

Marc S. Micozzi's

logical health
ALTERNATIVES



THE BEST OF DR. MICOZZI VOLUME I

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CHAPTER 1: THE HIDDEN COSTS OF THAT “PERFECT” LAWN

In the early 1980s, two British epidemiologists published a technical book on the causes of cancer. They concluded cancer was primarily due to factors that we, as individuals, can each control—such as tobacco, diet, body weight, physical activity, and sun exposure. They considered the contribution of “environmental” factors such as pesticides, pollution, food additives, etc., to be very small by comparison.

This was 10 years into the U.S.’s own flailing “war on cancer,” and the National Cancer Institute and the rest of the government largely went down this road mapped out by the British.

Unfortunately, it has turned out to be mostly a dead end.

Despite the general public’s collective efforts to quit smoking, improve their diets, lose weight, and slather themselves with sunblock, most cancer and chronic disease rates have continued to increase.

As I’ve written before, the government’s focus on smoking did not turn out to be the final solution for oral cancer, or even for lung cancer, for that matter. When it comes to dietary factors—saturated fats, eggs, meat, and other favorite government culprits—the evidence has been evaporating. Even being “overweight” isn’t the chronic disease and death sentence the “experts” have made it out to be (except when it comes to morbid obesity, which has now been declared the new disease of the month). And, of course, the crusade against sun exposure has actually contributed to a national and global epidemic of vitamin D deficiency which is now being seen to have wide-ranging negative health effects.

Meantime, evidence has been mounting that pesticides are strongly associated with increased cancer risk.

Pesticides fuel tumor growth

Some pesticides, such as lindane, propoxur, and endosulfan can mimic estrogen activity in the body. And they are prime suspects for increasing tumor incidence.

In fact, a recent study in the journal *Anticancer Research*

revealed how these pesticides can increase tumor growth (that all-important “mechanism of action” I keep mentioning).¹ As I explain in this issue’s lead article (and in my special report *The one word battle plan to crushing cancer*), the only way cancer cells can grow into tumors is by hijacking the body’s blood supply—a process called “angiogenesis.”

“Anti-angiogenesis” is well on its way to becoming the new watchword for targeted, non-toxic interventions against cancer. But it is important to remember that there is a “flip side” to this coin. Indeed, some chemicals cause angiogenesis. And, in turn, fuel cancer growth.

This new insight won’t just help us find effective ways to prevent and treat cancers. It will also help us identify what specific substances are really causing cancer in the first place.

And researchers have found that the particular pesticides I mentioned above do not damage DNA (thus they are not like “mutagens” that cause cancer “initiation”). So their cancer-causing effect is due to their ability to promote subsequent tumor growth, for example, through angiogenesis.

18 holes with a deadly “handicap”

We worry a lot about pesticides in our foods. And we should, since large crops are treated with a couple rounds of pesticides each cycle. But I have become more concerned about a source much closer to home. That is, all the chemicals that are poured onto lawns to keep them artificially green and weed-and “pest”-free. This is especially a problem on golf courses.

These large turfs require constant maintenance. Barely a day goes by, all year round, when workers aren’t spraying an herbicide, fungicide, insecticide or other “cide” onto these vast acreages—which then drain into our water supply.

Many of the chemicals used on golf courses have long been recognized as environmental carcinogens (causing cancer initiation). Now we are seeing others can act as cancer promoters (including through angiogenesis).

So it's no surprise that studies around the world have been finding significantly higher rates of all types of cancers among golf course workers.

No one is really studying it yet, but I think the next problem we will find is increased cancer rates in avid golfers themselves—people who are on the golf courses for long periods almost every day, or several times per week. Not to mention all the people living on and around the high-end real estate that was built right on golf courses.

I, for one, wouldn't recommend spending too much time hanging around on artificially green lawns or golf courses, waiting for the results to come in. There are a lot of other ways to get your exercise and your sun.

CHAPTER 2: THE HIDDEN, GRISLY DANGERS OF “ROUTINE” COLONOSCOPIES

And two safe, time-tested alternatives that won't cost you a fortune (or your life!)

Bend over, here it comes again...

The U.S. is well-known for its massive expenditures on end-of-life care. On average, people here incur more medical costs during the last six months of life than during their entire life up until then. But it turns out the cost of ordinary care is nothing to sneeze at either.

“Routine” tests and exams add up to \$2.7 trillion per year (even more than the federal government's annual deficit).¹ Colonoscopies are a case in point.

Colonoscopy is—by far—the most expensive screening test that Americans are exhorted to undergo. But there are several reasons you should think twice before “bending over,” when it comes again. In fact, skipping your next routine colonoscopy might actually save your life.

There are some serious dangers associated with this supposedly safe test you won't hear about from the public health “experts.” Or the mainstream hype. There are also alternatives to colonoscopy that are just as effective—and much safer (not to mention less expensive). More on that in just a moment.

But first, let me tell you why some real health experts are questioning whether it's truly worth it to get a colonoscopy once you hit a certain age...

“Too old” for a colonoscopy?

The minute you hit 50, your doctor probably started encouraging you to get regular colonoscopies.

But at this point in life, is a colonoscopy really worth it?

You see, the major purpose of routine colonoscopies is to detect polyps growing from the mucosal surface of the colon. But it takes, on average, 15 years for cancer within a polyp to develop into full-blown colorectal cancer.²

Yes, some people have a specific genetic predisposition

which can lead to multiple polyps and a higher risk of colorectal cancer. And these people should be followed and managed closely.

But anyone can potentially develop a colon polyp. And in light of that 15-year lag time, how old is “too old” to go through this uncomfortable procedure and be subjected to its risks? This question is important because “routine” colonoscopy can be quite dangerous—even fatal.

