

## **Many Diet Studies Lack Key Data**

(HealthDayNews) -- Scientific studies that claim to support the effectiveness of weight-loss plans often leave out key facts that can influence the results, claims a new analysis of hundreds of diet studies.

Many of the reports omit key mitigating details about the dieters themselves -- things such as medication use, health status, ethnicity and even age.

"We had not expected such poor reporting quality," said study author Cheryl Gibson, a research associate professor of medicine at the University of Kansas Medical Center.

Her team published their findings in the Feb. 22 issue of Biomed Central Medical Research Methodology.

Studies of weight loss are plentiful, since 97 million adults are overweight or obese in the United States, Gibson pointed out. To stem the obesity epidemic, much research has focused on the role of diet, exercise and genes to maintain a healthy weight.

"We wanted to look at the reporting quality of those studies that looked at diet and exercise for weight loss," Gibson said.

To do so, she and her colleagues analyzed 231 articles in medical journals focused on the weight-loss effects for obese individuals of regimens that either included restricting diet, restricting diet plus increasing exercise, or exercise only. They also looked at studies whose main endpoints included changes in body composition, fat distribution, metabolism and aerobic fitness. The studies were published between 1966 and 2003.

Gibson's team looked closely at how the articles reported the physical, background and health characteristics of the study participants. As a guide, they used the Consolidation of the Standard of Reporting Trials Characteristics (CONSORT). This is a list of 21 different elements considered essential for a study to be validated by experts and editors of medical journals.

Gibson's team especially focused on age, gender, general health information, use of medication (other than drugs used to control weight), ethnicity and female participant's menopausal status.

Their findings: 92 percent of the studies did not report medication use, while 34 percent ignored the health status of the persons. Ethnicity was not mentioned in 86 percent of the studies; ages were missing in 11 percent.

Eight percent of studies didn't say whether women were pre- or postmenopausal; 4 percent didn't differentiate men from women when reporting results.

Besides the lack of detail on ethnicity and other factors, Gibson found the end of study sample size was often not listed, making it impossible to determine the diet dropout rate.

Missing data like this is important, the study authors conclude, because "inadequate reporting can create difficulties of interpretation, and lead to biased results."

"As researchers we need to do a better job of reporting our studies," said Gibson. "For other researchers to replicate a study there needs to be more attention to detail to enhance the reporting quality of the trials." Replicating studies helps researchers prove a particular method or approach or medicine truly works.

One expert took the study conclusions as call to do better.

"She makes a good point," said Dr. Michael Dansinger, director of obesity research for the atherosclerosis research lab at Tufts–New England Medical Center in Boston. "We have gaps to fill in reporting of obesity research studies and we should view her work with an open mind and an effort to improve."

"By identifying these gaps, we can identify areas for improvement," he said.

More information

For tips on healthy weight loss, visit the American Heart Association.

By Kathleen Doheny

SOURCES: Michael L. Dansinger, M.D., director, obesity research, Atherosclerosis Research Lab, Tufts–New England Medical Center, Boston; Cheryl Gibson, Ph.D., research associate professor, medicine, University of Kansas School of Medicine, Kansas City, Kan.; Feb. 22, 2005, Biomed Central Medical Research Methodology  
Last Updated: December 2005  
Copyright © 2005 ScoutNews LLC. All rights reserved.

E-Mail This Page

Queen of the Valley Hospital • 1000 Trancas Street • Napa,  
California 94558 • (707) 252-4411