JONATHAN V. WRIGHT, MD'S
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IN THIS ISSUE

Depression, Amino Acids, and Rubidium

- Chronic depression can be successfully treated by taking supplemental essential amino acids.
- A simple blood test can check for low amino acid levels, and can suggest appropriate dosages to bring levels back to normal.
- Supplements of a mineral called rubidium, part of the lithium–sodium–potassium "family" of minerals, can stimulate catecholamines and further help depression.

For over forty years, my observation has been that low levels of essential amino acids are one major cause of depression. Among very many other things, our bodies use amino acids to make the large majority of neurotransmitters—molecules that help nerve cells to communicate. If essential amino acids are low, then neurotransmitters are very likely to be low also, and depression is a frequent result. Patent medicine companies know this too, but since amino acids aren't patentable, they've looked for artificial, patentable molecules to raise levels of neurotransmitters. Many patent antidepressants do exactly that.

Mrs. Jones (of course not her real name) came to see me at Tahoma Clinic sometime in the 1990s with several problems. The main one was chronic depression; it was "successfully" being treated with one of the common patented antidepressants, which raise neurotransmitter levels. As is more usual than not, the patented antidepressant was also causing adverse effects.

Mrs. Jones asked if her depression could be treated by more natural means. I told her that it was very likely; if the neurotransmitter-raising patented antidepressant was helping her depression, it was also very probable that neurotransmitter-raising amino acids would do the same thing, as it had for literally dozens of other individuals. Along with other lab tests, she had a blood test done for essential amino acids.

The test results were quite typical of many depressed individuals. Mrs. Jones was low on five of the nine essential amino acids, and low–normal on two more. She asked which of these lower-than-normal essential amino acids might be responsible for her depression. Although at least one or two were very probably involved, there was no way to know for sure, since the function in our brains of all of the essential amino acids and their derivatives wasn't (and still isn't) completely known.

She looked simultaneously puzzled and disappointed, and asked how to know which ones she should take. We didn't need to know exactly which ones, because she could just take *all* of the essential amino acids, blended together in proportions individualized for her personally, according to the results of her test. Her brain would do the rest, choosing exactly what it needed to raise its own neurotransmitters to normal levels. Even though science doesn't yet know everything about normal human biochemistry, our bodies "know," and—if we're born intact—will function normally if given all the raw materials needed to do so.

Continued on next page

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OUR PURPOSE

Green Medicine is dedicated to helping you keep yourself and your family healthy by the safest and most effective means possible. Every month, you'll get information about diet, vitamins, minerals, herbs, natural hormones, natural energies, and other substances and techniques to prevent and heal illness, while prolonging your healthy life span.

A graduate of Harvard University and the University of Michigan Medical School (1969), Dr. Jonathan V. Wright has been practicing natural and nutritional medicine since 1973 at the Tahoma Clinic, now in Tukwila, Washington. Based on enormous volumes of library and clinical research, along with tens of thousands of clinical consultations, he is exceptionally well qualified to bring you a unique blending of the most up-to-date information and the best and still most effective natural therapies developed by preceding generations.

In 1992, Dr. Wright was among the original founders of the American Preventive Medical Association—now known as the Alliance for Natural Health USA—which was created to defend integrative doctors from relentless and coordinated attacks from the conventional medical establishment and the government agencies that protect them. Now one of the leading voices in natural health policy, the Alliance for Natural Health USA continues this mission by organizing half a million grassroots activists to protect access to natural, preventive medicine.

Dr. Wright and ANH-USA are proud to be teaming up once again to empower consumers to exercise their inalienable rights to choose their own healthcare, and to warn the public of continual, pervasive attempts from both government and private organizations to restrict them.

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Depression, Amino Acids, and Rubidium

Continued from previous page

After a moment, she agreed that this approach made sense, but she wanted to know how her levels of essential amino acids got so low, since she ate enough protein. There were several possibilities, but inadequate protein digestion due to low stomach acid (called hypochlorhydria or achlorhydria), and poor amino acid absorption because of hidden gluten sensitivity, were (and still are) at the top of the list. A stomach test ("gastric analysis by radiotelemetry") showed that Mrs. Jones's stomach was secreting hydrochloric acid in much lower-than-optimal amounts; fortunately, a stool test (in my opinion, the most sensitive test for hidden gluten sensitivity) showed that she did not have that problem, so absorption of any supplemental amino acids she took should be good.

