Review

Phytother Res

. 2006 Jul;20(7):519-30.
doi: 10.1002/ptr.1900.

# A Review of the Bioactivity and Potential Health Benefits of Chamomile Tea (Matricaria Recutita L.)

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- DOI: 10.1002/ptr.1900

## Abstract

Chamomile (Matricaria recutita L., Chamomilla recutita L., Matricaria chamomilla) is one of the most popular single ingredient herbal teas, or tisanes. Chamomile tea, brewed from dried flower heads, has been used traditionally for medicinal purposes. Evidence-based information regarding the bioactivity of this herb is presented. The main constituents of the flowers include several phenolic compounds, primarily the flavonoids apigenin, quercetin, patuletin, luteolin and their glucosides. The principal components of the essential oil extracted from the flowers are the terpenoids alpha-bisabolol and its oxides and azulenes, including chamazulene. Chamomile has moderate antioxidant and antimicrobial activities, and significant antiplatelet activity in vitro. Animal model studies indicate potent antiinflammatory action, some antimutagenic and cholesterol-lowering activities, as well as antispasmotic and anxiolytic effects. However, human studies are limited, and clinical trials examining the purported sedative properties of chamomile

tea are absent. Adverse reactions to chamomile, consumed as a tisane or applied topically, have been reported among those with allergies to other plants in the daisy family, i.e. Asteraceae or Compositae.

- Cited by 66 articles

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Review

Int J Mol Sci

. 2017 Dec 27;19(1):70.
doi: 10.3390/ijms19010070.

# Anti-Inflammatory and Skin Barrier Repair Effects of Topical Application of Some Plant Oils

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Affiliations expand

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# Abstract


Plant oils have been utilized for a variety of purposes throughout history, with their integration into foods, cosmetics, and pharmaceutical products. They are now being increasingly recognized for their effects on both skin diseases and the restoration of cutaneous homeostasis. This article briefly reviews the available data on biological influences of topical skin applications of some plant oils (olive oil, olive pomace oil, sunflower seed oil, coconut oil, safflower seed oil, argan oil, soybean oil, peanut oil, sesame oil, avocado oil, borage oil, jojoba oil, oat oil, pomegranate seed oil, almond oil, bitter apricot oil, rose hip oil, German chamomile oil, and shea butter). Thus, it focuses on the therapeutic benefits of these plant oils according to their anti-inflammatory and antioxidant effects on the skin, promotion of wound healing and repair of skin barrier.



**Keywords:** antioxidant activity; barrier function; barrier repair; inflammation; plant oil; skin aging; wound healing.


## Conflict of interest statement

The authors declare no conflict of interest.

Review

Plant Foods Hum Nutr

. 2019 Sep;74(3):266-276.
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# Herbal Teas and Their Health Benefits: A Scoping Review

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- PMID: 31243622

- DOI: 10.1007/s11130-019-00750-w

## Abstract

Herbal teas are used as therapeutic vehicles in many forms of traditional medicine and are a popular global beverage. The purpose of this scoping review was to examine the evidence relating to the clinical efficacy and safety of herbal teas, and to identify the main research themes and gaps in knowledge to inform further work. A scoping review methodology was followed that set out the research question and described the sourcing, selection and analysis of studies. Overall, a total of 145 research publications were retrieved from global bibliographic databases, and after applying exclusion criteria, 21 remained. These studies looked at herbal tea use in female health, diabetes, heart disease and weight loss, with plant species including lavender, chamomile, fenugreek, stinging nettle, spearmint, hibiscus, yerba maté, echinacea and combinations of herbs. Observational studies explored associations between herbal tea consumption and cancer risk, liver health, and the risks linked to the consumption of environmental contaminants in the plant material. Despite plant materials being the basis for drug discovery, and the popularity of herbal teas, the number of articles exploring clinical efficacy and safety is small. In this review we discuss how herbal teas may be beneficial in some

areas of clinical and preventative health, and what further research is required to understand whether regular consumption can contribute to healthy living more generally.

**Keywords:** Herbal tea; Infusions; Phytochemicals; Plant biodiversity; Plant medicine.

- 67 references

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Planta

. 2015 Sep;242(3):721-32.
doi: 10.1007/s00425-015-2308-2. Epub 2015 May 15.

# Comparative Analysis of Antioxidant, Antimicrobiological and Cytotoxic Activities of Native and Fermented Chamomile Ligulate Flower Extracts

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- PMID: 25976264

- DOI: 10.1007/s00425-015-2308-2

# Abstract

The work investigated differences in apigenin content, as well as in other compounds, and examined the chemical profiles, antioxidant, antimicrobial and cytotoxic effects of extracts obtained from native and fermented chamomile ligulate flowers. Chamomile (Chamomilla recutita L.) has a long history of being used as a medicinal plant due to many health benefits, including antiinflammatory, anticancer, antispasmodic, radical-scavenging effects and others. Apigenin is recognized as one of the most bioactive phenolic compounds in chamomile. In comparison to its bound forms, which include mostly apigenin-7-O-β-glucoside and various acylated forms, the aglycone is attributed with much higher bioactivity. Due to this fact, in this work ligulate florets of chamomile anthodium were subjected to a fermentation process using native chamomile enzymes to hydrolyze bound forms of apigenin to free aglycone. The contents of apigenin and apigenin-7-O-β-glucoside were determined in both fermented and nonfermented samples by UHPLC-MS-MS analysis to define the efficiency of conversion. After defining their chemical profiles, the extracts of fermented and nonfermented chamomile samples were also compared with respect to their antioxidant, antimicrobial and cytotoxic effects. The antioxidant effects of the obtained extracts were defined by electron spin resonance analysis for hydroxyl and superoxide radicals. The antimicrobial activity was defined for eight microbial strains, whereas cytotoxic activity was evaluated using two human cell lines (human cervix carcinoma and human rhabdomyosarcoma) and murine fibroblasts.