What's the Best Way to Fight Obesity?


May 18--A couple of years ago, Virginia Utility Protection Service President and Chief Executive Officer Rick Pevarski looked in the mirror and decided he could stand to lose a few pounds.

"You look at that [reflection], and you can see the trending going in the wrong direction because you are sedentary," Pevarski said. "I lost 30 pounds."

The weight loss proved to be more than just a personal accomplishment. It also became a catalyst for a companywide commitment to health wellness.

Since 2007, VUPS has invested $10,000 to outfit an exercise room with treadmills, an elliptical machine and a big-screen television.

It has offered employees health assessments and monthly wellness talks.

And, beginning in February, VUPS has participated in a work site weight control study conducted by Virginia Tech's newly established Center for Translational Obesity Research. VUPS is now one of 16 area businesses that have agreed to participate in the project.

"It was a nice dovetail between what we were already doing," said Bruce Wood, VUPS' human resources director of the study. "And it actually takes it to another level [and] steps us up another notch, not just because of the awareness and what goes along with it, but also that sense of community, because it's not just us."

Employees have already changed daily habits.

Paul Estabrooks, the study's primary investigator and an associate professor of human nutrition, foods and exercise, said he hopes to eventually enroll 32 companies. In addition to VUPS, Advance Auto Parts in Roanoke and Progress Printing in Lynchburg are among the companies already signed up.

Funded by a $2.5 million grant over five years from the National Institute of Diabetes and Digestive and Kidney Diseases, Estabrooks' study tests two weight loss programs, one that's intensive and one that's less intensive.

"The intent of the grant is to first and foremost determine if our more intensive intervention can actually help people lose a substantial amount of weight," Estabrooks said.

"We let anyone within a given workplace participate that has a BMI of 25 or greater, and the folks that are part of the more intensive intervention get daily e-mail support that has
different types of messages related to the physical activity they should do, the types of things they should eat [and] we also have a weekly update on a success story."

While the study began in September and is still in the early stages, Pevarski and Wood said they’ve already noticed some subtle changes among VUPS’ 100 employees.

A few have replaced their afternoon soda with a quick run on the treadmill, Pevarski said. Others have begun talking about portion sizes. And one woman has upped her workout from a slow walk to a speedy jog.

To collect more scientific data on study participants, Estabrooks and his research assistants have installed "HealthSpots" in the businesses participating in the more intensive interventions.

The small, black computer terminals weigh participants and take head-to-toe photos of them. The photos are then uploaded to a Web site where participants can log in and track their progress.

"It becomes pretty clear where you’re starting to lose things," Estabrooks said. "Whether you’ve seen a lot of pounds drop or not, you can actually see distribution change in pictures."

For those who do lose weight, the reward may be not only a trimmer waistline, but also a bit of cash.

Participants in the more intensive program are paid small sums based on the percentage of their body weight they lose.

"So, if they lost 5 percent of their body weight by the time the first quarter rolls around, ... they’d get a $5 check per month for the quarter -- so they'd get $15," Estabrooks said.

"Our average weight loss is somewhere around 5 percent so people aren't getting paid a whole lot to do it," he added. But "sometimes it's enough to get a new tank top or some exercise stuff."

And hopefully, that's enough to encourage people to eat well and exercise.

"They make it as simple as possible," Wood said. "Because there's going to be times when you're going to say, 'I can't deal with this,' and you've got to get over that hump."

Long term, employees aren't the only ones who stand to benefit from increased attention to health and fitness.

According to a report from the U.S. Department of Health and Human Services, workplace physical activity programs can reduce short-term sick leave by 6 percent to 32 percent, reduce health care costs by 20 percent to 55 percent, and increase productivity by 2 percent to 52 percent.
Virginia Tech is adding faculty to study obesity. Translating a variety of research on obesity, exercise and nutrition into practices and programs people actually use is something Estabrooks has been doing for years.

The Denver transplant came to Virginia Tech from Kaiser Permanente in August 2007 and since then, has worked out of VT Riverside -- a newly built, eight-person laboratory facility in the Carilion Biomedical Institute on South Jefferson Street in Roanoke.

"For several years now, we've been ramping up to be more involved in obesity research and obesity education [and] as a result of that, we've hired a group of new faculty into this department and others," said Joseph Marcy, professor and interim head of Tech's Department of Human Nutrition, Foods and Exercise.

Currently, Estabrooks is the only faculty member based in Roanoke, but Marcy said he hopes he will be joined by a second faculty member in the next three to six months.

"We already have six back here on campus at Virginia Tech," Marcy said. But "the satellite research facility there in Roanoke gives us a chance to interact with Carilion's medical community more on their turf rather than have them always come to Blacksburg to do something."

VT Riverside, Marcy noted, represents a "very intentional desire to increase the linkage between Virginia Tech and Carilion," a desire that is "separate but parallel" to the organizations' efforts to develop a medical school.

"Our primary goal here is to do research that has a higher likelihood to translate into practice," Estabrooks said of the Center for Translational Obesity Research.

"I think what's really helpful about being here [in Roanoke] is that we're able to partner with Carilion and have this good working relationship where they have a need and a desire to work on different things related to prevention and we have some expertise in developing interactions along those lines."

Studies include childhood obesity, physical activity

In addition to the work site weight control study, center researchers are working on three other projects, including a grant-funded physical activity study Estabrooks brought with him from Denver and two early-stage projects on childhood obesity and a statewide physical activity program.

Together, the center's studies on work site weight control and physical activity for people "post-cardiac stress" represent $5 million in grant money from the National Institute of Diabetes and Digestive and Kidney Diseases.

Estabrooks said he has yet to secure grant funding for the center's other two projects but is using about $50,000 in startup money from Tech and Carilion to begin work on the childhood obesity study.
The study, which targets low-income, high-need families with overweight children, is a partnership between Carilion and Virginia Cooperative Extension's Family Nutrition Program.

Estabrooks said he hopes to have an intervention program developed by the end of the summer and start testing it in September.

But as with the work site study, Estabrooks hopes the family-oriented interventions will eventually move well beyond program participants.

"If we develop interventions that help people eat better, move more and manage their weight, once we demonstrate that they work ... hopefully there’s some delivery system that we’ve partnered with and are working with that would continue to deliver the program once we're done," Estabrooks said.