Ginger: An Anti-inflammatory Article

By Deb Chasteen

Even culinary types who enjoy the zest and warmth ginger brings to many cuisines may not think of ginger as an ally for wellbeing. Our culture has, after all, largely relegated ginger to the spice rack. Yet for centuries many countries have regarded it as an important medicinal herb, and current research is confirming what Chinese herbalists believed over 2000 years ago: Ginger is a powerful remedy for many health conditions and a guardian of existing good health.

Zingiber officinale is a perennial plant native to Southeast Asia, where it assumed an importance in Ayurvedic and Chinese medicine. It's now also cultivated in many tropic and subtropical climates, most notably in Jamaica. Although its grassy leaves grow from two to four feet tall, only the underground rhizome, or root, is used for culinary and medicinal purposes. This knobby root bears in a light bark bears quite an exotic history. Arabian traders traversing the first spice highway carried it from China and India to the ancient Greeks. In the second century A.D., Roman treasurers taxed ginger as a valuable. Ginger arrived on our own shores with the first British colonists, whom I like to imagine drinking robust ginger beer (Version 1.0 of ginger ale, if you will)

Zinc Lozenges - An Effective Cold Cure

By Victoria Smith

In the right form, zinc has been proven to be effective in fighting off cold viruses. However, just swallowing any old form of supplemental zinc will not vanquish the common cold. Chelated forms of zinc (like zinc picolinate), made available to the body through digestion, are virtually invisible to the upper respiratory tract because they do not release zinc ions at the near neutral pH's of the mouth and mucous membranes. Unbound zinc ions are needed directly where the cold virus begins its work in order to be effective.

Dissolving zinc compounds in your mouth is not enough, either. The compound itself must dissociate into positively charged zinc ions that are stable (that is, they stay in solution). A key factor in the effectiveness of a given form of zinc is the concentration of Zn₂⁺ ions that are released into solution. Zinc acetate and zinc gluconate are the only zinc compounds that release stable zinc ions. At a pH of 7.4, zinc acetate releases 100% of its zinc as positively charged zinc ions, while zinc gluconate releases 30%. This higher dissolution rate may make the zinc acetate preparations more effective at lower dosages than zinc gluconate. Other common zinc compounds do not release any Zn₂⁺ ions at physiologic pH 7.4, such as zinc aspartate, tartarate, citrate, orotate or picolinate.

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Celebrex and Vioxx, expensive drugs both introduced in 1999, were heralded as great advances in treating inflammation. Unlike traditional NSAIDs, they inhibit only the COX-2 enzyme, sparing COX-1, which helps protect the stomach lining. While they do significantly reduce gastrointestinal problems, risks remain. These drugs have been found to have serious side effects which, though uncommon, could prove fatal. Studies link Vioxx with a heightened risk of heart attack. This increased risk may be a property of all man-made Cox-2 inhibitors; if so, Celebrex is also implicated. Additionally, prevent heart attacks and strokes. Aspirin also reduces platelet aggregation, but ginger relieves pain while having a calming effect on the digestive tract, rather than carrying the gastrointestinal side effects of NSAIDs.

Herbalists have long used ginger to treat arthritis, and their work is being validated in the laboratory. Danish studies in the late 80's and early 90's have shown ginger to reduce pain, swelling and stiffness associated with both rheumatoid arthritis and osteoarthritis, with no adverse effects. Osteoarthritis is the most common form of the disease, stemming from damage to joints and connective tissue. A 2001 clinical trial at the University of Miami Medical school found that two thirds of osteoarthritis patients who reported moderate to severe pain reported relief when given a pill containing 225 milligrams of ginger twice a day for six weeks. Professor Ray Altman, a rheumatologist who ran the study, reported in the journal Arthritis and Rheumatism that "the effect is similar to that seen with trials using conventional drugs."

To obtain these results, one must consume ginger everyday. Fortunately, there are many good reasons to do so. Chronic inflammation is linked with many adverse health conditions, including some cancers and Alzheimer's Disease. Difficult menstrual periods can also be eased by ginger's Cox-inhibiting properties. Prostaglandins, which constrict muscles, play a role in normal menstruation by working to help slough off the endometrial lining. However, inflammation causes overproduction of these compounds, resulting in the pain, cramping and upset stomach some women experience monthly.

