World Academy of Science, Engineering and Technology
International Journal of Medical and Health Sciences
Vol:17, No:11, 2023

Vegan Low Glycemic Index Diet in Appetite Reduction Among Polycystic Ovarian Syndrome (PCOS) Patients Carrying Melanocortin 4 Receptor (MC4R) Variants of (rs12970134), and (rs17782313): A Mini Review

Authors : Jumanah S. Alawfi

Abstract : Polycystic ovary syndrome (PCOS) is a common endocrinopathy among females in their reproductive years. The incidence cases are nearly 1.55 million among females across the globe, with 0.43 million associated disability-adjusted life-years (DALYs). This syndrome is associated with intricate mechanisms typically characterized by insulin resistance (IR), infertility, overweight and/or obesity. Lifestyle interventions are often prescribed as an adjective treatment. Nonetheless, obesity is a complex disease that encompasses multiple dimensions, such as excessive energy intake and genetics. The melanocortin 4 receptor mutation (MC4R) is an important mediator in appetite. There is emerging evidence that suggests its role in the Body Mass Index (BMI) among PCOS subjects, which poses the question of obesity and/or overweight among the PCOS patients who carry the MC4R variants may be caused by overconsumption. Thereby, using other satiety techniques may be beneficial as a part of personalized nutrition. Therefore, the aim of the current mini-review is to discuss the effect of the vegan low glycemic diet on reducing appetite among PCOS patients. The review shows that there is a gap in the knowledge of the effect of the vegan diet on PCOS patients who carry MC4R variants which need further research.

Keywords : polycystic ovarian syndrome (PCOS), Appetite, Melanocortin 4 Receptor Mutation (MC4R)., Obesity
Conference Title : ICREWH 2023 : International Conference on Reproductive Endocrinology and Women's Health
Conference Location : Jeddah, Saudi Arabia
Conference Dates : November 20-21, 2023