

Jonny Bowden, PhD, CNS

Unleash the Amazingly Potent
Anti-Aging, Antioxidant
Pro-Immune System
Health Benefits of the

Olive Leaf



JONNY BOWDEN, PhD, CNS

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ADVANCE PRAISE FOR OLIVE LEAF

"What is the secret behind olive trees living thousands of years and resisting attacks from bacteria, virus, fungus and a range of micro-organisms? It's the same cell-protecting super-antioxidants in Olive Leaf Complex—a must for maintaining a healthy immune system. I recommend it to all of my patients during cold and flu season."

—Dr. Robert Wildman, best-selling author of The Nutritionist: Food, Nutrition & Optimal Health, Sport & Fitness Nutrition and Handbook of Nutraceuticals and Functional Foods

"To optimally support one's immune system, first consume a diet rich in nature's immune-enhancing foods and then supplement with nature's arsenal of immunesupportive ingredients such as the Olive Leaf."

—Ashley Koff, RD, AKA (www.ashleykoffapproved.com)

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It's no secret that the Mediterranean diet is one of the healthiest ways to eat on the planet. And it's also no secret that one of the most prominent ingredients in that diet is olive oil.

But here's a well-kept secret: the amazing, documented health benefits of olive oil don't just come from the oil. In fact, from a health perspective, the oil may not even be the most important product of the olive tree.

Interested?

Read on.

Look in any nutritional textbook and you're sure to find an entry for olive oil, with a massive number of references touting its health properties. A number of studies have shown that people who get plenty of olive oil in their diet are less likely to die of heart disease. And a study in the *Archives of Neurology* found that people who adhered closely to an olive oil-rich Mediterranean diet had a 28 percent lower risk of developing cognitive impairment. The Mediterranean diet not only protects your heart, it also protects your brain!

There's no disagreement about the fact that the fat in olive oil—an omega-9 monounsaturated fat called oleic acid—is a "healthy" fat associated with a myriad of benefits. But recently nutritionists have begun to wonder whether the demonstrated health benefits of olive oil are not just coming from the fat. The olive plant itself is a rich source of such beneficial plant compounds as tocopherols, flavonoids, anthocyanins, sterols and polyphenols. "The body makes plenty of its own omega-9s," says David Rubin, MD, MSC, an Israeli researcher and biochemist. "The real benefit of olive

"The arthritis in my fingers was so painful that I booked in to a surgeon for knuckle replacement surgery. My daughter recommended that I try your Olive Leaf product. I am so amazed at the relief I obtained. The surgeon was amazed and I no longer needed the surgery. I can do all the things I love to do again, gardening, fishing, photography even the household chores like hanging out the washing are pain free. I am so happy."

— Jill Falls, Rainbow Beach

oil is that it delivers these amazing polyphenols."

The International Olive Oil Council (100c) located in Madrid, Spain is an intergovernmental agency that has 23 member states. It has done significant research on olive oil, but, like Dr. Rubin, it's also come to the conclusion that there are significant benefits that come from the actual leaves of the olive tree. In fact, when the distinguished medical journalist Dr. Morton Walker wrote about the antimicrobial benefits of the olive leaf in his column for the *Townsend Newsletter for Doctors and Patients* (July 1996, issue 156), he received over 1,500 phone calls, letters and faxes asking for more information about the therapeutic, germ-killing components in olive leaf complex. Dr. Walker dubbed olive leaf complex "nature's antibiotic" and even wrote an entire book about its health benefits.

While the fat in olive oil may indeed be healthy, it still contains 100 calories per tablespoon. And while olive oil tastes great on a number of dishes from salads to vegetables, it's not always practical to consume it on a daily basis.

The polyphenols from the olive leaf plant, however, are a whole different story.

Olive Leaf Complex: The Ultimate Source Of Phenolic Compounds

According to research published in *Nutrition Research Reviews* in 2005', the Mediterranean diet's healthy effects can be attributed not only to the high relationship between unsaturated and saturated fatty acids in olive oil but also to the antioxidant property of its phenolic compounds. Olive leaf complex is a rich source of some of the most important phenolic compounds on earth, such as oleuropein, hydroxytyrosol, tyrosol, rutin, luteolin, catechin and apigenin, which are believed to be responsible

for most of the leaf's pharmacological effects. Olive leaf complex also contains various trace elements vital to good health such as selenium, chromium, iron, zinc, vitamin C, beta-carotene and a wide range of amino acids.

Olive leaf complex is a concentrated source of antioxidant power that may just be one of your best weapons against aging and disease. How does it work? Read on.

Antioxidants: A Secret Weapon Against Aging

Imagine putting your car outdoors in the rain and leaving it there for years, without any protection. What would it look like?

Not very good.

If you looked underneath that car you'd probably find many areas that were rusted. That rusting is caused by what we call *oxidative damage*. Preventing—or combating—oxidative damage (also known as *oxidative stress* or *oxidation* for short) is one of the major anti-aging strategies under your control, and you're more likely to do it if you understand why it's so important.

Here's how oxidative damage works in your body. You may remember from Chemistry 101 that every atom and molecule has electrons circling around it. These electrons like to fly around in pairs, which keeps everything nice and stable and balanced. But once in a while, one of those electrons breaks free—and that's when all the trouble starts.

Once one of the paired electrons breaks off, the molecule or atom where it used to live is now running around with an unpaired single electron. The presence of that "unpaired" electron turns our formerly stable molecule into what is known as a "free radical"—the raging bull of molecules. It's not a happy camper. In fact, the free radical acts like a college kid on spring break without adult supervision, or, more accurately, like a 1950s salesman who has just been let loose at Club Med for the first time in his life. It literally goes wild looking for a "mate" for its newly single electron.

The irony, of course, is that when it does finally steal an electron away from a stable molecule, the molecule that just lost an electron to the rogue molecule becomes unstable itself and turns into a free radical (since it's now left with an unpaired electron). And the process begins again. The whole thing is kind of like a vampire novel—each time a new victim gets bitten, he turns into a vampire and the whole sequence

repeats. Ron Rothenberg, MD has a clever name for the sequence: he calls it "Cellular World War III."

These free radicals are the source of an enormous amount of damage in the body. Every time these free radicals "hit" on your cells looking for a mate for their unpaired electron, they do cellular damage. This cumulative damage is a huge part of aging. "If the DNA is damaged when the cell divides to make new cells, the copies will be wrong and whatever function that cell performs will not be done correctly," says Rothenberg.

