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Dietary Modifications in Patients with Polycystic Ovary Syndrome: A Public Health Concern

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Occasional periods or no menstrual periods at all are typical symptoms of polycystic ovarian syndrome (PCOS). It is due to an excessive synthesis of the hormone androgens, people with PCOS frequently have numerous ovarian cysts [1]. According to literature between 33 and 83 percent of women with PCOS who are overweight or obese shows signs of acne, hirsutism, and male pattern baldness and if not managed high blood pressure, cardiovascular diseases and endometrial cancer. Insulin levels in PCOS patients are frequently reported to be higher than usual. The pancreas is where hormone insulin is made [2]. It works with the body's cells in converting sugar (glucose) into energy. The sugar levels in blood may increase if your body doesn't create enough insulin [3]. This can also occur when you develop insulin resistance, which prevents you from adequately using the insulin that you do make [4]. The body may try to produce excessive amounts of insulin if you develop insulin resistance in an effort to maintain normal blood sugar levels. Your ovaries may start to create more androgens like testosterone if your insulin levels are too high [5]. The obese and overweight according to BMI can cause the insulin resistance [6]. Due to their insulin resistance, people with PCOS typically deal with this issue, which can keep reduced weight more challenging [7]. It could be more challenging to regulate insulin resistance and, as a result, weight reduction if you eat a diet high in refined carbs, which including starchy and sugary meals [8].

Dietary modifications in PCOs

The use Carbohydrates: It is a primary source of energy that can be added to their which can reduce symptoms PCOS and balance their hormonal level. Give a low carbohydrate, high saturated fatty acid diet for at least 2 months to infertile and overweight women, their BMI drop, and ovulation process maintain and increase fertility [9-11].

The use of Protein: The protein is very like carbohydrates and fats so added in their diet as healthy protein sources and improve their insulin sensitivity and reduce their weight good source of protein whey protein that can be added to their diet and that can give 35 g of that supplements and after 7 days check their GLUT 4 response, that is an insulin-stimulated transporter and that was regulate glucose level and insulin level so whey protein helpful in alleviate PCOS symptoms [12].

The use of Fats and Oils: The diet related to saturated fats can cause dyslipidemia and then HDL level decreases and increase cholesterol and LDL level. Apo lipoprotein B increases because of insulin resistance and causes imbalance in androgens and corticosteroids hormones level and increase estrogen secretion. Healthy options of diet like monounsaturated fatty acids and poly unsaturated fatty acids like almonds and walnuts improve ovulation [13].

The use of Micronutrients: The utilization of vitamin D can be helpful in reproductive function and in insulin sensitivity. Inositol, folate, folic acid omega 6 fatty acid and omega 3 fatty acid added in their diet that can improve menstrual problems balance their hormonal level. Glycyrrhizin, vitamin Selenium and catechin effective in lowering testosterone level influence

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proinflammatory state in PCOS[14].

Conflicts of Interest

The authors declare no conflict of interest

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