

## Ayurvedic Medicine: An Introduction



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Ayurvedic medicine (also called Ayurveda) is one of the world's oldest medical systems. It originated in India more than 3,000 years ago and remains one of the country's traditional health care systems. Its concepts about health and disease promote the use of herbal compounds, special diets, and other unique health practices. India's government and other institutes throughout the world support clinical and laboratory research on Ayurvedic medicine, within the context of the Eastern belief system. But Ayurvedic medicine is not widely studied as part of conventional (Western) medicine. This fact sheet provides a general overview of Ayurvedic medicine and suggests sources for additional information.

### Key Facts

- **Is Ayurvedic medicine safe?**  
Ayurvedic medicine uses a variety of products and practices. Some of these products—which may contain herbs, minerals, or metals—may be **harmful, particularly if used improperly or without the direction of a trained practitioner**. For example, some herbs can cause side effects or interact with conventional medicines. Also, **ingesting some metals, such as lead, can be poisonous**.
- **Is Ayurvedic medicine effective?**  
Studies have examined Ayurvedic medicine, including herbal products, for specific conditions. However, there are not enough well-controlled clinical trials and systematic research reviews—the gold standard for Western medical research—to prove that the approaches are beneficial.

### Keep in Mind

Tell all your health care providers about any complementary health approaches you use. Give them a full picture of what you do to manage your health. This will help ensure coordinated and safe care.

U.S. DEPARTMENT OF HEALTH  
AND HUMAN SERVICES

National Institutes of Health  
National Center for Complementary  
and Alternative Medicine



## Background

The term “Ayurveda” combines the Sanskrit words *ayur* (life) and *veda* (science or knowledge). Ayurvedic medicine, as practiced in India, is one of the oldest systems of medicine in the world. Many Ayurvedic practices predate written records and were handed down by word of mouth. Three ancient books known as the Great Trilogy were written in Sanskrit more than 2,000 years ago and are considered the main texts on Ayurvedic medicine—*Caraka Samhita*, *Sushruta Samhita*, and *Astanga Hridaya*.

Key concepts of Ayurvedic medicine include universal interconnectedness (among people, their health, and the universe), the body’s constitution (*prakriti*), and life forces (*dosha*), which are often compared to the biologic humors of the ancient Greek system. Using these concepts, Ayurvedic physicians prescribe individualized treatments, including compounds of herbs or proprietary ingredients, and diet, exercise, and lifestyle recommendations.

The majority of India’s population uses Ayurvedic medicine exclusively or combined with conventional Western medicine, and it is practiced in varying forms in Southeast Asia.

## Safety of Ayurvedic Medicine

Ayurvedic medicine uses a variety of products and practices. Ayurvedic products can be made either of herbs only or a combination of herbs, metals, minerals, or other materials in an Ayurvedic practice called *rasa shastra*. Some of these **products may be harmful if used improperly or without the direction of a trained practitioner.**

- **Toxicity**

- Ayurvedic products have the potential to be toxic. Many materials used in them have not been studied for safety in controlled clinical trials. In the United States, Ayurvedic products are regulated as dietary supplements. As such, they are not required to meet the same safety and effectiveness standards as conventional medicines. For more information on dietary supplement regulations, see the National Center for Complementary and Alternative Medicine’s (NCCAM) fact sheet *Using Dietary Supplements Wisely* at [nccam.nih.gov/health/supplements/wiseuse.htm](http://nccam.nih.gov/health/supplements/wiseuse.htm).
- In 2008, an NCCAM-funded study examined the content of 193 Ayurvedic products purchased over the Internet and manufactured in either the United States or India. The researchers found that 21 percent of the products contained levels of lead, mercury, and/or arsenic that exceeded the standards for acceptable daily intake.

Other approaches used in Ayurvedic medicine, such as massage, special diets, and cleansing techniques may have side effects as well. To help ensure coordinated and safe care, it is important to tell all your health care providers about any Ayurvedic products and practices or other complementary health approaches you use.

