FOOD SECURITY

Improving access to healthy foods

A healthful diet provides sufficient, safe and nutritious foods. Healthy eating can reduce the risk of disease and improve wellbeing, but many people don’t have access to or can’t afford healthy foods. Plus, food production faces many challenges. Climate change, pests and diseases threaten to reduce yield and quality. Land-grant university research and Extension projects are addressing these challenges and ensuring healthy diets are affordable and accessible for everyone, including future generations.

HERE ARE A FEW EXAMPLES OF THAT WORK:

• Programs in California helped members of three tribal communities learn new skills, gain resources and develop networks that improve food security, health and well-being, and tribal sovereignty. Programs strengthened canning, baking, butchering, drip irrigation and seed-saving skills and resulted in two new community gardens, six new greenhouses and eight revitalized orchards in tribal communities as well as six trained tribal Master Gardeners.

• As a result of hands-on urban farming trainings in Virginia, three low-income communities established demonstration gardens to teach and feed their neighbors. An estimated 14,000 pounds of fresh produce was distributed to 65 low-income families, saving each household an estimated average $650 on their grocery bills last year.

• Various outreach and training programs in Connecticut are connecting local farmers to schools and other consumers.

• In the U.S. Virgin Islands, 50% of participants in the Garden 2 Table Training initiative successfully produced vegetable crops in their home gardens, providing fresh, healthy food for families and lowering their grocery expenses.

• After working with local Extension educators, nearly 10,000 Kentuckians were able to supplement their diet with fruits and vegetables they grew and preserved. Almost 15,000 began using a new access point for fruits and vegetables, such as farmers markets and local food pantries. Seventy-nine restaurants are now offering locally grown, healthy foods on their menus.

• In Virginia, Extension educators helped establish eight tilapia aquaculture systems within or close to food desert communities, conducted market feasibility studies and offered tasting events. Providing up to 3,840 tilapia each year, these aquaculture systems give residents easier access to fresh fish. Each of these aquaculture systems could earn a gross income of $720 to $1,440 annually, with a total estimated local economic benefit of $9,560 to $19,123.

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• Extension educators in Maine mobilized gardeners, farmers, businesses, schools and civic groups to grow and donate high-quality produce to distribution sites and directly to neighbors in need. In 2018, volunteers donated 231,752 pounds of fresh produce (valued at almost $400,000) to 187 distribution sites, helping mitigate hunger and improve nutrition and health.

• In North Carolina, high schoolers are working with Extension educators to grow and sell vegetables from a school garden, providing local, fresh food for their school.

• Researchers in Iowa showed that SNAP and WIC (two USDA food assistance programs) are complementary, not redundant; participating in both programs, compared with SNAP alone, increases household food security by up to 24 percentage points.

• California researchers co-led a food security symposium that increased awareness of food assistance resources, improved understanding of policies that influence food security and created opportunities for collaborative solutions.

• Researchers in multiple states are improving heat tolerance in crops and livestock, ensuring food security in warm climates.

• Illinois researchers have shown that changes in seasonal precipitation patterns are harming agriculture and exacerbating civil conflict in the Philippines, which could lead to increased poverty and food insecurity.

EATING BUGS
As the world population increases and puts additional strain on the food supply, Americans will need to consider alternative protein sources to meet their nutritional needs in the future. The thought of eating bugs may be shocking to many Americans, but more than 2 billion people worldwide eat insects as part of their daily diet. Land-grant universities across the nation are working to make insects an attractive protein source. For example, researchers in Wisconsin found that eating crickets is not only safe, but can be beneficial to gut health and the immune system. In Virginia, youths participating in Bug Cuisine curriculum and trainings learned how eating bugs improves food security; gained skills needed to prepare tasty snacks, entrees and desserts with bugs; and shared their knowledge and recipes with families and friends.

MAKING FRUIT MORE APPEALING TO CONSUMERS
Poor fruit quality is a major reason people don’t eat more fresh fruit. Researchers at land-grant universities in multiple states are finding effective ways to protect fresh fruit quality during storage, shipping and handling, which often leads to bruising, browning, rot and deterioration of texture and flavor. Researchers are testing new tools and methods for protecting fruit quality during shipping and storage. They’re also breeding fruits with longer shelf lives, resistance to browning and rot, and qualities that entice consumers and ensure satisfaction. Preventing fruit damage and disease gives consumers more reliable access to high-quality fruit and could encourage Americans to eat more fresh fruit.