She took her individualized amino acid blend, as well as capsules of hydrochloric acid with pepsin at every meal to replace her "missing" stomach acid, and learned to give herself vitamin B_{12} injections with folate (recommended for everyone with low stomach acid). At the beginning, she was given amino acids and minerals intravenously, since this enables much quicker symptom relief for hypochlorhydric individuals. In just a few weeks she felt much better; the intravenous nutrients were discontinued. She continued with all her oral supplementation, and was able to taper and stop her patented antidepressant.

After nearly a year, she returned. Even though she had continued everything recommended, depression was starting to become noticeable again. She was disappointed, and so was I. My experience to that point had been that once depression has cleared up with individualized amino acids, it usually stays away, as long as protein digestion is improved, and other supplementation is continued.

Her records had a clue. She'd had a screening test for minerals (a hair mineral analysis), and her rubidium levels were so low that the laboratory couldn't find any of it at all! Italian researchers were the first to report that rubidium used alone was helpful against some cases of depression in the 1970s. Rubidium is a mineral, part of the lithium–sodium–potassium "family" of minerals.

Unfortunately, at that time, there were no rubidium supplements available in natural food stores or the Tahoma Clinic Dispensary. However, we did have very low dose rubidium available for IV use, so I got a bottle, and asked Mrs. Jones to just take the top off and swallow the equivalent of approximately fifty milligrams daily.

Initially, adding rubidium seemed to help, but in a few weeks her depression came back, more rapidly this time, and Mrs. Jones returned to her patented antidepressant. Since rubidium had helped her initially, it appeared more rubidium study was needed! Checking research publications thoroughly (which took awhile), it became apparent that—used at higher doses than she had used—rubidium alone is at least as effective, if not more so, than patented antidepressants! And used properly (see "Using Rubidium Safely," below), it's safe!

Here are summaries of some of the published research:

- In 1973, depressed patients who had not responded to any other form of treatment took rubidium chloride. 70% of those who took rubidium chloride for a minimum of four weeks had a "good to excellent" response.[1]
- In 1975, researchers found that the response rate of chronically depressed individuals who took rubidium chloride was 65%. Rubidium chloride was found to work as well as imipramine, a major patented antidepressant.[2]
- In 1980, a double-blind study compared the effects of rubidium chloride, 540 milligrams daily, with a widely

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sold (at that time), patented antidepressant, chlorimipramine, 100 milligrams daily. The researchers found that rubidium chloride's antidepressant results were superior to the chlorimipramine.[3]

- In 1988, thirty-one women hospitalized with depression took rubidium chloride, 180 to 720 milligrams daily. By the second week, two-thirds had significantly improved.[4]
- In 1993, twenty individuals with major depression were treated with 360 to 720 milligrams of rubidium chloride. The researchers wrote, "Rubidium chloride showed a marked and rapid anti-depressive action."[5]
- In 1996, researchers reported that fifteen individuals hospitalized with depression were treated with rubidium chloride 540 milligrams daily. They wrote, "Speedy therapeutic efficacy has been shown, with lack of side effects."[6]

With all this study (and additional rubidium research now easily available through the National Library of Medicine's online service), why isn't rubidium treatment for major depression well known? You know the answer: as a naturally occurring mineral, rubidium isn't PATENTable. No one can make megabucks selling rubidium.

My only excuse for not finding these research reports much sooner was that patients suffering from depression usually did very well with other natural treatments, particularly individualized amino acids and (at appropriate ages) bioidentical hormones.

How Does Rubidium Improve Depression?

Most *Green Medicine* readers know about the hormone adrenalin, secreted into the blood by the adrenal glands, and its cousin noradrenalin, mostly secreted by nerves to communicate with other nerves. Noradrenalin, adrenalin, dopamine, and closely related molecules are termed catecholamines, and are well-known nervous system stimulants. Increasing levels of noradrenalin and adrenalin is well known to have a significant antidepressant effect. (Amphetamine, as well as methamphetamine or "meth," are previously patented, and much more powerful, synthetic versions of catecholamines. Both of these "uppers" are powerful and dangerous stimulants/antidepressants.)

With all this study, why isn't rubidium treatment for major depression well known? You know the answer: as a naturally occurring mineral, rubidium isn't PATENTable.

