meat Production

INPUTS

Feed

- A calorie of beef, pork, or poultry needs 11–17 calories of feed.
- 80 percent of soybean harvest is eaten by animals, not people.
- Feed containing meat and bone meal can cause mad cow disease, which has affected thousands of cattle in industrial countries.

Water

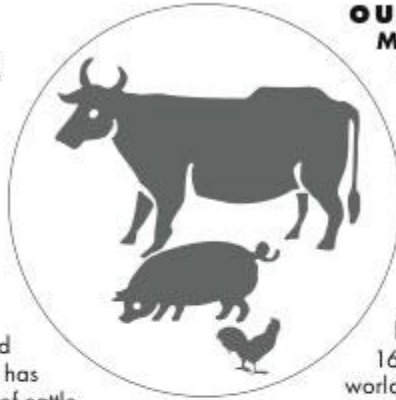
- Producing 8 ounces of beef can require up to 25,000 liters of water.

Additives

- Cows, pigs, and chickens get 70 percent of all antimicrobial drugs in the United States.

Fossil Fuels

- A calorie of beef takes 33 percent more fossil-fuel energy to produce than a calorie of energy from potatoes would.



OUTPUTS

Manure

- Manure from intensive pig operations stored in lagoons can leak into groundwater or pollute nearby surface water.

Methane

- Belching, flatulent livestock emit 16 percent of the world's annual production of methane, a powerful greenhouse gas.

Disease

- Eating animal products high in saturated fat and cholesterol is linked to cancer, heart disease, other chronic illnesses.
- Factory farm conditions can spread *E. coli*, *Salmonella*, and other food-borne pathogens.
- Creutzfeldt-Jakob disease, the human variant of mad cow disease, has killed at least 150 people.

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