

*NATURAL EARTH:
The English Standard Reference
on Herbal Substances
Volume One:*

The Herbal Center of Healing

by Gary J. Lockhart

with artwork by
April Bingham

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voice mail: (888) 690-1277

fax: (907) 696-1277

This book is dedicated to

Arthur Lee Jacobson

*As a naturalist, gardener and writer of books on trees,
he shares the adventure of life and love for our green friends.*

THE HERBAL CENTER OF HEALING

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Introduction

*“The doctors tender of their fame, wisely on me lay all the blame.
We must confess his case was nice; but he would never take advice,
Had he been ruled for ought appears, he might have lived these twenty years.
For when we opened him we found, that all his vital parts were sound.”*

—Jonathan Swift

In O. Henry’s story, *Let Me Feel Your Pulse*, a sick man visits doctor after doctor, without success, until he finally meets one very knowledgeable old doctor who tells him, “Somewhere in these mountains there’s a plant growing—a flowering plant that’ll cure you, and it’s about the only thing that will. It’s of a kind that’s as old as the world; but of late it’s powerful scarce and hard to find. You and I will have to hunt it up.”

For weeks they hunt in the mountains, but they cannot find the rare herb. When they are about to admit defeat, the sick man realizes that the weeks of climbing and sunshine have healed him. When O. Henry wrote this story in 1909, he must have hoped that it would be his story, for he was very ill, and nobody was able to help him. He needed that rare herb, for he died the next year.

Of course, today, it’s not just that the herbs are rare; the information about these herbs is scattered and buried in thousands of old books, indexes and journals.

My search started twenty years ago after I tried to help a friend understand the chemistry of common herbs. It eventually yielded the largest collection of material from medical and scientific literature on herbal medicine ever assembled. I have spent almost all my time during these years, digging through books, indexes and journals to recover whatever I could about this rare, hidden knowledge. Much of this time was spent in the medical and science libraries of the University of Washington, but I also took three 8,000 mile trips and a dozen shorter trips visiting libraries throughout North America. I worked my way through most of the medical and scientific literature from the seventeenth century up to the present. On a good day, I could go through ten feet of old journals. I have gone through more than three miles of journals. With diligent work I

went through some four miles of journals in about 40 major libraries across the country ranging from the Library of Congress to Stanford. This included most of the material written in the nineteenth century when herbal medicine was more common. Thousands of studies and observations have been published in the past three centuries that are of great interest, but they are lost in the sea of words now gathering dust in the basements of major libraries. Many observations have the ring of truth, but others are doubtful. I have tried to sort out the things that would be of great interest to my readers. I have also tried to summarize ethnobotanical material that might be of interest to researchers. The work has been difficult, but it has yielded thousands of obscure, unindexed bits of information that could not easily be found—until now.

The Herbal Center of Healing is the first of five books covering the use of plants in medicine. The work focuses on the use of herbs for the nervous system, the blood system, and the main organs of the body.

These books are intended to be an encyclopedia of material arranged topically under the subject area. Those who have a medical problem will be able to see most of the herbal material found in medical and scientific literature that has some validity. I found hundreds of surprises in medical literature, which offer help to those suffering from nearly every disorder. Information is also provided on discoveries relating to health on minerals, vitamins and diet.

Only the literature that is deemed “official medical practice” makes its way into the books of medical students. There are thousands of medical, botanical, pharmaceutical, agricultural and chemical journals in which observations about herbs have been made. Some of these observations on herbs

are just as revolutionary and worthy of study as the latest technological breakthroughs in medicine, but, since there is little publicity and money to be made, they are largely ignored.

Often there is a contemptuous attitude among medical professionals towards simple treatments. I once had dinner in a small restaurant, where strangers shared tables, for want of a place to sit. The woman at my table was graduating from medical school. When I mentioned that I was writing a chapter on the cures for diabetes, she angrily snapped: “That can’t possibly be true. They don’t teach us that in medical school!”

In these times, when something is wrong with our heart, kidneys or liver, the tendency is to replace the organ or provide a mechanical substitute. We are no longer practicing healing medicine; we are practicing technology. Richard Bright was famous for his study of kidney disease (Bright’s disease) and high blood pressure. In 1813 he wrote to his father: “You must know that surgery is at this moment rising very fast at the expense of medicine—and we must do our best to keep our ground.” In our time, the surgeon is the king of the mountain, while the natural healer is lost in the swamp. Often true healers are shut off from grants from the National Institutes of Health, and they become the target of the FDA and the AMA.

I want to thank friends who helped to translate Russian, Ukrainian, Portuguese, Spanish, Danish, Swedish, French and German articles. Thanks to those who answered my queries with letters from South Africa, Indonesia, Spain, France, Germany, Peru, India and Saudi Arabia. Special thanks go to Arthur Lee Jacobson for helping with the botany.