If "aging" is another name for "breakdown" you can see immediately why free radicals age us. Cells break down, organ systems don't function well, DNA is damaged and DNA replication—an incredibly complex and delicate enzyme-dependent process—doesn't happen efficiently and DNA can become mutated. When this kind of damage accumulates in the brain it contributes to all sorts of cognitive disorders typical of "aging." When it accumulates in the heart or vascular system, you have heart disease. When it accumulates in the skin, you have aging skin.

The Free Radical Theory of Aging

The role of free radicals in aging has been recognized at least since the 1950s, when an innovative scientist named Denham Harman, MD, Ph.D proposed "the free radical theory of aging." Harman believed that as go the cells, so goes the body: if our cells age, our whole body ages (which makes perfect sense since we are, after all, made up

"I have been taking your Olive Leaf product since September 2003 and during this time I have noticed a general improvement in my well-being. 1) I have had no colds or flu-like symptoms.

2) The continual arthritic pain in my left knee and hip is now almost non-existent. 3) I have been on medication for high cholesterol for a number of years and since taking the Complex my cholesterol level has drastically lowered and my doctor has now reduced the medication. I am convinced that your great product is responsible for the better health I am now enjoying."

~ Arthur Standring, Jacob's Well

of nothing but cells). Harman saw aging as the cellular accumulation of free radical damage over time—that our bodies are essentially "rusting from within."

Years later, the free radical theory of aging was expanded to include not just aging, but degenerative diseases in general. We now know that oxidative damage plays a major role in every degenerative disease of aging from Alzheimer's and cancer to heart disease and diabetes and even immune dysfunction.²⁻⁷ (Harman was nominated for the Nobel Prize in medicine in 1995.)

Free Radicals From The Environment

The environment is a major source of the free radicals that wear down our bodies. Tobacco smoke, air pollution, pesticides, herbicides, contaminants in our water, all of these form free radicals which we then take into our body by breathing, drinking or eating, and all of which contribute to the aging process and to the diseases which kill us. People who are constantly assaulted by these environmental free radicals—and who don't have good defenses against them—tend to age badly. The free radicals come into our body and start attacking our cells. They destroy genetic material, damage and mutate DNA, burden the immune system and virtually destroy a cell's identity. The damage is enormous and it's a huge part of what ages us.

Some of the obvious sources of free radicals include tobacco smoke, pesticides and chemicals. Not coincidentally, these are also sources of cancer-causing chemicals called carcinogens. The combination is lethal to anyone wanting to live in optimal health for nine or more decades. Smoking, for example, creates free radicals that damage the lungs and just for good measure, expose us to carcinogenic chemicals. Tobacco smoke is literally a turbo-charged free radical factory on steroids.

Then there are the pesticides sprayed on crops. "Pesticides kill the pest by creating free radicals," says Hari Sharma, MD, a fellow of the Royal College of Physicians and Surgeons and a consultant to the National Institute of Health. "If you consume them, you will be damaged by those free radicals also." According to a study by the U.S. Food and Drug Administration, at least 53 carcinogenic (cancer-causing) pesticides are applied in large amounts to the major food crops. In 2005, for example, 73 percent of fresh vegetables and fruits contained pesticide residues as did 61 percent of processed fruits and vegetables, 22 percent of soybeans, 75 percent of wheat, a whop-

ping 99 percent of milk and cream, and 16 percent of bottled water.8

It gets worse. The Centers for Disease Control and Prevention found 116 pesticides and other artificial chemicals in human blood and urine. And a 2006 study by the Environmental Working Group uncovered a dirty dozen of fruits and vegetables which they assessed to be the most contaminated of all—peaches, apples, bell peppers, celery, nectarines, strawberries, cherries, pears, imported grapes, spinach, lettuce and potatoes (the most pesticide-intensive U.S. crop¹o). "The effects of these chemicals may be difficult to separate from normally mildly debilitating aspects of the aging process," says Professor Harvey Blatt of the Institute of Earth Sciences at Hebrew University of Jerusalem.

Aging Free Radicals From Our Own Bodies

But the environment isn't the only source of these toxic free radicals. Our bodies are a virtual free radical factory. Now why in the world would you produce free radicals in your body, you might ask, especially since these are such dangerous and health-robbing compounds? The answer is simple—all free radicals aren't bad. Our immune system, for example, produces free radicals in the process of protecting us from harmful microorganisms and in the process of fighting infections. The very process of creating energy, respiratory metabolism, or in plain English, *breathing*—creates free radicals. Free radicals can help activate enzymes and produce hormones. The problem arises when the amount of free radicals in our body is excessive and out of control. Then the damage significantly outweighs the benefits.

While free radicals can search for that extra electron anywhere, they cause the most damage when they are derived from oxygen. Yup, oxygen—the stuff you breathe and without which you couldn't live for more than a few moments. But oxygen has a dark side. Oxygen radicals are actually one of the most damaging kinds on the planet. When oxygen molecules are the ones that give up their electron we're in big trouble. It's like those wild, unpaired electrons decided to pick on the biggest, toughest guy in the schoolyard—and mayhem ensues. Free radicals derived from oxygen are known collectively as reactive oxygen species and they are a virtual aging factory.

Oxygen-derived radicals are a normal part of aerobic metabolism, so they're constantly being formed. In fact, anywhere there's oxygen, there's oxygen radicals.

"I have been taking your Olive Leaf for three months and am very happy to say I have been off my medication for high blood pressure for three weeks now (after having been on it for over two years). I bought my own monitor and take my pressure about twice a week and it seems to average around 136 over 67 which my chemist says is very good. I also have had pain in my lower back caused by arthritis. I now find that after gardening the pain isn't as severe and I recover more quickly. Ihope with continued use of the Olive Leaf Complex, the back pain will improve even more."

~ Thelma Farmer, Kingaroy

Doing some aerobic exercise? You're making oxygen radicals! Just breathing? Oxygen radicals! White blood cells are especially talented at producing oxygen radicals which they then use as a defense against invading microbes. But all those toxins from the environment that we spoke about earlier also have oxidizing effects on cells and produce tons of oxygen radicals. So does radiation, which actually produces the most damage in tissues that have a heavy concentration of oxygen (we call these heavily oxidized tissues).

