



Recent scientific publications relevant to mobile telephony

## November 2009

### Details

**China:** Exposure to 1800 MHz radiofrequency radiation induces oxidative damage to mitochondrial DNA in primary cultured neurons, [Xu et al., Brain Research](#), Available online 30 October 2009.

*'...these results suggested that 1800 MHz RF radiation could cause oxidative damage to mtDNA in primary cultured neurons. Oxidative damage to mtDNA may account for the neurotoxicity of RF radiation in the brain.'*

**China:** Impact of 1.8-GHz radiofrequency radiation (RFR) on DNA damage and repair induced by doxorubicin in human B-cell lymphoblastoid cells, [Zhijian et al., Mutation Research/Genetic Toxicology and Environmental Mutagenesis](#), Available online 13 October 2009.

*'...The results demonstrated that (1) RFR could not directly induce DNA damage of human B-cell lymphoblastoid cells...'*

**Finland:** Proteomic Analysis of the Response of Human Endothelial Cell Line EA.hy926 to 1800 GSM Mobile Phone Radiation, [Nylund et al., Journal of Proteomics & Bioinformatics](#), 2(10):455-462, October 2009.

*'...Our results suggest that the 900GSM and 1800GSM exposures might affect the expression of some proteins in the EA.hy926 cell line...'*

**Greece:** Cranial and postcranial skeletal variations induced in mouse embryos by mobile phone radiation, [Fragopoulou et al., Pathophysiology](#), Available online 24 October 2009.

*'...It is concluded that mild exposure to mobile phone radiation may affect, although transiently, mouse foetal development at the ossification level...'*

**Japan:** The correlation between mass-averaged SAR and temperature elevation in the human head model exposed to RF near-fields from 1 to 6 GHz, [Hirata et al., Physics in Medicine & Biology](#), 54(23):7227-7238, 7 December 2009.

*'...An averaged SAR over 10 g was found to reasonably correlate with local temperature elevation even for frequencies from 3 to 6 GHz...'*

**Switzerland:** Prevalence of nuclear cataract in Swiss veal calves and its possible association with mobile telephone antenna base stations, [Hässig et al., Schweizer Archiv für Tierheilkunde](#), 151(10):471-478, October 2009.

*'...there are a lot of other possibilities for nuclear cataract beside MPBS. Further studies on the influence of electromagnetic fields during embryonic development animal or person at risk are indicated.'*

**Turkey:** The Influence of 1800 MHz GSM-like Signals on Hepatic Oxidative DNA and Lipid Damage in Nonpregnant, Pregnant, and Newly born Rabbits, [Tomruk et al., Cell Biochemistry and Biophysics](#), Published online: 23 October 2009.

*'...Consequently, the whole-body 1800 MHz GSM-like RF radiation exposure may lead to oxidative destruction as being indicators of subsequent reactions that occur to form oxygen toxicity in tissues.'*

**Turkey:** The effects of electromagnetic fields on peripheral blood mononuclear cells in vitro, [Atasoy et al., Bratisl Lek Listy](#), 110(9):526-529, September 2009.

*'...These data suggest that electromagnetic signals could affect the functional capacity of the peripheral blood mononuclear cells by changing their adhesion ability...'*

**USA:** Pathophysiology of cell phone radiation: oxidative stress and carcinogenesis with focus on male reproductive system, [Desai et al., Reproductive Biology and Endocrinology](#), 7(1):114, October 2009.

*'...We explore the disturbance in reactive oxygen species (ROS) metabolism caused by RF-EMW and delineate NADH oxidase mediated ROS formation as playing a central role in oxidative stress (OS) due to cell phone radiation (with a focus on the male reproductive system)...'*

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The MMF is an international association of wireless communications manufacturers established to support scientific research in relation to mobile telephony and health [www.mmfai.info](http://www.mmfai.info)

The GSM Association (GSMA) is the global trade association that exists to promote, protect and enhance the interests of GSM mobile operators throughout the world. <http://www.gsmworld.com/health>

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