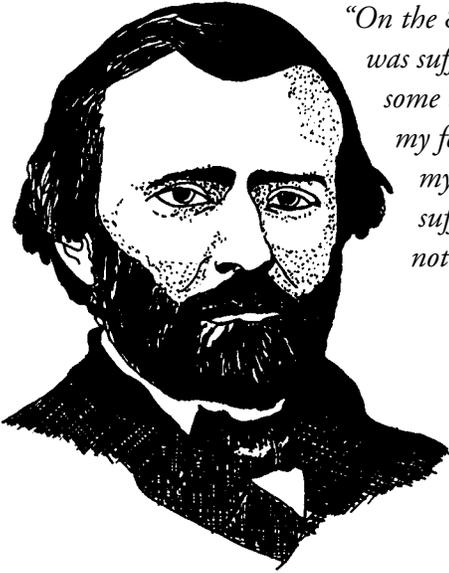
Thanks must go to Seth Berholwitz, David Wesley, Doris Jones, Jean Radosevich and Anne Winter for their interest in my work. Special thanks to artist April Bingham.

In most cases I have to use proper botanical names, because common names are inadequate. A dandelion isn’t just one plant; it is a collection of some 200 members of the *Taraxacum* genus. Just as we have first, middle, and last names, botanists name plants in the reverse order, so the dandelion is a member of the *Compositae* family, and its genus and species name is *Taraxacum officinale*. Those who grow or gather plants will want the proper identification, for similar plants may not be active. Botanists change these names to reflect new knowledge about family relationships. In some cases I have used the new name with an = sign, followed by the old botanical name, because the old name is better known, but not current.

I have followed the modern trend of replacing clumsy date notations of “Before Christ” and “Anno Domini” with “-” and “+”; milligrams is abbreviated as mgs., and kilograms is often found as kgs., while cc. is cubic centimeters. An extensive bibliography is provided for those who want to study original sources.

These books are not intended to replace the services of qualified doctors or medical experts. If you have a medical problem, see a doctor or professional according to your choice. Most plants listed in this book have had a tradition of use, but some require great caution. I do not specifically recommend any herbs, products or healing techniques, but I do encourage exploring more effective and inexpensive ways of healing.

Headache Herbs



“On the 8th [April 8, 1865] I had followed the Army of the Potomac in the rear of Lee. I was suffering very severely with a sick headache, and stopped at a farmhouse at the road some distance in the rear of the main body of the army. I spent the night in bathing my feet in hot water and mustard and mustard plasters on my wrists and the back of my neck, hoping to be cured by morning . . . When the officer reached me I was still suffering with the sick headache; but the instant I saw the contents of the [surrender] note [from General Robert E. Lee] I was cured.”

General Ulysses S. Grant

“I’m very brave generally,” he went on in a low voice, “only today I happen to have a headache!”

Lewis Carroll, *The Walrus and the Carpenter*

*“Lord, how my head aches! What a head have I!
It beats as it would fall in twenty pieces.”*

William Shakespeare, *Romeo and Juliet*

The ancients believed that headaches were caused by evil spirits. The Greeks called these evil entities *keres*. The best way to cure a headache was to cut a hole in the head, so the spirit could escape. This process was called *trepanning*, and ancient skulls have been found all over the world with holes cut in them.

Saint Augustine wrote: “All diseases of Christians are caused by demons.” The cure then obviously was a prayer to God, or the intercession of some saint, to release the evil demon. In the sixth century, St. Gregory, the Bishop of Tours, France, told how his headache was cured by touching the railing at the tomb of St. Martin. This resulted in a flood of pilgrims. Pilgrims also traveled to the tomb of St. Julian to cure their headaches.

The Babylonians tried to find a rational explanation for the order of events, by linking the stars to human events. Headaches were the result of bad stars, and there wasn’t much you could do about it. People born in the sign of Aries were believed to be especially headache-prone.

Hippocrates tried to explain all problems, with the idea that the body was influenced by the four humors. These were influenced by food, water and climate. If you had headaches, you had too much of

the wrong humors. By changing the diet or climate, you could change the humors and solve your medical problems.

At some time we all have headaches, but they are much more likely in people who plan and achieve, and are careful and precise. People who “don’t give a damn,” are much less likely to suffer from headaches.

Two early U.S. presidents suffered from headaches. Thomas Jefferson was the author of the Declaration of Independence. He also was an inventor, architect, and statesman. He had such problems with headaches that he stated in 1786: “The art of life is the avoiding of pain.” General Ulysses S. Grant suffered from headaches all through the American Civil War.

The mechanism of most headaches become clear, with the study of anatomy in the 20th century. Blood vessels are wrapped with muscle strands that relax or constrict to regulate the circulation. The loosening or tightening of these muscular strands regulates the oxygen and nutrient supply. When we are upset about something, we become tense, and the muscular strands constrict. The brain tissue becomes short of oxygen, and it sends out a pain signal. If we eat a dish of ice cream too rapidly,

the smooth muscle fibers suddenly constrict and we have a temporary headache. Headaches may also be the result of not enough constriction of the smooth muscle strands.

A doctor discovered that his headaches could be cured by sipping cold water. He tested this discovery by having all of his patients with headaches sip cold water, and the results were plotted against blood pressure. About 60% of the people with low blood pressure were relieved with cold water, but sipping cold water rarely relieved people with high blood pressure. Blood pressure is greater in the sitting rather than lying position, and it is increased by smoking, exercise, and exposure to cold wind. Hot drinks gave some relief to those with high blood pressure.