Our nerve cells and other cells use specialized enzymes to transform the essential amino acid phenylalanine and its derivative tyrosine into noradrenalin, adrenalin, dopamine, and other naturally occurring stimulatory catecholamines (pronounced "cat-e-KOL-ah-means"). Without enough phenylalanine and/or tyrosine, our bodies can't make nearly as much of these catecholamines, and many of us become depressed. (Some patent medicine antidepressants are thought to artificially raise levels of catecholamines in the brain.)

Rubidium (with other vitamin and mineral co-factors) stimulates the enzymes that use phenylalanine and tyrosine to produce catecholamines. In addition to stimulating catecholamine build-up, rubidium also slows its breakdown, and (in a parallel to many patented antidepressants) slows the "re-uptake" of catecholamine neurotransmitters into the nerve cells that secrete them, thus keeping them working for longer.[7]

Rubidium appears to affect other neurotransmitter systems as well. In research volunteers, rubidium administration increased blood and urine levels of alpha-ketoglutarate, which (among other things) promotes the formation of gamma-amino butytric acid (GABA) and glutamate, non-catecholamine neurotransmitters.[7]

Before You Consider Rubidium for Depression . . .

. . . make sure to have your fasting essential plasma amino acids checked. Although not every clinically depressed individual has low essential amino acids, the majority do, so testing and treatment for these essential nutrients should never be omitted. In case your essential amino acids are all normal, but you're suffering from depression, rubidium can still be tried anyway—it is just more likely to work when sufficient essential amino acids are already available.

"Fasting plasma essential amino acids" is a blood test. What's in the blood is what the body has available for use; amino acids in urine are of course no longer available to the body. Except in unusual circumstances, it's not necessary to check dozens of amino acids as our bodies will transform the essential amino acids into the much more abundant non-essential amino acids, according to the body's needs.

For years, Meridian Valley Lab (www.meridianvalleylab.com, 206-209-4200, where I am Medical Director) and Metametrix Laboratory (which has been purchased by another laboratory) did the best job on this test for the best price. Meridian Valley Labs continues to do so. After Metametrix was purchased, the "normal values" on the test were changed (I find the original "normals" still used by Meridian to be the most useful in practice), and then the

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test itself was changed. That test report and recommendations became less useful. Whichever lab you choose, if your essential amino acids are low, make sure to use a blend of all the essential amino acids (including tryptophan) *individualized for you*.

Just as importantly, look for the cause, which is quite likely to be gastric hypochlorhydria (low stomach acid) and/or hidden gluten sensitivity, and occasionally both. If low stomach acid is a problem, "replacement" hydrochloric acid with pepsin should be taken with meals, along with injections of vitamin B_{12} with folate. Individualized amino acid combinations along with these injections can frequently help your depression clear up over a few weeks' to a few months' time.

If this isn't effective enough, or if you want to go faster, then rubidium could be helpful. As you can tell, all of this may be a little complicated, so it's best to work with a physician skilled and knowledgeable in nutritional and natural medicine to help you coordinate it all. That physician can also suggest other nutrient co-factors that work with rubidium to make those antidepressant catecholamines. With those co-factors, the overall dose of rubidium can be less than without them while still being effective.

While using rubidium by itself without any of these other nutrients can be effective (the research reports cited show significant effectiveness with rubidium alone in 65–70% of depressed individuals), you might well be overlooking deficiencies in essential amino acids (as well as other co-factor nutrients) that rubidium alone cannot replace. Your depression would go away while other body functions unnecessarily decline. You also might have symptoms of rubidium-induced intracellular potassium deficiency. Make sure to work with a knowledgeable physician to avoid this possibility!

Using Rubidium Safely

Rubidium is a member of the same mineral family as lithium, sodium, and potassium. Reviewers have pointed out that rubidium and potassium behave in many of the same ways, as do lithium and sodium. Potassium and rubidium are mostly found inside of body cells ("intracellular"); sodium and lithium are mostly found outside of body cells ("extracellular"). Potassium given in excess or too rapidly intravenously can be dangerous, even causing death; rubidium can do the same. So except in very small doses, rubidium should always be taken orally.

In reasonable doses, oral rubidium is safe. According to a major English-language review of rubidium and rubidium therapy, "Rubidium chloride appears to be a safe therapeutic agent when administered orally. . . . Some minor side effects that have been noted are constipation, diarrhea, agitation, insomnia, and a transient decrease in heart and pulse rate."[7] Other investigators have noted transient skin rashes and frequent urination.[5]

Rubidium should not be used by individuals with bipolar (manic-depressive) illness, as it appears to increase the length of any manic phase of the illness, even though it decreases the extremes of mood.

