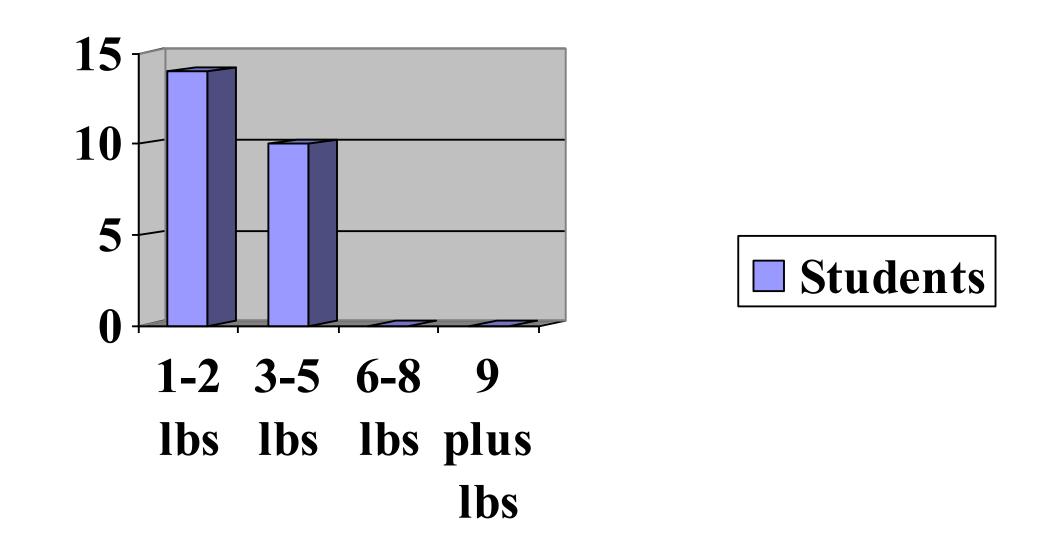
Abstract:

The purpose of this study was to gather current information about safe and unsafe weight loss. Studies have shown that the rate of obesity in America has risen significantly since the 1970s. Currently over half of adults in the United States are overweight and government organizations and independent researchers are searching for ways to reduce obesity rates. Obesity causes many premature deaths each year and studies have found a high correlation between obesity and disease rates.

There are roughly 45 million Americans who are dieting or have dieted. When searching for diets on GoogleTM, pages of diets plans are found and many of them are Fad diets that promise rapid weight reduction using a very low calorie plan. Studies have shown that the effects of losing too much weight are emotionally damaging and counter-productive to long term weight loss and health. Most sources state that healthy weight loss is 1 to 3 lbs. per week. However, there is limited research about safe weight loss when dieting. More research on weight lost should be conducted and publicized.

FIGURE 1: SURVEY RESULTS: 24 Beloit College students were asked what they thought was a safe amount of weight to lose each week.



How much weight is safe to lose in a week?

Introduction:

America's obesity rate have risen since the 1980s and evidence shows that the obesity rates are becoming worse [14]. In 2006 there were only four states that had an obesity rate of less than 20% and twenty-two states that had an obesity rate of 25% or more [14]. Studies have shown that the risk of death increases with increasing excess weight [13]. Obesity in America has been called an epidemic by the government. Roughly 45 million Americans are dieting every year [9] and Americans spend between one to two billion dollars a year on weight-loss programs [9]. If one were to GoogleTM rapid weight loss or diets, one would find pages full of diets promising fast results. Even the media have used the idea of dieting for a reality TV show "The Biggest Loser," which chronicles a group of contestants trying to lose the most weight in a summer's time for half a million dollars. Contestants on the show are losing weight at a rate of around 10 pounds weekly. The show has quickly become a world wide hit airing in over 35 territories and 15 countries and is in its fourth season [12].

How much weight is healthy to lose? For the reasons listed above it is important to be informed about how much weight is healthy to lose and why. Rapid weight loss can result in a number of health complications like anorexia and usually produces fast results that do not last and can lead to rebound weight gain [3]. Therefore the purpose of my study is to determine the healthy rate to lose weight and to encourage further research and publicity about safe weight loss.

How much weight is safe to lose?

