

P-081: SYSTEMATIC ESTROGENIC EVALUATION OF DIETARY HERBAL EXTRACTS FOR THE POTENTIAL TREATMENT OF MENOPAUSAL SYMPTOMS

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The UIC/NIH Center for Botanical Dietary Supplements Research's purpose is to address the issues of standardization, quality, safety, and efficacy of botanical dietary supplements. We tested sixteen herbs for estrogenic activity. Extracts of the aerial parts of *Cimicifuga racemosa*, *C. rubifolia*, and *Pueraria lobata*, and the roots of *Lepidium meyenii* had significant activities in the estrogen receptor (ER) alpha competitive binding assay. Extracts of the roots of *Asclepias tuberosa*, *Beta vulgaris*, *Paeonia moutan*, *Valeriana officinalis*, and *Viburnum prunifolium*, the fruits of *Vitex agnus castus*, and the aerial parts of *C. rubifolia*, *C. racemosa*, and *P. lobata* had significant activity in the ER beta binding assay. These extracts were tested for estrogen response element luciferase activity in the MCF-7 WS8 ER alpha positive or the MCF-7 ER beta positive cell lines. Estrogenic and antiestrogenic activities were assayed in the ER alpha positive Ishikawa cell line. Further research is on going to establish the therapeutic efficacy prior to wide spread use as menopausal therapies.

(Supported by F31 AT24232 from NIH/NCCAM and P50 AT000155 from the ODS, NCCAM, and ORWH).