



Ginger and its healing properties

Not only is ginger a culinary marvel, its health benefits are stunning. It has been shown to be more effective against staph infections than antibiotics—and without the adverse effects.

Ginger's culinary qualities are a delight, but its health benefits are simply stunning. It has been shown to be more effective against bacterial staph infections than antibiotics. It can kill cancer cells. Its anti-inflammatory effects are already famous. It can resolve brain inflammations, and ease or cure a variety of gut problems, such as ulcerative colitis and acid reflux. And ginger can even alleviate the effects of gamma radiation. What's not to love about this incredible herb?

Standard in many kitchens and cuisines, ginger is the seasoning that gives life to a host of dishes. It's been used medicinally for more than 2,000 years. Though best known for its gastrointestinal soothing effects, that's just the beginning of its uses. The plant parts used for both culinary and medicinal purposes are the rhizomes, the root-like stems that grow underground. The primary plant used medicinally is [Zingiber officinale](#).

Several compounds in ginger may be related to its health benefits, including shogaol, zingerone, and gingerols, which are similar to chili pepper's capsaicin, noted for its pain relieving ability. However, as we've seen with separating [aspirin from willow bark](#), trying to find the active ingredient in a herb and using it alone tends to both diminish its effects and remove the balancing components that can both increase positive effects and decrease or eliminate adverse effects.

Some information in this article is derived from studies that have isolated single ingredients, generally with the goal of developing drugs. Though this may be accomplished, a history of pharmaceuticals demonstrates that it is both hubristic to believe that nature will be improved and naive to think that isolating a single chemical can possibly be done without removing the balancing elements that mitigate against harmful effects. Nonetheless, such studies do help demonstrate that there is strong medicine in ginger.

Ginger's Health Benefits

Let's take a look at some of the areas that ginger has been shown to benefit health:

Cancer: Several studies have demonstrated ginger's ability to defeat several types of cancer cells, including some of the most aggressive and difficult to treat: lung, ovarian, colon, breast, skin carcinoma, prostate, and pancreatic.^(1,2,3,4,5,6,7,8)

Diabetes Prevention: Studies have shown that diabetes may be both prevented and treated, along with the related abilities to lower blood sugar, cholesterol, and blood fats.^(9,10)

Antibiotic: Ginger's antibiotic effects may be exceptional. At least one study⁽¹⁰⁾ that compares the effects of ginger and antibiotics on *Staphylococcus aureus* and *S. pyreus* infections shows that ginger extract may be superior. The effects on drug-resistant infections are, as yet, unknown. Ginger has been shown to have an antibacterial effect on respiratory and periodontal infections.^(11,12,13)

Antifungal: Fungal infections are among the most difficult to treat, and drug-resistant fungi have been developing. However, there's no need to despair, as ginger has been found to have antifungal capability, including to drug-resistant forms.⁽¹⁴⁾

Ulcers: Intestinal ulcers can be prevented with ginger. There is a generally recognized acceptance now that the *Helico pylori* bacterium is associated with ulcers, and at least one study has shown that a derivative of ginger has been shown to inhibit *H. pylori*. One study has demonstrated that ginger can inhibit existing ulcers, too.^(15,16)

Diabetes Complications: Complications of diabetes may be limited by ginger. Studies have shown that it may reduce urine protein levels, decrease water intake and urine output, and reverse proteinuria. It's been shown to aldose reductase inhibitors, which reduce damage done by diabetes. Ginger can protect nerves in diabetes and lower blood fat levels.^(17,18,19,20)

Inflammation: Inflammation is a serious problem with many chronic conditions, both in terms of causing them and causing pain, and ginger can be highly effective in managing it. Neurodegenerative diseases may be aided by ginger's ability to inhibit nitrous oxide production and proinflammatory cytokines. Its antiinflammatory ability may be helpful in arthritis, cancer prevention, prostate disease, and general inflammatory processes.^(21,22,23,24,25)

