Study of heat production reasons during low power exposure

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The study of mobile phone influence upon humans has become an important topic nowdays since almost all of us use them. The primary objectives of this study is to determine the amount of emmited energy that is transformed into heat in the human tissues. Previous investiagations were conducted using a head model of an adult man, and were aimed at determening the correlation between SAR and temperature rise. Sveral conventional antenna types placed at different distances from the head were also studied, but the presence a hand, holding the mobile phone was not considered. It is also very important to study the model of a child, becasue the impact in the child tissues can be higher. It is of a big importance to compare two exposure scenarios: with a hand, holding the mobile handset and without it because the hand absorbs the energy and changes the radiation pattern. The study of the SAR dependance on the antenna matching is also planned. As a result several recomendations for th emobile phone useage have been developed. This list will be farther extended.