



Volume 4,
Issue 2

In This Issue:

1 New Grants for
CHN

3 Clinical Trials
update

3 Stroebele
Publication

4 Research Study
Recruitment

5 Employee News
The Director's
Corner

General Editor:
Ruth Bowling

Assistant Editor:
Tim Goss
303-315-9011

NEW GRANTS FOR CHN RESEARCH TEAMS

Holly Wyatt, M.D. received a grant from the National Institutes of Health (NIH), her first R01 type. This is what the NIH calls the “traditional research project grant.” Following is an excerpt from her grant entitled “Using the Energy Gap to Prevent Weight Regain”:

The major obstacle for obesity treatment is not producing weight loss but in maintaining weight losses over time. Most previous research has been aimed at understanding the factors involved in weight loss and comparing different interventions for weight loss. We propose that weight loss and weight loss maintenance are different processes and that some strategies that work well for losing weight do not work well for keeping weight off.

Specifically, we propose that the strategy used by most dieters to keep weight off – food restriction - is not likely to lead to success in keeping weight off. We believe that the body has a physiological drive to maintain a high level of energy expenditure (i.e. high energy throughput). The high energy expenditure can be obtained by maintaining a high level of physical activity or by increasing body weight. Obese individuals have achieved a high level of energy expenditure in part through the process of becoming obese. After weight loss, total energy expenditure is reduced due to declines in metabolism. We have termed this reduction as the “energy gap” and filling the “energy gap” is the challenge for weight loss maintenance. We believe that most people try to fill the “energy gap” by restricting energy intake.

This is difficult over the long-term because it opposes both biology and the environment. Our previous data from the National Weight Control Registry suggest that those individuals who are successful in long-term weight loss maintenance close the “energy gap” by physical activity, thus allowing energy balance to be achieved at high energy expenditure (i.e. high energy throughput). We propose to evaluate this hypothesis by

randomly assigning individuals to different methods for filling the “energy gap” following weight loss.

We hypothesize that those who are assigned to close the “energy gap” with physical activity will regain less weight than those assigned to close the “energy gap” with food restriction alone or with a combination of increased physical activity and food restriction. We further propose to use leading edge techniques to assess how a high energy throughput produced by a high level of activity affects components of energy balance and matching of intake with expenditure.

If our hypothesis is correct, estimating the “energy gap” could be done in clinical practice and could provide a quantitative prescription for lifestyle changes required for weight loss maintenance. It would provide a new strategy to help the public be more successful at maintaining a weight loss.

Helen Thompson and the America On the Move in Colorado research team received a grant entitled, “Implementing America On the Move™ in Two Communities”. Following is her written description of this grant.

The Center has received a three-year grant from the Colorado State Department of Health and Environment (CDPHE) to implement America On the Move (AOM) in the communities of Original Aurora and Broomfield, both of which have identified a willingness to address health, wellness, and healthy lifestyles.

We will work with residents of both communities through individual programs, schools, worksites/organizations and healthcare professionals to promote small steps to achieve nutrition and active living lifestyles changes. The needs of the

Latino populations in both communities will be addressed by having culturally competent materials and staff. We recognize that individual change is not sustainable without environmental change. AOM will assist Aurora and Broomfield in connecting the various programs, creating incentives through local businesses, and working on local policy changes so that residents will be supported in their individual efforts in all sectors of the community to create sustainable behavior change.

The AOM in Colorado group also received a grant from the Office of Health Disparities at CDPHE.

America On the Move (AOM) in Colorado encourages and motivates individuals to be more physically active and to eat more healthily in an environment that is not conducive to doing so. The health care setting is a place where individuals go to seek health information from people who have great credibility for delivery of such information. The Office of Health Disparities at the Colorado Department of Public Health and Environment has awarded AOM in Colorado a two-year grant to link AOM to the health care setting, with specific aims to reach Latino individuals/families who seek/receive health care from community health clinics.

In Year One, AOM will assist a Metro Community Provider Network, a major metropolitan community health clinic system to adopt the AOM Healthcare Professional Toolkit, train its employees, and implement it with adult patients. Year Two will see an expansion of both AOM programs to up to two additional community health clinic systems in rural Colorado.

The expected outcome is to offer a nationally-evaluated toolkit to health care

professionals in order to enhance their effectiveness with encouraging and documenting patient (both individuals and families) uptake of small changes behaviors to promote healthy eating and active living.

Clinical Trials Update

Kristen Cassic, M.S.

Director of Clinical Trials for CHN

We are currently recruiting for 3 studies, Orexigen (weight loss with a drug combination) AM Todd (reducing inflammation with a nutritional supplement) and McCleary (testing the effects of another nutritional supplement on resting metabolic rate). We are close to wrapping up both AM Todd and McCleary, and just starting Orexigen. We hope to enroll 40 patients into the year-long weight loss study by mid-September.

