



Recent scientific publications relevant to mobile telephony

April 2006

Australia: Neuropsychological sequelae of digital mobile phone exposure in humans, [Keetley et al, Neuropsychologia](#), Available Online 17 April 2006.

'...The results of this study provide statistical evidence of a cognitive difference in performance between the real and sham field DMP exposure conditions.'

Australia: How dangerous are mobile phones, transmission masts, and electricity pylons? [Wood, Archives of Diseases in Childhood](#) 91(4): 361-6, April 2006.

'...This article reviews the strength of the available epidemiological and laboratory evidence and notes that this falls short of what is normally required to establish a causal link. However, because of scientific uncertainty a cautious approach is often advocated, but here, too, there may be a tendency to judge these risks more harshly than those in other areas with similar strength of evidence.'

Austria: Subjective symptoms, sleeping problems, and cognitive performance in subjects living near mobile phone base stations, [Hutter et al, Occupational and Environmental Medicine](#), 63(5): 307-313, 1 May 2006.

'... Despite very low exposure to HF-EMF, effects on wellbeing and performance cannot be ruled out, as shown by recently obtained experimental results; however, mechanisms of action at these low levels are unknown.'

Canada: Gene Expression Analysis of a Human Lymphoblastoma Cell Line Exposed In Vitro to an Intermittent 1.9 GHz Pulse-Modulated Radiofrequency Field, [Chauhan et al, Radiation Research](#), 165(4):424-429, April 2006.

'...We demonstrated that transcript levels of these genes in RF-field-exposed cells showed no significant difference in relation to the sham treatment group...In conclusion, our study found no evidence that the 1.9 GHz RF-field exposure caused a general stress response in TK6 cells under our experimental conditions.'

Germany: ROS release and Hsp70 expression after exposure to 1,800 MHz radiofrequency electromagnetic fields in primary human monocytes and lymphocytes, [Lantow et al, Radiation and Environmental Biophysics](#), Published online 22 March 2006.

'...After continuous or intermittent GSM-DTX signal exposure (2 W/kg), a significantly different ROS production was detected in human monocytes...In human lymphocytes, no differences could be detected...The Hsp70 expression level after 0, 1, and 2 h post-exposure to GSM-DTX signal at 2 W/kg for 1 h did not show any differences...'

India: Protein Kinase C Activity in Developing Rat Brain Cells Exposed to 2.45 GHz Radiation, [Paulraj et al, Electromagnetic Biology and Medicine](#), 25(1): 61-70, 2006.

'...Electron microscopic study shows an increase in the glial cell population in the exposed group as compared to the control group. This present study is indicative of a significant change after exposure to the above-mentioned field intensity. This suggests that chronic exposures may affect brain growth and development.'

Japan: Effects of continuous and intermittent exposure to RF fields with a wide range of SARs on cell growth, survival, and cell cycle distribution, [Takashima et al, Bioelectromagnetics](#), Published Online: 13 April 2006.

'...Exposure to RF radiation results in heating of the medium, and the thermal effect depends on the mean SAR. Hence, these results suggest that the proliferation disorder is caused by the thermal effect.'

Japan: Effects of a 2450 MHz high-frequency electromagnetic field with a wide range of SARs on the induction of heat-shock proteins in A172 cells, [Wang et al, Bioelectromagnetics](#), Published Online: 18 April 2006.

'...Our results suggest that exposure to a 2450 MHz HFEMF has little or no apparent effect on HSP70 and HSP27 _expression, but it may induce a transient increase in HSP27 Phosphorylation in A172 cells at very high SAR (>100 W/kg).'

Turkey: Effect Of Electromagnetic Fields Emitted By Cellular Phones On The Latency Of Evoked Electrodermal Activity, [Esen et al, International Journal of Neuroscience](#), 116(3):321-329, March 2006.

'...the findings point to the potential risks of mobile phones on the function of CNS and consequently, possible increase in the risk of phone-related driving hazards.'

Turkey: Effects of Intensive and Moderate Cellular Phone Use on Hearing Function, [Oktay et al, Electromagnetic Biology and Medicine](#), 25(1):13-21, 2006.

'...However, detection thresholds in those who talked approximately 2 h per day were found to be higher than those in either moderate users or control subjects...This study shows that a higher degree of hearing loss is associated with long-term exposure to electromagnetic (EM) field generated by cellular phones.'

UK: Infection, immune responses and the aetiology of childhood leukaemia, [Greaves, Nature Reviews Cancer](#), 6(3):193-203, March 2006.

'...A plethora of candidate environmental exposures have been proposed, but most lack a biological rationale or consistent epidemiological evidence. Although there might not be a single or exclusive cause, an abnormal immune response to common infection(s) has emerged as a plausible aetiological mechanism.'

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