



Living Healthy

How adults can maintain or lose weight

Young heterosexual couples who live together double their risk for becoming obese, as compared to their dating peers.

As young people grow up and settle into their adult lives, many are at greater risk for diabetes, heart disease, cancer and other chronic diseases if they become overweight or obese. Researchers at UNC Gillings School of Global Public Health want to know how adults can manage their weight and stay healthy.

Penny Gordon-Larsen, PhD, nutrition associate professor and fellow at UNC's Carolina Population Center, and nutrition doctoral student Natalie The have shown that it's not just older, married adults who are at risk of gaining weight. It's young adults, too, particularly if they are married or living with their romantic partners.

Young heterosexual couples who live together are at more than twice the risk for becoming obese than are their dating peers, their research shows.

Gordon-Larsen and The are the first to study this age group using a national sample. Drawing conclusions from the National Longitudinal Study of Adolescent Health,

nicknamed "Add Health," they released their findings in April 2009 in the journal *Obesity*.

"At baseline, when we started our analysis (during the early- to mid-1990s), study participants were adolescents between 12 and 20 years old," The says. "Then we followed them into adulthood, when they were 18 to 27 years of age." Add Health also recruited the adolescents' romantic partners to participate in the adult phase of study.

The study didn't address *why* obesity risk was higher in this group, but data implications were clear. "When you establish a shared household with a romantic partner, you need to think of ways each partner can support the other to create a healthy

environment – healthier foods in the house, working out together and supporting each other in terms of physical activity in general," Gordon-Larsen says.

A healthy, supportive environment on the job also is important. Laura Linnan, ScD, and Deborah Tate, PhD, associate professors of health behavior and health education, have shown the value of workplace weight-loss programs.

In a "WAY to Health" study with employees at 17 community colleges in North Carolina, nearly 20 percent of the subjects lost five percent or more of their body weight with minimum intervention over 12 months — a significant result.

Most of the individuals who lost five percent of their weight fell into two groups – one that received a Web-based weight-loss program or one that received the Web program and cash incentives for weight loss.

"Losing even five percent of baseline body weight (roughly 10 pounds for the average participant in this study) is important from a public health point of view because the participants begin to experience positive health benefits," Linnan says of the study, which was funded by the Centers for Disease Control and Prevention. ►►



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Research assistants with "Way to Health," a workplace weight loss program, interview a study participant.

But the researchers, whose results are slated for publication in late 2010, still recognize that only about a fifth of the participants achieved the five percent loss over a year. "It told us that if people are motivated and get a self-directed program such as this, they can be successful, but the results are modest," Tate says.

Adds Linnan, "The Web-based weight-loss program is an important option we need to make available to those who are interested in it, but there is no magic bullet. We need

other options to support healthy choices. This is not about how motivated people are. It's more than that. It's about creating conditions where motivated people can make good choices and have options that work for them."

Linnan and Tate were surprised that participants who received the Web/cash combination didn't perform much better than those who only received the Web program. "They did a little better, but the results were not statistically significant," Linnan says.

She and Tate hope to shine more light

on the role of cash incentives in 2011 when they release results from a second study, funded by the National Heart, Lung, and Blood Institute, which tests the independent effects of the Web-based program and cash incentives.

Data from the second study come from nearly 1,000 employees at 12 universities and community colleges across North Carolina. One of four study groups received "cash only," based on their percentage of weight loss over an 18-month study. The other three groups received a Web-based program only, the Web program and cash, or "usual care" (the control group).

This study's results are expected to draw national attention as it is the first large study of "cash only" incentives since the 1980s, Tate says.

In other research related to adults and weight, Kimberly Truesdale, PhD, nutrition research assistant professor, has gleaned significant findings from the large longitudinal study known as "ARIC," or Atherosclerosis Risk in Communities. The study focused on four U.S. communities and included both white and African-American respondents. Truesdale found no disparities between the two races in her most recent results, published online in January 2009 in *International Journal of Obesity*.

Looking at adults ages 45 to 64 and how their health is affected by excess weight over time, Truesdale discovered that simply maintaining weight brings benefits. "Weight loss is something a lot of adults can't achieve," she says. "We found that if people maintain



Dr. Deborah Tate



Dr. Laura Linnan



Dr. Kim Truesdale

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their weight (± 3 percent), they still have some health improvements in total cholesterol, LDL cholesterol and diastolic blood pressure, regardless of weight status.”

Truesdale also found that people who lose a significant amount of weight (≥ 5 percent) reap long-term benefits associated with their lighter physique. “We wondered, if you had been heavier in the past, do you pay the consequences of that for the rest of your life?” she asks. The answer, based on some important criteria, was *no*.

“People who were heavier in the past – their blood pressure, lipids and glucose levels were slightly better or about the same as someone who always had been the lighter weight,” Truesdale says, noting that she didn’t look at hard outcomes like heart attacks.

Carmen Samuel-Hodge, PhD, another nutrition research assistant professor, is testing a weight-loss intervention program targeted to low-income women who, as a group, have the highest rates of being overweight or obese.

The intervention focuses on helping participants gain awareness of how their behavior contributes to weight gain. “Once they know what they are doing, they can start figuring out how to change,” Samuel-Hodge says. “A lot of the sessions were about problem solving.

The participants were the ones who solved their own problems.” (For more on Samuel-Hodge’s study, see page 22.)

— *Susan Shackelford*



Maintaining a healthy weight throughout middle age may result in lower blood pressure and cholesterol levels.