Horror-film injuries from a “routine” test

Colonoscopy is portrayed as a benign, safe procedure for everyone. But in my forensic medicine practice I have seen case after case of perforated intestines and peritonitis (a potentially fatal inflammation of the abdominal lining), lacerated and punctured livers with massive bleeding, and other fatal complications. All from “routine” colonoscopies.

I even had one case in which the air pumped into the colon (to inflate it for easy examination) escaped into the patient’s abdominal cavity. It put so much pressure on the liver that it cut off blood supply back to the heart. The patient died from shock.

To make matters worse, colonoscopies are often prescribed more frequently than medical guidelines recommend.

ACOG in the wheel

Ten years ago, apparently having run out of things to say on TV from one end, Katie Couric had her colonoscopy performed on the other end, live, on national TV. Patients began demanding them like the latest cosmetic procedure. Then, the American College of Gastroenterology (ACOG) successfully lobbied Congress to have the procedure covered by Medicare (in other words, us, the taxpayers).

So now, when you become eligible for Medicare at age 65, with the 15 year lag time for a polyp to become cancerous, this Medicare benefit can help you avoid coming down with colorectal cancer at age 80 years or older, on average. Just doing the math. But I digress...

The fact is, several much less expensive and less

dangerous techniques are also effective. Yet specialist medical practitioners have (not surprisingly) picked the most expensive—and dangerous—option. Without any scientific data to support it. I know it sounds bizarre, given all the hype and increased recommendations for colonoscopy... but it’s true.

In fact, according to a study published earlier this year in the *American Journal of Gastroenterology*, colonoscopy has never even been compared to other, much safer—and less expensive—screening methods head-to-head in randomized trials.³

This despite the continual call from mainstream medicine for ever more randomized, controlled, clinical trials—which are considered the “gold standard.”

Until the last 10-15 years, colonoscopies were only performed in doctor’s offices. And only on patients at high risk for colorectal cancer or who were experiencing intestinal bleeding.

Then doctors reported they could detect early cancers even in people who are not at high risk and don’t have bleeding. But, according to an article published in the *Journal of the National Cancer Institute*, there is no compelling evidence that colonoscopy offers any additional benefit over the older, cheaper, safer tests.⁴

And the bottom line is no study has shown that colonoscopy prevents colorectal cancer incidence or mortality any more than the other safer, less expensive screening methods.

And don’t forget—colonoscopies can miss polyps that are present.

I previously reported on a study which showed that with each passing hour of the day, gastroenterologists are nearly 5 percent less likely to detect a polyp during colonoscopy.

Nonetheless, the ACOG unilaterally declared colonoscopy as the “preferred” approach to colorectal cancer prevention. It certainly was preferred when it came to collecting membership dues, apparently.

Of course, colonoscopy has also become very lucrative.

One analysis even reported colonoscopy is the reason the U.S. leads the world in health expenditures!

But some primary care doctors don't realize the costs of the tests and procedures they prescribe.

The most expensive hour you'll ever spend

A colleague of mine in Hartford, CT recently called the local hospital in order to price a colonoscopy. And even he couldn't get an answer.

Because this "routine" screening procedure can cost anywhere from \$6,000 to nearly \$20,000. For an outpatient procedure requiring less than an hour.

Again, they are the most expensive screening tests that otherwise healthy Americans undergo. In fact, colonoscopies in the U.S. often cost more than childbirth or an appendectomy in most other developed countries.⁵

But colonoscopies represent such a large financial burden because, unlike hip replacements, c-sections, or even nose spray, everybody gets them—or is supposed to, whether they need it or not.

The final "knock-out" blow

And on top of all this, there is the "wild west" of administering anesthesia during colonoscopies. Not only does anesthesia add to the procedure's risk, but this service is billed separately—and is all over the map.

For anesthesia during one surgical procedure, for the exact same service, one anesthesia group practice charges \$6,970 from a large private health insurer, \$5,208 from Blue Cross Blue Shield, \$1,605 from Medicare, and \$797 from Medicaid.⁵

What is the real cost of providing this service?

Who knows!

A better question is: *Why* are anesthesiologists involved in colonoscopies at all?

Colonoscopy does not require general anesthesia. Moderate sedation—a drug like Valium, or another

intravenous medicine that takes effect and wears off quickly—is all you really need. Both of which could technically be administered by any nurse in any doctor's office. There is no clinical benefit whatsoever from having anesthesiologists involved in this procedure. But it adds a further cost of \$1.1 billion per year.^{7, 8}

So, who is keeping the anesthesiologists where they don't belong? Our "friends" at the FDA. They refuse to modify the drug labels advising that moderate sedation must be performed in the presence of an anesthesiologist (a policy that the American Society of Anesthesiologists lobbies strongly to keep in place, of course).

So all of this leads us to the \$1 billion question...

What are the alternatives?

Here we have yet another situation where the most expensive, most dangerous screening procedure has simply never been proven to be better than less expensive, safer procedures.

Three proven alternatives to colonoscopy are:

- 1.) The long-established **hemoccult test** detects blood in the stool as a sign of intestinal bleeding. When there is bleeding in the lower intestinal tract it can be seen as bright red blood in the stool. But when the bleeding is higher up, the blood breaks down and becomes invisible, or "occult." Fecal occult blood testing can decrease the risk of death from colorectal cancer by 33 percent.⁹ Not bad for a test that is cheap, completely safe, non-invasive, and that you can administer yourself in the privacy of your own bathroom.
- 2.) To get an actual look inside the lower intestine, opt for a **sigmoidoscopy**. Unlike colonoscopy, which examines the entire colon, sigmoidoscopy only enters the lower large intestine, which is where most cancers occur. Several recent studies have shown that this screening method is as effective as colonoscopy—if not more so.^{10,11} In fact, according to one of these studies, getting just ONE sigmoidoscopy between the ages of 55-64 can reduce incidence of colorectal cancer by 31 percent and colorectal cancer

mortality by 38 percent.¹² A sigmoidoscopy can be done right in your doctor's office and doesn't require any sedation. Which makes it much less expensive—and also much safer— than colonoscopy.

