

DIETARY FOOD AND ITS ROLE IN MANAGEMENT OF WEIGHT.

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Abstract

The key factors in the evolution of mankind are its physical well being and mental robustness. Based on the nutrients that one attains through his/her daily food intake combined with the physical resistance put upon the body which is through exercise, the overall physical and mental state is governed. But upon further evolution of mankind which brought an overall feel of easiness in most of the tasks we perform on an everyday regime , it also further brought upon the feeling of laziness involving lesser efforts to put upon with the greatest possible outcome, this has led to increased complications with a person getting diagnosed with life threatening disorders such as cardiac arrest, congestive heart failure, renal failure, high blood pressure, coronary artery disease, high blood pressure, high levels of cholesterol in the body, obesity, underweight disabilities etc. Majorly because of unorganized schedules involving lack of exercise and lack of nutrient rich food.

Through this article we as a team would like to portray the various dietary and exercise based methodologies involved leading to the overall well being of a person, to live a life in a healthy and positive manner, furthermore leading to the development of a better nation with the zeal to strive for greatness.

Key Words: Diet, Nutrition, Weight management, Physical fitness, Supplements

Introduction

Dietary food has a major role in the maintenance of one's body. In today's world particularly, the youth prefer consuming non-conventional foods such as packaged chips, double cheese-greasy burgers, noodles, fried snacks, pizza's etc, Why? Because it involves lesser or equivalent of no preparatory time and is comparatively much soothing to the taste buds, leading to the disorders mentioned above, with the leading disorder being obesity, due to the unhealthy methods of preparation along with unhealthy ingredients being used to prepare it.

According to a study published by The Lancet Journal, it measured the obesity rates within India, India's obesity statistics were found to be increasingly extreme, where in 1975, 0.4 million men were found to be obese which made up 1.3% of the global population but in 2014, it boomed up to 9.8 million men being obese, 3.7% of the global population, making it the 5th nation of the world on the obesity charts. Women were seen further zooming up the charts with 20 million of them being obese, making 5.3% of the global population and the 3rd to rank on the obesity charts globally. India also has the highest rates in terms of being underweight, where 13.8% of men and 14.6% women were found to be underweight.¹

Based on this analysis we can understand that this percentile isn't merely just a statistical average but is a major proportion of the population opting for unhealthy choices, which has further led the general physical appearance of Indian men and women being round with layers of visceral fat surrounded throughout their body, instead of being lean and strong.

Exercise along with food balanced and enriched with nutrients and essential minerals assist in positive management of weight. Management of weight involve various aspects according to the standards set by the Medical board. This is governed by certain equations which measure a person's overall body statistics for instance the equation used for calculating the Body Mass Index, which is a measure employed to calculate the body fat based on height and weight. The formula is $BMI = \frac{kg}{m^2}$ where kg is a person's weight in kilograms and m^2 is their height in metres squared. A BMI of 25.0 or more is overweight, while the healthy range is 18.5 to 24.9. BMI applies to most adults 18-65 years. Another equation employed is Resting metabolic rate (also called RMR) is the rate at which your body burns energy when it is at complete rest. It is calculated to see how many calories one's body needs to perform basic functions like breathing and circulation. RMR also known as Basal Metabolic Rate is usually analyzed by licensed practitioners. BMI on the other hand is the most common formulae used to analyze ones overall visceral fat and muscle mass index.²

To live a healthy lifestyle one must opt for better and healthier food choices. Foods involving the right amounts of Protein, Carbohydrates, Fats, Fibre and water intake assist in maintaining weight. Water intake is the topmost criteria to emphasize on as lack of water could lead to dehydration and unconsciousness. The preferred water intake is around 8-10 glasses which is 2 litres on a daily basis. Based on the analytical report of the BMI, the preferred intake of food in a particular amount is regulated. Certain people who are obese or over weight are recommended to keep their calorie intake in check along with the fat and carbohydrate intake, whereas people who are underweight and are looking forward to bulk up/mass up are recommended to increase their calorie intake along with their carbohydrate intake. Depending on person to person it is determined whether he/she should increase their overall food intake or decrease it. It is not necessary for the aspects to be the same for all

even if 2 or more individuals BMI is similar, it depends on what body type that person is wishing to be in , either muscular, aesthetic or generally fit to perform everyday tasks.³

