



AN SURVEY ON OBESITY STIGMA AND ITS ASSESSMENT WITH UPDATE : A REVIEW

Sagar¹, Amit Mittal^{1*}, Dileep Singh Baghel^{1*}, Saurabh Singh¹, Amrik Singh², Anand Kumar Chaudhary³, Shrutu Chopra⁴ and Amit Bhatia⁵

¹School of Pharmaceutical Sciences, Lovely Professional University, Jalandhar - Delhi G.T. Road, Phagwara, Punjab (India)-144411

²School of Hotel Management & Tourism, Lovely Professional University, Jalandhar - Delhi G.T. Road, Phagwara, Punjab (India)-144411

³Department of Rasa Shastra and Bhaishjya Kalpana, (Ayurvedic Pharmaceutics), Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University, Uttar Pradesh, India-221005,

⁴Amity Institute of Pharmacy, Amity University, Uttar Pradesh, India-201303.

⁵Department of Pharmaceutical Sciences and Technology, Maharaja Ranjit Singh Punjab Technical University, Punjab, India-151001

Correspondence to Author:

Dr. Amit Mittal (Professor)

School of Pharmaceutical Science, Lovely Professional University, Punjab – 144411, India

Email: amit.13145@lpu.co.in

Dileep Singh Baghel (Associate Professor)

School of Pharmaceutical Science, Lovely Professional University, Punjab – 144411, India

Email: baghel_12@rediffmail.com

Abstract

Obesity word comes from Latin language "Obesitas" indicates stout, fat or plump nature. The fatness in person more than their usually body requirement or having BMI more than 30 is known as obese person. An obese person is in severe condition that it can lead to further more diseases like hypertension, diabetes, myocardial infarction, peripheral vascular disease, stroke, heart attack, etc. The number of obese persons is increasing day by day in the world. In most of time obesity is caused due to consumption of excessive amount of food and moving deficient. It is due to intake of high energy diet, particularly fat and sugars, however we do not burn off the energy through determine and physical action, abundant of the surplus energy will be accumulated by the human body as fat. It has been detailed that in the event that we adjust the good nourishment and diminishing terrible nourishment such as fast food or junk food and adjusting good life style like waking up and running, gym workout makes a difference to decrease in the obesity. Other strategies are moreover accessible for treating obesity like Acupuncture, Hot spa, Medication but the lifestyle and diet are find to be key role player in treating obesity. In present study a survey questionnaire was planned and reaction was reported online in google form. The study was conducted with 212 people's responses gotten through web against 17 questions/query asked. The questions are related to their life style, diet and medication which is particularly related with their diet propensities.

Keywords: Obesity, BMI, Life style, WHO, Diet

Introduction

The word obesity comes from Latin language "obesitas" which having several meanings like stout, fat or plump. According to WHO Obesity and overweight is abnormal or excessive fat accumulated in body which further leads to risk to health. Obesity is a state of body in which accumulated fat over the limit will cause to the adverse effect on health. It may lead to the reduced life expectancy and or increased health problems. Obesity can be determined by the dividing weight of a person by the square of the height of the person in meters. If that value is 25 or above then it will know as overweight as and more than 30 it will term as obese. This value or method is known as Body Mass Index (BMI) (PL Rajagopal *et al.*, 2016; Knai C *et al.*, 2007; George P *et al.*, 2011). Triglycerides [TGs] are biochemical basis of obesity which forms due to deposition of fatty acids into the cells. Generally, there are two reasons of obesity, High fat diet food and a diet which having low amount of vitamins, minerals and other nutrient. The daily intake of high-fat diet food can cause obesity. Decreased amount of physical works which can be due to daily routine, technology, change in modes of transformation etc. There are some more reasons like junk food, not enough sleep, medicine reaction, genetics, etc which also can cause obese (Kelly *et al.*, 2008; McAlpine *et al.*, 2007; Sampsel *et al.*, 2007).

Obesity can cause hypertension, diabetes, myocardial infarction, peripheral vascular disease, stroke, heart attack, etc. The extra mass or weight of body put stress on every part of body. There is a high risk of joint pain in obesity. This pain is because of extra mass which can cause osteoarthritis. Also, the extra mass accumulated at the sight of heart can cause heart attack, congestive heart failure and stroke. Hypertension, High blood glucose, sleep apnea also caused by obesity. Obesity taker as a most effective factor for type-II diabetes. Because obesity which is in particular area of intra-abdomen can increase FFC (Free Fatty Acid) concentration in blood plasma which gives a major negative effect on insulin. Sensitivity in both muscle and liver. Besides the insulin resistance it secretes defective insulin which can cause type-II diabetes. Diabetes is a late phenomenon in obesity. Several diseases of heart, blood pressure, fatigue, etc. are also connected with obesity. So, we can take obesity as a major threat for our health. For cure this threatened disease, there are some drugs from ancient time like *Mellisa officinalis* [Labitae], *Bambusa textilis* [bambusoideae], *Crinum asiaticum* [amaryllidaceae], *Vitis thunbergii* [vitaceae], *Nielumbo nucifera* [nelumbonaceae] etc. which having the anti-obesity properties (Zachary Bloomgarden, 2003; WHO, 2015; Kaur *et al.*, 2018).