3.) A relatively recent development has been **CT colonography**, which involves doing CT scans to detect colon polyps. In general, CT colonography is done every five years, but radiologists have worked out several more specific guidelines for individual cases—including instances of positive fecal occult blood tests (FOBT), and to deal with the frequent problem of an “incomplete colonoscopy.”

Please don't misunderstand my intention. In no way am I downplaying the importance of colorectal cancer and effective screening for this potentially deadly disease. However, I—and many others—do take issue with the medical subspecialists' *carte blanche* recommendation of colonoscopy. The available science simply doesn't support it as the be-all, end-all of colorectal cancer screening. And, as always, when it comes to your health, it's absolutely critical to follow the science.

The fact is, there are serious risks associated with colonoscopy...and its superiority is unproven. But there ARE alternatives. Safer ones. That do a better (or, at the very least, safer) job of reducing mortality from this disease.

If you have your doubts about getting a colonoscopy, make sure to consult with your primary care physician regarding your family history, personal medical history, and any current health problems or symptoms, to find out whether starting with safer, less expensive options—a hemoccult test, a sigmoidoscopy, or the new CT colonography scan—may be right for you for colorectal cancer screening and prevention.

And remember, you can lower your risk of colorectal cancer in the first place (and any other form of cancer, as well as many other chronic diseases, for that matter) by following the diet, exercise, and supplement recommendations you'll find throughout your issues of *Logical Health Alternatives*.

Also...

U.S. ranks as a world leader—in health care costs

It's not just colonoscopy that is too expensive. Americans pay more for almost everything we get from the healthcare system than people in other countries.

Hip replacements cost four times as much here as in Europe. Caesarian sections are three times more expensive than in Britain and New Zealand. A common nasal spray for allergies costs over five times more in the U.S. than in Europe. Hospital stays are three times more expensive in the U.S. compared to the rest of the developed world (even though they are being cut shorter and shorter by insurance companies).

We are prescribed more frequent, and more expensive, tests and procedures than in other countries—whether or not those countries have private or government health systems.

The International Federation of Health Plans compiled a list of drug treatments, scanning tests and other procedures which shows the U.S. is the most costly in all of their 21 categories—often by a huge margin.⁶

CHAPTER 3: COMMON BLOOD PRESSURE DRUGS TRIPLE BREAST CANCER RISK

Blood pressure drugs are one of the most common and widespread medical treatments in the U.S. today. And breast cancer is generally the No. 1 concern of women in the U.S.

So, why has it taken until now to perform a study on the risk of breast cancer from long-term treatment with blood pressure drugs?

For years, the NCI has supported research into dietary factors that may increase cancer rates.

But it seems that in order to find the risk factors that really increase cancer, they should be looking at drugs, not foods.

Turns out, calcium-channel blocking blood pressure drugs cause double to triple the risk of breast cancer.¹

Believe it or not, this finding comes from the Fred Hutchinson Cancer Research Institute in Seattle. The same organization I told you about previously in this issue. The one that just published their clueless study on fish oil and prostate cancer, and then selectively and wildly over- interpreted their suspicious “results.”

But now they seem determined to under-interpret their shocking discovery regarding blood pressure drugs and breast cancer.

In fact, they were quick to say there was no reason to change clinical practice in any way. Despite the fact that women who took the calcium- channel drugs for 10 years or more were two-to-three times more likely to develop invasive lobular breast cancer (2.6 times) or invasive ductal breast cancer (2.4 times).

These cancer-causing, calcium-channel blood pressure drugs are now among the most frequently prescribed medications in the U.S. They account for nearly 98 million of the 678 million prescriptions filled per year.

The Seattle researchers expressed “surprise” at their findings (again, having had no apparent hypothesis, to

test in the first place). But other scientists suspect that these drugs increase cancer risk by preventing apoptosis. Apoptosis is a kind of programmed cell death.

Ironically, independent scientists have confirmed that in terms of design and statistical analysis, this was a “first-rate” study. Yet this Center’s poorly designed, misinterpreted study on fish oil and prostate cancer was shamelessly shouted from the roof tops.

Now they’ve conducted a better designed study with a drastic conclusion that affects 100 million women, nearly tripling their rate of breast cancer. And what do they conclude? Nothing.

If you are taking a calcium channel blocker for blood pressure, consult with your doctor to see if you might be able to switch to another blood pressure medication. When it comes to choosing a blood pressure drug, the safest course of action is to work with your doctor to choose one that’s been around for many years. As I always say, newer is not always better—or safer.

Just remember, everyone is an individual and may react differently to different medications. It may take some trial and error, with very close monitoring, to find the right medication for you. But the time you invest could very well save your life.

CHAPTER 4: “FRAT-BOY DIET” DISCOVERY LEADS TO ULTIMATE PROSTATE PROTECTION

I’ve written before about the government’s failed campaign to promote beta-carotene as an anti-cancer solution. The more my colleagues at USDA’s Beltsville Human Nutrition Research Center and I delved into the research, the clearer it became: There was no correlation between dietary or blood levels of beta-carotene and cancer.

In other words, beta-carotene was not the cancer savior the National Cancer Institute promoted it to be.

But something good did come out of the research my colleagues and I conducted some 25 years ago...

We found that while beta-carotene doesn’t protect against cancer, other carotenoids—such as lutein and lycopene—**do**.

At the time, no one had ever heard of these carotenoids before. Of course, since then they’ve become much more well known. In fact, lycopene has taken center stage for being highly protective against prostate cancer. And it really should be at the top of every man’s prostate cancer prevention priority list—followed by a few other specific nutrients. There’s also one very important step you should take when supplementing with these nutrients to ensure you get their full protective benefits.