Nutrients and other bioactive constituents of foods may interact with each other and the surrounding food matrix in complex ways. Experimental, clinical, and epidemiological nutrition research has traditionally strived to identify the specific mechanisms and health effects of single nutrients. However, because each food item contains energy, essential nutrients, and a multitude of bioactive substances that interact with each other and the surrounding food matrix in complex ways, the search for associations between single food factors and chronic disease may be difficult and confusing. It is argued that nutrition studies choosing a traditional nutrient specific approach may underestimate the total health impact of natural foods, and could lead to inaccurate interpretations of study outcomes resulting in the formulation of erroneous dietary advice.^{12/13}

What we eat provides all the essential nutrients to our body. This supplies our body with the right amount of energy to do our daily work. And all these nutrients come only from healthy food, not anything and everything we eat. Healthy food is needed to stimulate the growth hormones that will increase our height gradually with age. Healthy food is also needed for the functioning of our system. All the nutrients derived from healthy food trigger body cells and brain cells to actively run and perform their task. Healthy food improves the immune system, preventing you from falling sick easily. A strong immunity fights against all disease bearing bacteria and viruses. It is generally advised to cut out fat from our diet. This is often mistaken as entirely excluding even healthy fats. The unhealthy fats that should not be eaten are called saturated, and trans- fats. Mono unsaturated fats, poly unsaturated fats, omega 3 and omega 6 fatty acids are very important for our health, just like proteins and vitamins.^{10/11} These fats get stored under skin cells which get transformed into energy required for physical and mental activities. It is important that we include these in our diet. The right food can help one maintain a well-shaped body without falling into the evil trap of weight gain or obesity. The holistic sort of nutrients are attained from different sources such as:

- PROTEIN SOURCE- All dairy products, meat, fish, soya and pulses.
- CARBOHYDRATE SOURCE- Potatoes, all grains, bread.
- ESSENTIAL FAT SOURCE- Nuts and seeds, healthier oils such as coconut, olive oil and granola oil for cooking purposes.
- FIBRE SOURCE- Fruits such as bananas, berries, plums, peaches, apples, oranges, watermelons, mangoes.⁴

Based on the conditions in today's world , the rise in pollution, various toxic reagents which chemical based professionals deal with on a regular basis, dust, chlorine rich water, certain supplementation's are pre-requisite for excreting these chemicals out from the body to maintain the constant sanitization of the organs within.⁵ Supplements on the other hand are not to be confused with regular food , supplements as the word itself stands for supports the overall immune system of the body by boosting it.⁶ Milk Thistle which is obtained from the herb Silybummarianum is a potent supplement which ensures the cleansing of the liver in a natural and raw form, Vitamin D Capsules are usually administered to people living in cold regions unable to attain the natural form of Vitamin D which is from the sun rays, hence based on the body's D3 levels , Vitamin D supplements are recommended, another example being Omega-3 Fish oil capsules which assists in the cleansing of the skin along with

providing a natural glow and provides the essential fats to the body. Whey Protein is another form of supplement which is commonly seen to be used by top professional athletes such as Cristiano Ronaldo the famous Portuguese Football player and many more, Whey protein assists in providing the essential branched chain amino acids required for muscle recovery and muscle development, whey is attained from the water of cheese which is further isolated to attain a powdered complex which delivers a complete package of Protein in its raw form. Such supplements are only effective with constant physical exercises, required water and healthy food intake within the adequate amount.⁷

Remaining in a calorie constant diet with regular exercise patterns which involve cardiovascular involvement, core endurance and weight lifting based regime along with a diet rich in all nutrients serve as the base structure in management of weight and sculpting the body in the right form.⁸

Currently there are many Pharmaceutical and supplementation based firms which guarantee magic pills, powders, syrups, creams/oils, steroids and many other chemical based permanent solutions to eliminate fat and disorders like overweight and underweight issues, but these are all deceiving tricks and have no positive effects, furthermore causing more damage to the external body and its organs.^{9/14}

Hence, it is mandatory to seek advice from a Registered Medical Practitioner or a Registered Nutritionist, who has the knowledge and skill set to finally recommend a plan based on a person's overall general report inclusive of blood tests, X-rays/scans, psychological analysis and any other tests if required.

Conclusion

This study has been framed as a brief context of our overall understanding/experience of Diet and Exercise simultaneously practising the above mentioned theories practically. Long term maintenance of weight can only be achieved by remaining consistent and following the regime strictly without any excuses. Many people have attained their required body weight and body shape by following and staying true to their path of weight loss/weight gain.

Food and Supplementation alone cannot regulate weight maintenance and body sculpting, Exercise is a key factor in the fix that too, in the right manner under the governance of someone well qualified and well experienced in the field.

A major source of inspiration comes from The Military Organizations all around the world who stick to a regime which involves waking up at a specific time, performing physical exercises and particular tasks throughout the day to remain mentally and physically able to perform at the topmost levels in a stable state.

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