Gastric Distress: Ginger's ability to ease gastric distress is superior, and it does more than simply ease pain. In a double-blind study, ginger capsules were taken orally in people suffering from dyspepsia with slow emptying of the stomach's contents. It stimulated the emptying of the stomach without any negative effects. It has been found to have an antispasmodic agent, which helps explain some of its beneficial effects on the intestinal tract. As previously stated, it inhibits *H. pylori*, which helps prevent ulcers. It also protects gastric mucosa.^(26,27,28)

Toxicity: Ginger helps prevent the toxic effects of a wide array of substances, including the pesticide lindane, a cancer drug, the chemical bromobenzene, and the excitotoxin monosodium glutamate (MSG). Lindane was shown to modulate oxidative stress in rats exposed to the pesticide lindane, a neurotoxin, simply by adding it to their diet. The cancer drug doxorubicin damages kidneys, but ginger has been shown to help alleviate the harm. Bromobenzene is highly toxic, used in chemical reactions, and can rapidly damage the liver and nervous system. Ginger has been shown to alleviate its liver damage. Ginger extract has been shown to protect against MSG nerve damage.^{29,30,31,32)}

Nonalcoholic Fatty Liver Disease (Fructose Damage): Nonalcoholic fatty liver disease (NFLD) has a variety of causes, but it's now on the increase because of the prevalence of fructose as a sweetener.

Research on ginger's function with regard to NFLD is in the very early stages. However, NFLD is known to be associated with dyslipidemia and excess triglycerides in the liver. Ginger may help this condition by lowering serum cholesterol. Research showing this is very new, published just this year, so it's hardly definitive. However, ginger does appear to hold promise as a treatment for NFLD.⁽³³⁾

Heartworms in Dogs: *Dirofilaria immitis*, heartworms, are a common canine infection. The standard medical treatments are risky, frequently causing neurological disorders and circulatory collapse. Resistance to them is also developing. It's therefore quite fortunate that ginger has been shown to be effective against heartworms. The treatment that's been tried is injections of the extract, and it does take time. However, after 55 days, an average 83% reduction, up to a maximum of 98%, was found.

About half the dogs exhibited lethargy early in the treatment, but it's believed to be a result of their bodies' need to dispose of the worms, as opposed to an adverse effect.^(34,35)

Menstrual Pain: A double blind study of young women suffering from menstrual pain compared with mefenamic acid (a nonsteroidal anti-inflammatory marketed as Ponstel), ibuprofen, ginger powder in capsules, and placebo was performed. Ginger was found to be as effective as both mefenamic acid and ibuprofen.⁽³⁶⁾

Radiation: With radiation in the news lately, it's wonderful to learn that ginger has been proven to provide significant benefit against it. One study has demonstrated that it can help prevent vomiting and taste distortion associated with radiation poisoning. Another study administered high doses of ginger extract to mice before their exposure to gamma radiation, and compared them to mice that had received only distilled water before exposure. It reduced the severity of symptoms and mortality. They were protected from gastrointestinal and bone-marrow-related deaths. It's interesting to note that treatment after exposure provided no benefit.^(37,38)

Gout, Rheumatoid Arthritis, Knee Osteoarthritis, and Indomethacin: Indomethacin is an anti-inflammatory drug commonly used to treat the pain from inflammation of gout, rheumatoid arthritis, and osteoarthritis of the knee. Studies comparing the effect of ginger extract with indomethacin consistently show that ginger is, at a minimum, just as effective, and sometimes even more than indomethacin. Since indomethacin's adverse effects include renal insufficiency in 40% of the people who take it, jaundice in 10%, headaches in 12%, and elevations in liver function tests indicating harm to the liver, plus a host of other nasty problems, it's difficult to imagine any legitimate reason for doctors prescribing the drug when they could simply have their patients take ginger extract.^(39,40,41)

Nausea and Motion Sickness: Ginger has been well studied for its classic ability to ease nausea in all sorts of situations. It has long been used for motion and sea sickness. Studies have been done both to ascertain whether it's effective—which, of course, it is—and also to try to figure out how it works. Morning sickness,

nausea, during pregnancy causes misery for a lot of women. Women suffering from morning sickness were given beverages with ginger during the first trimester of pregnancy and compared with women given placebo. Ginger alleviated the nausea in a highly significant percentage of the women. A trial of taking ginger and protein after chemotherapy demonstrated that patients were able to lessen their intake of anti-emetic medications.^(42,43,44,45)

