DIFFERENCES IN THE INTAKE OF FOODS HIGH IN FATS, SUGARS AND LOW IN ANTIOXIDANTS IN WOMEN WITH POLYCYSTIC OVARY SYNDROME AND A CONTROL GROUP

Rachel Dabrell
Project Supervisor: Dr. Selby Nichols
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**Background:** Throughout the world Polycystic Ovarian Syndrome, or PCOS as it is commonly known, is described as a common and perplexing endocrine disorder of women in their reproductive years with a prevalence of up to 10% (Bhagel et al, 2010). Worldwide between 5% - 10% of all women have some degree of Polycystic Ovarian Syndrome frequently co-existing with obesity and diabetes. As much as 90% of women with irregular menses are affected by PCOS.

**Objective:** The main objective of this study was to test the hypothesis that Women with Polycystic Ovary Syndrome (PCOS) have a higher intake of foods high in fats and sugars and a lower intake of foods high in antioxidants than women without Polycystic Ovary Syndrome.

**Design:** The study design was that of a case control study. Seventy three (73) women between the ages of 16 – 40 years were recruited to participate in the study. Of the 73 participants 43 represented women who had been clinically diagnosed with PCOS, and 33 participants represented normal women who had no medical history of PCOS.

**Results:** The findings of the study revealed that women with PCOS did have a higher intake of foods high in fats and sugars, and a lower intake of foods high in antioxidants than women without PCOS. The PCOS group had a higher rate of consumption high glycemic index foods than the non-PCOS group. More women with PCOS consumed fried foods, sugary snacks, and flour based products like pasta, roti and baked goods. It was also shown that women with PCOS had higher BMI’s and waist circumference measurements, with a strong correlation between BMI and waist circumference ($p = 0.03$).
Conclusion: When compared with the controls it was found that women with PCOS did consume more fats and sugar and lower levels of antioxidants than women without the syndrome, and there was also a tendency to foods rated as high glycemic index scale.