But most importantly, *if you're taking rubidium supplementation, it's important to take an equal or greater amount of potassium*. As there's clearly more potassium than rubidium naturally present in our bodies, we don't want to allow too much "replacement" of potassium with rubidium over any length of time. One individual who ignored advice to take as much rubidium as potassium developed very sore muscles, which very fortunately became entirely better after he took relatively large (but still safe) quantities of potassium.

All of the rubidium vs. depression studies cited below used between 180 and 720 milligrams daily. The largest review suggests 180 milligrams three times daily. Mrs. Jones took 500 milligrams total daily, with food.

Because of the rubidium–potassium interaction, it's best to consult with a physician skilled and knowledgeable in natural medicine before taking rubidium supplementation. Rubidium is available through some compounding pharmacies and—combined with an equal amount of potassium for greater safety—at the Tahoma Clinic Dispensary.

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Effective Then, Effective Now

Cut A Child's Risk of Type 1 Diabetes by 80%

- An important Finnish study found that infants who received 2,000 IU of vitamin D in the first year of life had 80% less incidence of type 1 diabetes by age 31.
- Other research shows that cod liver oil (which contains both omega-3 fatty acids and vitamin D) also cuts the risk of type 1 diabetes.
- In addition, prenatal omega-3 fatty acids help improve mental development in infancy.

Research (reported, and in these United States, ignored, even though it was reported in 2001 in *The Lancet,* one of the most prestigious medical journals) tells us of a safe and very inexpensive way to completely prevent a major proportion of type 1 diabetes.

This particular research report concerned a thirty-one year follow-up study of over 10,000 children born in 1966 in northern Finland. The mothers were advised to give their newborns 2,000 IU—yes, that's 2,000 IU—of vitamin D per day for their first year of life. The researchers followed up with the families to determine which children had been given the vitamin D, which had not, and if any of them had signs of rickets (caused by severe vitamin D deficiency).

Thirty-one years later, the now-adult children who were regularly given the supplement during their first year had a nearly 80% lower incidence of type 1 diabetes. In sharp contrast, those children who showed signs of rickets (bone disease caused by a severe lack of vitamin D) at age 1 had 300% more type 1 diabetes diagnosed over the following thirty-one years.[1]

And There's More: Fish Oil

Cod liver oil (which contains both omega-3 fatty acids and vitamin D) also cuts the risk of type 1 diabetes. The *Journal of the American Medical Association*—another major medical journal—reported a study of 1,770 children at increased genetic risk for type 1 diabetes. Each had a brother, sister, or parent with type 1 diabetes, and/or HLA (genetic) testing that showed them to be at extra risk. Each of them underwent special testing for something called "islet cell auto-immunity," which essentially "proves" type 1 diabetes.

It appears that giving your newborn vitamin D every day can significantly cut his or her risk of type 1 diabetes for at least the next thirty-one years.

Fifty-eight children developed type 1 diabetes, as proven by antibodies to pancreatic islet cells. The children with the highest levels of omega-3 fatty acids in their red blood cell membranes had the lowest risk of type 1 diabetes! The researchers concluded, "Dietary intake of omega-3 fatty acids is associated with reduced risk of [type 1 diabetes] in children at increased genetic risk for type 1 diabetes."[2]

And for bonus points, prenatal omega-3 fatty acids (found in abundance in cod liver oil) helps improve mental development in infancy.[3]

My beginning recommendations for pregnant moms are one tablespoon of cod liver oil daily (along with 400 IU of the mixed tocopherol form of vitamin E) along with enough extra vitamin D—how much of which depends on the result of a vitamin D blood test (for the technically inclined, a "25-OH vitamin D" test), usually between 4,000 and 6,000 IU daily. In thirty to sixty days, vitamin D levels are measured again, and dosages are adjusted accordingly to maintain a blood level of 60 to 100 nanograms per milliliter—the levels found in non-supplemented men and women living in tropical areas of the world. Those women's babies are not harmed by their moms' vitamin D blood levels; in fact, they benefit, as the lowest levels of autoimmune disease worldwide are found in tropical areas. Researchers attribute that to higher vitamin D levels. However, everyone's different, so please check with your own physician skilled and knowledgeable in natural medicine for recommendations for you.

After the baby is born, unless you personally live in the tropics where you and your infant can get plenty of sunshine daily, it appears that giving your newborn vitamin D every day can significantly cut his or her risk of type 1 diabetes for at least the next thirty-one years.

