

# A Holistic Approach for Weight Management through Dietary Management

V. Lakshmi

Associate Lecturer, Department of Hotel Management & Catering Technology,  
S.P.W Polytechnic, Tirupathi, Andhra Pradesh -517502, India

**Abstract:** *Obesity is a multi-state with different aspects: Organic, Psychological, Aesthetic and should be treated with care and long term. In our diet and run massive portion-sized culture, maintaining a healthy weight can be tough and losing weight even tougher. Adding to the difficulty is the abundance of fad diets and quick-fix plans that tempt and confuse us and ultimately fail. This is because they help loose muscle and water, something criminal, after all what we need is to lose fat. Meditation, yoga, exercise, and proper diet are well documented mechanisms for a healthy balance and well-tuned system. A safe and effective long-term weight reduction and maintenance diet has to contain balanced, nutritious foods to avoid vitamin deficiencies and other diseases of malnutrition.*

**Key words:** Diet, Obesity, Balanced nutrition, Weight, Food.

## 1. Introduction

Nutrition, which depends on food, is also of utmost importance in the cure of disease. The primary cause of disease is a weakened organism or lowered resistance in the body, arising from the adoption of a faulty nutritional pattern. There is an elaborate healing mechanism within the body but it can perform its function only if it is abundantly supplied with all the essential nutritional factors. It is believed that at least 45 chemical components and elements are needed by human cells. An adequate diet must contain each of these 45 substances, called essential nutrients. Two of these nutrients are oxygen and water. The other 43 are classified into five main groups, namely, carbohydrates, fats, proteins, minerals, and vitamins. All 45 of these nutrients are vitally important and they work together. Therefore, the absence of any of them will result in disease and eventually in death.

Research has shown that almost all diseases can be attributed, directly or indirectly, to an undersupply of various nutrients. Apart from nutritional deficiencies, other factors contributing to this are a faulty nutritional pattern, constant overeating, excessive consumption of proteins and the body's inability to properly digest them and sluggish metabolism. As wrong food habits is the most potent cause of disease, a healthy and balanced diet alone can prevent further accumulation of toxic waste matter in the system, purify the blood and allow all bodily structures to work at a high level of efficiency. Research shows that diseases produced by combinations of deficiencies can be corrected when all the nutrients are supplied, provided irreparable damage has not been done. A well-balanced and correct diet is thus of utmost importance for the maintenance of good health and the healing of diseases.

## 2. Causative Factors of Obesity

While there are a number of causes of obesity, it is most commonly the result of consuming more calories each day that can be burned for energy. If the body does not use the amount of calories it consumes, they are stored as fat and the result is weight gain. When this ratio of consumed versus expended calories gets out of hand, obesity is often the

result. This however is a simplified look at the problem, as obesity has multiple causes which usually occur in combination.

Diet plays a vital role in the maintenance of good health and in the prevention and cure of disease. In the words of Sir Robert Mc Carrison, one of the best known nutritionists, "The right kind of food is the most important single factor in the promotion of health ; and the wrong kind of food is the most important single factor in the promotion of disease." A healthy diet is one that helps maintain or improve general health. A healthy diet provides the body with essential nutrition: fluid, adequate essential amino acids from protein, [1] essential fatty acids, vitamins, minerals, and adequate calories. The requirements for a healthy diet can be met from a variety of plant-based and animal-based foods. A healthy diet supports energy needs and provides for human without exposure to toxicity or excessive weight gain from consuming excessive amounts. Where lack of calories is not an issue, a properly balanced diet (in addition to exercise) is also thought to be important for lowering health risks, such as obesity, heart disease, diabetes, hypertension and cancer[2]

Overeating leads to weight gain, especially if the diet is high in fat. Foods high in fat or sugar (for example, fast food, fried food, and sweets) have high energy density (foods that have a lot of calories in a small amount of food). Epidemiologic studies have shown that diets high in fat contribute to weight gain.

## 3. How to Diagnose Obesity

The most common and accepted measurements used to diagnose obesity are the **Body Mass Index (BMI)** and waist circumference measurements. While these measures allow you to put your weight concerns into perspective, it is recommended that you make an appointment with a medical health advisor. They will be able to suggest a weight loss program tailored to your needs as well as do any necessary tests to screen for weight-related complications. In addition to these measurements, your doctor will probably ask a number of questions to help confirm a diagnosis and possible causes of obesity. You will probably be asked about

your medical history, the age you started gaining weight, family weight and medical history, eating and exercise habits, nicotine and alcohol use, and previous experience with weight loss attempts. Blood tests to check thyroid functioning, along with glucose and cholesterol levels to determine whether any obesity-related conditions are present.