The pressure caused by moderate constriction of the blood vessels forces lymph through the tissues, and brings nutrition and oxygen. Headaches can be caused by a vasodilator, which makes the vessels too wide. Nitroglycerin is a vasodilator, and this is the reason why it causes “dynamite headaches.” Angina pain is caused by a lack of blood circulation in clogged blood vessels, and nitroglycerin is an effective remedy in this form of heart pain. The old miners initially got headaches from working with nitroglycerin. When they retired after years of working with it, they developed headaches from not breathing nitroglycerin fumes!

High blood pressure is often a factor in headaches. This can be due to the constriction of the muscular bands around the blood vessels, the kidneys or many other factors. When the blood pressure returns to normal, the headaches go away.

Many old time doctors believed that headaches were due to the liver and they prescribed liver tonics to cure headaches. The enzyme-rich cells of the liver act as a filter for the blood stream, and they break down materials for elimination in the kidneys. There may be some truth to this idea, for one of the strongest liver activators is the green leaf of the common artichoke, which is known for relieving headaches in Italy.

“Intestinal toxemia,” was a popular explanation for frequent headaches in the early part of the 20th century. The colon and intestinal tract is populated with gram-positive or gram-negative bacteria. The gram-negative bacteria have an endotoxin in the cell walls, and many people appear to be sensitive

to this. Normally we have about 75% gram-negative and about 25% gram-positive bacteria in our intestinal tract. Taking garlic supplements, calcium phosphate salts, castor oil or pantothenic acid can reverse the population. Yogurt and buttermilk are rich sources of gram-positive bacteria, and aid in shifting the population. One study showed that a shift towards gram-positive bacteria resulted in the disappearance of most chronic headaches.

Around 1890, Doctor Alexander Haig popularized his “uric acid theory.” He suffered from headaches for years, and after keeping a record of his activities, he found that they got worse when he ate large portions of meat. Fish, meat, eggs and coffee generate uric acid. When you eliminate these items, you eliminate the headaches. He added more cheese and beans to the diet to make up for the protein.



Umbellularia californica

Umbellularia californica is known as the headache tree in California. The wood is valued for ornamental cabinetwork, and insects never attack this tree. It is a popular children’s trick to crush a leaf and have someone smell it. The bufotenine in the leaf can cause a severe headache and dizziness. The Indians once used these leaves to cure headaches, because of a constrictive rebound of the smooth muscles. The activity of the leaves must be variable, because the ones in Seattle did not produce headaches when I tried them, but the California trees are said to be very active.

Some Australians have cured headaches by crushing and breathing the headache vine *Clematis glycinoides*. The constriction and loosening of the

blood vessels provides the cure. Another “headache flower” is *Daphne genkwa*. The odor of it will give you a headache.

Altering the diet can relieve many headaches. I had a friend who stopped his severe headaches by eliminating coffee from his diet. People with headaches due to constriction of the blood vessels can take niacin. This B vitamin dilates the blood vessels and large doses leave the face red and flushed. In one study 82% of the people taking niacin reported that their headaches were relieved in an hour.

Calcium salts as dietary supplements were said to be effective in 40 of 48 chronic headaches. Most of these people found permanent relief in three to six weeks. In headaches occurring after meals, 16 of 23 people found relief with calcium supplements.

Could headaches be due to an iodine deficiency? One cure was made by mixing 100 milligrams of potassium iodide with 20 grams of water. A teaspoonful of the iodine mixture is taken every few minutes. This was tried in twenty unselected headaches. In twelve cases potassium iodide gave permanent relief in fifteen to forty-five minutes. Partial relief was obtained in four cases; it didn't work in another four cases.

Nathaniel Dwight discovered the first “American cure” for headaches, when he presented his findings to the Hartford Medical Society in 1799. He believed that “vegetable acids” corrected the “morbid acid” of the stomach. He found that the malic acid of apple cider was the perfect corrective for a sick headache. His patients drank up to half a pint of apple cider before eating breakfast.

Dr. Dwight found that apple cider cured bilious colic, which he believed had the same cause as headaches. He wrote: “The cider has been drunk by persons for months together, with entire relief from the colic, who, before they began with the remedy, were subject to paroxysms of it every few weeks.” When his patients quit drinking the cider, their problems returned.

There has been little effort to investigate the old headache remedies or study their mode of actions. *Angelica acutiloba* is a popular woman's herb in China. The dry powdered roots turned out to be 1.7 times stronger as an analgesic than aspirin. It is used in China for the same problems that we normally treat with aspirin.

There are at least two herbs which are comparable to aspirin in pain relief. *Dittrichia viscosa* is similar in effect to aspirin, although it doesn't reduce fever. *Scabiosa atropurpurea* has a strong effect on reducing pain and fever. The raw herb is about a third as powerful as refined aspirin.

In the Philippines the sap of *Kibatalia gitingensis* is used to cure stomach disorders, dysentery, worms, and headaches. There is an alkaloid in the tree that antagonizes histamine and prevents histamine contractions. It acts on the serotonin receptors and blocks the painful response that results in the headaches.

A survey of headache remedies in Poland showed that many common herbs were used. The peasants used poultices of horseradish, cabbage or potato peelings. Teas were made of horseradish, cabbage, potatoes, beet roots, garlic, coltsfoot and the linden tree.