Another way free radicals age us is through their effect on DNA. You may remember from high school biology that your DNA is kind of like your own individual genetic instruction manual. It's found in every cell and it's like a set of master blueprints that tell every other cell what to do. When free radicals attack the DNA in your cells, they screw up their ability to replicate properly and pass on their instructions. This kind of DNA damage eventually shortens your DNA strands and triggers a process called *apoptosis*, or "programmed cell death." It's as if you were passing on a repair manual that constantly got dropped in the dirt and burned at the edges or dropped in the water, and finally became so worn, anyone trying to use it couldn't read the words anymore and had to guess what was written on the page. A mechanic relying on a manual like that couldn't be counted on to do a good job with your car, and DNA that's been damaged like that doesn't do a good job of repairing and rebuilding your cells, tissues and organs. The result? What we know as aging!

But wait, there's more!

One of the best known toxic effects of oxygen radicals is damage to cellular membranes. Nothing will age you faster than an assault on your cell membranes, even though it takes place under the radar and even though you can't see it (except with a microscope). Why? Because the membranes are critical to cell health—they hold the cell together. Cell membranes have to be flexible enough to allow information to pass in and out, but stiff enough so that they don't collapse. They're delicate structures. (One of the reasons trans-fats are so damaging is that they negatively impact the cell membrane.)

Cell membranes are made up largely of fats (lipids) called *phospholipids*, and the oxidative damage done to cell membranes is called *lipid peroxidation*. The fats that are most vulnerable to this kind of oxidative damage are the very fats we've been told to eat more of—unsaturated fats like vegetable oil. Those fats are much more susceptible to oxidative damage than the more stable (and stiffer) saturated fats. A paradox—but it's completely true. Does that mean we shouldn't eat unsaturated fats? No. But it does mean they need special protection in the form of antioxidants if we're going to get their full benefit.

Lipid peroxidation—the damage to membranes caused by oxygen free radicals—can have a number of effects, none of them good. It can make the membranes stiffer. It can decrease the activity of enzymes that are bound in the membranes. It can alter the activity of membrane receptors. Ultimately, on the cellular level, lipid peroxidation ages you from the inside out.

There's not a disease of aging in which free radical damage is not an important component. That's why fighting free radical damage is such a running theme in the field of natural health and why any natural substance that can deliver a powerful antioxidant wallop is so vitally important to your well-being.

"I have taken three bottles of Olive Leaf. I had my 6 month cholesterol check up and was amazed as it dropped from 6.6 to 5.2. I was also on the borderline of diabetes for 18 months and now I'm back to normal. I feel this helped me so much and I feel wonderful. Many thanks for a wonderful product."

— Beverley Cherry, Toogoolawah



Olive leaf complex can do exactly that. In fact, it might be the best free radical fighter in the natural world.

What You Can Do About It

By now it should be pretty apparent that there's no aging without free radical damage, and there's no way to fight the effects of aging without a strong army to fight off that damage. If your body didn't have any built-in defenses against the constant assault of free radicals, you probably wouldn't be here reading this booklet—in fact, you'd be quite dead. Fortunately, nature hard wired into our DNA the ability to make chemicals that help protect the cells against oxidative damage. These chemicals are called—can you guess?—antioxidants.

An antioxidant works by exactly the mechanism you might imagine from its name—by fighting oxidation. It donates one of its own electrons to the rogue molecule, essentially rendering it impotent and unable to do any damage. You've probably used the power of antioxidants yourself without realizing it. When a cook slices up some apples, she'll often squeeze some lemon juice over them. Left alone without that protection, the apple slices will turn brown—that's oxidation (or oxidative damage) in action. But the lemon juice contains powerful antioxidants like vitamin C, and thus apple slices "protected" with this antioxidant will survive the air a lot longer without changing color. You can try this for yourself—it's the perfect home science project for demonstrating the protective power of antioxidants in the real world.

"I suffer from chronic osteoarthritis and hypertension. Olive Leaf Complex is certainly helping the body to cope with the arthritis, but better still is keeping the hypertension at a very acceptable level. Last year I stopped taking it for a few weeks and the blood pressure went up to 150/80. So back onto the Olive Leaf Complex and within a couple of weeks it was down to 130/80. Even though I still take BP medication I now only take half the dose I used to. Olive Leaf Complex also helps me by giving me energy and helps relieve me from tiredness. I am in my 60th year but feel pretty good. Thanks to God and Olive Leaf Complex."

— Lance Smith, New Norfolk

"My husband and I have been taking your Olive Leaf product for about 18 months and have never looked back. No more colds or hay fever. We have family and friends all taking it now."

~ (os & Louise Costa

Your body has some powerful antioxidants of its own. "These built-in antioxidants keep us alive through the reproductive age," explains Rothenberg.

But there's one big problem. They can't keep up with the work load. Our internal (endogenous) antioxidants are just not as effective as we age—especially when we live in an environment that assaults us with free radicals on a daily basis." "After 30, these built-in antioxidants cannot keep up with the cellular damage that has been produced by free radicals," says Rothenberg.

But fortunately, there's help out there. And some of that help comes in the form of olive leaf complex, whose powerful antioxidant effects are probably responsible for a good deal of its medicinal benefits.

Olive Leaf Complex: The Anti-Aging Miracle

Plants like olive trees have their own built-in protection against the oxidative damage of the sun, and these built-in protectors function as cell protectors in our own body. The very pigments that make blueberries blue and raspberries red protect those berries from oxidative damage, and they do the same for you once inside your body. This is probably one of the many reasons for the greater health and longevity of people who regularly consume tons of fruits and vegetables.

The most famous of the powerhouse antioxidants are vitamin C and vitamin E, but that's only the beginning of the list. Vitamin A is an antioxidant. Minerals like zinc and selenium are powerful antioxidants, as are dozens—perhaps hundreds—of plant compounds known as phytochemicals. Quercetin, for example, a member of the flavonoid family, is found in apples and onions and has tremendous antioxidant activity. So does curcumin, a phytochemical found in turmeric, the spice that makes curry yellow. Spices in general are a tremendous source of antioxidants. And nutrients

"My wife and I are 60 years of age and are practicing accountants. We believe Olive Leaf has helped us cope with the stress public practice causes and since starting your Olive Leaf (about four years ago), neither of us has had the flu. Prior to taking it, we both suffered with flu every year. We don't have flu injections. We recommend Olive Leaf to all our family and associates and often get glowing reports back."