As the *Lancet*-reported study was done in Finland, far north of the tropics, and you may live in Arizona or Florida and expose your infant regularly to sunshine, keep in mind there are much better ways to prevent skin cancer than using sunscreen (see *Green Medicine Newsletter*, May 2016). A dosage of 2,000 IU vitamin D daily may or may not be necessary for your child to very significantly lower risk your child's risk of type 1 diabetes.

Again, please check with a doctor skilled and knowledgeable in natural medicine for vitamin D recommendations for your child, and you can significantly reduce his or her risk of type 1 diabetes. Vitamin D was effective then

Continued on next page

Cut A Child's Risk of Type 1 Diabetes by 80%

Continued from previous page

(1966–1997), and will be effective now and in the future!

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Snake Oil and Copper Bracelets

- Folk medicine evolved through careful observation of the beneficial effects of certain herbs and substances on human health—and modern science frequently validates our ancestors' observations.
- Snake oil contains concentrated levels of omega-3 fatty acids, particularly eicosapentaenoic acid (EPA), and is a credible anti-inflammatory agent.
- Modern research has found that copper has significant anti-inflammatory effects, and that copper in bracelets can alleviate the inflammation that causes arthritis.

Have you heard an opponent of natural medicine say—usually in a "superior" tone—that using vitamins, minerals, or botanicals is "just so much snake oil"? Those who use this phrase like to think they're so modern and so, so scientific, but what they're really doing is exposing their ignorance and unwillingness to investigate the facts.

Our ancestors as a group were very, very likely to have been just as smart and just as dumb a group as we are, as a group. That's called "genetics" and "inheritance"; we inherited our genes from them! And of course if we have children, grandchildren, and so on, our descendants—as a group again—will very likely be as smart and as dumb as we are, unless of course we continue to drink fluoridated water and do other "modern" things that cause lower IQs no matter what our genetic heritage may be.

"Putting down" folk medicine—a tendency that still continues, strongly encouraged by those who earn big bucks selling patent medicines—is, particularly when accompanied by some remark about "no scientific evidence," an insult to generations of our ancestors who observed the beneficial effects of certain herbs and other natural things on human health. When finally studied "scientifically," the findings very frequently are that our ancestors were correct!

Perhaps our ancestors were wiser than we could appreciate when they wrapped a snake around the staff of Aesculapius.

Let's take a look at two much-maligned "traditional" remedies: snake oil and copper bracelets. No way I can defend snake oil as well as my colleague Richard Kunin, MD, a longtime practitioner and teacher of natural medicine. His Letter to the Editor about snake oil is immediately below.

After that, there's a much shorter description of what researchers found when finally studying the effects of copper bracelets, traditionally used against arthritis pain—probably because one or more smart (but "unscientific") ancestor or ancestors observed this beneficial effect!

Snake Oil

To the Editor:[1]

The snake has been a part of Western medicine since the time of the ancient Sumerians, 4,000 years ago. Ningishzida, their god of healing, was draped with twin snakes, an emblem still in fashion in medical circles today. Snake was an ingredient of a famous theriaca used by Andromachus, physician to Nero, and of a theriaca of Galen, which was in use until the efforts of William Heberden to ban it in 18th century England. It was still quite popular in colonial America, however, and only in the past century have snake and snake oil become synonymous with quackery.

Another kind of oil has come into fashion recently: fish oil has been elevated to the front rank of medical therapeutics because of convincing clinical and laboratory research that documents effects on platelets, white blood cells, and blood vessel walls. Clinical benefits in treating inflammatory disorders, cardiovascular disease, and even cancers are now subjects of

Continued on next page

Snake Oil and Copper Bracelets

Continued from previous page

serious research. These effects are known to be related to the presence in fish oil of ω-3 essential fatty acids, which are precursors of prostaglandin hormones. It is well known that the biology of both plants and animals commonly adapts to cold temperature by producing more of the ω-3 unsaturated fatty acids with one more double bond than the ω-3 fatty acids.

Since snakes are cold-blooded animals, it is plausible to me that they might contain ω-3 essential fatty acids. Finding no listing of snake oil in the analytical tables, I sent three specimens of snake to a laboratory for analysis by chromatography and flame ionization (analysis by Dr. George Miroff, Monroe Medical Laboratory, Southfields, New York).