Readers of a popular health magazine contributed several tips on how they stopped their headaches. One woman found that taking 25 micrograms of vitamin B¹² could stop headaches with bright shimmering flashes. It took about fifteen minutes for the headache to disappear. Another reader had daily headaches, but stopped them completely in two weeks by taking 500 units of vitamin E daily.

In the East Indies the leaves of the “headache tree” *Premna integrifolia* are used to make a tea. In Jamaica and the Caribbean the “headache weed” is *Hedyosmum nutans*. In North America the “headache weed” was blue cohosh *Caulophyllum thalictroides*. In Central America, herb vendors sell *Cissampelos tropaeolifolia* under the name of “aspirina.” The “headache wood” of Australia is *Scaevola spinescens*. It contains an antagonist of the pain producing chemical 5-hydroxytryptamine. It has also been used for cancer and colitis.

The old Romans drank a tea of *Verbena officinalis* to cure headaches. The active substance is adenosine. Its function has been described as a “retaliatory metabolite,” remaining in the plasma outside of cells, and helping them to recover when needed. A number of late medieval medical books mention it for curing headaches. Chinese studies show that the plant is synergistic with prostaglandin E2. The prostaglandins regulate cell function.



Verbena officinalis

A test of the herb was reported in 1869 in Italy. You don't take the herbal tea when you have a headache, for it doesn't act like aspirin. You drink it in a daily basis when you don't have a headache, and the frequency and severity of the headaches decrease. They are often gone in a few weeks.

Two women had severe headaches coming with the menstrual cycle that lasted up to 36 hours with vomiting and dizziness. The women couldn't stand light, and had to be in a dark room. By drinking verbena tea, made with a half ounce of the herb in 9 ounces of water, they were able to reduce and then cure the headaches. Another couple suffered from terrible stress headaches for three years. Often the headaches came before rain. A tea of verbena cured them in a short time.

Cluster headaches are somewhat like short duration migraines. They include intense pain in the same side of the head, dripping nose, blockage of the nasal passages and facial sweating. They may last from 30 minutes to two hours. There may be from 1 to 5 headaches per day.

Thirteen patients with cyclic episodes of cluster headaches had a solution of capsaicin, the hot substance from red pepper, squirted into their noses. The first application produced a painful burning sensation with high nasal flow. By the fifth application, there was little sensation. Seven patients had their headaches completely disappear, and three had a reduction of 75% of attacks. The remaining three had no help.

Seven patients had the chronic form, with daily attacks of cluster headaches without interruption for six months or more. The capsaicin treatment cured five and helped the remaining two.

The famous English herbalist Culpepper recommended a tea of yarrow *Achillea millefolium*. In England, wood betony *Stachys officinalis* was said to cure the most obstinate headache known. John Floyer, the doctor to King Charles II wrote: "The juice of ground ivy *Hedera helix* snuffed up the nose out of a spoon taketh away the greatest pain that is."

Among the American Indians, we find that the Apaches used the root of *Lycium andersonii*, the Omahas used the roots of *Physalis lanceolata* and in Nevada the cure was the roots of *Mirabilis alipes* = *Hermidium alipes*. The early settlers got their remedies from the Indians and passed on the information. In New England a tea of the trailing arbutus *Epigaea repens* was once used to cure "liverish-digestive headaches." A tea of *Berberis vulgaris* was once considered to be an unsurpassed remedy for headaches and neuralgia. Mexicans drank a tea of marigolds *Tagetes lucida* for headaches.

The Bushmen of South Africa use *Heinsia jasmiflora*. The Zhosa tribe of South Africa used *Ocotea bullata*. In Zaire a tea of *Pterotaberna inconspicua* leaves is used. It contains 0.3% methuenine, which is a powerful antihistamine. In central Africa headaches are treated with a tea of *Warburgia salutaris* or *W. ugandensis*.

The seeds of *Vitex rotundifolia* are widely used in Asia. In Nepal, *Cerastium fontanum* is used, and in China the flower buds of *Magnolia biondii*. In Korea a tea of the boiled roots of the *Chrysanthemum cinerariifolium* is said to be a sure headache cure. Australians drink a tea of *Melaleuca quinquerivaria*. In Java headaches are treated with the roots of *Bidens chinensis*. One of the best known headache cures of the Amazon was a tea of *Fittonia albivenis*.

The first Spanish explorer of the American Southwest was Coronado. He was seeking the seven cities of gold, which his interpreters assured him were always just a short journey away. Of course, the Indian tribes were glad to get rid of him, and everyone told him that with another two weeks journey into the desert, he would find what he was seeking. In 1540 his biographer Pedro de Castenado wrote:

“Granted they didn’t find the gold, but at least they found a place in which to search for it.”

On May 4th, 1563 Coronado was stationed on the Pacific side of Costa Rica. He wrote to his superior: “In this province [Quipo, Costa Rica] we have found a spice called chiro, of which I have sent a sample to you from this village, so that you could experience it. We have all used it, and found it good for headaches. It seems to us tasty, but I don’t know if it caused me to lose my taste for good things. Brahman is again bringing a little of it.”