— Roger Oates, Victor Harbour

rarely found in any appreciable amount in food—like alpha-lipoic acid—are also tremendous weapons in the battle against oxidative damage.

Olive phenolics have a powerful ability to eat up "free radicals," and are a tremendous weapon in the fight against oxidative damage. They also show a strong synergistic behavior when combined, as occurs naturally in the olive leaf and—concentrated—in the olive leaf complex. The most active flavonoids—rutin, catechin and luteolin—exert antioxidant effects almost 2.5 times more than those of vitamins C and E and are comparable to lycopene according to *in vitro* tests. In addition, the antioxidant effect produced by Barlean's Olive Leaf Complex is higher due to the synergy of flavonoids, phenols and the high oleuropein content.

How important is that antioxidant power to your health? Consider this: recent research from the Agricultural Research Service¹² investigated the effects of antioxidants on after-meal "oxidative stress." In it, volunteers first drank a shake containing carbohydrates, protein, and fat—but no antioxidants. Sure enough, they produced blood samples with a reduced ability to counter noxious free radicals.

Not good.

"We're learning that antioxidants should be consumed with every meal," says Ronald Prior, a chemist who was the lead researcher on the study. "And if you routinely skip antioxidants in your diet, over time, the excess number of free radicals being produced may begin damaging cellular components, ultimately leading to atherosclerosis, cancer, and other diseases." In other words, all the diseases of aging.

Antioxidants Are Better as a Team: The ORAC Ratings

Scientists have discovered a novel way to assess the antioxidant "power" of foods. It's called the ORAC test. Usually, when I write articles about the ORAC test I don't bother to tell people what it stands for because it's complicated and hard to explain in a short magazine article. But it's going to make complete sense to you because of the material we've already covered. Ready?

ORAC stands for Oxygen Radical Absorbance Capacity. Sure, it's a mouthful, but we already know what Oxygen Radicals are—those really bad actors also known as free radicals. So the ORAC test basically looks to see how effective foods are at mopping up these suckers—hence "Absorbance Capacity." The ORAC test is similar to what you see in those television commercials for paper towels—the best performers are the ones that soak up the junk more effectively!

Why, you might ask, don't the scientists just measure the vitamin C and vitamin E and all those other antioxidants in the food and be done with it?

Good question, and the answer is an important key to anti-aging eating strategies in general.

Number one, there are probably hundreds of antioxidants we don't even know about. There's a whole class of plant chemicals called flavonoids, for example, that have over 4,000 members, and many of these act as antioxidants. Sure, we could measure the best known antioxidants, but that wouldn't necessarily present a complete picture of the food's true age-fighting potential, because it might miss many of the most important antioxidants not being tested. (Not to mention each specific test for each individual antioxidant is expensive!)

Number two—and even more important—is a mysterious thing called *synergy*. Vitamins, minerals, phytochemicals and nutrients in general work in mysterious ways, which is one reason hard-nosed scientists sometimes have trouble isolating and "proving" their effects. Actually, it's not really mysterious at all when you think about it. There is something in *groups* that's different than the individual members, and there is something in a *food* that's different from the sum total of its individual components. Sometimes a particular nutrient only shows benefit when it's in the presence of another *nutrient* on which it depends to do its job. Recent research, for example, has shown that vitamin D protects against colon cancer—unless your levels of vitamin A are too high in which case

the protective effect of vitamin D disappears. Sometimes two (or three) nutrients work together synergistically—like calcium, magnesium and vitamin D, which, together, offer a substantial measure of protection for aging bones. Sometimes a nutrient's "good deeds" depends on being in an environment provided by the rest of the components in the food and without these, the isolated nutrient doesn't "perform" as well (An example: the vision-enhancing carotenoids *lutein* and *zeaxanthin* are only absorbed properly when they're consumed with some fat).

Because of this synergistic effect, it's much more useful to look at the food itself and see how it performs—with all its components—in the task of fighting free radicals. The best example of this is a rock and roll band. I'll bet most of you can name at least one great album by the Rolling Stones. A Mick Jagger solo album? Not so much. Same thing with a championship basketball team, a superb doubles team in tennis, or even

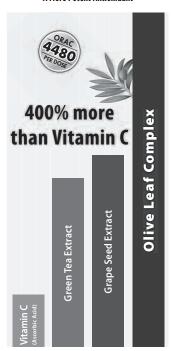
a pair of figure skaters. The *team* may have the ability to perform together way better than the individual components can perform alone.

So in the ORAC test, scientists take whole foods and test them against various oxygen radicals of the nastiest kind. They look to see which foods mop up those unfriendly, age-robbing, cell-destroying free radicals the most effectively, and rate those foods, giving them a number which is—not surprisingly—called their ORAC value.

As you can see from the chart in figure one, Barlean's Olive Leaf Complex tested 400 percent higher in ORAC capacity than vitamin C alone, and scored almost twice as high as green tea extract or grape seed extract, two potent sources of antioxidants.

No wonder that world-renowned cardiologist and Mediterranean diet specialist Dr. David Colquhoun commented recently,

FIG. 1
Olive Leaf Complex,
A More Potent Antioxidant



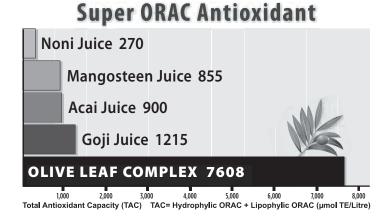


FIG. 2 Olive Leaf Complex, the Super Antioxidant

"Olive Leaf Complex is potentially a huge step forward for antioxidant therapy in a wide range of human diseases."

How Does Olive Leaf Complex Compare with "Super Juices"?

Recently, independent laboratories in Australia were contracted to compare the antioxidant capacity of fruits and "super juices" with that of Barlean's Olive Leaf Complex. The results (shown in figure two) speak for themselves. In a test known as the TAC test (Total Antioxidant Capacity) Barlean's Olive Leaf Complex significantly outperformed expensive products like noni, mangosteen, acai, and goji by a wide margin.

Historical Use of Olive Leaf Complex

The use of olive leaf for medicinal purposes goes all the way back to the ancient Egyptians. They believed that the olive leaf was a symbol of heavenly power, and they used the extracted oils from the leaf in the mummification rituals of their kings.

