Accepted Manuscript

Title: Skeptical approaches concerning the effect of exposure to electromagnetic fields on brain hormones and enzyme activities

Authors: Aymen A. Warille, Gamze Altun, Abdalla. A. Elamin, Arife Ahsen Kaplan, Hamza Mohamed, Kıymet Kübra Yurt, Abubaker El Elhaj

PII: S2213-879X(17)30033-0

DOI: http://dx.doi.org/10.1016/j.jmau.2017.09.002

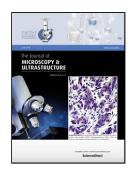
Reference: JMAU 146

To appear in:

Received date: 22-2-2017 Revised date: 31-8-2017 Accepted date: 7-9-2017

Please cite this article as: Aymen A.Warille, Gamze Altun, Abdalla.A.Elamin, Arife Ahsen Kaplan, Hamza Mohamed, Kıymet Kübra Yurt, Abubaker El Elhaj, Skeptical approaches concerning the effect of exposure to electromagnetic fields on brain hormones and enzyme activities (2010), http://dx.doi.org/10.1016/j.jmau.2017.09.002

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



ACCEPTED MANUSCRIPT

Skeptical approaches concerning the effect of exposure to electromagnetic fields on brain hormones and enzyme activities

Aymen A. Warille^{1,2,*}, Gamze Altun³, Abdalla. A. Elamin^{1,3}, Arife Ahsen Kaplan³, Hamza Mohamed^{1,3}, Kıymet Kübra Yurt³, Abubaker El Elhaj^{1,3}

¹Department of Anatomy and Histology, College of Medicine, University of Hail, Hail, Kingdom of Saudi Arabia

²Department of Anatomy, Medical School, Ondokuz Mayıs University, Samsun, Turkey

³Department of Histology and Embryology, Medical School, Ondokuz Mayıs University, Samsun, Turkey

(*) Corresponding Author:

Aymen A. Warille PhD Department of Anatomy, Faculty of Medicine, Ondokuz Mayıs University, Samsun, Turkey

Highlights

- Alterations in voltage-gated calcium channels (VGCCs) occur due to the direct effects of EMF exposure.
- NF-kB plays a key role in the effects of inflammation caused by mobile phones.
- 900-MHz and 60-Hz EMF affect melatonin metabolism and the circadian rhythm.

ABSTRACT

This review discusses the effects of various frequencies of electromagnetic fields (EMF) on brain hormones and enzyme activity. In this context, the mechanism underlying the effects of EMF exposure on tissues generally and cellular pathway specifically has been discussed. The cell membrane plays important roles in mediating enzymatic activities as to response and

Download English Version:

https://daneshyari.com/en/article/7696065

Download Persian Version:

https://daneshyari.com/article/7696065

<u>Daneshyari.com</u>