GLOBAL SCENARIO OF OBESITY

WHO estimated first time in the civilized human history that the total number of overweight peoples in the world is higher than the total number of starving or undernourished people of world. WHO reported that approximately 1.6 billion adults {age is 15+} in world were overweight and at least 400 million adults were obese in 2008. WHO further estimated that approximately 2.3 billion adults were overweight and more than 700 million were obese in 2015 at least 20 million children under the age of 5 years are overweight globally in 2005. And in 2016, 39% of women and 39% of men aged 18 and above were overweight also estimated 41 million children under the age of 5 are overweight and more than 1.9 billion adults, 18 years and older, were overweight. Out of these over 650 million were obese (McAlpine DD *et al.*, 2007; Sampsel S *et al.*, 2007; Zachary Bloomgarden, 2003; WHO, 2015).

INDIAN SCENARIO OF OBESITY

ACC to stats from 1998 - 2005 there is 20 percent increment in total number of obese and overweight people in now days from 6 women one is overweight or obese and from 5 men one is overweight or obese A study published in lancet has revealed that by 2030 non communicable diseases will cause for the approx. 70 percent deaths of all global world and 80 percent deaths will occur in developing countries like India the latest stats shows that 75 percent of Indian women and 58 percent of Indian men are obese (Sampsel *et al.*, 2007; Zachary Bloomgarden, 2003).

COMMON CAUSES OF OBESITY

There are generally combinations of two reasons which are responsible for obesity which are high fat diet and low physical work other reasons for obesity are

- Insufficient sleep spacing of meals (eating very often) excess calorie intake.
- Consumption of high energy foods that are in-rich with fat
- Due to physical inactivity, Availability of luxurious transportation system, and increasing urbanization.
- More usage of medicines that can be act as precursor for weight gain e.g. atypical antipsychotics
- Endocrine and metabolic factors they both also rarely cause obesity
- Conceiving child in older age may lead to obesity in children
- Proportional increased in ethnic and age group which tend to be heavier
- Increased rates of smoking because smoking suppresses appetite.
- Genetic and environmental factors also caused obesity (Choi JW *et al.*, 2003).

RISK FACTORS OF OBESITY

- Cardiovascular diseases such as heart disease and stroke, which were the leading cause of death in 2012.
- Diabetes mellitus, which can further lead to several diseases like hypertension, polyurea, etc.

- Musculoskeletal disorders especially osteoarthritis – a highly disabling degenerative disease of the joints.
- Some cancers including endometrial, breast, ovarian, prostate, liver, gallbladder, kidney, and colon.

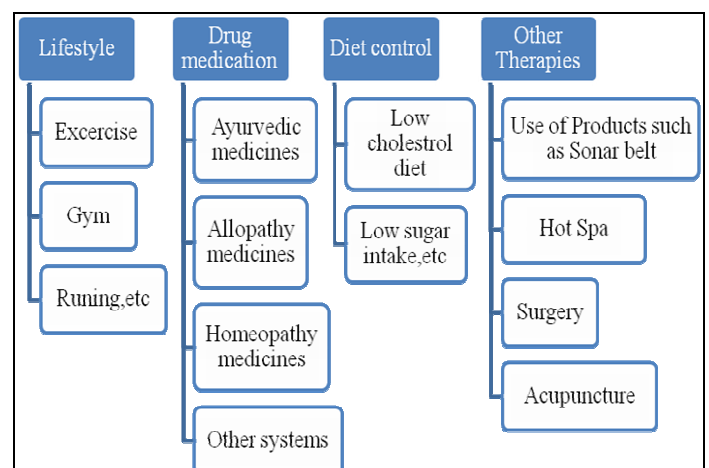
Obesity can cause myocardial infraction, peripheral vascular disease, stroke, heart attack, stopping breathing during sleep [sleep apnea] etc (Knai *et al.*, 2007; Kelly *et al.*, 2008; McAlpine *et al.*, 2007; Sampsel *et al.*, 2007; Zachary Bloomgarden, 2003; WHO, 2015; Kaur *et al.*, 2018; Choi *et al.*, 2003).

OBESITY TREATMENT

The main goal of treatment of obesity is to maintain the proper health in a normal weight the treatment method for obesity is depend upon level of obesity generally proper low fat diet or dieting and physical exercise is used to treat obesity but in modern days due to busy schedule and people are unable to do these things in a regular manner and lifestyle just because of this people runs for the other option like surgery which takes a high cost of money also there a gradual increased in usage of drugs are pharmacological agent where reduce or control fat there are five distinct strategies for weight loss.

1. Altering the internal reference valve sought by controller
2. Increasing thermogenesis by uncoupling fuel metabolism from the generation of ATP
3. Block the nutrient absorption in the alimentary canal in particular fat area
4. Modulating the fat or protein metabolism or storage by regulating fat synthesis
5. Modulating the primary afferent signals regarding fat stores analyzed by controller (George *et al.*, 2011; Kelly *et al.*, 2008; McAlpine *et al.*, 2007; McAlpine *et al.*, 2007; Sampsel *et al.*, 2007).