Bacterial Diarrhea: The primary cause of death in young children in developing countries is bacterial-induced diarrhea. The bacteria don't cause it directly. The toxins they release do. Zingerone, a compound found in ginger, binds the toxin so that it cannot interact with the gut, thus preventing diarrhea and the resultant death. The standard treatment now is antibiotics coupled with electrolyte replacement, which would indicate that the antibiotics are not particularly effective. Since the long term effects of antibiotics are now known to be disastrous and antibiotics are expensive, it's hard to imagine a legitimate reason for not implementing large-scale trials of ginger on children suffering from bacterial diarrhea.⁽⁴⁶⁾

Other Benefits: The benefits of ginger are amazing, and they don't stop with the ones listed above. Here, briefly, are a few more that have been studied:

Post-stroke neurological urinary incontinence can be helped with ginger-salt-partitioned moxibustion.⁽⁴⁷⁾

Patients with hospital ventilator-induced pneumonia benefit from ginger extract.⁽⁴⁸⁾

Trigeminal nerve pain is alleviated with a traditional Japanese herbal combination that includes ginger, Saiko-Keishi-To.⁽⁴⁹⁾

Blood urea nitrogen, the BUN of blood tests, is markedly decreased by ginger extract.⁽⁵⁰⁾

Cerebral ischemia, small stroke, causes brain damage, including memory loss. Ginger extract significantly reduces damage and alleviates the loss of memory.⁽⁵¹⁾

One study demonstrates that ginger extract may help prevent heart attacks.⁽⁵²⁾

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Health Benefits

Historically, ginger has a long tradition of being very effective in alleviating symptoms of gastrointestinal distress. In herbal medicine, ginger is regarded as an excellent *carminative* (a substance which promotes the elimination of intestinal gas) and *intestinal spasmolytic* (a substance which relaxes and soothes the intestinal tract). Modern scientific research has revealed that ginger possesses numerous therapeutic properties including antioxidant effects, an ability to inhibit the formation of inflammatory compounds, and direct anti-inflammatory effects.

Gastrointestinal Relief

A clue to ginger's success in eliminating gastrointestinal distress is offered by recent double-blind studies, which have demonstrated that ginger is very effective in preventing the symptoms of motion sickness, especially seasickness. In fact, in one study, ginger was shown to be far superior to Dramamine, a commonly used over-the-counter and prescription drug for motion sickness. Ginger reduces all symptoms associated with motion sickness including dizziness, nausea, vomiting, and cold sweating.

Safe and Effective Relief of Nausea and Vomiting During Pregnancy

Ginger's anti-vomiting action has been shown to be very useful in reducing the nausea and vomiting of pregnancy, even the most severe form, *hyperemesis gravidum*, a condition which usually requires hospitalization. In a double-blind trial, ginger root brought about a significant reduction in both the severity of nausea and number of attacks of vomiting in 19 of 27 women in early pregnancy (less than 20 weeks). Unlike anti-vomiting drugs, which can cause severe birth defects, ginger is extremely safe, and only a small dose is required.

A review of six double-blind, randomized controlled trials with a total of 675 participants, published in the April 2005 issue of the journal, *Obstetrics and Gynecology*, has confirmed that ginger is effective in relieving the severity of nausea and vomiting during pregnancy. The review also confirmed the absence of significant side effects or adverse effects on pregnancy outcomes.

Anti-Inflammatory Effects

Ginger contains very potent anti-inflammatory compounds called *gingerols*. These substances are believed to explain why so many people with osteoarthritis or rheumatoid arthritis experience reductions in their pain levels and improvements in their mobility when they consume ginger regularly. In two clinical studies involving patients who responded to conventional drugs and those who didn't, physicians found that 75% of arthritis patients and 100% of patients with muscular discomfort experienced relief of pain and/or swelling.

