

# The Science Behind Aromatherapy

By Juliana Goodwin

Pam Samson discovered aromatherapy when her sister was battling cancer.

Samson's sister used aromatherapy to relax and combat nausea caused by her treatments. Samson, manager at Incense & Peppermints in Springfield, Mo., has been hooked ever since: "I'm an enthusiast."

Aromatherapy is the use of scent to support good health. It has been around for thousands of years, and was used by the Chinese, Indians, Egyptians and others.

Aromatherapy incorporates essential oils, which the National Cancer Institute defines as scented liquids taken from certain plants using steam or pressure. Essential oils contain the natural chemicals that give the plant its "essence" (odor and flavor). They often are inhaled or applied topically.

Essential oils are highly concentrated. For example, it takes about 220 pounds of lavender flowers to make about one pound of essential oil, according to the institute.

There is mixed research on whether aromatherapy is truly beneficial. Believers say it can aid digestive problems, ease nausea, boost the immune system and promote relaxation, among many other physical and mental benefits. It's commonly used in conjunction with massage therapy.

Aromatherapy is not regulated, and advocates say people interested in it need to be aware of what real aromatherapy is before they try it.

"They can practice on their own, but you really have to know what you are doing," says **Mary Witman**, an instructor at the **Professional Massage Training Center** in Springfield, Mo., who has used aromatherapy for years. "It can be dangerous without knowing the quality of the oils."

There are two main schools of thought on why aromatherapy might be effective, according to the National Cancer Institute.

One thought: Essential oils are derived from plants, so they might affect the body in unique ways.

Essential oils do have benefits in nature, says Dr. Lance Luria, the medical director of St. John's Integrative Medicine Program.

"Their function in the plant community is to help the plant's immune system," Luria says. Plants use chemicals to fight off bacteria and fungi. "They even battle back against the harmful effects of sunlight by making phytonutrients we call antioxidants. Both fungi and plants make chemicals to protect themselves from bacteria, and so we think of these substances as antimicrobial."

Another theory is that smell receptors in the nose might respond to the smells of essential oils and send chemical messages along nerve pathways to the brain's limbic system. The limbic system affects moods and emotions.

"There have been several small studies demonstrating an impact on mood by utilizing aromatherapy," Luria says.

If you're new to aromatherapy, you want to make sure you get pure essential oils, not simply perfumed oils, says **Juliet Mee**, director of the **Professional Massage Center**.

It is possible to have an allergic reaction, Samson says. To protect yourself, you have to know the oils and their properties.

For instance: "You don't want to use bergamot on skin for 12 hours prior to sun-bathing, because it has skin reactions," Mee says. "Cinnamon-bark oil is extremely antimicrobial, but it can be very skin irritating."

Before you get started, you should read up on essential oils and consider taking a course on how to use them, Witman says.

And proper doses are important: "Five drops of rosemary in a full tub of water is all you need ... peppermint, you need only one drop. Too much of an oil can injure the skin," Witman says.

You can find essential oils at health food stores, she adds.

Before you buy, look for these items on the oil's label, says aromatherapy practitioner Holland Azzaro: The oil's common name followed by its Latin botanical name, the place where the essential oil was distilled, the date and batch number, the company name and contact information, and safety information regarding the oil's application and home use.

Real essential oils should be stored in dropper bottles made of dark glass such as amber, cobalt blue or forest green. Sunlight can deteriorate these oils.

If you are purchasing oils or working with a practitioner, don't be afraid to ask questions, Azzaro says. "Be clear in what you are wanting to use aromatherapy for, and (mention) if you have any health issues or concerns. True aromatherapists will not shy away from questions -- they are all about education and empowerment."

If used correctly, many people believe aromatherapy can be beneficial to the mind and body. The practice is more accepted in Europe, Luria says.

"(America has) developed outstanding biomedical expertise, but we're losing ground when it comes to managing the complexity of the human condition, which I think is essential for true health and healing to occur," Luria says. "Aromatherapy is but one of a long list of non-mainstream strategies that tries to bridge this gap, focusing on what may provide benefit for a particular individual while doing no harm."