THERAPY FOR OBESITY



Obesity is a preventable disease. It can be procured by several methods like changes in lifestyle, controlling the diet, medication of drug and also by use of some products like sonar belt^{3, 4, 5, 6, 7}.

LIFESTYLE

Lifestyle is the leading strategy or therapy for decreasing the excessive fat of the body. Moreover, it may be a mental and physically challenge for the body. A continuation routine is necessary in this therapy. A wrong

lifestyle propensity helps in inducing and collection fat inside body. Simple changes in lifestyle like early waking in morning, one hour running, a few exercise and early sleep can decrease the weight. A workout and physical exercise make a difference to burn the calories and excessive fat of the body (George *et al.*, 2011; Kelly *et al.*, 2008; McAlpine *et al.*, 2007; Sampsel *et al.*, 2007; Zachary Bloomgarden, 2003).

LIFESTYLE TIPS

- Do aerobic exercise (cardio).
- Stop drinking alcohol.
- Do resistance training (weight Lifting).
- Take a adequate sleep.
- Do running or Yoga.
- Stop late night wakening.
- Do cycling.

- Do Swimming (George *et al.*, 2011; Kelly *et al.*, 2008; McAlpine *et al.*, 2007; Sampsel *et al.*, 2007; Zachary Bloomgarden, 2003).

DRUG MEDICATION

This therapy is generally not a first choice of a patient. There are several drugs available for the reducing of the excessive fat of the body and also different systems of medicine and there formulations are available for the same. The doable edges of those medicine within the short term embody weight loss, which can lower the danger of some obesity-related health issues. Whether or not these medicines truly improve somebody's health over the future isn't better-known. However additionally the risks embody the facet effects, which vary from drug to drug. (McAlpine *et al.*, 2007; Sampsel *et al.*, 2007; Zachary Bloomgarden, 2003; WHO, 2015)

Table 1: Suggestion and example of some Anti-obesity Modern medicines

| Sr. No | Drugs | Mode of Action | Adverse effect |
|--------|----------------|---|---|
| 1 | Orlistat | Reversible gastrointestinal lipase inhibitor preventing dietary fat absorption by 30% by inhibiting pancreatic and gastric lipase | Diarrhea, flatulence, oily spotting, Steatorrhea (oily stools) and faecal incontinence (Padwal RS <i>et al.</i> , 2007). |
| 2 | Sibutramine | Enhances satiety by inhibiting nonselective uptake of nor adrenaline, serotonin and dopamine. | Hypertension, serotonin syndrome (Padwal RS <i>et al.</i> , 2007). |
| 3 | Metformin | Activates cAMP-activated protein kinase and suppresses hepatic gluconeogenesis activity | Lactic acidosis, Gastro-intestinal upset (Padwal RS <i>et al.</i> , 2007). |
| 4 | Rimonabant | canabinoid CB1 receptor antagonist. It selectively acts on CB1 receptor in brain and peripheral organs. | Severe depression and predisposes to neurodegenerative diseases E.g. Alzheimer's disease, amyotrophic sclerosis (Padwal RS <i>et al.</i> , 2007). |
| 5 | Phentermine | Sympathomimetic amine (appetite suppressant) | Insomnia, tremor, increase blood pressure and pulse rate, headache, palpitation, constipation (Kang JG <i>et al.</i> , 2012). |
| 6 | Diethylpropion | Sympathomimetic amine (appetite suppressant) | Insomnia, tremor, increase blood pressure and pulse rate, headache, palpitation, constipation (Kang JG <i>et al.</i> , 2012). |
| 7 | Zonisamide | Anti-convulsant agent | Increase Nervousness, sweating, tremors, gastrointestinal adverse effects, hypersomnia, fatigue, and insomnia (Kang JG <i>et al.</i> , 2012). |
| 8 | Topiramate | Anti-convulsant agent | Paresthesia, dizziness, altered taste, fatigue, memory impairment, somnolence, anorexia, and abdominal pain (Kang JG <i>et al.</i> , 2012). |

Table 2: Suggestion and examples of some Ayurvedic Anti-obesity herbs

| Sr. No. | Botanical name | Common name | Mode of action |
|---------|----------------------------|----------------|--|
| 1 | <i>Myristica fragrans</i> | Nutmeg | Inhibit protein tyrosine phosphatase 1B (CV Chandrasekaran <i>et al.</i> , 2012). |
| 2 | <i>Ziziphus jujube</i> | Chinese date | Inhibition of lipase activity (CV Chandrasekaran <i>et al.</i> , 2012). |
| 3 | <i>Arachis hypogaea</i> | Peanut | Inhibitory mechanism on lipid absorption (CV Chandrasekaran <i>et al.</i> , 2012). |
| 4 | <i>Nelumbo nucifera</i> | Indian lotus | Inhibition of the activities of alpha-amylase and lipase, and up-regulated lipid metabolism and expression of UCP3 mRNA in C ₂ C ₁₂ myotubes (CC Velusami <i>et al.</i> , 2013). |
| 5 | <i>Melissa officinalis</i> | Lemon balm | Inhibit adipogenesis and adipocyte hypertrophy (S Woo <i>et al.</i> , 2016). |
| 6 | <i>Akebia quinata</i> | Chocolate vine | Adipogenesis and increased acetylCoA oxidase and adiponectin in the epididymal adipose tissue (YY Sung <i>et al.</i> , 2015). |
| 7 | <i>Bambusa textilis</i> | Bamboo | antioxidant effect in 2,2-diphenyl-1-picrylhydrazyl (DPPH), ferric reducing antioxidant power (FRAP) and inhibition of β-carotene (MH Liu <i>et al.</i> , 2016). |
| 8 | <i>Perilla frutescens</i> | Perilla | Increasing the levels of serum high density lipoprotein cholesterol, adjusting metabolic disturbance of lipoprotein, increasing antioxidant enzyme activity and repressing development of atherosclerosis (Feng <i>et al.</i> , 2011). |