Jasmine Nears

Beloit College, Beloit, WI

TABLE 1: STATEMENTS ABOUT SAFE WEIGHT LOSS

Resources	Number of Sites reviewed and showing recommended weight loss	Weight loss recommended for persons under 27 Body Mass Index	Recommendations on how to lose weight effectively.	Effects of rapid weight loss mentioned
Government Sites on Nutrition.	Sites Reviewed:5 Sites recommending safe weight loss range: 3	.5-2 pounds a week 1-2 pounds a week	Low Calorie Diet & Exercise Set realistic Goals Gradual weight loss Eat variety of Foods low in sugar and fat	Regain Weight
Peer-reviewed journal/website & Books published by accredited publisher	Sites Reviewed:7 Sites recommending safe weight loss range: 1	10% weight reduction is beneficial	Support group Low calorie/ Exercise Chose diet right for you	Gallstones Mood Swings Cardiovascular complications Bone loss
Websites not accredited by government or peer- reviewed by academics. peers	Sites Reviewed:10 Sites recommending safe weight loss range:1	Max 3- 4 pounds per week healthy person 1-2 lbs per week	Set realistic goals Use food pyramid Drink tea Specialize planning for money Diet pills	Loose Skin Gallstones Weight regain
Newspapers and magazines online	Sites Reviewed: 8 Sites Recommending safe weight loss range:2	1- 1.5 was shown to be healthy .5-1.5 a week	Eat lots of fruits and vegetables Eat less protein Healthy lifestyle Herbal supplements	Deficient Immune System Depression

Method:

I read newspaper articles, peer-reviewed journals, government documents, online articles, diet sites, and books, and asked two professionals to determine the amount of safe weight loss. I examined how many sites mentioned an amount of healthy weight loss. Government sites included the Food and Drug Administration, Department of Agriculture, and the Department of Health and Human Services, I searched key words such as diets, safe weight loss, weight loss, and fast weight loss on Google. I surveyed 24 Beloit College students on what they thought was a healthy amount of weight to lose. A list of 35 websites was examined and will be provided upon request from nearsj@stu.beloit.edu.

Results:

Side effects of rapid weight loss occurs include gallstones [4], mood swings [5], poor athletic performance [5, 7], deficient immune system [9], the appearance of loose skin [10], regaining of weight [11], and in rare cases death [6]. Results show that there is limited information about how much weight is healthy to lose. Most of the sources mention rapid weight lost and its effects, but they do not give a number for healthy weight loss. The values from academics, government, nutritionists, and doctors were found to range from 0.5 to 2 pounds per week for overweight and normal weight people. One source thought 3 pounds was okay. Fig. 1 shows that 42% of Beloit College students thought that 3 to 5 pounds were okay to lose per week, which could lead to health complications. Table 1 shows the side effects of rapid weight loss including appearance, emotional and physical ailments, and weight regain. It was harder to find information about safe weight loss from any authorities I reviewed. The hardest was the scholarly journals and peer-reviewed websites. Note: Safe weight loss for obese people varies with individual circumstances and is usually determined on a case by case basis, however the effects of unsafe weight loss on obese people is included in the results.

Discussion:

For the 45 million Americans who diet every year [9], understanding how to lose weight properly and safely is key to effective weight loss, healthy lifestyles, and a reduction in wasted money. The importance of understanding the safe amount of weight loss is obvious and should be further examined and made available to the general public. Understanding and setting a safe weight loss goal will decrease the risk of side effects from rapid weight loss. It will also save Americans from wasting money on programs that encourage unsafe weight loss. It may encourage those who create and market diets to consider a healthier and more realistic alternative to increasing sales through hazardous diets. It was alarming to discover how long it took to get information about a safe range of weekly weight loss from peer-reviewed journals and the government. It was easy to get recommendations for weight loss from the diet marketers themselves. This lack of information from credible sources could lead to confusion and unsafe choices in weight loss. The study shows there is a lack of information on safe weight loss compared to information on unsafe weight loss diets. In order to educate America and reduce the risks associated with unsafe weight loss, it is recommended that further studies into safe weight loss and more public information on safe weight loss should be put on the agenda of educators and researchers, as well as the government. The results of my survey reflect that 60% of Beloit college students are informed correctly about safe weight loss. This could be in part because they have been exposed to nutrition from first year initiative and nutrition classes, as well as friends who have taken these classes. It would be interesting to conduct this survey outside of a college setting.