Xylopiya frutescens

The identity was not given but chiro could be *Choisya ternata* = *Juliania caryophyllata* or the black palm *Bactris minor*, which has a delicious fruit known as ciro. The mystery spice is almost certainly *Xylopiya frutescens*. It is known as Malaqueto chico, and the grains are used as a pepper substitute.

Coronado might have made billions by setting up a monopoly to import chiro. He could have spread word that the secret headache cure makes people live long and increases their virility. But green gold and yellow gold don’t have the same attraction, and Coronado missed his golden opportunity to become rich and provide a service.

Before trying any or all of these cures, we should be prepared to deal with our emotional problems. Charles Darwin was so troubled with a bad headache, that he nearly didn’t marry his fiancée Emma Wedgwood. The closer the wedding, the worse his headaches got.

A woman went to her doctor complaining of intense persistent headaches. He gave her drugs, but there was no change. When she returned, he sent her to a gynecologist. Next she went to a specialist in internal diseases, and then to a neurologist, but the headaches persisted. Then she went to naturopathic doctors and chiropractors, but without result.

Months later she returned to her original doctor and they sat down and had a long talk. She had been newly married and her mother had moved in with her. The mother was a domineering and overbearing woman, whom none of the other children could stand. When the mother was placed in a home, the daughter’s headaches ceased, and her life returned to normal.

Migraine Headaches

“The general sight did not appear affected; but when I looked at any particular object it seemed as if something brown, and more or less opaque, was interposed between my eyes and it, so that I saw it indistinctly, or sometimes not at all. Most generally it seemed to be exactly in the middle of the object, while my sight, comprehending all around it, was as distinct and clear as usual; in consequence of which, if I wished to see anything, I was obliged to look on one side. After it had continued a few moments, the upper or lower edge appeared bounded by an edging of light of a zigzag shape.”

Caleb Parry 1825

The word migraine, comes from the Greek words “hemi-crania,” meaning “half-head.” Through the centuries the word was chopped down to micrania, and it finally became “migraine.” It refers to the fact that the headaches only occur on one side of the head.

The beginnings of a migraine headache are marked with “fortification spectra.” These are visual signs, which include showers of sparks, balls of fire, and zigzag lines. Colors may include flashes of purple, black or mixtures of color like a rainbow. The zigzag nature of certain paintings makes the artwork seem alive with motion, and it resembles a migraine. Artists like William Blake, and Saint Hildegard seem to have included migraine figures in their artwork.

The earliest descriptions of migraines appear on the clay tablets of the ancient East. A Sumerian poem reads: “The sick-eyed says not ‘I am sick-eyed.’ The sick-headed says not ‘I am sick-headed.’” Another cuneiform tablet reads: “The head throbs, when pain smites the eyes and vision is dimmed.”

Many times the person gets premonitory symptoms of migraines in his or her dreams. One person had dreams of storms, volcanic eruptions and fires before his attacks. Another person dreamed of a white figure with great beauty that appeared from the right and then disappeared. The next day his migraine headache would start.

Mental states seem to be able to kick off an attack of migraine. Sir John Herschel found that he could get a migraine attack, by picturing in his mind the visual phenomena of the disorder. Another person could get migraines just by looking at zigzag wallpaper.

The English novelist George Eliot had migraines. And she would feel “dangerously well” before her attacks. Stress often acts as a trigger, and the person begins to see sparkles of snow or rings of flashing silver. The ache begins to grow around your eyes, and you seek darkness. Loud noises are as disruptive as gun shots at close range. Waves of nausea and vomiting come over the sufferer, and the attack lasts from three to twenty-four hours, but the person can remain sick for several days. Studies show that about 15% of all men and 25% of women suffer from migraine headaches at one time or another.

The Swedish botanist Carolus Linnaeus suffered from migraines, and prior to an attack, he would notice someone walking alongside of him. Once he entered a lecture room to teach a class, but he saw someone standing at the lectern. Thinking that he arrived too early, he left, only to realize that he was looking at a spectral illusion of himself. This is a common manifestation of migraines in Scandinavian countries, and it is called “nautosopic hallucinations.” People also call them “doppelgangers” and they are responsible for a whole class of ghost stories.

Migraines have been the domain of the famous, for Alfred Nobel, Alexander Graham Bell, George Bernard Shaw, Woodrow Wilson and Thomas Jefferson suffered from them. Sigmund Freud had migraine attacks, and he did not find an answer through psychoanalysis. It might have been a response to stress, for although he was famous, he wasn’t well liked by professionals and he was never given a full professorship in Vienna.

Charles Darwin often suffered from migraines. When his father died, he was so ill, that he was

unable to attend the funeral. Migraines must have been hereditary in his family, for three of his children suffered from them.



Jöns Jakob Berzelius

During the early part of the nineteenth century the Swedish chemist Jöns Jakob Berzelius laid the groundwork for modern chemistry. He devised Latin symbols for the elements and combined the atomic weights with a chart of electrical charges. His book *Larabok I Keon* [Foundation of chemistry] was translated into all European languages, and was largely responsible for the spread of basic chemical knowledge. From the age of 23, he was tortured by migraine headaches, which he believed followed the cycles of the moon. In earlier life, they were irregular, but now they came twice a month, on the days of the new and full moon. During these days he accepted no social invitations, but stayed home in a darkened room.