REASON FOR USING HERBAL DRUG

Health benefits of weight loss without any side effects, less demanding than accepted lifestyle changes, such as exercise and diet, easily available without a prescription, more easily accepted than a professional consultation with a physician or a nutritionist and 100% natural origin and perception that natural means safe makes them more preferable than other synthetic drugs (George *et al.*, 2011).

DIET CONTROL

An inadequate diet and habits of food like junk food, cholesterol rich food, more oily and fatty foods can result in intemperate fat or obesity. A control on the diet or intake of healthy nourishment and diet or stop the inadequate intake of food can result in decrease in excessive fat of the body. A control or diet is additionally essential for reducing fat. It is more based on mental power of the individual rather than any physical control. In combination with lifestyle it can give a good and extraordinary result in decreasing obesity (George P *et al.*, 2011; M Belivani *et al.*, 2013).

DIET CONTROL TIPS

- Eat Plenty of Soluble Fiber
- Avoid Foods That Contain Trans Fats
- Eat a High-Protein Diet
- Don't Eat a Lot of Sugary Foods
- Cut Back on Carbs, Especially Refined Carbs
- Replace Some of Your Cooking Fats With Coconut Oil
- Avoid Sugar-Sweetened Beverages
- Eat Fatty Fish Every Week
- Stop Drinking Fruit Juice
- Add Apple Cider Vinegar to Your Diet
- Eat Probiotic Foods or Take a Probiotic Supplement
- Try Intermittent Fasting
- Drink green tea (George *et al.*, 2011; Belivani *et al.*, 2013).

OTHER THERAPIES

Next to the above said treatments, we have a few other treatments moreover they are not guaranteed treatments as well as not easy one also. These are

- **Surgery:** It's not a generalize method and costly method also. The small intestine of the body is made smaller by surgery so that the patient will eat less and their excessive fat will burn into form of energy, In the end patient will be start to lose weight and excessive fat. In another surgery, in severe case the excessive fat of the body is cut and remove by the help of surgery.
- **Products:** There are number of products available in the market like sonar belt, fat cutter, etc. however in some cases they will work, in some cases they not so that they do not give us a appropriate result.
- **Hot spa:** This therapy is to reduce the fat by the help of steam and heat so that excessive fat come out in the form of sweat and person start to lose weight. A frequent number of spa required in this method.
- **Acupuncture:** It is effective and one of the oldest known therapies for multiple disorders In which treatment is done by applying the pressure of needles to some specific point on the body. It is also recognized by the national institutes of health and as well as WHO. The herbal needle extract can be helps to treat the obesity. There are also some data suggested showing that electro-acupuncture may be more effective than normal acupuncture. In combination with lifestyle and diet acupuncture can really

treat obesity (George *et al.*, 2011; Belivani *et al.*, 2013; Abinaya *et al.*, 2014; Rössner *et al.*, 2000).

Data and Report

An obesity study is conducted with 212 people's reactions gotten through web against 17 questions/query inquired. The questions are related to their lifestyle, diet and medication which is specifically related with their diet habits. The reported response are as follows –

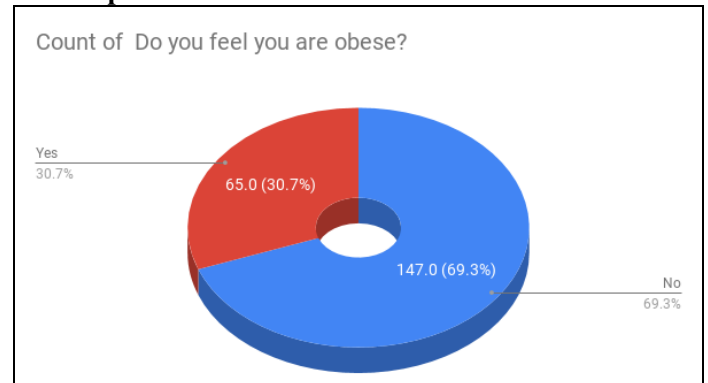
1. Do you feel you are obese?

- a) Yes b) No

Scope of question:- This is a generalize question helps to find the total number of obese and non-obese person in our list

- Number of Participants:-212
- Number of response:- 212

Data in pie chart form



Result

- 30.7% of responses said they are obese.
- 69.3% are not obese.