Arthritis-related problems with your aging knees? Regularly spicing up your meals with fresh ginger may help, suggests a study published in a recent issue of *Osteoarthritis Cartilage*. In this twelve month study, 29 patients with painful arthritis in the knee (6 men and 23 women ranging in age from 42-85 years) participated in a placebo-controlled, double-blind, crossover study. Patients switched from placebo to ginger or visa versa after 3 months. After six months, the double-blind code was broken and twenty of the patients who wished to continue were followed for an additional six months.

By the end of the first six month period, those given ginger were experiencing significantly less pain on movement and handicap than those given placebo. Pain on movement decreased from a score of 76.14 at baseline to 41.00, while handicap decreased from 73.47 to 46.08. In contrast, those who were switched from ginger to placebo experienced an increase in pain of movement (up to 82.10) and handicap (up to 80.80) from baseline. In the final phase of the study when all patients were getting ginger, pain remained low in those already taking ginger in phase 2, and decreased again in the group that had been on placebo.

Not only did participants' subjective experiences of pain lessen, but swelling in their knees, an objective measurement of lessened inflammation, dropped significantly in those treated with ginger. The mean target knee circumference in those taking ginger dropped from 43.25cm when the study began to 39.36cm by the 12th week. When this group was switched to placebo in the second phase of the study, their knee circumferences increased, while those who had been on placebo but were now switched to ginger experienced a decrease in knee circumference. In the final phase, when both groups were given ginger, mean knee circumference continued to drop, reaching lows of 38.78 and 36.38 in the two groups.

How does ginger work its anti-inflammatory magic? Two other recent studies provide possible reasons.

A study published in the November 2003 issue of *Life Sciences* suggests that at least one reason for ginger's beneficial effects is the free radical protection afforded by one of its active phenolic

constituents, 6-gingerol. In this *in vitro* (test tube) study, 6-gingerol was shown to significantly inhibit the production of nitric oxide, a highly reactive nitrogen molecule that quickly forms a very damaging free radical called peroxynitrite. Another study appearing in the November 2003 issue of *Radiation Research* found that in mice, five days treatment with ginger (10 mg per kilogram of body weight) prior to exposure to radiation not only prevented an increase in free radical damage to lipids (fats found in numerous bodily components from cell membranes to cholesterol), but also greatly lessened depletion of the animals' stores of glutathione, one of the body's most important internally produced antioxidants.

A study published in the February 2005 issue of the *Journal of Alternative and Complementary Medicine* sheds further light on the mechanisms of action that underlie ginger's anti-inflammatory effectiveness. In this research, ginger was shown to suppress the pro-inflammatory compounds (cytokines and chemokines) produced by synoviocytes (cells comprising the synovial lining of the joints), chondrocytes (cells comprising joint cartilage) and leukocytes (immune cells).

Protection against Colorectal Cancer

Gingerols, the main active components in ginger and the ones responsible for its distinctive flavor, may also inhibit the growth of human colorectal cancer cells, suggests research presented at the Frontiers in Cancer Prevention Research, a major meeting of cancer experts that took place in Phoenix, AZ, October 26-30, 2003.

In this study, researchers from the University of Minnesota's Hormel Institute fed mice specially bred to lack an immune system a half milligram of (6)-gingerol three times a week before and after injecting human colorectal cancer cells into their flanks. Control mice received no (6)-gingerol.

Tumors first appeared 15 days after the mice were injected, but only 4 tumors were found in the group of -gingerol-treated mice compared to 13 in the control mice, plus the tumors in the -gingerol group were smaller on average. Even by day 38, one mouse in the (6)-gingerol group still had no measurable tumors. By day 49, all the control mice had been euthanized since their tumors had grown to one cubic centimeter (0.06 cubic inch), while tumors in 12 of the (6)-gingerol treated mice still averaged 0.5 cubic centimeter—half the maximum tumor size allowed before euthanization.

Research associate professor Ann Bode noted, "These results strongly suggest that ginger compounds may be effective chemopreventive and/or chemotherapeutic agents for colorectal carcinomas."

