

Name (English)	Hanan Ali Mohamed Abdel-Moneim	حنان على محمد عبد المنعم	الإسم باللغة العربية
University	Damanhour	دمنهور	جامعة
Faculty	Fac. of Vet. Med.	كلية الطب البيطرى	الكلية
Department	Physiology	الفسيولوجيا	القسم
Specialization	Physiology	الفسيولوجيا	التخصص الدقيق
E. Mail	Hanan.ghoneim@yahoo.com		البريد الإلكتروني
Tel.			التليفون
Fax			الفاكس



Paper number 1

Title	Effect of Ginger and L- carnitine on some reproductive parameters of male rats.
Authors	Hanan A. , Ghoneim ¹ , El-Far, A.H. ² , Elnasharty, M. A. ³ , and Abo-Ghanema, I. I. ¹ ¹ <i>Physiology department, Fac. of Vet. Med., Damanhour Univ., Egypt</i> ² <i>Biochemistry department, Fac. of Vet. Med., Damanhour Univ., Egypt</i> ³ <i>Histology and Cytology department, Fac. of Vet. Med., Damanhour Univ., Egypt</i>
Abstract	In this study, we investigated the effects of ginger and L-carnitine on the reproductive performance of male rats with respect to semen parameters, male sex hormones and the testicular antioxidant system. A total of sixty mature male albino rats were divided into four groups of fifteen rats. The control group received saline, whereas the other three groups received ginger (100 mg kg ⁻¹ d ⁻¹), L-carnitine (150 mg kg ⁻¹ d ⁻¹) or a combination of both ginger (100 mg kg ⁻¹ d ⁻¹) and L-carnitine (150 mg kg ⁻¹ d ⁻¹) via a stomach tube daily for one month. At the end of the treatment period, the rats were sacrificed, and their sperm characteristics (count, motility and viability), antioxidant enzyme factors levels (reduced glutathione, catalase, superoxide dismutase and total antioxidant capacity) and sex hormone levels (testosterone, Follicle stimulating hormone (FSH) and luteinizing hormone (LH) were analysed. Our results showed that the three experimental treatments improved sperm parameters, antioxidant enzyme activity and testosterone hormone levels; the most pronounced positive effects were observed in the group that received a combination of both ginger and L-carnitine. Therefore, the administration of a combination of ginger and L-carnitine may be beneficial for improving male sexual performance.
Keywords:	Ginger, L-Carnitine, Spermatogenesis, Antioxidant enzymes, Sex hormones, Seminiferous epithelium, Rats
Published in:	World Academy of Science, Engineering and Technology 2012 (64):1199-1205.

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DAMANHOUR UNIVERSITY