I’ll give you all the details in just a moment. But first, let’s take a closer look at lycopene.

Pizza, burgers, fries...and healthy prostates?

When we performed our original study on dietary consumption and blood levels of carotenoids, we were initially amazed at the high levels of lycopene among young college students from our local state school, the University of Maryland. When we broke this down further, we found the students had very high consumption of some seemingly “unhealthy” foods—like pizza, hamburgers, and French fries. But all of these foods had one thing in common: tomatoes.

The pizza, of course, was topped with thick tomato sauce. And the burgers and fries were typically doused with a hefty serving of ketchup.

In nature, of course, tomatoes are the primary abundant food source of lycopene. And when they’re heated and concentrated during the manufacturing process to produce ketchup, tomato sauce, or other tomato-based products, the natural lycopene actually becomes more concentrated and remains bio-available.

Contadina tomato paste was famous for getting “eight great tomatoes in that little, bitty can.” And tomato paste is essentially like a concentrated lycopene supplement.

Even lycopene’s “side effects” are benefits

Since our discovery of lycopene at the USDA, numerous studies have demonstrated that this nutrient not only reduces prostate cancer risk, but also heart and circulatory disorders, immunologic dysfunction, and general inflammation.

Granted, not all the studies on lycopene have been positive. But this probably represents differences between using a therapeutic “dose” and an ineffective level of consumption. For example, population studies show that a minimum daily intake is essential for disease prevention. Some studies have seen positive results with doses as low as 3-5 mg per day. But others have shown more promising results with daily consumption of 10-12 mg.

The most recent study, published in the journal *Neurology* showed a decreased risk in stroke with just 10 mg of lycopene per day.¹ More than 50 percent decreased risk, to be precise. A truly remarkable feat.

Especially when you consider how easy it is to get 10 mg of lycopene. Even without supplements. A wedge of watermelon, for example, has about 12 mg of lycopene. And a cup of tomato juice has even more, of course, at 22 mg of lycopene.

Even the most effective drugs hardly come close to this magnitude of benefit. And they’re usually associated with negative side effects.

Meanwhile, the “side effects” of lycopene are simply more benefits. For example, studies completed at the University of Kentucky show that elderly individuals consuming 30 mg of lycopene had significantly enhanced preservation of memory.

And lycopene was enough to keep a substantial segment of the population free-living and independent—without requiring an extended-care facility. Such a simple step would result in substantial savings in health care costs. Not to mention a great improvement in the quality of life for senior citizens.

In other studies, eyesight problems, including macular degeneration, were significantly decreased by the consumption of lycopene.

Lycopene even appears to offer some “anti-aging” and cosmetic benefits. The consumption of lycopene has been shown to decrease the development of wrinkles. And it may be able to diminish your reaction to sunburn.

So this simple nutrient can protect you from harmful UV rays without toxic and dangerous “sun blocks.” As an added benefit, it still allows you to get enough sun for healthy vitamin D levels. And getting optimal vitamin D is important for cancer prevention, including prostate cancer.

Four more nutrients to round out perfect prostate support

Speaking of nutrients to support prostate health, here is the complete list of my specific recommendations:

Lycopene 5 – 15 mg
Selenium 100 mcg
Vitamin D 2,000 IU
Vitamin E 50 IU

One important note: All of these nutrients are fat-soluble—which means taking them with an oil increases their absorption and their effectiveness.

So I also recommend taking a fish oil supplement, 1-2 grams per day. If you absolutely can’t bring yourself to take fish oil, at the very least, you should opt for some other source of omega-3 fatty acids. And don’t forget to

eat plenty of fish, tomatoes, and other food sources of the above nutrients. See the box below for a list of good options.

Remember, people eat foods, not nutrients. Tomatoes, and other foods with lycopene also have an extensive array of other antioxidants and phytonutrients. It is important to remember that other carotenoids and flavonoids in foods often have synergistic benefits.

Of course, how foods are grown is also important to preserve their nutrient content, as well as their taste.

Harvesting your health

I admit that I’m more than a little skeptical of the so-called “organic” movement—at least since big government and big industry have stepped in.

And a recent study from Stanford University Center for Health Policy has cast more doubt on “organic” farming. Researchers examined data from 237 previous studies. They found that when it comes to certain nutrients, there is not much difference between organic and conventionally grown foods.²

However, studies have shown that the levels of lycopene in organic tomatoes are at least double those in conventional tomatoes.^{3,4}

These days, it’s easy to substantially improve your health with in-season consumption of locally grown tomatoes and other brightly colored fruits and vegetables. They not only taste better, but will yield long-term health benefits.

But as the harvest season winds down this year and we head into winter, you can keep up your healthy levels of vitamin D, lycopene, and the other nutrients mentioned above with high-quality supplements.

Prostate protection on your plate	
Nutrient	Food source
Lycopene	Tomatoes, tomato products (ketchup, tomato sauce, tomato paste, tomato juice), guava, watermelon, pink grapefruit, cherries
Vitamin D	Swordfish, salmon, tuna, sardines, liver, egg yolk
Selenium	Brazil nuts, tuna, halibut, sardines, shrimp, ham
Vitamin E	Sunflower seeds, almonds, hazelnuts, peanut butter
Omega-3 fatty acids	Fish oil, salmon, mackerel, cauliflower, chia seeds, flax seeds, walnuts

The surprising origin of this Italian staple

Tomatoes were originally called *tomatl* and cultivated among the Aztec in MesoAmerica (modern central Mexico). When the Spanish brought them back to Europe in the 1500s, they were initially considered poisonous as a member of the *Solanacea* family which includes other plants such as “deadly nightshade.” Believe it or not, tomatoes did not appear on an Italian menu until the 1700s. But by the time mass immigration of Italians to the U.S. occurred in the later 1800’s, tomato sauce had been firmly established as an “Italian American” dish.

