

## **P90. EVALUATION OF THE RELATIONSHIP BETWEEN OBESITY AND ENDOCRINE DISRUPTING CHEMICALS. PHTHALATES AND BISPHENOL A**

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Obesity is defined as a case in which body-mass index is over 30. Obesity and Metabolic disorders are increasing health problem in recent days. Endocrine disruptings are synthetic or natural substance damaging body's normal physiological functions by imitating or preventing hormones. They show their effects by increasing the metabolism of endogen peptidic or steroidal hormones; or activating or deactivating the receptors on hypothalamus, adiposis tissue, liver and the other tissues. They can be present in the environment both as a result of industrial production and naturally. These substances are thought to affect some basic process like growth, stress response, sex development, capability of reproduction, forming and using insulin and Metabolic speed by unbalancing equilibrium. Ftalats and bisfenol A are plastizer substance that are widely used in the process of producing of variety consumer goods. They are extensively used in the food packaging, materials which contact with food, cosmetics, toys, bags, drugs, medical equipment and material of construction. DEHP is mostly used phthalate derivative and considered to have possible carcinogenic effects on human. In the researches this phthalate derivative is considered to cause testicular disgenesis syndrome in animal and possibly human. Detecting of these substances in the urine, blood and in the tissues shows us that there is a contact with these materials via oral, inhalation, dermal route. The effects of phthalates and BPA on the Obesity and the adipogenesis are discussed by showing datas of in vitro, animal, animals. The latest in vivo and in vitro researches provide evidences supporting that contamination of individuals with the chemicals lead to Obesity epidemic. Animal datas and few human studies show that phthalates lead to obesity with the various biological mechanisms such as activation of PPAR, antiandrogenic effect and thyroid hormone inhibition. It is reported that there are lots of mechanism of why BPA also lead to obesity and also that BPA shows oestrogenic effect in vivo and in vitro researches. In addition to that, BPA can have some effect causing Insulin resistance and body fat forming. With the exposure to oestrogenic chemicals in the critical phase of development, there can be some unprecedented changes in the adipose tissue. Additionally, it is shown that BPA lead to some metabolic changes and increase the formation of the fat cell and accumulation of the lipid in mature fat cell with the factor of adipocyte spesific gene and transcription such as PPAR and lipoprotein lipase.

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