In this first round of experiments, mice were fed ginger before and after tumor cells were injected. In the next round, researchers will feed the mice ginger only after their tumors have grown to a certain size. This will enable them to look at the question of whether a patient could eat ginger to slow the metastasis of a nonoperable tumor. Are they optimistic? The actions of the University of Minnesota strongly suggest they are. The University has already applied for a patent on the use of (6)-gingerol as an anti-cancer agent and has licensed the technology to Pediatric Pharmaceuticals (Iselin, N.J.).

Ginger Induces Cell Death in Ovarian Cancer Cells

Lab experiments presented at the 97th Annual Meeting of the American Association for Cancer, by Dr Rebecca Lui and her colleagues from the University of Michigan, showed that gingerols, the

active phytonutrients in ginger, kill ovarian cancer cells by inducing apoptosis (programmed cell death) and autophagocytosis (self-digestion).

Ginger extracts have been shown to have both antioxidant, anti-inflammatory and anti-tumor effects on cells. To investigate the latter, Dr Liu examined the effect of a whole ginger extract containing 5% gingerol on a number of different ovarian cancer cell lines.

Exposure to the ginger extract caused cell death in all the ovarian cancer lines studied.

A pro-inflammatory state is thought to be an important contributing factor in the development of ovarian cancer. In the presence of ginger, a number of key indicators of inflammation (vascular endothelial growth factor, interleukin-8 and prostaglandin E2) were also decreased in the ovarian cancer cells.

Conventional chemotherapeutic agents also suppress these inflammatory markers, but may cause cancer cells to become resistant to the action of the drugs. Liu and her colleagues believe that ginger may be of special benefit for ovarian cancer patients because cancer cells exposed to ginger do not become resistant to its cancer-destroying effects. In the case of ovarian cancer, an ounce of prevention—in the delicious form of liberal use of ginger—is an especially good idea. Ovarian cancer is often deadly since symptoms typically do not appear until late in the disease process, so by the time ovarian cancer is diagnosed, it has spread beyond the ovaries. More than 50% of women who develop ovarian cancer are diagnosed in the advanced stages of the disease.

Immune Boosting Action

Ginger can not only be warming on a cold day, but can help promote healthy sweating, which is often helpful during colds and flus. A good sweat may do a lot more than simply assist detoxification. German researchers have recently found that sweat contains a potent germ-fighting agent that may help fight off infections. Investigators have isolated the gene responsible for the compound and the protein it produces, which they have named *dermicidin*. Dermicidin is manufactured in the body's sweat glands, secreted into the sweat, and transported to the skin's surface where it provides protection against invading microorganisms, including bacteria such as *E. coli* and *Staphylococcus aureus* (a common cause of skin infections), and fungi, including *Candida albicans*.

Ginger is so concentrated with active substances, you don't have to use very much to receive its beneficial effects. For nausea, ginger tea made by steeping one or two 1/2-inch slices (one 1/2-inch slice equals 2/3 of an ounce) of fresh ginger in a cup of hot water will likely be all you need to settle your stomach. For arthritis, some people have found relief consuming as little as a 1/4-inch slice of fresh ginger cooked in food, although in the studies noted above, patients who consumed more ginger reported quicker and better relief.

Description

The spice ginger is the underground rhizome of the ginger plant, known botanically as *Zingiber officinale*. The plant's botanical name is thought to be derived from its Sanskrit name *singabera* which means "horn shaped," a physical characteristic that ginger reflects.

The flesh of the ginger rhizome can be yellow, white or red in color, depending upon the variety. It is covered with a brownish skin that may either be thick or thin, depending upon whether the plant was harvested when it was mature or young. The ginger rhizome has a firm, yet striated texture and a taste that is aromatic, pungent and hot.

