Paper Title

Name

Institution

**Research**

**Abstract:**

 Obesity is one of the serious problems that is faced by almost everyone nowadays due to unhealthy eating habits and less physical activities, but there are also some genetic reasons that accompany this disease. Previously doctors and nurses used to rely on exercise and monitoring of sugar intake to control the problem, but it was seen that the problem was not solved and also it affects other body systems therefore now surgeries are being used to control this. So in this study, the types of surgeries and the effect of obesity on body systems are examined.

**Introduction:**

 Gastric sleeve, gastric band, and gastrointestinal bypass are the commonly used procedures to reduce body weight. Gastric sleeve is also called vertical sleeve gastrectomy which is a good option for all those patients who are too sick to undergo treatments like bariatric procedures. In case of the gastric sleeve, the side part of the stomach is removed while a smaller tub is left for food storage. In this, the hormone-like gherlin is also removed which is responsible for hunger stimulation. Once the surgery is done the patients feel full after eating one or three ounces of food and in this way their body weight is controlled. While in case of the gastric band a silicone band is placed around the upper part of the stomach to decrease stomach size thus reducing the food intake. Gastrointestinal surgery is another procedure for weight loss where the size of the stomach is shrunk so that the patient cannot eat as much as he used to before. Part of the digestive system is also re-routed so that food is not absorbed in enough amounts (Mosinski & Kirwan, 2016). Although all these methods are in practice due to the prevailing obesity and the risk factors that are there with the disease. Exercises and other physical activity along with food intake monitoring are some of the common practices that are used by the healthcare providers but they are not enough to cure the disease therefore doctors are now suggesting to their patients to undergo these surgeries because not only they are the fastest methods to reduce weight but also limited health risks are involved in all these surgeries, therefore, doctors across the US are now using these methods to cure obesity so I will also help my patients to get rid of the extra weight with the help of these surgeries (Park & Torquati, 2011).

 Digestion is a process where the food is broken down by chewing and churning and also by some of the chemical processes like the digestive system of the stomach and intestine. When the food is digested, then the body feels hungry and wants to get more food. Once the food particles are converted into smaller particles, then they are absorbed by the epithelial cells of the intestinal villi. Among all the food groups carbohydrates are the most commonly consumed ones they are consumed in the form of polysaccharides and disaccharides; therefore, they are required to broken down in monosaccharide for their utilization by the body. The digestion process starts from the mouth where with the help of saliva they are hydrolyzed. As the food does not stay long in the mouth; therefore, most of the starch is not hydrolyzed here. The salivary starches are denatured once the bolus reaches the stomach which results in the digestion of the food in the small intestine when the pancreatic amylase hydrolyzes the starch into maltose and dextrin. After the digestion, the monosaccharide are transported via the small intestine into the liver. In the liver, the monosaccharide is converted to various metabolites. Some of the glucose is transported to the blood where it is absorbed and then reaches to the entire body. Once the person has surgery then the digestion rate is slower so that the person feels full all the time because of the food that is still present in the stomach and also the absorption process is slower so that fewer carbohydrates are supplied to the body and the individual do not get the right amount, and the weight is controlled in this way (Cdn.ymaws.com, 2019).

 The respiratory system is one of the most important systems in homeostasis and the reason is due to the gas exchange of gases. The gas exchange occurs in the alveoli of the lungs. When the blood passes through the capillaries in the alveolar sacs, change the pressure gradient which ultimately allows carbon dioxide and oxygen to diffuse in and out of the blood. When the body gains weight, then the individual suffers from multiple issues including respiratory issues. Obesity causes the diaghphrm, lungs and chest cavity to compress mechanically which further leads to damage of pulmonary ventilation. The pulmonary ventilation is also responsible for the breathing process or the exchange of gases between outside gases and the alveoli of lungs. Ventilation is a mechanical process that depends on the differences between the pressure in the alveoli and the atmospheric air. It is important to have proper lungs expansion and have full capacity because only then the homeostasis will be maintained due to obesity this particular function is disturbed because of the fat accumulation in the veins due to which the lungs are not able to expand properly, and certain problems occur (Mayaan et al., 1992).

**Conclusion:**

 Weight gain and obesity are one of the rising concerns in healthcare due to the issues that are followed by the problem. Although the healthcare providers are using multiple strategies like food intake monitoring and physical activities to control body weight even then, this is not controlled. Sue to these reasons some of the doctors prefer to do surgeries on the patients who are obese and are in severe problems. Although there are serious concerns related to these surgeries, these are the only effective and easy way to reduce body weight.

**References**

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