Free-radicals also contribute to inflammation. These molecules react with tissue to cause cell damage and aging. Ginger contains twelve anti-oxidants which help neutralize these ravaging particles. The anti-oxidant properties of ginger were well-known centuries ago, when the spice was used extensively as a preservative.
Now, studies have demonstrated that meat mixed with ginger will last up to 33% longer, as ginger retards the oxidation that spoils flesh. A 1994 American study established that many elements in ginger were more effective anti-oxidants than Vitamin E; research conducted in India in 1992 and 1993 validated claims for ginger’s anti-oxidant effects.

I hope this piece spurs you to incorporate ginger into your daily life; certainly doing so will be the most delicious New Year’s resolution you make. Sauté fresh ginger with vegetables, steep slices in boiling water for a soothing tea, throw ginger root into a juicer and wake up fruit juices with it. Dash ground ginger into root vegetables or baked goods. Pickled, candied, dried or tucked into a supplement capsule, ginger fits into the busiest routine. It’s a good idea to consult an herbal encyclopedia or similar guide for recommended doses to treat particular ailments. Generally, up to one gram of dried ginger or from five to fifty grams of fresh ginger is suggested for daily use. If you are going to have surgery or are taking a blood thinner such as Coumadin, discuss using ginger with your doctor.

For those interested in learning more about the medicinal properties of ginger, the book Ginger: Common Spice and Wonder Drug (2001, Hohm Press, Prescott, Arizona) is an excellent resource. Written by research herbalist Paul Schulick, its 176 pages examine early herbal healing claims in the light of new scientific research and provide over 300 references to support the author’s positive conclusions on ginger’s curative and preventative powers.

Daily’s Local Music section continues to grow by leaps and bounds. This month, local label Orange Twin represents in a big way, as do many members of the Elephant 6 recording collective. Here’s the skinny on some of the new local CDs available at Daily.

- Tony Paglia

Jeff Mangum “Live at Jittery Joe’s”

This live recording from 1997 finds the lead singer and songwriter from Neutral Milk Hotel going solo. Words like “powerful” and “emotional” are vast understatements here, as Jeff performs songs from the 2 Neutral Milk albums, a handful of unreleased original tunes, and a Phil Spector cover. As a bonus, the CD functions as a DVD; you can put the CD in your computer and watch the performance. (Incidentally, the cowering baby heard at various points through the album is none other than one of Daily’s favorite young-uns, Kavi Fernandes)

Elf Power - “Nothing’s Going to Happen”

Andrew Rieger and Co. are Athens’ rock historians par excellence. This CD re-releases their 1998 “Come On” covers EP and adds 10 new tracks, including songs by Husker Du, Bad Brains, Buzzcocks, The Misfits, Roxy Erickson, and The Frogs. Super rockin!!

Fablefactory - “Freak Out Hard on You”

This is the swan song from this now-defunct band. Wonderfully catchy pop tunes with whacked-out, super-intelligent lyrics. If you missed out on the fablefactory experience firsthand, definitely check out this album.

The Instruments - “Billions of Phonographs”

Heather McIntosh, cellist-about-town with Japancakes, Circulatory System, Flicker Orchestra, Elf Power, and many others, is, as it turns out, also a songwriter, and a damned fine one at that. This record has a beautifully atmospheric vibe, projecting a true otherworldliness and timelessness, featuring brilliant performances by members of Circulatory System, Neutral Milk Hotel. This album is bliss.

Calvin Don’t Jump - “Crystal Clear Mississippi”

Calvin Don’t Jump is the musical project of local songwriter J. Kirk Pleasant. On this, his self-released debut album, he sets his ‘weird, folkly/oblique lyrics’ to musical accompaniments that feature many local musicians on a variety of instruments such as oboe, bassoon, clarinet, accordion and more.

Wide Receivers - “Wide Receivers”

Daily’s own beloved produce manager, Marc Tissenbaum, rocks out with this soaring set of new-wavey rock and rule. Don’t be fooled by the innocent-looking Howdy Doody style puppets on the cover. This record might try to eat your face. In a good way.