P13 EFFECTS OF HIBISCUS SABDARIFFA EXTRACT ON CLINICAL BLOOD CHEMISTRY IN RATS

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Hibiscus sabdariffa Linn. has been reported to have a broad range of therapeutic effects. This study examined effects of H. sabdariffa aqueous extract on clinical blood chemistry and hematology. Thirty male Wistar rats were randomly divided into 3 treatment groups. Each group comprised 10 rats. Rats in the first group were given distilled water 1 ml/kg/day orally for 30 days, serving as a control groups. The other two groups of rats were given H. sabdariffa aqueous extract orally at dosage of 250 and 1000 mg/kg/day for 30 days. During the treatment period, body weight was recorded every week, food and water consumptions were recorded at every five days. At the end of the treatment period rats were anesthesized. Blood was collected by heart puncture and serum was prepared for measuring hematology and clinical blood chemistry (hematocrit (Hct), hemoglobin (Hb), RBC count, mean corpuscular volume (MCV), mean corpuscular hemoglobin (MCH), mean corpuscular hemoglobin concentration (MCHC), RBC morphology, platelet count, white blood cell (WBC) count and % differential WBCs; aspartate aminotransferase (AST), alanine aminotransferase (ALT), alkaline phosphatase (ALP), total bilirubin, direct bilirubin, total protein, albumin, globulin, blood urea nitrogen (BUN), serum creatinine (SCr), glucose, uric acid, total cholesterol, triglyceride (TG), high density lipoprotein-cholesterol (HDL-C), low density lipoprotein-cholesterol (LDL-C), sodium, potassium, calcium and chloride), respectively. The results showed that, rats received both dosage regimens demonstrated no changes of clinical blood chemistry and hematology. These results suggested that H. sabdariffa extract no effect on several important organs/systems such as liver, kidney, blood system, electrolytes as well as lipid and carbohydrate metabolism.