If more attention was directed toward setting a normal range for weight loss and publicizing how to lose weight, individuals without health problems would not have to try so many different diets and spend countless dollars on false expectations. Individuals could be more grounded in the reality of weight loss and focus on healthy lifestyles instead of rapidly losing the maximum weight one physically can.

References:

- 0788126040.
- 5. Hall, CJ. Lane, AM "Effects of Rapid Weight loss on mood and performance among amateur boxers." National Center for Biotechnology Information: Pub Med. 35 (6) 390-5 (2001) Abstract. <http://www.ncbi.nlm.nih.gov/sites/entrez?cmd=Retrieve&db=PubMed&dopt=AbstractPlus&list_uids=11726472>
- <http://www.ajcn.org/cgi/reprint/39/5/695?maxtoshow=&HITS

- September, 21, 2007)

1. Bren, Linda. "Losing weight: start by counting Calories." <u>U.S. Food and Drug Administration.</u> 2004. Center for Food Safety and Applied Nutrition. < <u>http://www.cfsan.fda.gov/~dms/fdweigh3.html</u>>

2. Boin, Krishna. Chinnala, Krishna. Koka, Saisudha. Nammi, Srinivas. "Obesity: An overview on its current perspectives and treatment options." <u>Nutrition Journal.</u> 3:3 (2004) <<u>http://www.nutritionj.com/content/3/1/3</u>> 3. Coxon, Ann. Kreitzman, Stephen. Szaz, Kalman. Year. Glycogen Storage: Illusions of east weight loss, excessive weight regain, and distortions in estimates of body composition. The American Journal of Clinical Nutrition Vol? <<u>http://www.ajcn.org/cgi/reprint/56/1/292S.pdf</u>>

4. Everhart, James & National Digestive Disesases Data Working Group. Digestive Diseases in the United States: Epidemiology and Impact. Diane Publishing: 1995 Pg 660 (accessed from

http://books.google.com/books?id=bQXwQ5u7yUQC&pg=

PA660&ots=QzCrg38la7&dq=effects+of+rapid+weight+loss&sig=119WDN5vZAOQHSwy0htqtDc7d2A) ISBN:

6. Itallie, Van TB. Yang, MU. "Cardiac dysfunction in obese dieters: a potentially lethal complication of rapid, massive weight loss." The American Journal of Clinical Nutrition. Vol 39, 695-702. (1984)

=10&hits=10&RESULTFORMAT=&fulltext=Rapid+Weight+loss&andorexactfulltext=and&searchid=1&FIRSTINDE

<u>X=0&sortspec=relevance&resourcetype=HWCIT></u>

7. Morris, Rick. Unsafe Weight Loss Methods. Running Planet. <<u>http://www.runningplanet.com/training/unsafe-weight-</u> loss.html> (accessed September 21, 2007)

8. Rayn, Monique. "The feedzone with Monique Ryan: Rapid weight loss and your immune system." VeloNews. 7. Feb. 2007. <<u>http://www.velonews.com/train/articles/11611.0.html</u>>

9. Associate Press. "Diet Plan Success Tough to Weight." CBS News. Jan 2005.

Philadelphia.<http://www.cbsnews.com/stories/2005/01/03/health/main664519.shtml>

10. How Fast Can You Lose Weight?. Anne Collins Weight loss Program 2007. <<u>http://www.annecollins.com/rapid-</u> weight-loss.htm> (accessed October 1, 2007)

11."Setting Goals for Weight Loss." Partnership for Healthy Weight Management. Consumer.gov. <

<u>http://www.consumer.gov/weightloss/setgoals.htm</u>> (accessed October 12, 2007)

12. "The Biggest Loser" http://www.nbc.com/The_Biggest_Loser/ (accessed October 14, 2007)

13. US Department of Health and Human Services. Office of the Surgeon General: The surgeon General's call to action to prevent and decrease overweight and obesity. Rockville MD: United States Department of Health and *Human Services* 2001. <<u>http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_consequences.htm</u>>

"U.S. Obesity Trends 1985-2006." <u>Center for Disease Control and Prevention.</u> < <u>http://</u> www.cdc.gov/nccdphp/dnpa/obesity/trend/maps/index.htm> (accessed October 12 2007)

15. "Weighing In On Aging Bones: Excessive Weight Loss And Age-related Structural Change May Contribute To Fracture Risk." <u>Medical News Today</u>. June 2006. <<u>http://www.medicalnewstoday.com/articles/44626.php</u>> (accessed