CLINICAL STUDY REFERENCES: Gamma-tocopherol

Familiarizing oneself with relevant scientific research is critical to understanding nutritional supplements at a deeper level. Clinical studies on supplement ingredients can be accessed in many ways, from visiting a local University library to using an online database such as PubMed. (See last page to learn more about using the PubMed database.) Some useful studies on gamma-tocopherol are noted below.

*Am J Clin Nutr 2001 Dec;74(6):714-22*
**Gamma-tocopherol, the major form of vitamin E in the US diet, deserves more attention.**
Jiang Q, Christen S, Shigenaga MK, Ames BN
University of California, the Department of Molecular and Cell Biology, Berkeley, USA

*Proc Natl Acad Sci USA 1997 Apr 1;94(7):3217-22*
**Gamma-tocopherol traps mutagenic electrophiles such as NO(X) and complements alpha-tocopherol: physiological implications.**
Christen S, Woodall AA, Shigenaga MK, Southwell-Keely PT, Duncan MW, Ames BN
Division of Biochemistry and Molecular Biology, University of California, Berkeley 94720, USA

*Proc Natl Acad Sci USA 1993 Mar 1;90(5):1771-5*
**Gamma-tocopherol detoxification of nitrogen dioxide: superiority to alpha-tocopherol.**
Cooney RV, Franke AA, Harwood PJ, Hatch-Pigott V, Custer LJ, Mordan LJ
Cancer Research Center of Hawaii, University of Hawaii, Honolulu 96813

**Gamma-tocopherol: an efficient protector of lipids against nitric oxide-initiated peroxidative damage.**
Wolf G
Department of Nutritional Sciences, University of California, Berkeley 94720, USA

*FASEB J 2003 May;17(8):816-22*
**Gamma-tocopherol, but not alpha-tocopherol, decreases proinflammatory eicosanoids and inflammation damage in rats.**
Jiang Q, Ames BN
Division of Biochemistry and Molecular Biology, University of California, Berkeley; and Children’s Hospital Oakland Research Institute, Oakland, California 94609-1673, USA

*Semin Urol Oncol 1999 May;17(2):85-90*
**Vitamin E, alpha- and gamma-tocopherol and prostate cancer.**
Moyad MA, Brumfield SK, Pienta KJ
Section of Urology, University of Michigan, Ann Arbor 48109-0330, USA
**TIPS & GUIDELINES FOR USING PUBMED**

PubMed is an online research database. It provides access to literally millions of clinical studies that have been published in selected scientific journals. The PubMed database is part of the National Library of Medicine at the National Institutes of Health.

To research a topic on PubMed, go to: www.pubmed.com. Doing this will redirect you to the site's actual URL: www.ncbi.nlm.nih.gov/entrez/query.fcgi?DB=pubmed. (You may also type the actual URL into your browser – it’s just more complicated. Save the page as a bookmark to avoid this step in the future.)

Once on the PubMed site, find the search bar near the top of the page and enter the keywords you desire. Hit the Go button to the right of the search bar (or your “return” key) to bring up studies in the database that are relevant to your search.

**TIPS FOR SUCCESSFUL SEARCHING:**

- **Narrow down your search by entering more than one keyword or phrase.**
- **Surround phrases with quotation marks.**
  (Example: instead of calcium citrate, type “calcium citrate.”)
- **Use commas or the word AND in upper case letters**
  to separate multiple keywords or phrases.
  (Example: instead of calcium citrate bone, type in “calcium citrate” AND bone.)
- **To find a specific study whose authors or title are known, include one or more last names**
  of the authors and a few choice words from the title as keywords. (Note: This is the easiest way to pull up the studies noted in Pioneer’s Clinical Study References.)

**VIEWING ABSTRACTS VS SUMMARIES**

When you hit “Go,” studies will be displayed in what is called summary form. The summary only provides journal name & volume number, date of publication, author names and title - the same points noted in these clinical reference pages. For information about the study’s results and conclusions, you will want to view an abstract of the study - a paragraph describing a study’s objective, procedure and findings.*

- **To view a single abstract**, click on the authors’ names (appearing in blue) in the summary.
- **To view several abstracts**, click in the boxes located to the left of the summaries. Then select “Abstract” from the pull down Display menu (located below the left side of the search bar, under the folder icons).
- **To view additional studies on the same topic**, click on the words “Related Articles” (appearing in blue) located to the right of each study summary or abstract.

*Note: Not all studies on PubMed are available as abstracts, but it is sometimes possible to find the abstract – even the full text – elsewhere on line by entering the title or author in a search engine, such as Google or Dogpile.