

Abstract

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Endocrine disruptors are synthetic substances used in many areas of industry or agriculture that negatively affect and interfere with the functions of the endocrine system. Their negative effects have been mentioned since the beginning of the 20th century, but only recently have more attention been paid to them due to their adverse effects on the human organism and the environment.

In the thesis, we summarized the mechanisms of action of the most well-known endocrine disruptors on selected nuclear receptors. Specifically, it was bisphenol A and phthalate-type compounds. From nuclear receptors, we focused on PPAR (Peroxisome Proliferator-Activated Receptors), Pregnane X receptor (PXR) and Aryl androstane receptor (AHR).

From the information obtained, it follows that we are in constant contact with these substances, and therefore we should devote more attention to studying their effects, because not all mechanisms of action and effects of these compounds are completely known. In this way, we could increase the safety of using these substances, avoid their toxic manifestations or develop safe substances without affecting endocrine functions.