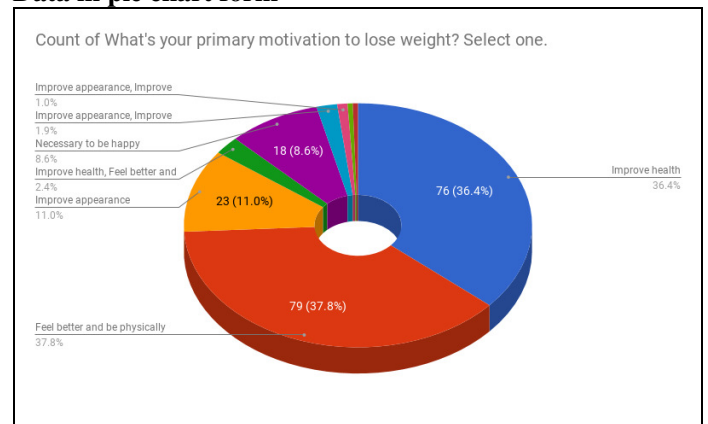
2. What's your primary motivation to lose weight? Select one.

- a) Improve appearance
b) Improve health
c) Feel better and be physically comfortable
d) Necessary to be happy

Scope of question:- This question helps to identify their main reason for obese person why should they want to lose weight? And what can be suggestion from non-obese people for the same.

- Number of Participants:-212
- Number of response:- 209

Data in pie chart form



Result

- According to data 37.8% responses suggested that they want to loose weight because it feel them better and being them physically fit. Whereas lowest responses 8.6% for statement its necessary to be happy.

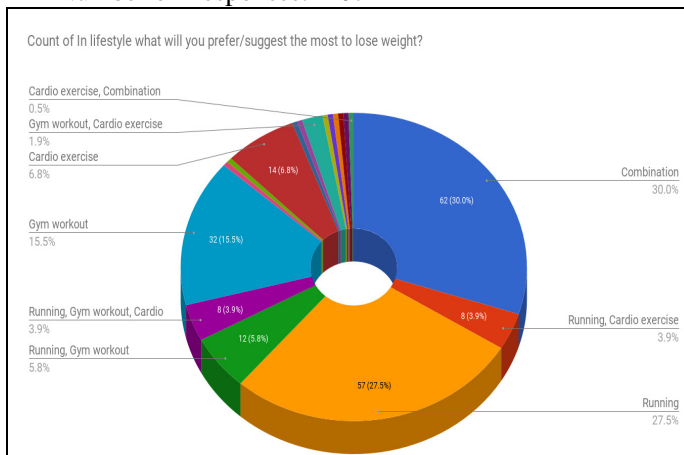
- Diet is find as second biggest preferable therapy for obesity with 20.2% responses.
- 12% of responses find that to suggest medication and treatment for the therapy. and 11.5% for the combination therapy.

7. In lifestyle what will you prefer/suggest the most to lose weight?

- a) Running
- b) Gym workout
- c) Cardio exercise
- d) Combination
- e) Any other ____

Scope of question:- This question helps to identify what method in lifestyle is most preferable or suggestive by the participants.

- Number of Participants:-212
- Number of Responses:- 207



Result

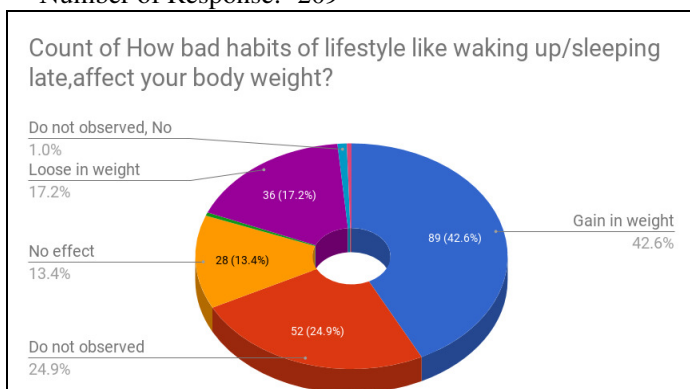
- Combination of Running, Cardio exercise, Gym workout is most preferable and suggestive method by the participants with 30% of highest responses.
- Running is preferred as a single method to loose weight by the participants with 27.5% response.
- Gym workout and cardio exercise having 15.5% and 6.8% responses respectively.
- Other responses are multiple responses from one participant.

8. How bad habits of lifestyle like waking up/sleeping late, affect your body weight?

- a) Gain in weight
- b) Loose in weight
- c) Do not observed
- d) No effect

Scope of question:- Bad habits of lifestyle like waking up and sleeping late also influence the weight nature of a person. This question helps to find what can be that influence or effect.

