## BEST FOOTPRINT FORWARD





## SOMETHING TO CHEW ON

Is organic farming the healthiest, greenest way to feed the world? It depends on whom you ask. Taking into account the various long- and short-term consequences, though, we're opting to plant our stakes on the natural side. BY SARAH MURRAY

# CONVENTIONAL FARMING

VS.

ORGANIC FARMING

### **WORKING IT**

In 2011, the organics industry added new jobs at four times the national average, per the Organic Trade Association.

JOBGANICS INDUSTRY
GENERAL ECONOMY
GENERAL ECONOMY
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CONGANICS INDUSTRY
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CONGAN

BY THE NUMBERS



If the PLU code is five digits starting with a 9, the item is organic. Conventional produce numbers are only four digits. POLLUTION

Fertilizer runoff pollutes coastal areas and can strip water of oxygen, spur algae growth, and kill marine life.

CARBON EMISSIONS Fertilizers are the biggest source of nitrous oxide (a potent greenhouse gas).

ECOSYSTEM HEALTH

SOIL

QUALITY

WATER

CROP

YIELD

Industrial agriculture favors planting the same crop over large areas, which increases the risk of pests.

Synthetic fertilizers acidify soil and damage the microbial community.

But conventional "no-till" cultivation (no plowing) can help retain carbon.

Pesticides used in largescale industrial farming can leach into the soil and pollute groundwater sources.

A 2011 study by the Dutch Wageningen University said that conventional methods yield 20 percent more food. No chemical pesticides or fertilizers are applied to organic crops.

Organically fed livestock produce more methane (also a potent greenhouse gas) than conventionally fed animals.

Organic practices foster biodiversity, and these farms tend to have more seminatural habitat.

Some studies show that organic farming methods can help increase carbon levels in soil, but more plowing may be required in order to control weeds.

Groundwater contamination is less of an issue, and organic farming helps soil retain more moisture.

A 30-year Rodale Institute study found that organic corn and soybean yields equal conventional ones. 66

When it comes to nutrition, the organic-conventional breakdown doesn't work. With some nutrients, conventional food is better, and with others, organic is better.

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-JAMES MCWILLIAMS, AUTHOR OF JUST FOOD

**AMERICANS SPENT** 

\$29

BILLION

on organic groceries in 2011—up from \$1 billion in 1990, according to the Organic Trade Association.

#### **BETTER GO ORGANIC**

When farmed conventionally, these fruits and vegetables currently have the highest levels of residual pesticides, according to the Environmental Working Group.

FROM BAD... CONTAMINATION SCALE ... TO WORST TO