Table 1 below shows the major fatty acids found in Chinese snake oil purchased over the counter, taken from the subcutaneous fat of a black rattlesnake from southern California (*Crotalus viridis*) and the subcutaneous fat of a red rattlesnake from Arizona (*Crotalus tigris*).

Chinese snake oil contains almost 20% eicosapentaenoic acid (EPA), about triple the concentration in the American rattlesnakes.I understand the Chinese product also includes snake oil from water snakes that feed on fish. This almost certainly would increase the content of EPA in their tissues. In human subjects fed cod liver oil, there was a sevenfold increase of EPA in neutrophils and monocytes. It was also found that arachidonic and docosahexaenoic acids did not increase and that leukotrienes decreased—which suggests that that anti-inflammatory action was due to EPA, and that it may work by inhibiting the leukotriene B_4-mediated output of neutrophils.[2]

As a concentrated source of EPA, snake oil is a credible anti-inflammatory agent and might indeed confer therapeutic benefits. Since essential fatty acids are known to absorb transdermally, it is not far-fetched to think that inflamed skin and joints could benefit by the actual anti-inflammatory action of topically applied oil just as the Chinese physicians and our medical quacks have claimed.

It is not unusual that an ancient remedy or a folk medicine turns out to have some merit. What is unusual is that this particular therapy, snake oil, has long been our favorite symbol of quackery. I find it humbling that the science of today invests the quackery of yesterday with new credibility.

Perhaps our ancestors were wiser than we could appreciate when they wrapped a snake around the staff of Aesculapius.

Richard A. Kunin, MD
San Francisco, California

Copper Bracelets

"The effect of copper bracelets on symptoms of arthritis was studied in several hundred arthritics, half of whom had previously worn copper bracelets. Research volunteers were randomly assigned to 1 of 3 groups. Group I wore a copper bracelet for 1 month, and then a similar appearing placebo bracelet (anodized aluminum resembling copper) for a second month. Group II wore the 2 bracelets in reverse order. Group III did not wear a bracelet. The copper bracelets were weighed before and after use."

"Of patients who noticed a difference between the 2 bracelets, significantly more preferred the copper ($p < 0.01$) than the placebo. Previous users of copper bracelets deteriorated significantly while wearing the placebo bracelet. The average weight loss of the copper bracelet was 13 mg during the study. It is suggested that copper from the bracelet is absorbed through the skin and exerts an anti-inflammatory effect in vivo. The amount of copper that would be released from a bracelet during a 12-month period is greater than the total body content of copper (100 to 150 mg)."[3,4]

Continued on next page

TABLE 1: FATTY ACID FRACTIONS IN SNAKE OILS % CONCENTRATION

SOURCE	w-3				w-6		
	ALA	EPA	DHA	LA	GLA	DGLA	ARA
Chinese Snake Oil	0.001	19.6	0.001	4.4	0.001	0.001	2.4
Black Rattlesnake	1.4	4.1	0.1	9.7	0.7	2.8	4.7
Red Rattlesnake	0.5	0.6	5.4	20.8	0.06	0.1	12.8

ALA=α-linolenic acid; EPA=eicosapentaenoic acid; DHA=docosahexaenoic acid; LA=linolenic acid; GLA=gamma-linolenic acid; DGLA=dihomo-γ-linolenic acid; ARA=arachidonic acid

Snake Oil and Copper Bracelets

Continued from previous page

Modern research has found that copper has significant anti-inflammatory effects;[5] arthritis is very often an inflammatory disease, so using copper bracelets actually makes modern "scientific" sense.

Natural medicine, especially "traditional" or "folk" medicine with hundreds and often thousands of years of use against specific health problems, should be considered as very probably effective until rigorous science shows it's not!

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About Dr. Jonathan V. Wright

Dr. Wright established Tahoma Clinic in 1973 in Washington State to offer nutritional and other natural therapies for common health conditions instead of patent medications.

A long-time researcher, author, speaker, and clinician, he has educated physicians in his techniques since 1983. Dubbed the "Father of Bio-Identical Hormones" by his peers, Dr. Wright was the first physician in the United States to prescribe comprehensive hormone replacement therapy (in the early 1980s) with hormones identical to those found in nature. This therapy (shortened to "BHRT") is now used nationwide by millions.

Also an author, he has written 13 books (with two texts achieving best-selling status), numerous medical articles, monthly magazine columns from 1976 to 2000, and since 1994 has written a popular monthly newsletter on natural health topics.

—ANH-USA