Then, in the late 1800s, researchers identified a particular phenolic compound in olive leaf which they named "oleuropein." To this day, many researchers believe that this is the component of the olive leaf most responsible for its therapeutic benefits.

The Secret Weapon of Olive Leaf Complex: Oleuropein

One of the most powerful—and under-appreciated—components of the olive leaf complex is a phenolic compound called oleuropein. Oleuropein and its metabolite hydroxytyrosol have powerful antioxidant activity both *in vivo* and *in vitro* and give extra-virgin olive oil its bitter, pungent taste.

Oleuropein and its derivatives have a variety of roles including anti-inflammatory and anti-thrombotic activities. Oleuropein has antimicrobial activity against a wide variety of viruses, bacteria, yeasts and fungi. Moreover, one of oleuropein's derivatives—a substance called hydroxytyrosol—has been shown to have even stronger broad-spectrum effects.

One of the active ingredients in oleuropein is a substance called elenolic acid. Elenolic acid has been shown to have an uncanny ability to inhibit the growth of viruses. And one form of elenolic acid—calcium elenolate—has been shown to fight not only viruses, but bacteria and parasitic agents as well.

The anti-microbial, immune-supporting effects of olive leaf complex have not gone unnoticed. World-renowned medical researcher Dr. Morton Walker reports many case histories, testimonials and studies of health problems that have been helped through the regular use of olive leaf. Dr. Walker is the author of more than 60 books and over 1,800 clinical journal and magazine articles and is the winner of many awards. In his book, *Olive Leaf Extract*, he states: "Based on my research, I am convinced that olive leaf extract is destined to become the most useful, wide-spectrum anti-microbial herbal ingredient of the twenty-first century!"

How is Your Immune System Functioning?

Immunity is one of the keys to good health. Think for a moment about the last time something was "going around" your office. Some people got really sick—but others probably didn't. And even among those who did, whatever "bug" was going around probably laid some people out for two weeks, while others were back to work after a day or so.

The difference? The performance of the immune system.

We can't really do much about natural disasters like hurricanes or tropical storms. But what we can do is build a stronger house, one that's more able to resist

the ravages of bad weather. And in much the same way, we can't do much about the bugs and microbes we're all exposed to—but what we can do is strengthen and support our immune system.

Olive Leaf Complex can help.

Here are some of the questions you might ask yourself if you're interested in evaluating just how well your immune system is functioning:

- → Do you get infections frequently?
- → Do you have frequent colds?
- → Do you get the flu?
- → Do you experience inflammation or infection in the upper respiratory tract?
- → Do you suffer from bronchitis frequently?
- → Do you have recurrent skin infections?
- → Have you ever suffered from recurrent infections of candida or yeast infections?
- → Have you been diagnosed with Epstein-Barr or chronic fatigue syndrome?
- → Do you experience a reduction in stamina and resistance, especially when under stress?
- → Are your energy levels less than you would like them to be?
- → Any or all of these can be symptoms of compromised immunity.

Immune-boosting foods like fruits, vegetables, garlic, onion, vegetable juices, Barlean's Greens, cold water fish (salmon, mackerel, sardines), sprouted seeds and beans, cold pressed oils (Barlean's Highest Lignan Flaxseed Oil), legumes, raw nuts

"I have been using liquid Olive Leaf for over two years. I began taking it because I was about to be put on blood pressure medication. After taking the Olive Leaf for about six weeks my blood pressure was normal and has been so ever since. It has really improved my energy level and I feel really great."

~ Alison Atkinson

"I am 68 years old and I have been taking Olive Leaf Complex for about six months and have noticed the following real improvements to my health; my blood pressure and heart are the best they have been in 15 years; surface bruising that occurs in older people from slight bumping has disappeared; for years I've taken antacid products for my heartburn and indigestion. Since taking Olive Leaf both problems have practically gone, and my recovery rate after physical exertion has improved. I'm not claiming that the Olive Leaf is a cure for anything, but I have noticed improvement and change for the better in my body since taking the extract on a regular basis."

~ Russell Booth, Cambooya

and seeds all contain powerful plant chemicals that can assist in supporting your immune system. (For a full list, see my book, *The 150 Healthiest Foods on Earth*). Seaweeds like kelp, nori, kombu and hijiki are also excellent as are cruciferous vegetables like broccoli, cabbage and brussels sprouts. And exercise is one of the best ways to promote a healthy immune system.

And now at last we can add to this list one of nature's best "natural" immunity boosters—fresh, high-quality olive leaf complex from the best trees in the world, grown in the rich soil of Australia.

Olive leaf complex also contains luteolin, another key constituent that exhibits anti-inflammatory activity in animal models and anti-allergy effects in test-tube studies. It has been found to possess antimutagenic and antitumerorigenic properties. Apigenin, also in the leaf, inhibits the inflammatory mediators nitric oxide and prostaglandin E2.

Effects on Blood Pressure and Glucose

The hypotensive (blood pressure lowering) effect of olive leaves has been well documented in animals. And recently a clinical study conducted by the Service de Cardiologie, Hopital Militaire in Tunis tested olive leaf complex in 30 patients with essential hypertension. Olive leaf complex was given every four hours for three months after 15 days treatment with a placebo. Active treatment resulted in a statistically signif-

icant decrease of blood pressure in all patients and was considered "well-tolerated". 13

At the University of Granada in Spain, researchers found that olive leaf complex caused the relaxation of the arterial walls in laboratory animals. And in animal studies in Tunis, researchers found that olive leaf complex reduced hypertension, blood sugar and blood levels of uric acid, which, when elevated, is a risk factor for heart disease.

Then there's blood sugar. Olive leaf complex has also demonstrated hypoglycemic (blood sugar lowering) activity in animals, probably because of the oleuropein which produced anti-diabetic activity in animals with diabetes. Though clinical studies (on humans) are not yet available, anecdotal evidence suggests that people are using it as an adjunct to dietary modification in Type 2 Diabetes. One report from Morocco found that 80 percent of people surveyed used herbal medicines for diabetes, hypertension and cardiac disease, and olive leaf was one of the most popular treatments.

Biochemist Arnold Takemoto, talking to the *Townsend Newsletter for Doctors and Patients*, put it this way: "Olive leaf extract is not a single magic bullet. There are very few such things, especially in non-pharmaceutical medicine. In many cases it takes a whole lot more than just one ingredient to get over a particular condition. Yet, I find it a very valuable addition against chronic fatigue syndrome and many other viral conditions, especially those that are more tenacious. It fills a hole we haven't been able to fill before".