- Number of Participants:-212
- Number of Response:- 209



Result

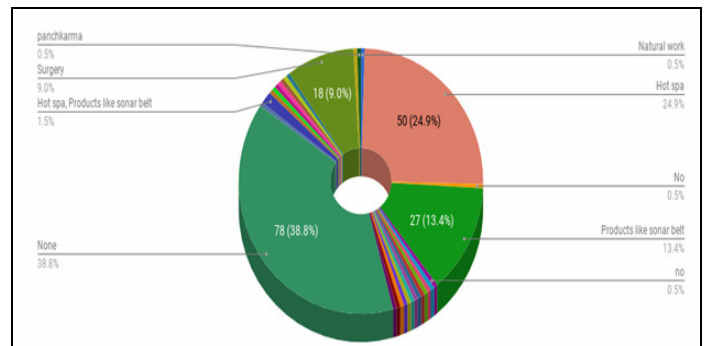
- 42.6% responses from the participants indicate that they observed gain in weight due to waking up and sleeping late.
- 17.2% of responses for the loses in weight by the participants.
- 13.4% responses of participants seem to no effect at all.
- 24.9% of response do not observed anything.

9. Will you prefer/suggest any therapy like ____ to lose weight?

- a) Hot spa
- b) Products like sonar belt
- c) Surgery
- d) Any other ____

Scope of question:- This question helps to identify what therapy in lifestyle is most preferable or suggestive by the participants.

- Number of Participants:-212
- Number of response:- 201



Result

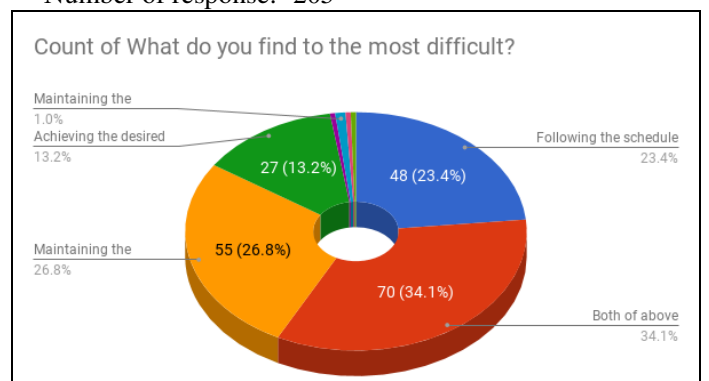
- 24.9% of responses of participants suggest Hot spa is a good therapy for weight loss.
- 13.4% of responses of participants suggest to use some products like sonar belt in daily life to loose weight.
- 9% of responses go with the surgery while maximum responses 38.8% of participants suggest to use nothing from these things.
- Also, some participants suggest their own suggestions like *panchkarama* and natural work.

10. What do you find to the most difficult?

- a) Achieving the desired weight
- b) Maintaining the desired weight
- c) Both of above
- d) Following the schedule to lose weight

Scope of question:- This question will describe the physical and mental statement of person regarding their weight loss goal.

- Number of Participants:-212
- Number of response:- 205



Result

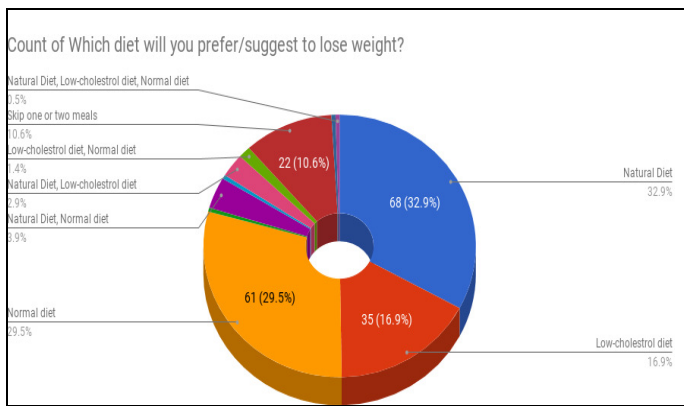
- 34.1% of responses of people told that achieving the desired weight and maintain that weight, both are difficult.
- While 26.8% of people find to maintain the desired weight is most difficult task.
- For 13.2 % of responses of people achievement of desired weight is difficult one.
- In last following the schedule for achieving weight is find to be difficult by 23.4% of responses of people.

11. Which diet will you prefer/suggest to lose weight?

- a) Natural Diet b) Low-cholesterol diet
- c) Normal diet d) Skip one or two meals

Scope of question:- The diet have an important role in gaining or loosing weight. A wrong diet or high fat diet can lead to increase weight.

- Number of Participants:-212
- Number of response:- 207



Result

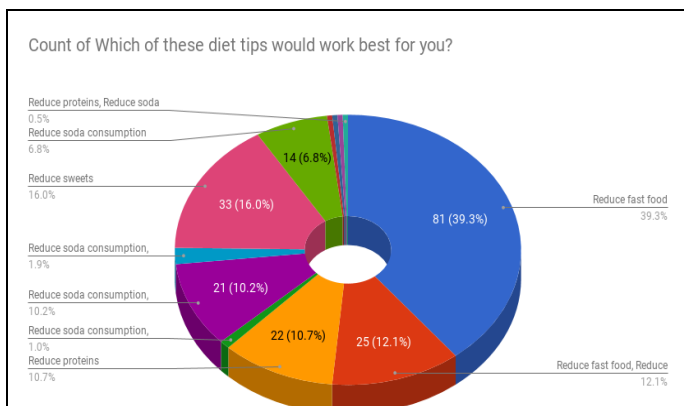
- 32.9% and 29.5% of responses of participants suggest or prefer to take a natural and normal diet respectively.
- 16.9% of responses of participants suggest or prefer to intake a low cholesterol diet.
- 10.6% of responses of participants suggest or prefer to skip one or two time meal to loose weight.
- Remaining responses are suggesting diet in combination.