He was able to cure his migraines by going to the mineral springs at Carlsbad, Czechoslovakia for treatment. When the migraines returned, he made artificial Carlsbad mineral water, and by drinking it he remained free of migraines. Could migraines be due to a mineral imbalance in the body?

Carlsbad has 17 mineral springs, and they may not all be identical. An analysis done by the German Apothecary Society in 1879 is probably close to the formula used by Berzelius. The springs contain traces of lithium, manganese and iodine. The prominent salts are 0.24% Na_2SO_4 ; 0.13% of Na_2CO_3 ; 0.10% of NaCl ; 0.03% of CaCO_3 and 0.02% of MgCO_3 .

In 1887 a German doctor reported that he had a cure. When he felt the migraine coming on, he put a half or whole teaspoonful of salt in a glass of water and drank it. If done at the very beginning, this completely stopped it. If done when the migraine started, the attack would stop in about half an hour.

In 1923 a London doctor had migraine patients take a soluble form of calcium as soon as they felt a migraine headache coming on. He found that 18

of 20 patients had their migraines stopped by taking calcium tablets. The trick is to chew the tablets to get the calcium into the blood stream at once. A friend of mine tried taking a gram of calcium gluconate immediately before her migraines. She told me that the tablets turned what would have been a severe migraine, which would have disabled her for a day, into an ordinary headache, which left in a few hours.

A Washington woman wrote in 1925: "Calcium lactate works wonders with me; without it, I always counted on a full day of severe headache, following the appearance of the typical visual hallucinations. Now a dose of calcium lactate gives relief from practically all the nerve-racking pain and difficulties I used to have to expect as the usual things. On several occasions I have made long drives in the car shortly after the beginning of the scintillations. Before the use of calcium, I would not have dared to have attempted this. I experience a double relief – that of the physical agony and that of the mental worry and dread incident of the attack. I carry it with me at all times; I never want to be without it."

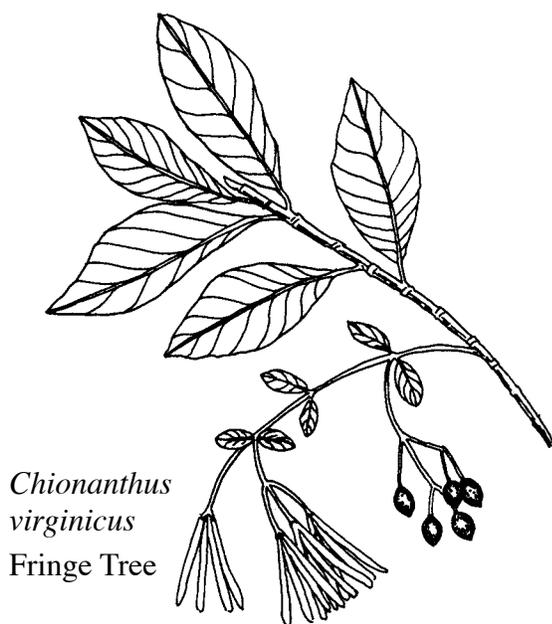
In 1888 a French doctor reversed an astigmatic lens on his own glasses, and got a migraine headache. He found that many cases of migraines could be cured, by getting the proper glasses. Seeing an eye doctor is a good step in helping yourself.

A woman was unable to find relief from her migraine headaches. Then she developed ulcerative colitis, and her doctor gave her supplements of *Lactobacillus acidophilus* hoping to alter the bacterial flora of her intestinal tract, and cure the colitis. It did improve the colitis, and unexpectedly her migraines disappeared. The doctor tried giving the friendly bacteria to ten persons with migraines, who weren't helped by other means. There was marked improvement in eight persons, when capsules were taken three times a day.

Migraines are also triggered by foods. The complex phenols that make up the coloring of red wine trigger migraines, but other forms of alcohol do not trigger migraines. Some foods known to produce the headaches are cow's milk, eggs, chocolate, oranges, and wheat. The foods that migraine sufferers must avoid are cheese, chocolate, and red wine.

There is an old theory that migraines are due to a poorly functioning liver, which doesn't break down impurities in the blood. A test was made of the liver function theory by giving twelve men with migraines a gram of the amino acid methionine and multiple B vitamins. The average number of migraines went from 4.3 per month to 1.5. In one instance a 59 year old man went from ten migraines a month to only one. Only one person in the study wasn't helped.

Henry Leclerc was a well-known French doctor who did numerous studies on medicinal herbs. He began to treat migraines and trigeminal neuralgia with a strong tea or tablets of powdered chamomile *Matricaria recutita*. A cup of strong tea or tablets of 3-5 grams of chamomile are taken at meals. There is normally a marked reduction in pain by the end of the day, and in a few days the problem is essentially cured. It is said to be a long term preventive, but no studies have been done.



Chionanthus virginicus
Fringe Tree

A young woman suffering from migraines was an astrologer. She reasoned that Jupiter was the ruler of the liver, and on the dates she suffered from migraines, her natal Jupiter was affecting her. She looked up the "Jupiter herbs" in an astrology herb book and took a tincture of the fringe tree *Chionanthus virginicus*. This cured her migraines and those of her mother. When she published a letter in a popular health magazine, another reader wrote to say that the herb eliminated her headaches.