#### 4. Dietary Recommendations for Obesity

The main treatment for obesity consists of dieting and physical exercise.[1] Diet programs may produce weight loss over the short term, [2] but maintaining this weight loss is frequently difficult and often requires making exercise and a lower calorie diet a permanent part of a person's lifestyle.[3][4] Success rates of long-term weight loss maintenance with lifestyle changes are low ranging from 2 to 20%.[5] Dietary and lifestyle changes are effective in limiting excessive weight gain in pregnancy and improve outcomes for both the mother and the child.[6] Weight control diets aim to maintain a controlled weight. In most cases dieting is used in combination with overweight or obese. Diets to promote weight loss are divided into four categories: low-fat, low-carbohydrate, low-calorie, and very low calorie.[14] The World Health Organization (WHO) makes the following 5 recommendations with respect to both populations and individuals: [3]

- Eat roughly the same amount of calories that your body is using. A healthy weight is a balance between energy consumed and energy that is 'burnt off'.
- Increase consumption of plant foods, particularly fruits, vegetables, legumes, whole grains and nuts.
- Limit intake of fats, preferring the healthier unsaturated fats to saturated fats and Trans fats.
- Limit the intake of granulated sugar. A 2003 report recommends less than 10% simple sugars.[4]
- Limit salt / sodium consumption from all sources and ensure that salt is iodized.

Diets to promote weight loss are divided into four categories: low-fat, low-carbohydrate, low-calorie, and very low calorie.[13] A meta-analysis of six randomized controlled trials found no difference between the main diet types (low calorie, low carbohydrate, and low fat), with a 2–4 kilogram weight loss in all studies.[15] At two years, all calorie-reduced diet types cause equal weight loss irrespective of the macronutrients emphasized.[11]

In addition to dietary recommendations for the general population, there are many specific diets that have primarily been developed to promote better health in specific population groups, such as people with high blood pressure (as in low sodium diets or the more specific DASH diet), or people who are overweight or obese (in weight control diets). However, some of them may have more or less evidence for beneficial effects in normal people as well.

Studies have found significant benefits in mortality in certain populations from weight loss. In a prospective study of obese women with weight related diseases, intentional weight loss of any amount was associated with a 20 % reduction in mortality. In obese women without obesity

related illnesses a weight loss of greater than 9 kg (20 lb) was associated with a 25% reduction in mortality.[9] A 2007 review concluded that certain subgroups such as those with type 2 diabetes and women show long term benefits in all cause mortality, while outcomes for men do not seem to be improved with weight loss.[10] A subsequent study has found benefits in mortality from intentional weight loss in those who have severe obesity.[11]

Very low calorie diets provide 200–800 kcal/day, maintaining protein intake but limiting calories from both fat and carbohydrates. They subject the body to starvation and produce an average weekly weight loss of 1.5–2.5 kilograms (3.3–5.5 lb). These diets are not recommended for general use as they are associated with adverse side effects such as loss of lean muscle mass, increased risks of gout, and electrolyte imbalances. People attempting these diets must be monitored closely by a physician to prevent complications.[2]

#### 5. Conclusion

Ideally our lifestyle should focus on preventing obesity with a healthy diet and exercise routine. Preventing obesity and the ailments that can come along with it can significantly improve your quality of life. If you are currently suffering from obesity, you should get treatment as soon as possible. Obesity is a serious health ailment that needs to be addressed and treated promptly. There is a number of treatment options including drug therapy, psychotherapy, surgery, lifestyle changes and natural herbal and homeopathic remedies and it is important that you weigh up each option before making a decision. Diseases can be overcome by sensible natural dietetic treatment. To conclude the best way to lose weight is to combine all of these points, make a full and permanent lifestyle change and never give-up.

