Research Relating Wireless Exposure to Anemia and Thyroid Disease

1. **Alterations in TSH and Thyroid Hormones following Mobile Phone Use**

   Conclusion: As far as the study is concerned, this is the first human study to assess the associations between mobile phone use and alterations in the levels of TSH and thyroid hormones. Based on the findings, a higher than normal TSH level, low mean T4 and normal T3 concentrations in mobile users were observed. It seems that minor degrees of thyroid dysfunction with a compensatory rise in TSH may occur following excessive use of mobile phones. It may be concluded that possible deleterious effects of mobile microwaves on hypothalamic-pituitary-thyroid axis affects the levels of these hormones.

2. **Affects of Cell Phone radiation and Thyroid Hormones**

   Conclusion: This study highlights some adverse effects of microwaves and benefits of garlic in making cell phone use safer. Although, microwaves can cause weight lost by enhan-cing fat breakdown and glycogenesis, presence of allicin and vitamins A and B in garlic can compensate some of this weight lost through an increase in appetite, digestive processes and body's metabolism. In addition, both microwaves and garlic extract has a considerable effects on thyroid gland; reflected both in its secretion and in its morphology. These effects could be attributed to induc-tion of heat in tissues and non-specific stresses asso-ciated with irradiation, changes in the levels of cortisol, reactive oxygen species, calcium - phosphatidyl inositol and various enzymes, such as ornithine carboxylase, anti thyroperoxidase and liver deiodinase.

3. **The effect of microwave irradiation on the status of the thyroid gland**

   Abstract: Multiple irradiation of rats with microwaves of continuous generation (2450 MHz, 1 mW/cm2) increased and of pulsed generation (3000 MHz, 0.1 to 2.5 mW/cm2) decreased the functional activity of the thyroid gland with no changes in the tri-iodothyronine and thyroxin in blood serum. The role of the thyroid gland in inducing behaviour effects of microwaves was demonstrated by the method of extirpation.

4. **Study Shows Cell Phone Radiation and Thyroid Cancer Link**

   Summary: University, identified evidence for the first time of the possible connection between the rise in thyroid cancer cases to the increased exposure to radiation emitted by cellphones. In one experiment, human thyroid cells collected from healthy patients were subjected to radiation with a device, designed for the study, that simulates the electromagnetic radiation emitted by cellphones. The irradiated thyroid cells proliferated at a much higher, statistically significant rate than non-irradiated cells in the control group