FORUM

# Tackling a Weighty Problem: America's Obesity Epidemic

Increasingly, more of us are entering the ranks of those who need to shed some pounds. Today, an estimated 64 percent of all American adults are overweight or obese. And this epidemic extends to our children, our nation's future. Nearly 9 million children aged 6 years or older, from all states, socioeconomic, and ethnic groups, are obese. A disproportionate number of them are African-American, Hispanic, or American Indian.

Unfortunately, there are few proven strategies for either preventing further unhealthy weight gain or ensuring permanent weight loss.

To help Americans rein in this epidemic, ARS research at six Human Nutrition Research Centers coast-to-coast are joining forces to focus on obesity prevention (see map, page 23).

Can scientific studies yield ways to help prevent gradual, unhealthy weight gain in adults and kids?

We think so!

And we are pursuing multiple research approaches to achieve that goal. Our first approach is to understand the biology underlying development of overweight and obesity. Using new genomic, proteomic, and metabolic research tools, ARS scientists are delving into the genes and resulting proteins and metabolites (compounds formed when proteins jump into action, for instance) that may be the culprits behind a propensity to easily gain weight.

Here's why this information is important: The earlier a physician, dietitian, or other healthcare professional can reliably profile this propensity, the sooner it might be counteracted. That can be life-giving for our children. Today's childhood obesity rates may make our kids' lifespans shorter than our own, some experts predict.

Genetics research described on page 5 of this obesity-prevention issue of *Agricultural Research* will give you a glimpse of some of this leading-edge research.

Second, we're taking a closer look at the impact of healthful eating and physical activity patterns on preventing obesity. For example, we want to determine whether adhering to the Dietary Guidelines for Americans, the nation's recommendations for what we eat and how physically active we need to be, can actually help keep off excess body fat.

We also want to know whether barriers exist to following the guidelines and, if so, what can be done to remove these obstacles. In addition, we want to determine how the guidelines can be adopted more readily by the diverse individuals who make up this country.

Because the guidelines are regularly updated, there's an ongoing opportunity for the newest data from ARS's scientific studies to be used in shaping each new generation of recommendations.

A third approach focuses on boosting the success of community-wide tactics to help people choose to eat healthful foods, and get the physical activity they need. Individuals can make changes, but what happens when they step outside their homes? We want to ensure that community cultures support healthful eating and physical activity practices.

The story on page 16 explores several creative approaches in three Delta communities, and these ideas may become a template for success in other communities.

Fourth, ARS scientists at food quality and utilization laboratories are developing a variety of healthy new foods that are convenient as well as tasty. A healthful additive called C-Trim that could replace fat in yogurt, peanut butter, or other favorites is among the remarkable products we highlight in an article beginning on page 12.

Lastly, we're helping to create a toolbox of handy obesity-prevention resources for adults and youngsters to use and benefit from. Key among the tools are the online versions—for kids and adults—of USDA's MyPyramid (www.mypyramid.gov), developed by USDA's Center for Nutrition Policy and Promotion. Much of the research information used to create the food and physical activity recommendations in these pyramids has its origin in studies conducted at ARS nutrition research centers, including the Texas and Arkansas centers that specialize in discovering more about the nutritional needs of children.

Other highly useful tools for adults include the ARS calorie and nutrient databases (go to www.nal.usda.gov/fnic/ and click on "Food Composition") that you can download to your hand-held computer. Then, whether you're at the supermarket shopping for groceries, in your kitchen planning a meal, or at your favorite restaurant ordering dinner, you can quickly and easily refer to the databases to find what your best nutritional buy might be.

These and other tools are also accessible at another World Wide Web venue, the popular, easy-to-use www.nutrition.gov, managed by specialists at ARS's National Agricultural Library. It's a top-notch resource for up-to-date information as well as for interactive tools provided by other USDA agencies.

With each of the approaches described here, we want to help people avoid putting on those troublesome excess pounds. Hopefully, new research findings and novel tools emerging from ARS investigations will go a long way toward deflating America's obesity epidemic.

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