Takemoto went on to say that "he has yet to discover another herbal substance that accomplishes antimicrobially what this substance achieves."

"i've taken liquid Olive Leaf on and off over the last year or two, and found it definitely increases my energy levels. Since getting 'burnout' two years ago, my immune system has never got back to 100% and I go through periods of fatigue. I hadn't taken any for about 6 months and found my blood pressure was 140/90 in October, so I started to take Olive Leaf and 5 weeks later my BP was 135/80, not a huge drop but enough to keep the doctor happy. I also noticed a great increase in my energy levels and general great feeling of well-being."

~ Christine Langdon, Maroubra



So What's the Deal with Bacteria and Viruses?

Bacteria are tiny one-celled organisms that have the power to divide and multiply by themselves. They exist everywhere, in virtually every nook and cranny on the planet. They live in (and on) plants and animals. Some are inside our bodies and some are on our bodies. For the most part they're pretty harmless, and some of them—like *lactobacillus acidophilus*, found in yogurt and also inside our gut—are actually very beneficial. But many are not so friendly.

Bacteria can end up in the wrong place in our body and have the power to cause disease. They cause an infection by entering the body and then finding a nice hospitable place to reproduce in large numbers, preferably before the body's immune system is able to do a "search and destroy" operation. "As their numbers rise into the billions, these bacteria damage the body by damaging its tissues and producing a variety of microtoxins that inflict even more damage," explains naturopath Jack Ritchason.

And there's no effective way to keep from being exposed—they can be passed on by touching, shaking hands, or hanging out with a person with a cold. Bacteria (but not viruses) can be knocked out with antibiotics, but the overuse of antibiotics has a set of problems that's just now being recognized for the serious health problems it presents.

Viruses on the other hand, are a whole different "animal". They can't multiply on their own—instead, they invade a "host" cell and take over the cellular machinery that allows them to reproduce and make more virus particles. The cells of the mucous membranes—like those that line the respiratory passages—are particularly susceptible to virus attacks since they're not covered by protective skin.

You can instantly see that your best defense against the potential damage of these

"For the last two years I have suffered with a health problem. Dreadful throat virus, losing my voice for quite a few days. I tried everything. Olive Leaf was the only relief I received. The virus was gone in a very short time. Olive Leaf also assists with my diabetes management. I really can't do without it. It is a MUST HAVE at the top of my natural products list."

~ Cheryl Clarke, Mansfield

little buggers is to have a strong, robust immune system that will prevent them from taking root and doing harm in the first place.

Olive leaf complex can be a powerful weapon in the battle between your immune system and invading microbes.

Compounds in the olive leaf have long been used to help fight illnesses brought on by microbes. According to James R. Privitera, MD, the first formal mention of the olive leaf—an account describing its ability to cure severe cases of fever and malaria—occurred in 1854 when the *Pharmaceutical Journal* carried a report by one Daniel Hanbury. The report contained the following simple healing recipe:

Boil a handful of (olive) leaves in a quart of water down to half its original volume. Then administer the liquid in the amount of a wine glass every 3 or 4 hours until the fever is cured.

.....

According to the author of the report, this method became popular in England for treating sick Englishmen returning from the tropical colonies. The author believed that a bitter substance in the leaves was the healing ingredient.

Oleuropein, Anyone?

Yes, the bitter substance in olive leaf complex—since identified as oleuropein—has been found to be particularly helpful in resisting bacterial damage. In fact, early research by the drug company Upjohn found olive leaf complex to be effective in treating infection by a large number of viruses as well as bacteria and parasitic protozoans.

According to Privitera, these are some of the unique properties possessed by the olive leaf compound for the broad killing power:

- Olive leaf complex has an ability to interfere with critical amino acid production essential for viruses
- Olive leaf complex has an ability to contain viral infection and/or spread by inactivating viruses or by preventing virus shedding, budding or assembly at the cell membrane
- → Olive leaf complex has the ability to directly penetrate infected cells and stop viral replication

"I have been plagued with colds, sinus and chest infections and a horrendous cough for 30 years. I was on Singulair tablets, Ventolin puffers and a nebuliser sometimes three times a day. I kept a record with a peak flow meter to help me with my asthma. I started on Olive Leaf with a peak flow reading of 270. The next day it had climbed to 350. On day seven it was 400. On day 19, I stopped taking the Ventolin nebuliser and puffer. That was December 12 and it is now February 2—still no nebuliser, the peak flow is between 420-450 and GUESS WHAT?—NO COUGHING! And I'm sleeping every night. My husband thinks it is a miracle."

— Margaret Chambers

Olive leaf complex can stimulate a process called phagocytosis, an immune system response in which cells act like little "Pac Men," ingesting harmful microorganisms and foreign matter

Privitera is not the only health expert who has taken note of the amazing antimicrobial properties of olive leaf complex. Dr. Ritchason, in his excellent book on olive leaf complex, writes that compounds of olive leaf complex can "directly penetrate infected cells and inhibit further microbial reproduction." Ritchason also points out that olive leaf complex may also directly stimulate the formation of immune system cells that combat various types of microbes.

Studies have shown that olive leaf complex is effective in delaying the growth of *Staphylococcus aureus*¹⁴ and *Bacillus cereus*¹⁵. However, a recent study involving over 500 patients conducted at the R-Clinic of Budapest, Hungary has found that it was extremely effective in treating a wide variety of infections and illnesses. In an uncontrolled trial by Dr Robert Lyons, O.M.D., M.S., Eden Extract, ¹⁶ which contains extract from olive leaves, resulted in 115 out of 119 patients with respiratory tract infections fully recovering. Sixty out of 67 patients with dental infections (pulpitis, leukoplakia, stomatitis), 120 out of 172 patients with viral skin conditions (e.g. herpes) and 30 out of 37 patients with skin infections (e.g. pyoderma and injuries). Furthermore, although not all of the patients fully recovered after taking the complex, none of them reported that they had not improved as a result of the treatment.

"We have six children living at home from ages 8 to 14. Our children have not been on any antibiotics for cold/flu related illnesses for at least the last five years. We believe that your Olive Leaf product has been a major role in this. In addition, our children don't get the green, yellow runny mucus which other children get for weeks on end over winter."