The root bark of the tree has long been used as a liver stimulant.

Father Sebastian Knapp became famous for his book *My Water Cure*. He treated all illnesses with special baths and herbs. His ideas evolved into modern naturopathic medicine. He had migraine sufferers chew 6-8 juniper berries *Juniperus communis* per day and take baths.

In the Ayurvedic medicine of India and the Unnani Tibb medicine of the Arabs, ginger is used for migraines and cluster headaches. At the very beginning, about 500 mgs. of powdered ginger *Zingiber officinale* mixed with water and drunk. It begins to be effective in about 30 minutes, and it is taken as often as needed. One woman found that this worked fairly well, so she included fresh ginger in her diet daily. The intensity and frequency of migraines decreased. In India ginger was mixed with equal parts of *Withania somnifera*. Sixty grams taken daily for three weeks were said to be a cure.

Many doctors still use ergot alkaloids to constrict the blood vessels in migraines. It constricts blood vessels all over the body, with considerable side effects. It was first used by doctors for migraines in 1925.

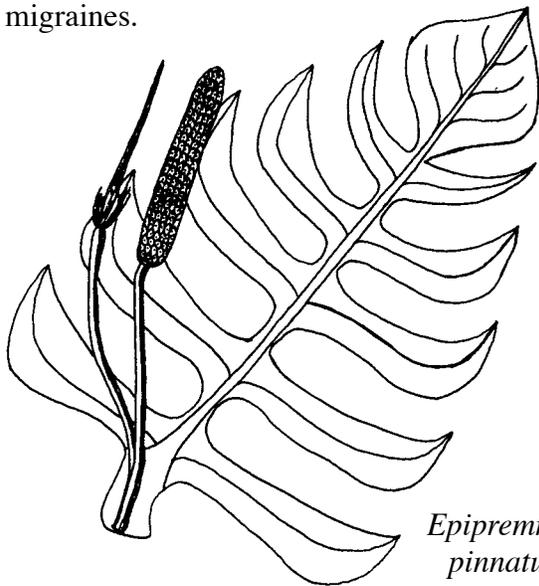


Tanacetum parthenium
Feverfew

Two centuries ago John Hill wrote in his herb book: "The mother of the late Sir William Bower told me that during the first half of her life, she

suffered from terrible and constant headaches fixed in one small part of the cranium, raging to distraction.” Then the woman discovered that a tea made of two handfuls of feverfew *Tanacetum parthenium* with boiling water was able to cure her migraines. Richard Brook noted in his herbal in 1772: “In the worst headache, this herb exceeds whatever else is known.”

The old remedy was basically forgotten until a miner who had been a long-time sufferer cured himself by chewing several leaves of feverfew daily. He told his success to the wife of the chief medical officer of Britain’s National Coal Board. She tried the treatment and in two weeks she was free from migraines. Her husband told this to Dr. Steward Johnson of the London Migraine Clinic. He began by giving ten patients feverfew leaves. Three were cured, and seven had less frequent migraines.



Epipremnum pinnatum

Feverfew has recently become well known in England for helping migraine headaches. A survey of 300 users showed that 72% had fewer headaches. When the remedy was compared to a placebo, there were 5 cases of vomiting and 34 cases of nausea in the feverfew group. In the placebo group there were 21 cases of vomiting and 95 cases of nausea. It is now known that the parthenolide in the herb provides the cure. Some varieties of the herb don’t have this, and they don’t work. The amounts of freeze-dried leaves taken vary from 50 milligrams to 2 grams a day.

Tablets of *Pueraria tuberosa* proved to be an effective migraine treatment in China. Volunteers



Premna taitensis

took 500 mg. tablets, three times daily. The herb has cerebral vasodilator effects, which help to normalize circulation in the head. Within two weeks, 83% reported that they were markedly improved, or had no more migraines.

One of the most interesting migraine remedies began on the island of Lomaloma, in the South Pacific. A Hungarian traveler married a native woman and settled on the island. He suffered constantly from migraines, and his wife insisted that the islanders had remedies, which would cure him. During a period of two years, Mr. Vessey took 55 different native remedies, but only four of them gave him temporary relief. He suspected that the natives were trying to poison him, so he had them take everything first, and he took careful notes on all the plants. At long last, four cups of a tea made from a mixture of *Premna taitensis* and *Epipremnum pinnatum* = *E. vitiensis* permanently cured his migraines.

His wife named the medicine “Tonga” and bundles of the barks were sent to England in 1882. There was a great deal of interest in learning the identity of the medicine, and botanists figured out the plants. Sufferers used a ball of chopped bark with netting around it. This was soaked in water and drank as a pleasant tasting tea before meals. One ball of the bark would generally provide a cure. In its first medical test, six of a group of eight migraine sufferers were permanently cured. The remedy was sold in Holland until about 1960, but it seems to have been forgotten in recent times. Some doctors used it in the United States until 1925, but it finally vanished from the medical scene.

Note: All titles have been put into English for the sake of my readers. I have listed the titles in the way that a person would find them when going into a large university library. Books are listed by author first.