12. Which of these diet tips would work best for you?

- a) Reduce proteins b) Reduce soda consumption
- c) Reduce fast food d) Reduce sweets

Scope of question:- Sweets, Protein, Soda Consumption and Fast food intake can increase the weight. This question helps to identify that which thing we have to reduce in our diet.

- Number of Participants:-212
- Number of response:- 206



Result

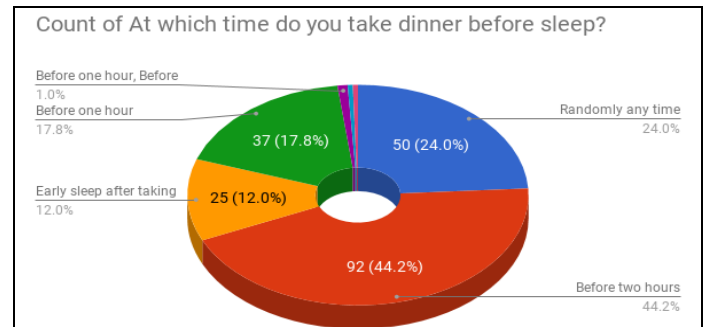
- 39.3% of responses or participants suggest or prefer to reduce fast food consumption.
- 16% of responses or participants suggest or prefer to reduce sweets in their diet.
- 10.2% and 10.7% of responses or participants suggest or prefer to reduce the soda consumption and protein in their diet respectively.
- 12.1% of responses or participants suggest or prefer to reduce the fast food and sweet in their diet.

13. At which time do you take dinner before sleep?

- a) Before one hour
- b) Before two hours
- c) Early sleep after taking meal
- d) Randomly any time

Scope of question:- The timing of taking meal and sleep can result in weight gain. The appropriate time to take meal is 2 to 3 hours before sleep.

- Number of Participants:-212
- Number of response:- 209



Result

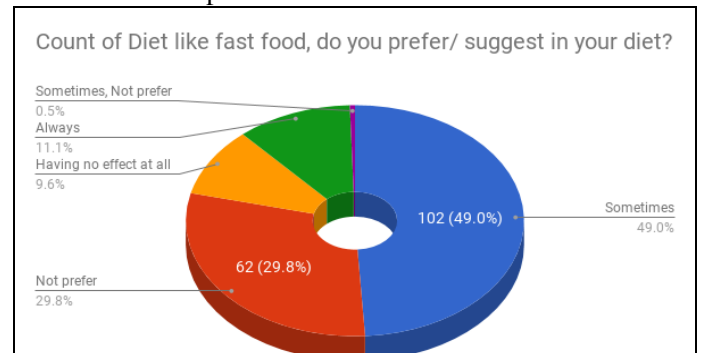
- 44.2% of responses or participants are taking dinner before 2 hours of sleep.
- 24% of responses or participants are taking dinner randomly.
- 12% of responses or participants are taking early sleep after taking dinner.
- 17.8 % of responses or participants are taking dinner before 1 hours of sleep.

14. Diet like fast food, do you prefer/ suggest in your diet?

- a) Sometimes b) Always
- c) Not prefer d) Having no effect at all

Scope of question:- Fast food contain a highly fried oily diet which leads to increase weight. Consumption of fast food having a major role in obesity that's why this question having an important role in this survey.

- Number of Participants:-212
- Number of response:- 208



Result

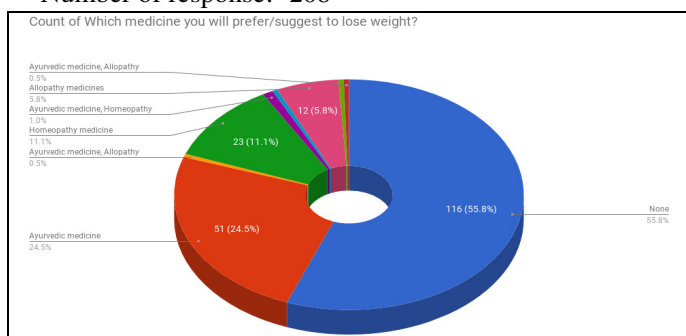
- 49% of responses of participants suggesting or preferring fast food sometimes in their diet.
- 29.8% of responses of participants not prefer or suggest fast food in their diet.
- 11.1% of responses of participants suggest or prefer always fast food.
- 9.6% of responses of participants find they having no effect at all of fast food on their obesity.

15. Which medicine you will prefer/suggest to lose weight?

- a) Ayurvedic medicine
- b) Allopathy medicines
- c) Homeopathy medicine
- d) Any other_____
- e) None

Scope of question:- All system of medicines having anti-obesity medicines. This question helps to identify the most preferable or suggestive system of medicines for losing weight.