~ Lorraine Hackett, South Maclean

The report concluded that the rate of improvement and recovery from all bacterial and viral infections was approximately 98 percent, and for all patients involved in the study, the body's immune system was found to be strengthened. No patients experienced any adverse side effects.

Further *in vitro* studies have found that olive leaf complex is effective against over 50 common disease causing organisms including viruses, bacteria, fungi and protozoa such as herpes, influenza A, Polio 1, 2, and 3; *Salmonella typhimurium, Candida krusei* and Coxsackie A-21.^{17, 18}

So does olive leaf complex belong on the short list of daily supplements to take for health and protection? You bet. But as with anything else, the devil is in the details. To get the real benefits of this amazing supplement, you have to be sure that it comes from only the finest olive trees in the world, grown under ideal conditions in a rich soil and chock-full of beneficial polyphenols.

Barlean's sourcing farm, Olive Leaf Australia—one of the leading growers of olive trees—contains more than 550,000 trees and has the distinction of being the world's largest specialized olive leaf grove. More importantly, it has what is arguably the most rigorous, medicinal olive leaf-testing program on earth. Barlean's Olive Leaf Complex uses only the finest olive leaf complex imported directly from this wonderful supplier.

Barlean's Olive Leaf Complex is 100 percent from fresh leaves; it's never reconstituted, has no artificial preservatives and it comes in a fast-acting, good-tasting liquid.

Each of the compounds has been analyzed using high-performance liquid chromatology, the global standard to scientifically identify and measure the healing compounds in herbal medicines. In Australia, consumers spend approximately a million

dollars a month on olive leaf complex, over 16,000 bottles every single month, chiefly to the Australian market but also to Taiwan and Korea where it is used as a medicinal agent and an ingredient in functional foods. The complex is manufactured under strict Good Manufacturing Practices (GMPs) and is listed on the Australian Register of Therapeutic Goods (ARTG).

Barlean's Olive Leaf Complex comes from trees that have been farmed naturally on virgin land. Their supplier uses vermiculture (worm created) fertilizers and pristine irrigation water and couples early-morning harvesting with immediate transfer of freshly harvested leaves to the processing plant. From the growing of the trees in Australia to the bottling of Barlean's Olive Leaf Complex at their plant in Washington, they have total control over the entire production. This trademarked process is called EnvirOlea® and it is your international quality guarantee—you can buy Barlean's Olive Leaf Complex with the same confidence that you buy all of Barlean's Organic Oils products, knowing that it is of the highest quality and provides the highest value of any product in its class.

What Dosage is Best?

Though there is really no "official" recommended dose for taking olive leaf complex, many experts recommend a basic maintenance dose for general use and a "therapeutic" dose for special cases. For adults, Barlean's recommends 1 tablespoon (15ml) per day. And for children, half of an adult dosage (7.5ml). However, do not give to children two years or younger without medical advice.

For conditions such as the common cold, flu, sinus infections and basic respiratory tract infections, the recommended dose is two 5ml teaspoons every 6 hours, says naturopath Jack Ritchason, ND. For acute infections such as sore throat, swollen glands or fever, Ritchason recommends 3 teaspoons every 6 hours.

He adds that it is completely safe: "From all indications—research, case studies and widespread use—olive leaf complex appears to be an extremely safe supplement that can effectively aid the body in improving immune function and fighting infection by various microbes." 19

From Biblical references to modern researchers and doctors, experts agree that taking this wonderful supplement can be a valuable part of anyone's health regimen. Anybody ready for enjoying super health?

References

- 1. Nutrition Research Reviews. 2005;18(1):98-112.
- 2. McCall MR, Frei B. "Can antioxidant vitamins materially reduce oxidative damage in humans?" *Free Radic Biol Med.* 1999;26;7/8:1034-53.
- 3. Halliwell B. "Oxygen and nitrogen are pro-carcinogens. Damage to DNA by reactive oxygen, chlorine and nitrogen species: measurement, mechanism and effects of nutrition." *Mutat Res.* 1999;443:37-52.
- 4. Valko M, Izakovic M, Mazur M, Rhodes CJ, Telser J. "Role of oxygen radicals in DNA damage and cancer incidence." *Mol Cell*. 2004;266:37-56.
- 5. Aslan M, Ozben T. "Reactive oxygen and nitrogen species in Alzheimer's disease." *Curr Alzheimer Res.* 2004;1:111-119.
- 6. Ryan-Harshman M, Aldoori W. "The relevance of selenium to immunity, cancer, and infectious/inflammatory diseases." *Can J Diet Prac Res.* 2005;66:98-102.
- 7. Harman D. "Nutritional implications of the free-radical theory of aging." *J Am Coll Nutr.* 1982;1:27-34.
- 8. Pesticide Data Program, Annual Summary Calendar Year 2005, USDA, 2006, available at ams.usda.gov/science/pdp.
- 9. America's Food: What You Don't Know About What You Eat, Harvey Blatt, PhD, (MIT Press, 2008).
- 10. Pesticides in Produce, Environmental Working Group, 2006, available at foodnews.org/walletguide.php.
- 11. Knight JA. "The biochemistry of aging." *Adv Clin Chem.* 2000; 35:1-62.
- 12. Prior RL, Gu L, et al. "Plasma antioxidant capacity changes following a meal as a measure of the ability to alter *In Vivo* antioxidant status," *Journal of the American College of Nutrition*. 26(2):170-181.
- 13. Cherif R, et al. "A clinical trial of a titrated olea extract in the treatment of essential arterial hypertension," *J Pharm Belg.* 1996;51(2):69-71.



- 14. Tranter HS, Soula C, et al. "The effect of the olive phenolic compound oleuropein on growth and enterotoxin B production by *Staphvlococcus aureus*." *Journal of Applied Bacteriology*. 1993;74:253-259.
- 15. Tassou C, et al. "Effect of phenolic compounds and oleuropein on the germination of *Bacillus cereus* spores." *Biotech-nologv and Applied Biochemistry.* 1991;13:231-237.
- 16. Lyons R. "The use of Eden Extract against pathological organisms—viruses, bacteria and fungi." *Explore.* 1996, 4.
- 17. Renis HE. "In vitro antiviral activity of calcium elenolate." Antimicrobial Agents and Chemotherapy. 1969; 167-172.
- 18. Elliot G, Buthala D, DeYoung F. "Preliminary safety studies with calcium elenolate, an anti viral agent." *Antimicrobial Agents and Chemotherapy.* 1975; 8:173-199.
- 19. Ritchason, Jack. Olive Leaf Extract: Potent Antibacterial, Antiviral and Antifungal Agent. Woodland Health Series, 2000.

