



Reducing Food Waste: It's More Than Just Cleaning Your Plate

Posted by Robert Fireovid, ARS National Program Leader for Quality and Utilization of Agricultural Products, on July 11, 2013 at 12:15 PM

When you think of steps that can be taken to improve our environment and mitigate climate change, “reducing food waste” probably doesn’t come to mind right away. But in fact, food waste is an important factor in climate change, because wasted food represents 20 percent by weight of the solid waste going to landfills. This decomposing food quickly generates methane, a greenhouse gas 21 percent more potent than carbon dioxide.

Wasted food also represents a drain on natural resources—after all, land and water are needed to produce that food. That’s why the U.S. Department of Agriculture has collaborated with the U.S. Environmental Protection Agency to launch the U.S. Food Waste Challenge, calling on producer groups and others to join in efforts to reduce food loss and waste, recover wholesome food for human consumption, and recycle discarded food to feed animals, produce compost or even generate energy.

Science can play an important role in cutting down on food waste. At USDA’s Agricultural Research Service (ARS), we’ve been conducting research at laboratories across the country to create new technologies or newly apply existing ones to curb food waste.

ARS scientists have developed an ozone-based treatment that growers of organic grapes can use post-harvest to inhibit *Botrytis cinerea*, the microbe that causes gray mold.

We’re also investigating the combined use of refrigeration, improved packaging and a natural compound that delays ripening to help perishable foods like strawberries and tomatoes stay fresh longer during shipping and storage.

We’re working to identify storage conditions that will minimize spoilage and losses in new food products such as “microgreens”, harvested when they’re very young and small from plants such as buckwheat or broccoli.