CHAPTER 5: SUPPLEMENTS IMPROVE BREAST CANCER SURVIVAL

If you’ve been reading *Logical Health Alternatives* for a while, it’ll come as no surprise how little mainstream doctors know about nutrition research or supplements.

Most doctors say they just don’t believe in it, aren’t interested, and/ or don’t have time. But even doctors who do say they’re interested in and knowledgeable about nutrition often get it wrong. In fact, I just participated in an exclusive survey of doctors who do include nutrition in their practices.

And judging by their answers to supplement questions, it really makes me wonder about all these “johnny-come-lately” nutrition docs and “natural-know-it-alls.”

Take the standard advice for cancer patients and survivors. The mantra has always been that vitamin and mineral supplements—especially antioxidants—could interfere with chemotherapy and radiation treatments.

Of course, this wasn’t based on anything resembling science.

Those of us who know a thing or two about nutrients have always known this theory doesn’t hold water. In fact, I laid that red herring to rest when I ran the Center for Integrative Medicine at Thomas Jefferson University Hospital in Philadelphia nearly 10 years ago.

My team and I proved to several different hospital committees that there was no evidence for harm, but evidence for benefit, in offering intravenous vitamin C to cancer patients. The evidence is summarized in my book, *Complementary and Integrative Therapies in Cancer Care & Prevention* (New York: Springer Publishers, 2007).

Unfortunately, a lot of mainstream doctors still haven’t gotten the memo. Maybe a powerful recent study on the subject will change that.

The real effects of vitamins on cancer

One of the reasons this recent study is so significant is that it used a very large sample size—12,019 women with breast cancer. Another reason is that it looked

at women in the United States *and* women in China. We often include China in cancer studies because of the significant differences in diet and nutrient intakes between the United States and China. These allow us to observe a greater range of different vitamin intake levels.

The researchers in this study wanted to find out once and for all what effects supplements have on breast cancer recurrence and survival. They looked at vitamins A, B, C, D, E and multivitamins, taking into account supplement use from one to five years after breast cancer was diagnosed.

Their findings were right in line with what I knew years ago: Higher vitamin C intake is associated with a decreased risk of cancer death. They also found that higher intake of vitamins D and E each are associated with a decreased risk of cancer recurrence.

Lumped together, antioxidants were associated with a 16 percent reduction in cancer deaths.

So not only is the use of vitamins not associated with increased cancer deaths or recurrence, it actually is linked to decreased death and recurrence. This study effectively confirms that myths about “dangers” of dietary supplements for cancer patients have no basis.

What’s more, these supplements probably helped protect patients against the toxic side effects of standard cancer treatments.

The researchers note that sorting out the effects of individual vitamins on cancer survival and recurrence is a larger question. But given the poor quality of many supplements, especially most common multivitamins, it is encouraging that this study still found significant beneficial effects.

That would lead us to believe that using high-quality supplements, with the right ingredients, at the right doses, in the right combinations (which are often missing from multi-million dollar cancer research studies) will provide even more protection and benefit to women with cancer.

The bottom line is that cancer survivors should forget

everything they’ve heard about avoiding supplements during recovery. Vitamin supplements not only aren’t dangerous, they actually may increase survival rates, decrease recurrence rates, and stem the side effects of traditional treatments.

That’s good news for the more than 2.8 million women in the United States with a history of breast cancer who want to take charge of their health.¹ Put a pink ribbon on that one, and wrap it up in red and green for Christmas.

CHAPTER 6:
WHY BIG PHARMA'S "LATEST, GREATEST"
WONDER DRUGS USUALLY AREN'T YOUR BEST BET
Plus a dozen tried-and-true medications that are
still the best in class

At New Year's, conventional wisdom counsels "out with the old, in with the new." But when it comes to choosing medicines, that advice is often dead wrong. You know that I'm an avid proponent of disease prevention and natural health. But for the times when pharmaceutical drugs are necessary, I want you to be informed so you can make the safest, most effective choices. Which often are at odds with what the pharmaceutical industry is trying to sell you.

As a matter of fact, despite what the flashy new pharmaceutical ads would have you believe, you are often better off holding on to proven, safe, and effective drugs that have been around since the early 20th and even 19th centuries. Not the new, blockbuster drugs. And the good news is that most of the oldie but goodie "drugs" actually come from nature in the first place!

If you pay attention to the research—and not just the glitzy ads—the facts are clear. For instance, a recent analysis from Harvard showed that over the past three decades **only 10 percent** of new drugs approved by the FDA are more effective than their predecessors. Even worse, a full 50 percent of them are actually less safe.¹

I can think of at least a dozen drugs for common medical conditions that have simply never been improved upon. Most go back to the mid-20th century. But some have been around since the early 1900s—and even the 1800s.

And why should that be surprising? After all, the human body has not changed over the last 200 years. So it makes sense that early medical research yielded some of the best drug treatments long ago. Most were based on nature anyway. And nature had it all figured out long before the pharmaceutical giants began to rule the world.

The question is: Why haven't most doctors figured it out yet?

Until they do, here is a list of the excellent "oldie but

goodie" drugs that are still available. These tried and true, proven medications have passed the period of post-marketing surveillance by the FDA (as I've often recommended)—sometimes by a century.

Age-old pain remedies

The natural world is replete with analgesic and anti-inflammatory compounds, and we humans have been taking advantage of them for as long as we've been around. In fact, the human body is even capable of producing its own natural pain killers, as my late friend and colleague at NIH and Georgetown University Candace Pert discovered. These substances—enkephalins and endorphins—bind with pain receptors to block pain in the brain. Some drugs we take to control pain do essentially the same thing. And the best, most effective pain-controlling drugs are derived from natural plant sources.

The best example is the opium poppy, which produces **morphine**—still the most effective pain killer ever produced. Morphine was first sold in 1827 by Merck, which was a small chemist's shop at the time.

