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English 21003

September 11<sup>th</sup>, 2019

The article titled “Seeking an Obesity Cure, Researchers Turn to the Gut Microbiome” was very captivating. Recently, there has been a great deal of research focusing on the gut microbiome and its effects on weight loss, immunity, and many other factors related to health and wellbeing. In this article researchers attempted to find a link between obesity and the gut microbiome via fecal transplants.

The first study was conducted by Dr. Elaine Yu of Massachusetts General Hospital in Boston. The study required obese participants to swallow a capsule containing a stool test from lean donors which would potentially result in the obese participants losing weight and improving their metabolic health. Interestingly, many volunteers applied to become participants in this study. Many of which were from other countries such as Alaska and Hawaii. The logic behind this is rather fascinating. Many scientists believe that because obesity, insulin resistance, and fatty liver disease are associated with a decrease in the diversity of the gut microbiome then having a more diverse gut microbiome, usually found in lean individuals, could result in these health issues being alleviated. In essence, if an obese individual receives a fecal transplant containing a diverse gut microbiome then they will lose weight and heal from their deteriorating metabolic conditions. This conditional statement sounds valid. However, there are scientists who disagree.

The research between the gut microbiome and metabolic diseases is currently in its infancy and there are many mixed findings on this topic. In one study, fecal treatment was given to one group and a placebo was given to the other group. However, researchers concluded that there was no significant change in weight loss or improvement in metabolic health between both groups. The differences in findings point to the fact that there needs to be more larger scale studies conducted. In addition, more longitudinal studies need to be conducted to assess weight loss and metabolic changes more accurately.

Dr. Purna Kashyap at Mayo Clinic mentioned that treating obesity and metabolic disorders with a fecal transplant is implausible. His reasoning behind this is that obesity is far too complex to narrow it down to a simple fecal transplant. Scientists must also consider the effects of diet, genetics, environment, behaviors, and lifestyle. This statement was engaging because if a patient were to receive a fecal transplant expecting for their obesity to be cured but proceed to go back home to an environment where they only have access to fast food then it is unlikely that the patient may lose weight. With this being said, scientist must ensure that in order to tackle obesity and metabolic disease they must also consider the array of factors that contribute to the disease and not just focus on the gut microbiome.

Overall, the gut microbiome should be another tool in the toolbox of fighting the obesity epidemic. The reasoning behind the gut microbiome and weight loss seems promising but much more large scale studies must be implemented to prove its efficacy.