- Number of Participants:-212
- Number of response:- 208



Result

- Highest responses 55.8% of responses of participants suggest not to use any kind of medicines
- 24.5% of responses of participants suggest to use ayurvedic medicines.
- 11.1% of responses of participants suggest to use homeopathic medicines.
- Allopathy medicines having lowest responses of participants with 5.8% response.

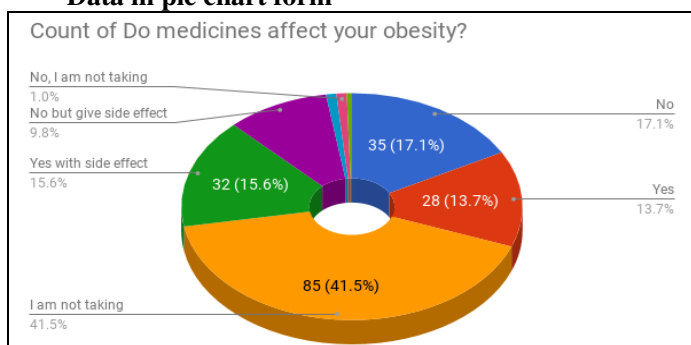
16. Do medicines affect your obesity?

- a) Yes
- b) No
- c) Yes with side effect
- d) No but give side effect
- e) I am not taking medicines

Scope of question:- Sometimes use of medicine is not effecting patient at all. This question helps to identify actual persons who having any good effect or side effect by the medicines.

- Number of Participants:-212
- Number of response:- 204

Data in pie chart form



Result

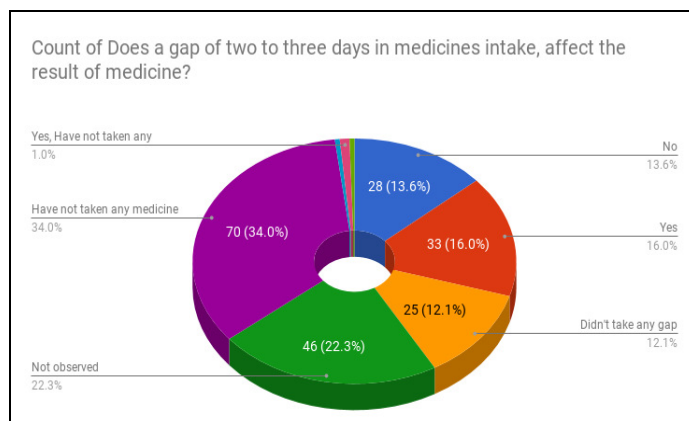
- 41.5% of responses of participants told that they are not using any kind of medicines.
- 13.7% of responses of participants having effect from the medicines whereas 15.6% of responses of participants having effect but side effects too.
- 17.1% of responses of participants having no effect from the medicines whereas 9.8% of responses of participants having no effect but side effects.

17. Does a gap of two to three days in medicines intake, affect the result of medicine?

- a) Yes
- b) No
- c) Didn't take any gap
- d) Not observed
- e) Didn't take any medicine

Scope of question:- The gap of medicine can effect the result. This question helps to identify that effect of gap in medication.

- Number of Participants:-212
- Number of response:- 206



Result

- 34% of responses of participants said that they didn't taken any kind of medicine.
- While 12.1% of responses of participants did not take any gap within their medication.
- 22.3% of responses of participants did not observed any effect.
- 16% of responses of participants find some effect on obesity by taking gap and 13.6% of responses of participants find no effect after taking gap.

Summary and Discussion

Obesity is a worldwide risky disease. The number of obese individuals on earth rising in a very high speed. Obesity can encourage to life threatening illnesses like type II diabetes mellitus, mental impediment, physically unfit, Hypertension etc. The obese nature of a individual is due to the destitute lifestyle, bad eating habits and sometimes due to improper medication. The changes in lifestyle, Controlling the diet, and right medicine will definitely offer assistance to reduce the weight.

Based on surveys overviews of obesity of 212 participants of random age group, by this an attempt was done after interpretation of find response reports the growing worldwide obesity epidemic among people. It has to be find that lifestyle and diet both are having a key role player in actuated obesity and as well as reduce obesity. Whereas medicine and other therapies having comparatively low role in reducing obesity. Adapting the good lifestyle like running

and early rising in morning helps to reduce the obesity. On the other hands diet control and adapting good diet habits like reducing soda consumption and sweets will also help to reduce the obesity. The obesity control products such as sonar belt are not much useful by the people. In medication some time it having good results but sometime it having good results with side effect too. In some cases, results are not find or not upto the mark.

Conclusion

Obesity may be a treatable disease. It happened just because of human wrong habits. If it is not corrected before the time than it can be severe. The treatment of obesity is depending upon the will of a patient. For the weight loss patient has to work by physically and well as mentally too because he has to do physically activity and control the diet in order to reduce the weight. Then only he will able to achieve the desired goal of weight lose but although he has to maintain the weight otherwise, he will again start to gain weight. That's why losing weight is likely seems to easier than maintaining the weight and that's why losing weight is a physically and mentally work too.

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