The reason morphine and its derivatives are so effective is that our brains and central nervous systems have built-in receptors for the opiates in these medications. It's a match made in pain-relief heaven.

Thus, morphine has since been formulated into drugs using every possible method of delivery, including oral tablets, rectal suppositories, intravenous (including self-administered drips for patient-controlled pain relief), and transdermal patches.

But, unfortunately, like many good things, opium also has a history of abuse. And that's where the focus has been for the past century. So outside of a hospital setting, you're less likely to get this gold-standard pain-reliever. At least, not without extensive scrutiny.

The good news is, there are also many other effective natural pain relievers.

In the meantime, **aspirin** is yet another "great grandfather" drug for pain. Originally derived from the

bark of the willow tree, aspirin also occurs naturally in meadowsweet grass, a much more abundant and harvestable source. Aspirin has been marketed as a drug since 1899 and is widely available over-the-counter. In addition to being the old standby for headache, pain, and fever, modern research has found it to be effective in low doses for cardiovascular diseases, including prevention of first heart attacks, and prevention of recurrent heart attacks and strokes.

Aspirin has faced its share of criticism (much of it misinformed). But the truth is, it's much safer than most other pain relievers. Especially acetaminophen, which you should avoid at all costs. (Recent research links acetaminophen to autism, ADHD, and asthma. It's also the leading cause of acute liver failure in the US).

History's best blood sugar fix

Diabetes has become a modern-day epidemic. And the pharmaceutical industry is doing its best to keep cashing in, with a whole slew of new blood sugar drugs from which to choose. But just because they're new doesn't mean they're "improved." In fact, the new, expensive anti-diabetes drugs are proving to have a number of problems with safety. Which is why the oldest blood sugar balancing options are still the best choices.

First and foremost, you have **insulin**. Of course, insulin is a natural substance made by the pancreas to drive glucose from the blood into the tissues. It was actually first discovered in the mid-1800s, but it wasn't until the 1920s that it was isolated for therapeutic use. Canadian medical student Charles Best, working under his professor, Frederick Banting, was awarded the Nobel Prize for this ground-breaking discovery.

And then there's the medication that set off the modern era of oral "drug" agents to lower blood sugar. I'm referring to Glucophage, now available as the generic form **metformin**.

Like morphine and aspirin, metformin comes from nature. It is originally from an ancient herbal remedy known as French lilac or goat's rue in Europe (in the US it grows wild but is classified as a "noxious weed" by the USDA). Metformin was first synthesized as a

drug in the 1920s but was initially overshadowed by the development of insulin as a treatment for diabetes.

Still in Europe, interest returned during the 1940s, and in 1957 it was first tested in diabetes. However it did not become available in the United States until 1995, two generations later (largely due to FDA fumbling—which persists to this day).

As I've said before, metformin is a superior drug in terms of safety and effectiveness. And it's now taken by tens of millions of people worldwide. Its main "side effects" are reducing the risk of other chronic diseases, such as cancer, including the deadly pancreatic cancer. Metformin does contribute to depletion of Vitamin B12, so it is important to take a high-quality B vitamin supplement—which is also good advice in general.

One of the big problems with diabetes is the damage to blood vessels, which can eventually progress to blindness, dementia, heart disease, kidney failure, and peripheral neuropathy. And while other diabetes treatments lower blood sugar, they do not prevent cardiovascular complications. Metformin is the only drug that has been conclusively shown to prevent these deadly and debilitating side effects of diabetes.

Old-school antibiotics still do the job

When the drug **isoniazid** was first synthesized in 1912, it was used to treat mental illness. It was only after it was in use for some time that doctors eventually discovered it was also an antibiotic.

In the first part of the 20th century, mentally ill patients were often sent to live in large institutional treatment facilities. Because they were so crowded, these places were also breeding grounds for chronic infections such as tuberculosis (TB) and hepatitis.

By 1945 doctors noted that patients given isoniazid for mental illness were being cured of TB. This finding was a major development as there was no cure for TB at that time, other than the Nature Cure (which nonetheless was effective about half the time). But isoniazid was able to treat the other half. In fact it was so successful that it's what we used, in combination with other antibiotics, to

treat TB when I was in Southeast Asia in the 1970s. It is still used today in some circumstances.

Of course the other antibiotic that provided a “miracle cure” for infection was **penicillin**. It was discovered accidentally in 1928 when Alexander Fleming noticed that colonies of Staph bacteria could not grow where mold spore contaminants had blown into them from an open window. Fleming found that the bacteria-destroying mold was *Penicillium notatum* and the world eventually took note indeed.

Penicillin is still the best drug today for most people against many infections (strep throat being one common example) who do not develop an allergy.

During the 1950s, research determined the chemical structure and fermentation process for **tetracycline**, which was then patented in 1955. Within three years, it was the most prescribed broad-spectrum antibiotic in the United States. Tetracyclines are used for urinary tract infections, chlamydia, anthrax, plague, and more. Minocycline and doxycycline (originally tested for scrub typhus and now Lyme disease) are also used for the treatment of acne. Current research is focusing on their anti-inflammatory properties and their potential for neuroprotection against Alzheimer’s disease, stroke, Parkinson’s disease, and AIDS-related dementia.

Of course part of the game today is developing new antibiotics to overcome the bacterial resistance we’ve developed to old antibiotics that have been overused. During the antibiotic era of “miracle cures” for infections, *magic bullets* have turned into *friendly fire*. You can help fight the growing problem of antibiotic resistance by only taking them when necessary. Don’t demand or take antibiotics for a viral infection. Antibiotics are life-saving drugs that should often be reserved for a life-threatening illness. Unfortunately, their overuse has led to resistant strains of truly life-threatening bacteria for which there is no cure.

