

Test Methods for Detecting Endocrine disruptors

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There is growing concern that a large number of human-made chemicals that have been released into the environment and that have been found to persist and travel through the food chains can cause endocrine disruption and cancers including breast cancer.

Food and environmental contaminants alter the reproduction of a number of wildlife species by changing the normal endocrine environment that mediates sexual differentiation and function. Many of these endocrine alterations are thought to occur by direct interactions between the contaminants and hormone receptors, but the specific mechanisms by which most environmental contaminants cause endocrine disruption are unclear. So far, there are no test and screening methods for detecting endocrine disruptors worldwidedly accepted. Recently, OECD, WHO and USA EPA are almost reached to consensus for the common methods for detecting endocrine disruptors. Today, I would like to show tests and screening syStem using human hormonal receptor-introduced cell lines, and also how to use transgenic mice for this study.