

Effect of dietary incorporation of *Vernonia colorata* (Willd) leaves on blood lipid profile in Albino rats.

Egedigwe Chima Agatha and Ijeh Ifeoma Irene

Dept of Biochemistry, College of Natural Applied Sciences, Michael Okpara University of Agriculture, Umudike, P.M.B 7267, Umuahia, Abia State

Corresponding Author: agathaeges@yahoo.com

ABSTRACT

Processed and unprocessed *Vernonia colorata* was incorporated into diets of albino rats at 5 and 10 percentage levels. Feeding processed (PVC) and unprocessed *Vernonia colorata* (UPVC) gave the following triacylglycerol (mg/100ml)- 5%PVC (133.91±2.09), 10%PVC (110.39±2.57), 5%UPVC (153.74±1.64) and 10%UPVC (111.41±2.30) relative to the control group fed basal diet(159.15±0.32).The serum cholesterol (mg/100ml) observed were 5%PVC (178.07±3.46), 10%PVC (174.60±4.21), 5%UPVC(191.54±1.43) and 10%UPVC (148.77±1.88) relative to the control (195.31±4.37).The LDL-cholesterol (mg/100ml) obtained were 5%PVC (45.27±2.10), 10%PVC (32.38±3.67), 5%UPVC(73.73±3.07) and 10%UPVC (23.16±2.49) relative to the control (101.69±3.66).The VLDL-cholesterol (mg/100ml) were 5%PVC (26.78±0.42), 10%PVC (22.08±0.51), 5%UPVC(30.75±0.33) and 10%UPVC (22.28±0.46) relative to the control(31.83±0.06).The HDL-cholesterol (mg/100ml) obtained were 5%PVC (106.02±2.05), 10%PVC (120.15±2.65),

5% Δ JPVC(87.06 ± 2.47) and 10% Δ JPVC (103.33 ± 2.61) relative to the control(61.79 ± 0.65). These findings are indicative that *Vernonia colorata* could have a positive modulatory effect on blood lipid profile by reducing blood levels of lipids with atherogenic potentials while increasing HDL that has a cardioprotective effect. It could therefore be beneficial to individuals predisposed to cardiovascular diseases.

Key words: *Vernonia colorata*, lipids, cardiovascular diseases, albino rats