



# HerbClip™

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**FILE:** ▪ **Ginkgo (*Ginkgo biloba*)**  
▪ **Colchicine**  
▪ **Herb Analysis**

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**RE:** **No Colchicine in Ginkgo According to CRN Analysis**

Third Party Testing Discredits Ginkgo Study [press release]. Washington, D.C.: Council for Responsible Nutrition; August 30, 2001.

Independent analysis of raw powdered ginkgo (*Ginkgo biloba*) and ginkgo extract from five different sources, using three different methods found no traces of colchicine, casting doubt on a study in *Chemical Research in Toxicology* ("Identification of Colchicine in Placental Blood from Patients Using Herbal Medicines", Petty, et. al.).

The analysis was undertaken at the behest of the Council for Responsible Nutrition (CRN), a science-based trade organization representing over 110 companies in the dietary supplement industry. The American Herbal Products Association (AHPA) and the National Nutritional Foods Association (NNFA) are carrying out additional analyses of finished ginkgo products. So far, no colchicine has been found in any products tested.

Colchicine, an alkaloid extracted from autumn crocus (*Colchicum autumnale*) for use in cancer chemotherapy and gout, can be quite toxic. The study's authors were quoted in *Chemical and Engineering News* as saying, "such supplements (as ginkgo) should be avoided by pregnant women or those trying to conceive because the colchicine in them could affect the viability of a fetus."

"For the authors to say (this) is an unacceptable leap, given the questions raised about this report, and its conflict with the existing scientific literature," said John Cordaro, president and chief executive officer of CRN. The vast majority of existing literature, which includes data on pregnant women treated with therapeutic doses of colchicine for Familial Mediterranean Fever, conflicts directly with the findings reported in the published study. However, Cordaro noted that warning statements for pregnant and nursing women are already included on many ginkgo products. The levels of colchicine reported by Petty, et. al., "would likely be incompatible with life for the fetus and the mother, if they were accurate," according to Dr. Richard Kingston of the PROSAR International Poison Center and the University of Minnesota, who reviewed the paper in question.

The authors erroneously stated in their report that dietary supplements are unregulated, and that the safety and efficacy of herbal medicines have not been verified by appropriate clinical trials. Both statements are simply false. Both the Food and Drug Administration and the Federal Trade Commission regulate dietary supplements. A growing body of clinical studies attests to the safety and efficacy of many supplements. John Cardellina, Ph.D., vice president for botanical science and regulatory affairs at CRN, noted that, "Ginkgo has been examined in more than 30 randomized, blinded, controlled studies, and more than 100 other clinical and pharmacological studies and found to be safe and efficacious, with no mention of colchicine. Data indicating

high daily doses of up to 1600 milligrams per kilogram in animal studies did not elicit teratogenic effects or affect reproduction, nor was there any evidence of mutagenicity in any in vitro tests."

*¾ Mariann Garner-Wizard*

[Editor's Note:] Many herbal experts have considered the research by Petty, et al. to be an example of some of the poorest publications on herbs to date. In a press release issued by the American Botanical Council, Professor Norman R. Farnsworth, one of the world's leading research pharmacologists, noted that there is no mention of the presence of colchicine in ginkgo, after reviewing the entries for ginkgo in the Napralert database at the University of Illinois – Chicago. Professor Farnsworth commented that any peer reviewers of the article for the journal were apparently not qualified to review this research if they believed that colchicines could be found in ginkgo. The full-text article can be viewed at <http://www.herbalgram.org/HerbInfo/HerbalGram>.

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