SAN LUIS OBISPO – A Cal Poly professor has received a $3 million grant from the National Institutes of Health to develop new ways to help low-income mothers return to their pre-pregnancy weight within a year of giving birth.

Kinesiology Professor Suzanne Phelan of Cal Poly's STRIDE center (Science through Translational Research in Diet and Exercise) will work with low-income mothers in San Luis Obispo and Santa Barbara counties for the study.

Helping women return to their pre-pregnancy weights within a year of giving birth is important for their long-term health, Phelan said.

“High postpartum weight retention occurs in approximately 25 percent of young adult women. It's a significant predictor of long-term weight gain, obesity, and obesity-related health problems including diabetes, high blood pressure and heart disease,” Phelan said.

Thanks to the NIH grant, Phelan, STRIDE researchers and Cal Poly students will offer an online weight-loss program to a target group of 410 new mothers served by 12 Central Coast WIC (Women, Infants and Children) clinics across San Luis Obispo and Santa Barbara counties. It will be the first in the nation to document and evaluate the effects of an Internet-based postpartum weight loss program in low-income women.

Phelan’s theory is that an additional online program aimed at multi-ethnic, low-income mothers could result in better weight-loss success.

The women participating in the study will get access to a private, personalized website including online video blogging, food logs and calorie counters. Participants will also receive inspirational and educational text messages. Some texts will request a response.

STRIDE research assistants and students will visit participating women in person monthly and physically assess the women’s weight changes and health at six and 12 months post-delivery.

Both the study group and a control group of mothers will receive the WIC clinics’ standard services, including nutritional counseling and food vouchers for low-income women and children.

Many traditional post-pregnancy weight loss programs have been successful, Phelan said, but most have included small sample sizes and had between a 30 to 40 percent drop-out rate among participating mothers. And most didn’t reach low-income and multi-ethnic mothers, who are most at-risk for health complications, she said.
An Internet-based program could change that, Phelan said.

“Over the past decade, Internet use has increased exponentially in the U.S. – most rapidly among young adult, low-income and minority sub-groups,” she said. “And Internet-based weight control programs have been effective in promoting significant weight loss.”

The study will run from 2012 to 2016, when the data will be reviewed and released.

The program for was developed by Phelan at Cal Poly and Professor Deborah Tate at University of North Carolina, Chapel Hill. If study results show success, the program could be expanded and offered through WIC clinics throughout California and beyond.

The grant-funded study is an example of how the professors, staff and students at Cal Poly’s STRIDE center are working to investigate public health issues, aid the local community and carry out Cal Poly’s Learn by Doing mission all at the same time, said STRIDE Director and Kinesiology Professor Ann McDermott.

“By engaging our undergraduate students in team-based health research, Cal Poly is preparing the next generation of professionals that our state and country will require,” McDermott said. “At STRIDE, we’re creating comprehensive, fun and effective programs to promote healthy weight throughout the lifespan.”

About STRIDE
Cal Poly’s STRIDE center was launched in 2007. Since its creation, STRIDE professors, staff and student interns have developed research studies and programs to improve the health status and knowledge of the greater community.

STRIDE brings together professors and students from departments across the university to conduct research and outreach programs that promote healthy weight. Most of the center’s work is supported by state and federal grants and private donations. For more details about STRIDE and its research projects and community health programs, go to http://stride.calpoly.edu.

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