#### References

- [1] Lau DC, Douketis JD, Morrison KM, Hramiak IM, Sharma AM, Ur E (April 2007 "2006 Canadian clinical practice guidelines on the management and prevention of obesity in adults and children [summary]". *CMAJ* **176** (8): S1–Strychar I (January 2006). "Diet in the management of weight loss". *CMAJ* **174** (1): doi:10.1503/cmaj.045037. PMC 1319349. PMID 16389240.
- [2] Shick SM, Wing RR, Klem ML, McGuire MT, Hill JO, Seagle H (April 1998). "Persons successful at long-term weight loss and maintenance continue to consume a low-energy, low-fat diet". *J Am Diet Assoc* **98** (4)
- [3] Tate DF, Jeffery RW, Sherwood NE, Wing RR (1 April 2007). "Long-term weight losses associated with prescription of higher physical activity goals. Are higher levels of physical activity protective against weight regained?" *Am. J. Clin. Nutr.* **85** (4): 954–9. PMID 17413092.
- [4] Wing, Rena R; Phelan, Suzanne (1 July 2005). "Science-Based Solutions to Obesity: What are the Roles of Academia, Government, Industry, and Health Care? Proceedings of a symposium, Boston, Massachusetts, USA, 10–11 March 2004 and Anaheim, California, USA, 2 October 2004". *Am. J. Clin. Nutr.* **82** (1 Suppl): 207S–273S. PMID 16002825.

- [5] Thangaratinam, S; Rogozinska, E; Jolly, K; Glinkowski, S; Roseboom, T; Tomlinson, JW; Kunz, R; Mol, BW; Coomarasamy, A; Khan, KS (2012 May 16). "Effects of interventions in pregnancy on maternal weight and obstetric outcomes: meta-analysis of randomised evidence." *BMJ (Clinical research ed.)* **344**: e2088. doi:10.1136/bmj.e2088. PMC 3355191.
- [6] Rucker D, Padwal R, Li SK, Curioni C, Lau DC (2007). "Long term pharmacotherapy for obesity and overweight: Updated metaanalysis". *BMJ* **335** (7631):119499.doi:10.1136/bmj.39385.413113.25. PMC 2128668. PMID 18006966.
- [7] Sjöström L, Narbro K, Sjöström CD, *et al.* (August 2007). "Effects of bariatric surgery on mortality in Swedish obese subjects". *N. Engl. J. Med.* **357** (8):74152. Williamson DF, Pamuk E, Thun M, Flanders D, Byers T, Heath C (June 1995). "Prospective study of intentional weight loss and mortality in never-smoking overweight US white women aged 40–64 years". *Am. J. Epidemiol.* **141** (12): 1128–41. PMID 7771451.
- [8] Poobalan AS, Aucott LS, Smith WC, Avenell A, Jung R, Broom J (November 2007). "Long-term weight loss effects on all cause mortality in overweight/obese populations". *Obes Rev* **8**(6): 503–13.
- [9] Peeters A, O'Brien PE, Laurie C, *et al.* (December 2007). "Substantial intentional weight loss and mortality in the severely obese".
- [10] Sacks FM, Bray GA, Carey VJ, *et al.* (February 2009). "Comparison of weight-loss diets with different compositions of fat, protein, and carbohydrates". *N. Engl. J. Med.* **360** (9):
- [11] Gwinup G (1987). "Weight loss without dietary restriction: Efficacy of different forms of aerobic exercise". *Am J Sports Med* **15** (3): 275–9. Sahlin K, Sallstedt EK, Bishop D, Tonkonogi M (December 2008). "Turning down lipid oxidation during heavy exercise—what is the mechanism?" *J. Physiol. Pharmacol.* 59 Suppl 7: 19–30.
- [12] Haskell WL, Lee IM, Pate RR, *et al.* (August 2007). "Physical activity and public health: updated recommendation for adults from the American College of Sports Medicine and the American Heart Association". *Circulation* **116** (9)
- [13] Shaw K, Gennat H, O'Rourke P, Del Mar C (2006). "Exercise for overweight or obesity". *Cochrane database of systematic reviews (Online)* (4):CD003817.
- [14] National Institutes of Health. *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: the Evidence Report*. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services; 1998.
- [15] Dietz W. Health consequences of obesity in youth: Childhood predictors of adult disease. *Pediatrics* 1998; 101:518—525.

## Author Profile



**Dr. V. Lakshmi** Working as an Assoc. Lecturer in the Department of Hotel Management and Catering Technology, Sri Padmavathi Women's Polytechnic, Tirupathi, having 3 years of Teaching experience with specializations in Food Science and Nutrition, Hotel Management and Catering Technology, Public Relations, Public Administration and Computer Applications and guided Project works. The area of interest is Food Production and Food & Beverage Service.