For a nation with five percent of the world’s population, the United States has an outsized environmental footprint. Americans consume a third of global resources and create a third of the planet’s waste. The food industry plays a significant role in this resource imbalance: results from the 2010 US Food and Agriculture Organization survey show that American’s consumed 271 pounds of meat per person, per year, nearly three times the global average. Statistics from the National Institute of Health show that two thirds of American adults are obese or overweight.

In addition to negative health impacts, this level of consumption has serious environmental consequences. Beef production emits 57 times more greenhouse gas than potato production. It takes as much water to produce a single pound of beef as an average person uses to bathe in a year. Despite such resource-intensive production, nearly a third of annual US food production goes to waste.

Arguments for changing this unsustainable paradigm typically rely on guilt or economic factoids as sources of external motivation. However, research suggests that positive internal motivation or incentives can be more effective in changing behavior. A University of Michigan Dow Fellows project team sought to change attitudes towards overconsumption by developing and telling stories. These stories are designed to help increase healthy and less wasteful food habits, as well as highlight interesting and fun aspects of behavior change.

Intrinsic satisfaction lies in finding personal connections. According to a U-M researcher, connections can come through one or more of the following: a heightened sense of competence; meaningful participation in problem-solving activities; sensible frugality; carefully calibrated indulgence in luxury; or a sense of fun.

When people convey their intrinsic satisfaction through storytelling, others can be motivated to enact similar changes. Good stories turn abstract concepts and statistics into authentic, memorable, and personal messages. These messages, framed around positive interactions with food and resource use, can be powerful catalysts to prompt more widespread behavior change.
COLLECTION OF STORIES ONLINE

The U-M project team conducted interviews through an online questionnaire to better understand how intrinsic motivations have encouraged people to practice intentional food production and consumption. They collected and categorized approximately 40 stories. Some examples of food-related behavior change included: joining a community-supported agriculture program, becoming vegan or vegetarian, learning to cook healthy food, starting a garden, working on a farm, and volunteering with community food service organizations. These stories were published online at www.ourfoodstories.org, an educational website with information about food waste and overconsumption and the concept of intrinsic satisfaction. The website also serves as a vehicle for gathering more stories.

The project team’s web tool demonstrates how storytelling provides a meaningful vehicle for motivating positive behavior change in businesses, governments, and non-profit organizations. The storytelling model can also be expanded beyond food consumption and waste to target behaviors related to electronics consumption, online shopping, and more.

In addition to developing a website with stories, students developed a sophisticated infographic to demonstrate key points about the intrinsic satisfaction framework, the results of an online survey and excerpts from the stories.

“I have learned that food has the power to change the world. If we can get one person in each family to focus on the food, to have a nice meal ready three times a day for the family, then the individual family members’ health begins to improve…”

Behavior changes represented include joining a CSA (community-supported agriculture, or farm share), buying local, eating healthy, gardening and having a greater appreciation for the food system. See details of the infographic, right, and read the complete infographic online.