## Use in the United States

According to the 2007 National Health Interview Survey, which included a comprehensive survey on the use of complementary health approaches by Americans, more than 200,000 U.S. adults had used Ayurveda in the previous year.

## The Status of Ayurvedic Medicine Research

Most clinical trials of Ayurvedic approaches have been small, had problems with research designs, or lacked appropriate control groups, potentially affecting research results.

- Researchers have studied Ayurvedic approaches for schizophrenia and for diabetes; however, scientific evidence for its effectiveness for these diseases is inconclusive.
- A preliminary clinical trial in 2011, funded in part by NCCAM, found that conventional and Ayurvedic treatments for rheumatoid arthritis had similar effectiveness. The conventional drug tested was methotrexate and the Ayurvedic treatment included 40 herbal compounds.
- Ayurvedic practitioners use turmeric for inflammatory conditions, among other disorders. Evidence from clinical trials show that turmeric may help with certain digestive disorders and arthritis, but the research is limited.
- Varieties of boswellia (*Boswellia serrata*, *Boswellia carterii*, also known as frankincense) produce a resin that has shown anti-inflammatory and immune system effects in laboratory studies. A 2011 preliminary clinical trial found that osteoarthritis patients receiving a compound derived from *B. serrata* gum resin had greater decreases in pain compared to patients receiving a placebo.

## Licensing

No states in the United States license Ayurvedic practitioners, although a few have approved Ayurvedic schools. Many Ayurvedic practitioners are licensed in other health care fields, such as midwifery or massage. For more information on credentialing complementary health practitioners, see the NCCAM fact sheet *Credentialing CAM Providers: Understanding CAM Education, Training, Regulation, and Licensing* at [nccam.nih.gov/health/decisions/credentialing.htm](http://nccam.nih.gov/health/decisions/credentialing.htm).

## If You Are Thinking About Using Ayurvedic Medicine

- Do not use Ayurvedic medicine to replace conventional care or to postpone seeing a health care provider about a medical problem.
- Women who are pregnant or nursing, or people who are thinking of using Ayurvedic approaches to treat a child, should consult their (or their child's) health care provider.
- Tell all your health care providers about any complementary health approaches you use. Give them a full picture of what you do to manage your health. This will help to ensure coordinated and safe care. For tips about talking with your health care providers about complementary health approaches, see NCCAM's Time to Talk campaign at [nccam.nih.gov/timetotalk](http://nccam.nih.gov/timetotalk).

## Key References

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## For More Information

### NCCAM Clearinghouse

The NCCAM Clearinghouse provides information on NCCAM and complementary health approaches, including publications and searches of Federal databases of scientific and medical literature. The Clearinghouse does not provide medical advice, treatment recommendations, or referrals to practitioners.

Toll-free in the U.S.: 1-888-644-6226

TTY (for deaf and hard-of-hearing callers): 1-866-464-3615

Web site: [nccam.nih.gov](http://nccam.nih.gov)

E-mail: [info@nccam.nih.gov](mailto:info@nccam.nih.gov)

### PubMed®

A service of the National Library of Medicine, PubMed contains publication information and (in most cases) brief summaries of articles from scientific and medical journals.

Web site: [www.ncbi.nlm.nih.gov/pubmed](http://www.ncbi.nlm.nih.gov/pubmed)

## **NIH Clinical Research Trials and You**

The National Institutes of Health (NIH) has created a Web site, NIH Clinical Research Trials and You, to help people learn about clinical trials, why they matter, and how to participate. The site includes questions and answers about clinical trials, guidance on how to find clinical trials through ClinicalTrials.gov and other resources, and stories about the personal experiences of clinical trial participants. Clinical trials are necessary to find better ways to prevent, diagnose, and treat diseases.

Web site: [www.nih.gov/health/clinicaltrials/](http://www.nih.gov/health/clinicaltrials/)

## **Research Portfolio Online Reporting Tools Expenditures & Results (RePORTER)**

RePORTER is a database of information on federally funded scientific and medical research projects being conducted at research institutions.

Web site: [projectreporter.nih.gov/reporter.cfm](http://projectreporter.nih.gov/reporter.cfm)

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