0.98 ± 0.15, 1.22 ± 0.70 & 1.16 ± 0.18 mg/ml respectively. Then, Adiponectin levels in chicken, beef and lamb were 150 ± 4.5 ng/ml, 24 ± 0.5 μg/ml and 37 ± 0.98 ng/ml respectively.

Conclusions: The adiponectin protein from adipose tissues wasted in meat sources may be a useful enrichment sources for a health conditions.

Keywords: Adipose tissue; Protein; Adiponectin; BCA kit; ELISA Assay.

XP03. HISTOLOGICAL FEATURES OF DATES (PHOENIX DACTYLIFERA) AND MORPHINE ON RAT TESTIS

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Drug abuse such as chronic morphine intake can cause sexual dysfunction in men. Medicinal plants such as dates (Phoenix dactylifera) have massive health benefit in improving male infertility. Various studies showed that morphine has negative effects on male infertility and Phoenix dactylifera (dates) could cure male infertility. This study was carried out to investigate the possible protective role of dates on the histological features of morphine induced rat testis. Adult male Sprague Dawley rats age 7-9 weeks old, 200-250g body weight (BW) were randomly divided into: Group 1 was force-fed with distilled water, 1ml/kg BW for 35 days, Group 2 was intramuscularly (i.m) injected with Morphine, 20mg/kg BW for 7 days followed by distilled water for 28 days, Group 3 was force-fed with distilled water for 7 days followed by crude P. dactylifera extract, 200mg/kg for 28 days and Group 4 was injected (i.m) with morphine, 20mg/kg BW for 7 days followed by force-fed of crude P. dactylifera extract, 200mg/kg for 28 days. Rats were sacrificed on day 36. The testis was abstracted, fixed in Davidson solution for two days and stored in Formalin solution prior to histological processes. The histology of the testicular tissues in group 2 rats showed degeneration and disorganisation of the cellular layers lining the seminiferous tubules (ST) with a decrease in number of the germ cells and less spermatooza were found in the lumen. Whereas, the ST in group 3 showed thicker layer of cellular linings with higher numbers of germ cells and spermatooza in the lumen. Interestingly, the administration of crude P. dactylifera after the morphine in Group 4 showed improvement in the histological features of rat testis as compared to Group 2. In conclusion, supplementation of dates could be useful in combating the detrimental effects of morphine on male reproductive system.

Keywords: Morphine; dates; Phoenix dactylifera; testis; rat.

XP04. ROLE OF NIGELLA SATIVA OIL ON ANDROGEN RECEPTOR AND ULTRASTRUCTURAL FEATURES OF NICOTINE TREATED MALE RATS SEMINAL VESICLE AND PROSTATE GLAND

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Nicotine is claimed to increase free radicals, DNA damaged and lipid peroxidation in male reproductive organs. Nigella sativa has been identified to improve the adverse effects due to