History

Native to southeastern Asia, a region whose cuisines still feature this wonderfully spicy herb, ginger has been renowned for millennia in many areas throughout the world. Ginger is mentioned in ancient Chinese, Indian and Middle Eastern writings, and has long been prized for its aromatic, culinary and medicinal properties. After the ancient Romans imported ginger from China almost two thousand years ago, its popularity in Europe remained centered in the Mediterranean region until the Middle Ages when its use spread throughout other countries. Although it was a very expensive spice, owing to the fact that it had to be imported from Asia, it was still in great demand. In an attempt to make it more available, Spanish explorers introduced ginger to the West Indies, Mexico and South America, and in the 16th century, these areas began exporting the precious herb back to Europe.

Today, the top commercial producers of ginger include Jamaica, India, Fiji, Indonesia and Australia.

How to Select and Store

Whenever possible, choose fresh ginger over the dried form of the spice since it is not only superior in flavor but contains higher levels of gingerol as well as ginger's active protease (it's anti-inflammatory compound). Fresh ginger root is sold in the produce section of markets. When purchasing fresh ginger root, make sure it is firm, smooth and free of mold. Ginger is generally available in two forms, either young or mature. Mature ginger, the more widely available type, has a tough skin that requires peeling while young ginger, usually only available in Asian markets, does not need to be peeled.

Even though dried herbs and spices like ginger powder are widely available in supermarkets, you may want to explore the local spice stores in your area. Oftentimes, these stores feature an expansive selection of dried herbs and spices that are of superior quality and freshness than those offered in regular markets. Just like with other dried spices, when purchasing dried ginger powder try to select organically grown ginger since this will give you more assurance that it has not been irradiated.

Ginger is also available in several other forms including crystallized, candied and pickled ginger.

Fresh ginger can be stored in the refrigerator for up to three weeks if it is left unpeeled. Stored unpeeled in the freezer, it will keep for up to six months.

Dried ginger powder should be kept in a tightly sealed glass container in a cool, dark and dry place. Alternatively, you can store it in the refrigerator where it will enjoy an extended shelf life of about one year.

Tips for Preparing and Cooking

Tips for Preparing Ginger

To remove the skin from fresh mature ginger, peel with a paring knife. The ginger can then be sliced, minced or julienned. The taste that ginger imparts to a dish depends upon when it is added during the cooking process. Added at the beginning, it will lend a subtler flavor while added near the end, it will deliver a more pungent taste.

How to Enjoy

A Few Quick Serving Ideas

Turn up the heat while cooling off by making ginger lemonade. Simply combine freshly grated ginger, lemon juice, cane juice or honey and water.

Add extra inspiration to your rice side dishes by sprinkling grated ginger, sesame seeds and nori strips on top.

Combine ginger, [soy sauce](#), olive oil and garlic to make a wonderful salad dressing.

Add ginger and orange juice to puréed sweet potatoes.

Add grated ginger to your favorite stuffing for baked apples.

Spice up your healthy sautéed vegetables by adding freshly minced ginger.

For some of our favorite recipes, click [Recipes](#).

Individual Concerns

Ginger is not a commonly allergenic food and is not known to contain measurable amounts of oxalates or purines.

Nutritional Profile

For an in-depth nutritional profile click here: [Ginger](#).

In-Depth Nutritional Profile

In addition to the nutrients highlighted in our ratings chart, an in-depth nutritional profile for [Ginger](#) is also available. This profile includes information on a full array of nutrients, including carbohydrates, sugar, soluble and insoluble fiber, sodium, vitamins, minerals, fatty acids, amino acids and more.

Original article <http://www.whfoods.com/genpage.php?tname=foodspice&dbid=72>

Ayurveda gives ginger the status of a virtual medicine chest. That's because this wonder spice has time-tested digestion-friendly properties, in addition to its numerous other health benefits. In India, ginger is liberally used in daily life. Ginger-infused chai is a household favorite, and it's grandma's antidote of choice for battling cold and flu.

On millions of dining tables in India, you'll see matchsticks of fresh ginger that have turned a soft pink from being soaked in lemon juice and salt: a zingy accompaniment to any cooked meal.

Let's give this knobby root a closer look.