The game-changer for coronary heart disease

Coronary heart disease is a common form of heart disease caused by narrowing of the coronary arteries (they’re

called coronary because they form a “crown” around the top of the heart, sending descending branches to supply blood to the constantly beating heart muscle). When the heart muscle doesn’t get enough blood and oxygen, it causes a crushing chest pain. But since the brain is not used to perceiving pain coming from the heart, the pain is often “referred,” or felt, as pain in the arm, neck, or jaw from collateral nerve fibers. This pain is called *angina pectoris*, from the Latin “pain in the chest.”

Nitroglycerin (NG) is a simple chemical compound used in mining and excavation for its explosive properties when detonated. It was first used in medicine when William Murrell realized it could treat angina pectoris. He published his results in 1878. It became a standard symptomatic treatment for the growing problem of coronary heart disease throughout the 20th century.

It wasn’t until 2002 that an enzyme was found to convert NG to an even more simple chemical, nitric oxide. Nitric oxide potently dilates blood vessels like the coronary arteries to provide more blood supply and oxygen to the heart muscle.

Nitric oxide is now being studied for bone health (to improve bone formation and reduce bone resorption) and for healing diabetic foot ulcers. It is also being investigated for treatment of metastatic prostate cancer. This just goes to show that research is finding new potential even in very old drugs.

Modern-day relief from Nature’s oldest gout reliever

Gout is an exceptionally common—and exceptionally painful disorder. And one of the oldest remedies is **colchicine**, a compound found in the Autumn crocus. Its use dates back as far as 1500 BC and it was first recorded as a treatment for gout in the first century AD. When European physicians first came to America it was grown in colonial physic gardens of the 18th century.

Colchicine had been available generically after being “grandfathered” by the FDA. However, in 2009, FDA granted URL Pharma an exclusive license, which increased the price of its “new” branded version from 10 cents to \$5

per tablet. While other treatments have been developed for gout, colchicine is still the best, most effective choice. And it's also now being researched as a treatment for cancer and cardiovascular disease. (Which probably explains why Big Pharma is interested in it again...)

Centuries-old diuretics

Many plants have a diuretic effect. Early diuretic drugs were all herbal derivatives, some in use since the 1500s. They were initially key for treating edema due to congestive heart failure. When the heart is not pumping effectively, it cannot move blood into the circulation. As a result, blood and fluid backs up into the lungs, causing "congestive heart failure." That leads to a backup, with fluid accumulating in the tissues, causing a condition known as edema.

Diuretics move fluids through the kidneys to be excreted in the urine. But a more direct approach was offered by **digitalis** from the purple foxglove plant. Used as a folk remedy by a "wise woman" in 18th century Shropshire, England, the physician William Withering brought it into medical use.

Digitalis acts by directly strengthening the heart muscles, causing more effective heartbeats and blood circulation. It became the standard treatment for congestive heart failure and is still one of the most effective medications for it to this day.

Nature's anticoagulants

As you can imagine, when blood backs up due to heart failure, ineffective heartbeats, or damaged veins, there is a tendency for the pooled blood to clot. Anticoagulants prevent this clotting from happening. That's why they're given in many heart and circulatory conditions.

The clues that led to the discovery of **warfarin**—the world's most commonly used anticoagulant—began to emerge in the 1920s. Cattle that ate moldy sweet clover hay were dying of internal bleeding. In the coming decades, that phenomenon led to the discovery of an anticoagulant compound in the mold growing on the hay. That compound, dicoumarol, was approved for prevention and treatment of blood clots and embolism

in the 1950s. Now called warfarin, the drug can still be found on medicine shelves throughout the world.

Warfarin sets itself apart from newer anticoagulants in a very important way: It can be rapidly reversed to stop bleeding when necessary unlike the newer drugs. If you have problems with blood clots you need to consult with and be monitored by your doctor. Both blood clotting and bleeding are dangerous conditions that can be rapidly fatal, which means it's not something you should try to manage yourself. Also, be aware that some common herbal remedies may contribute to bleeding when taken with other drugs or just before surgery or medical procedures.

Say no to new antidepressants

We hear a lot these days about SSRIs (selective serotonin reuptake inhibitors) for treating depression. But more than 50 years ago, drugs called MAOIs (monoamine oxidase inhibitors) were found to act on serotonin, norepinephrine, and dopamine to treat depression. Their use dropped dramatically after relentless promotion of newer SSRIs and exaggerated concerns about food reactions with MAOIs.

Of course, now we have an abundance of studies showing serious adverse effects with SSRIs. So now people are taking a second look at MAOI drugs—with good reason. It's also worth noting that a number of natural products also have MAOI properties, including resveratrol, curcumin, ginkgo, and coffee. St. John's wort is well established as safe and effective for mild-to-moderate depression.

What's old is new again

Some of the best "drugs" have been around for a long time as natural products. It turns out they have multiple benefits in addition to the historic uses we already knew about. Of course, since they can't be patented, Big Pharma has not had any real interest in continuing to make them available. That is, unless they can find roundabout ways to get the FDA to license them again.

The bottom line is that newer isn't necessarily better when it comes to drugs. If a medication has been

around for centuries and is still in use, it's probably with good reason.

So if circumstances call for it and you need to take medication, ask about the possibility of using older drugs. They're effective, and their side effects and safety have already been well established after many years of use. Bonus: These "oldie but goodie" drugs also have the "oldie but goodie" low prices to go along with them.

CHAPTER 7: 10 TIPS FOR A BALANCED DIET ON A BALANCED BUDGET

The mainstream media likes to lodge politically correct complaints that a healthy diet is too expensive for the average American. That's simply not true. Sure, if you only shop at overpriced places like Whole Foods and other upscale food emporia, you can blow your food budget. But those money pits are not the only places to buy high-quality foods. In fact, it seems to me that overpaying for food has become the latest fashion statement by urbanites, suburbanites, and the politically correct who aren't actually clued in to all the really important information about good nutrition.