We are also in discussions with several sponsors about other studies. Some things we are considering include looking at the anti-inflammatory/anti-oxidant effects of botanical extracts (specifically black tea and pomegranates) on overweight adults and the impact of a web-based program and low-glycemic index meal replacements on weight loss.

Publication for Nanette Stroebele

Nanette Stroebele, Ph.D., one of the Center's post-doctoral fellows, will have her research with Denver Public Schools published this Fall in the Journal of Child Nutrition and Management. Her abstract from this article follows:

A novel approach to improving the nutritional quality of school lunches

Objective

The objective of this study was to evaluate the acceptability to students of popular school lunch items that were reduced in fat and energy density.

Methods

Students from four elementary schools (grades 1-5) within the Denver Public School System participated in this study. During the fall semester we worked with food manufacturers to create healthier versions of three popular foods (pizza, French fries, and chicken fingers). Food manufacturers were asked to reduce the fat and energy density of these foods as much as possible while minimally affecting taste. The original foods and the modified versions were offered to students during lunch. The acceptability of the healthier foods was evaluated by assessing differences in meal participation (i.e. number of meals served) and by differences in ratings of appearance and palatability of the foods. Data from the original offered foods was compared to the modified foods using univariate and multivariate comparisons. Data was collected one time for the original food and two times for the modified foods for each food item in each school.

Results

Meal participation did not change after introducing the modified foods. Analyses of variance revealed a significant decrease in both appearance and palatability ratings for the modified pizza ($p < .01$). Ratings for French fries only decreased significantly in taste ($p < .05$) but not in appearance whereas the ratings of both appearance and palatability for the modified chicken fingers did not differ from the original offered chicken fingers. Overall, although some ratings for appearance and palatability decreased significantly it was observed that the changes were not meaningful. The healthier versions of the foods were still rated as extremely palatable and attractive. Both appearance and palatability ratings increased from the first to the second exposure of the modified foods.

Application to Child Nutrition Professionals

There is agreement on the need to provide healthier foods in schools. These results suggest that one way to do this is to work with food providers to improve the nutritional value of some of the most popular foods served in school lunches. By taking small steps to

increase the nutritional value of these foods, the modified versions appear to be completely acceptable to the students. Making small changes to the most popular foods can lead

to significant improvements in the overall composition of food consumed at school.

Research Study Recruitment

Looking to lose weight with medication?
Call (303) 315-9101 to be considered for our weight loss study.

Avoiding the Scale?

Are you!

- a non-diabetic?
- in overall good health?
- currently suffering from obesity?
- between 18 and 60 years of age?
- a non-smoker for at least 6 months?
- available for study related visits for a year?

If you answered yes to all these questions, you may be eligible for our combination drug therapy research study. If eligible, you will receive medical evaluations, nutritional & lifestyle counseling, investigational medication treatment, and visits to the clinic at no cost.

Please call for more information.

**Center for Human Nutrition
University of Colorado
(303) 315-9101**

COMEB 05-0212, P.J. Holly Wyatt M.D.



Employee News

In addition to her R01 grant, **Holly Wyatt, M.D.** will be promoted to Associate Professor with tenure as of July 1, 2006. Holly is presently the Program Director for the Centers for Obesity Research and Education (CORE) and the Medical Director for the Center for Human Nutrition. Congratulations, Holly!

Kristin Hoffman joined the Center as a Professional Research Assistant for the Human Nutrition group and America On the Move in Colorado, effective June 15. From January to May, Kristin was an intern under the direction of Jennifer Stuht and Helen Thompson. She just completed a 600-hour internship and her undergraduate studies at Colorado State University in the Department of Health and Exercise Science. Kristin has been accepted into the UCDHSC graduate school to study public health.

Sue Rodearmel, Ed.D. and **Sheila Smith** participated in the 21st Annual "Ride the Rockies" bike tour with over 2,000 in southern Colorado June 18-23. This tour was 419 miles of beautiful weather, great riding, tremendous physical challenge, and great fun with 2,000 great people! The tour started in Cortez and ended in Canon City, winding through the rural villages of Colorado and New Mexico along the route. Both Sue and Sheila have great stories to tell of their adventure!

Marsha Miller, M.S., R.D., Look AHEAD Program Coordinator, scored 96% on her Serious Adverse Event training and test. This was the highest score in the study, raising the bar for the MDs, PhDs, nurses, interventionists and other Look AHEAD staff who took the test. Eighty individuals participated in training and testing, the study average was 69%, and the range was 32% to 96%. Marsha truly did an outstanding job!

The Director's Corner *James O. Hill, Ph.D.*

New grants are always exciting, and of course, they are the lifeblood of our research. I am excited about our new grants that will help us to explore America's struggle with obesity through application of the energy gap, and that will help bring useful tools to our communities and to the healthcare profession.

Of course, these grants reflect only part of what we do at the Center. As we see in other articles in this newsletter, important work is done through Clinical Trials and through our training programs. And we continue to have new grants being developed!

Congratulations to Holly Wyatt and America On the Move in Colorado for the recognition they received through the award of these grants!

With warmest regards,
Jim