1. HEADACHE HERBS

- Acta Medica Philippina 1:1, 199, 1964 "Effects of an Azasteroidal Alkaloid from *Kibatalia gitingensis*" H.R. Estrada
 Arzneimittelforschung 27:2039, 1977 "Anti-nociceptive Substances from the Roots of *Angelica acutiloba*" S. Tanaka et al.
 Brain 20:194, 1897 "The Diet Treatment of Headache, Epilepsy and Mental Depression" A. Haig et al.
 Clinical Journal of Pain 5:49, 1985 "Beneficial Effect of Capsaicin Application to the Nasal Mucosa in Cluster Headache" F. Sicuteri et al.
 Curare 3:203, 1980 "Folk Phytotherapeutic Methods Used in Poland for the Relief of Headaches" A. Paluch
 Drugs of the Future 4:216, 1981 "Butylidenephthalide" K. Hillier
 Giornale Medico di Roma 1:601, 1865 "*Verbena officinalis* in Certain Headaches" A. Gavini
 Headache 1:Jan/21, 1962 "Clinical Study of Headache Relief with a Niacin Containing Compound" H.D. Ogden et al.
 Journal of Ethnopharmacology 36:193, 1992 "Headache Treatments by Native Peoples of the Ecuadorian Amazon" E.B. Russo
 Lancet 1:143, 1906 "On the Relief of Certain Headaches by the Administration of One of the Salts of Calcium" G.W. Ross
 Laryngoscope 61:138, 1951 "Headaches and Vertigo Associated with Hypoglycemic Tendency" J.A. Harrill
 Medical and Physical Journal 1:286, 1799 "Dissertation on the Sick Headache" N. Dwight
 Medical Record 153:404, 1941 "A Clinical Study of the Effect of Desiccated Garlic on Intestinal Flora" E. Weiss
 Medical Standard 6:171, 1889 "Potassium Iodide for Headache" J.H. Bertrand
 New England Journal of Medicine 235:541, 1946 "The Cause, Relief and Prevention of Headaches Arising from Contact with Dynamite" A.M. Schwartz
 New York Academy of Medicine; Bulletin 48:661, 1972 "Headaches in History and Literature" A.P. Friedman
 Planta Medica 50:331, 1984 "2-Acylindole Alkaloids from the Leaves of *Pterotaberna inconspicua*" P. Bakana
 Plantes Medicinales et Phytotherapie 21:47, 1987 "Contribution to the Pharmaceutical Study of *Scabiosa atropurpurea*" E.M. Requena et al.
 Plantes Medicinales et Phytotherapie 21:285, 1987 "Study of an Active Analgesic and Antipyretic from *Dittrichia viscosa*" W. Greuter
 Practitioner 42:337, 1889 "The Diagnosis and Treatment of Headaches Accompanied by Diminished or Increased Blood Pressure" E.L. Jones
 Prevention 19:May/28, 1967 "Herb for Headache" C.T. Grant
 Prevention 23:Oct/232, 1971 "Headaches Relieved with Vitamin E" F. Roberts
 Prevention 23:Nov/40, 1971 "Eyesight and B12" M. Burke
 St. Louis Eclectic Medical Journal 7:292, 1880 "Remedies for Headache" L.H. Washington

2. MIGRAINE HEADACHES

- American Journal of Clinical Nutrition 41:774, 1985 "Amelioration of Severe Migraine by Fish Oil (W-3) Fatty Acids" T. McCarren
 British Medical Journal 2:1133, 1923 "Treatment of Migraine by Calcium Lactate" A.D. Bigland
 British Medical Journal 291:569, 1985 "Efficacy of Feverfew as a Prophylactic Treatment of Migraine" E.S. Johnson et al.
 Chinese Medical Journal 92:260, 1979 "Radix Puerariae in Migraine" G. Xiuxian et al.
 International Archives of Allergy 7:205, 1955 "Historical Development of the Ergot Therapy of Migraine" E. Rothlin
 Journal of Ethnopharmacology 29:267, 1990 "Ginger (*Zingiber officinale*) in Migraine Headache" T. Mustafa et al.
 Journal of the American Osteopathic Association 49:502, 1950 "The Effects of dl-Methionine and Some Members of the B Complex on Migraine" A.P. Cline et al.
 Lancet 2:412, 1959 "Mechanism of Migraine" J. Hamilton
 Lancet 2:446, 1966 "A New Remedy for Migraine" E. Ask-Upmark
 Medical Age 7:392, 1889 "Cascara Sagrada in Migraine" S.E. Morgan
 Minnesota Medicine 9:87, 1926 "Calcium Lactate as a Preventive in Migraine" C.E. Riggs
 Quarterly Journal of Crude Drug Research 1:104, 1961 "Tonga" E.F. Steinmetz
 Semaine Therapie 43:307, 1967 "Migraine and *Fumaria officinalis*" Y. Barre
 Therapeutic Gazette 5:77,187,437, 1881 & 7:260, 1883 & 10:424, 1886 (Articles on Tonga)
 Therapeutische Monatshefte 1:138, 1887 "Treatment of Migraine with a Home Remedy (Salt)" S. Rabow
 Union Pharmaceutique 64:323, 1923 "Analgesic Action of Camomile" H. Leclerc
 Berzelius, Jöns Jöns Jacob Berzelius; *Autobiographical Notes* Royal Swedish Academy of Sciences, 1934