Additional References on Olive Leaf Complex

- Tripoli E, Giammanco M, Tabacchi G, Di Majo D, Giammanco S, La Guardia M (June 2005). "The phenolic compounds of olive oil: structure, biological activity and beneficial effects on human health." Nutr Res Rev 18 (1): 98–112. doi:10.1079/ NRR200495. PMID 19079898.
- 2. Walter WM, Fleming HP, Etchells JL (November 1973). "Preparation of antimicrobial compounds by hydrolysis of oleuropein from green olives." *Appl Microbiol* 26 (5): 773–6. PMID 4762396.
- 3. Andreadou I, Iliodromitis EK, Mikros E, et al (August 2006). "The olive constituent oleuropein exhibits anti-ischemic, antioxidative, and hypolipidemic effects in anesthetized rabbits." *J. Nutr.* 136 (8): 2213–9. PMID 16857843.
- Lee-Huang S, Huang PL, Zhang D, et al (March 2007). "Discovery of small-molecule HIV-1 fusion and integrase inhibitors oleuropein and hydroxytyrosol: Part I. fusion [corrected] inhibition." *Biochem. Biophys. Res. Commun.* 354 (4): 872–8. doi:10.1016/j.bbrc.2007.01.071. PMID 17275783.
- 5. Lee-Huang S, Huang P, Huang P (2004 July 11-16). "Anti-HIV activity of olive leaf extract and synergism with HAART." *Int Conf AIDS* 15th.
- 6. Fleming H, Waler W, et al. Antimicrobial proper-ties of oleuropein and products of its hydrolysis from green olives. *Microbiology* 1973 26(5) 777-782.

About the Author

Jonny Bowden, PhD, CNS is a board-certified nutritionist with a doctorate in holistic nutrition and a masters degree in psychology. He's a nationally known expert on weight loss, nutrition and health whose books have been endorsed by a virtual who's who in the world of integrative medicine and nutrition including Dr. Christianne Northrup, Dr. Mehmet Oz, Dr. Barry Sears (who calls him "one of the best") and Dr. Ann Louise Gittleman, (who calls him "the personal health coach I would want in my corner no matter what.")

He is on the editorial advisory board of Men's Health, an associate editor of Total Health Magazine, and a regular contributor to America Online, Forbes Online, Better Nutrition and Clean Eating magazines. In addition, he has been featured in The New York Times, Bottom Line Health, Chicago Tribune, Time Magazine, GQ, Muscle and Fitness, Cosmopolitan, Oxygen, Seventeen, MSNBC Online, MSN Online, Self, Fitness, Family Circle, Marie Claire, Allure, Men's Health, Ladies Home Journal, Walking, Prevention, Total Health, Woman's World, Weight Watchers, In Style, and Shape. A popular and dynamic speaker who lectures around the country, he has appeared on television on Fox News, CNN, MSNBC, ABC, NBC and CBS as an expert on nutrition, weight loss and fitness.

Dr. Bowden is the author of seven acclaimed books, including the best-sellers The 150 Healthiest Foods on Earth, Living Low Carb, The Most Effective Natural Cures on Earth, The 150 Most Effective Ways to Boost Your Energy, and The Most Effective Ways to Live Longer.

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He lives in Topanga Canyon in California with his three dogs, Woodstock, Emily and Lucy and is an avid tennis player.

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Olive Leaf: Ancient Secret, Modern Miracle

Olive trees live for thousands of years, resisting attacks from pests, drought and a range of microorganisms. What is their secret?

Find out inside *The Amazingly Potent Anti-Aging, Antioxidant Pro-Immune*System Health Benefits of the Olive Leaf ...

Recorded evidence of the olive leaf's medicinal use dates back thousands of years: it was used by ancient Egyptian and Mediterranean cultures to treat a wide variety of health conditions. Today, health experts have sparked a significant resurgence because of its remarkable antioxidant qualities and it is fast becoming the hottest health sensation for supporting a healthy immune system—critical for cold and flu season.

Win the war against viruses, flu and bacterial infections.

Olive Leaf Complex taps into the same phenomenal defense system of the ancient olive tree and provides hundreds of broad-spectrum, naturally occurring compounds to provide a powerhouse of cell-protecting antioxidants. Olive Leaf Complex is a concentrated liquid extract made directly from fresh olive leaves that has an antioxidant capacity almost double green tea extract and 400 percent higher than Vitamin C.

What are the amazingly potent anti-aging, antioxidant pro-immune system health benefits of Olive Leaf Complex?

Due to its broad spectrum of natural polyphenols, and its very high antioxidant power, significant health improvements can be experienced in all of the following areas, and more:

→ Allergies	→ Arthritis	→ Asthma	Blood pressure	Cardiovascular health
→ Cholesterol	→ Circulation	→ Colds	Constipation	→ Coughs
→ Diabetes	→ Fatigue	→ Flu	→ Fungal infections	→ Hay fever
→ Immune system health	→ Intestinal health	→ Joint aches and pain	→ Psoriasis	→ Skin problems

"Olive Leaf Complex offers a convenient and uniquely rich source of plant-based antioxidants. These nutrients are a key component to slowing the aging process and an essential part of attaining optimal and vibrant health. In addition to helping you live longer and live younger, the plant-based antioxidants in Olive Leaf Complex help your body fight inflammation that can contribute to worsened symptoms of many chronic diseases. Consuming Olive Leaf Complex on a regular basis will help you feel better while maximizing the age-reducing benefits of an otherwise healthful 'whole foods' based diet."

—Andy Larson, M.D. and Ivy Larson, authors of *The Gold Coast Cure, The Gold Coast Cure's Fitter, Firmer, Faster Program* and *Whole Foods Diet Cookbook* (www.The2Larsons.com)

"Filled with astounding, real-life testimonials as well-documented studies, this book is a must-have for those interested in the re-discovery of one of the most exciting health remedies today. Olive Leaf Complex is imperative for maintaining a healthy lifestyle, for fighting off infection and inflammation and for achieving peak physical performance."

—Jorge Cruise, creator of The Belly Fat Cure and JorgeCruise.com, New York Times best-selling author featured on Oprah, The Today Show and CNN

