

**Conference Presentation**

**Immunological research about ultra-high dilution and Homeopathy:  
From 1994 to 2014**

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**Abstract**

**Background:** This review is part of a special issue of journal “Homeopathy” (ELSEVIER) scheduled for publication in 2015, about the follow-up of researches published in the book titled “Ultra-High Dilution, Physiology and Physics”, written and edited by PC Endler and J Schulte in 1994. In this book, Prof. Madeleine Bastide described experimental models in immunology that were used during the 1980s to investigate high dilution effects on several biological systems. Bastide categorized available papers in four categories: high dilutions of antigens; high dilutions of thymus, bursa and other hormones; high dilutions of cytokines and immunopharmacological activity of silica. The studies about high dilutions of antigens were interrupted from this time onwards. Only the *in vitro* models developed on antigens and histamine dilutions lasted up to 2009. During this process, a huge multi-centre study was performed, with high reproducibility, and involving different independent laboratories. The studies about highly diluted cytokines, thymulin and other hormones brought some regulatory properties of endogenous substances prepared homeopathically, with special focus on epigenetic mechanisms of highly diluted cytokines. The frequently studied substance was Thymulin 5cH, which improved the activity of phagocytes in viral, bacterial and parasitic infections. Studies about the immunopharmacological activity of silica have assumed a new focus: the putative role of silica as active contaminant present in high dilutions, that is still under discussion.

**Keywords:** Allergy and Immunology, ultra-high dilution, homeopathy, experimental model

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