10 Terrific Benefits of Ginger

- 1. Haven't been feeling hungry? Eat fresh ginger just before lunch to stoke a dull appetite and fire up the digestive juices.**
- 2. Ginger improves the absorption and assimilation of essential nutrients in the body.**

3. Ginger clears the ‘microcirculatory channels’ of the body, including the pesky sinuses that tend to flare up from time to time.
 4. Feeling airsick or nauseous? Chew on ginger, preferably tossed in a little honey.
 5. Can’t stop the toot-a-thon? Gas—oops—guess what?! Ginger helps reduce flatulence!
 6. Tummy moaning and groaning under cramps? Munch on ginger.
 7. Reeling under joint pain? Ginger, with its anti-inflammatory properties—can bring relief. Float some ginger essential oil into your bath to help aching muscles and joints.
 8. Just had surgery? Chewing ginger post-operation can help overcome nausea.
 9. Stir up some ginger tea to get rid of throat and nose congestion. And when there’s a nip in the air, the warming benefits of this tasty tea are even greater!
 10. Bedroom blues? Try adding a gingery punch to a bowl of soup. (Pss...the Ayurvedic texts credit ginger with aphrodisiac properties)
- Original article <http://foodmatters.tv/articles-1/10-healing-benefits-of-ginger>

Ginger is one of the ancient, revered medicines of India and Asia. The list of conditions for which it is used is so long that it might prompt skepticism. How can one herb affect so many seemingly different diseases? Here's how this alternative medicine works:

Healing Properties

Ginger's ability to combat a variety of diseases and conditions is due in part to its impact on excessive inflammation, which is a significant underlying cause of many illnesses. Inflammation is the body's natural healing response to illness or injury, and its pain, redness, heat, and swelling are attempts to keep you from moving a damaged area while it is being repaired. Inflammation subsides as the body heals. However, in some conditions, including arthritis, diverticulosis, gallbladder inflammation, and heart disease, the inflammation does not go away. It becomes chronic and leads to many other problems.

Ginger is particularly useful in treating chronic inflammation because it partially inhibits two important enzymes that play a role in inflammation gone awry -- cyclooxygenase (COX) and 5-lipoxygenase (LOX). While anti-inflammatory drugs block COX more strongly, they don't affect LOX at all and therefore only address part of the problem. Even worse, anti-inflammatory drugs can cause side effects, such as ulcers, because they also block the beneficial effects that COX has on the digestive tract, including protecting the stomach.

Ginger does not cause stomach irritation; instead it helps protect and heal the gut. Ginger also treats a broader range of the inflammatory problem because it affects both the COX and the LOX enzymes. And because it doesn't shut down the inflammatory process entirely, ginger may actually allow it to work properly and then turn itself off, the way it does with an injury.

Besides reducing inflammation, ginger has many other benefits. It helps relieve nausea, destroys a host of viruses, and in some laboratory studies has shown promise as an anticancer agent.

Preparation and Dosage

The part of ginger we use is not a root, as one might guess from the way it looks. It's actually the rhizome, or underground stem. The spicy, aromatic compounds in the rhizome that impart the medicinal activity to ginger are relatively susceptible to heat and oxygen, so tread gingerly when making medicine from this herb.

To make a tea, cut a two-inch cube of rhizome into slices and simmer them in one cup of water on low heat for 10 minutes. Cover the pot while cooking to retain as many volatile constituents as possible. Remove the

slices, and sip the remaining liquid before a meal. Eat the slices after drinking the tea. Drink three cups of tea per day, one before each meal.

Ginger capsules or powder are also widely available. Take at least 2,000 milligrams three times or more per day with or without food. Just be sure to use powder that has not been sitting around too long, as it can lose its potency.

People often make the mistake of taking too little ginger and thus don't gain the full benefits.

Storage

Store fresh ginger rhizomes in a cool, dark, dry place. Do not keep them in the refrigerator, even after cutting them, or they will shrivel up. Use within 2 to 3 weeks for optimal effects. Capsules or powder should be kept away from heat and light.

Original article <http://health.howstuffworks.com/wellness/natural-medicine/alternative/medical-uses-for-ginger-ga.htm>