Really, it's not rocket science. In fact, your grandparents knew just about all they needed to know about nutrition by living on the family farm. And there was nothing fancy about the family farm.

So, how can you watch your expenses while staying right at your usual grocery store? Well, the good news is, most regular supermarkets have already responded to consumer demand by supplying sections with fresh, healthy, organic foods of all varieties. Many also offer produce grown within 50 miles, so you can support local farmers instead of big agri-business.

With that in mind, here are 10 simple tips for improving your diet without breaking the bank.

1. Forget all the fad foods. As with too many dietary supplements, the current "it foods" are hot because of hype, not nutritional science.

There is no reason to buy goji berries from the Himalayas at \$14 a pound when raisins, for example, are filled with constituents like resveratrol, which have been better studied by science. And cleverly packaged pomegranate juice is good for you, but it's no better than any number of fruit juices in terms of antioxidants.

If you want to drink juice (though I prefer water—check out #10 on this list), you can approximate the taste of pomegranate juice—at far less cost. Just mix cranberry juice with a little lemon, both of which also

have a host of health benefits.

2. Choose your organics wisely. Organically grown foods allow you to avoid pesticides and other agricultural chemicals. Organic makes sense with fruits and vegetables that you can and should eat with the skin: apples, celery, cherries, grapes, nectarines, peaches, pears, peppers, potatoes, raspberries, spinach, and strawberries. The skins have more vitamins. If a fruit or vegetable has a thick inedible skin, like bananas or pineapples, paying extra for organic doesn't make sense. When it comes to meat, milk, butter, and eggs, organic makes a world of difference in both healthfulness and taste. So it's worth the "splurge."

3. Budget for beef. Despite years of government health "experts" trying to convince the public that red meat will kill us, the fact is, red meat provides bioavailable protein, B vitamins, essential minerals, and a host of other nutrients hard to get from other sources. So forget everything you've heard from so-called government "experts," and indulge in a hearty steak—or bottom round, hanger, tri-tip, or shoulder cut. (Just make sure to budget a little more for the organic varieties. As I said above, this is one instance where it's worth it—from both health and taste perspectives—to spring for organic.)

4. Don't buy bagged lettuce. It may seem convenient, but bagged salad greens are ridiculously expensive and create unnecessary packaging and waste. Plus, the supposed convenience of not having to wash the lettuce disappears when you consider the fact that contamination appears to be more of a problem with bagged lettuce. Get your produce fresh, whole, and un-bagged. Another bonus: Un-bagged produce stays fresh longer, since grocers water it periodically.

5. Buy single ingredient spices in larger quantities. Spices are herbal remedies by another name and they're calorie-free. So it's definitely worth budgeting for them. But make sure you're not paying more for packaging than for contents. Buy in bulk from natural food stores. Avoid expensive spice mixes and instead just use specific individual ingredients that are called for in recipes. Most spices will stay fresh for at least two years. (Powdered red spices, such as cayenne, chili, and paprika have a shelf-life of one year.)

6 Make your own salad dressings. There's simply no reason to buy bottled salad dressings. In addition to being expensive, they are full of unhealthy ingredients, fats, sugars and/or salt that have no place in a healthy salad. A basic— but delicious—salad dressing takes seconds to make. Just mix olive oil with vinegar or lemon oil. Then if you feel like it, throw in some of those healing (and calorie-free) spices for added flavor. To reap the health benefits of olive oil, choose a high- quality oil and keep it fresh by using it within three months. (By contrast, vinegar can be kept around for years.)

7. Go nuts. Nuts and seeds are loaded with heart-healthy essential fatty acids and other bioavailable nutrients and minerals, and they have been shown to lower the risk of many chronic diseases. They also help you feel fuller throughout the day, making them a good snack food. Although they're relatively expensive, a little goes a long way. Save by buying in bulk and keeping them in the freezer.

8. Keep cereal simple. Forget the pricey, high-calorie, pre-sweetened cereals, as well as the trendy (and spendy) designer granolas. Instead buy a big container of steel-cut oats. The only oats that are really heart-healthy are steel-cut, because they retain the healthy bran and not just the carbs.

Use the oats to make old-fashioned hot oatmeal and add natural sweeteners such as maple syrup, honey, molasses, or agave. Toss in some dried fruit and nuts to make a quick, delicious, and inexpensive breakfast.

9. Give your trash can a break. Americans waste 15 to 30 percent of all the food they buy. When tomatoes get a little soft, chop them and cook them to make your own tomato sauce base. When vegetables begin to limp in the "crisper," use them to make your own vegetable stock. When bread turns hard, make breadcrumbs or croutons for your salads. When a recipe calls for egg whites, save and cook the yolk for a healthy sandwich or salad. When you buy a whole chicken, cook and consume the whole thing.

10. Drink one thing. There is no need to consume any type of expensive bottled beverages, carbonated sodas, or juice drinks. You are paying for bottling,

transporting, and stocking drinks that are 99% water—a highly wasteful use of packaging, energy, fuel, and space just to provide products that “replace” water. Many of these beverages also contain unhealthy, high-fructose corn syrup or artificial sweeteners. Studies show that instead of being a healthier option, artificial, zero-calorie sweeteners can actually be just as unhealthy for metabolism, obesity, and diabetes as is sugar.

Instead, you should get the fluid you need from water. Of course, since today’s public water sources are full of chlorine and toxic hydrocarbons, it’s important to invest in a good filter. And to truly get the hydration you need—at the cellular level—I recommend adding South African red bush to your water. You can get it in tea bags or opt for the convenient Red Joe powdered drink mix that I helped formulate.

CHAPTER 8: THE NATURAL DIABETES TREATMENTS THE GOVERNMENT WON’T TELL YOU ABOUT

In November 2013, the National Center for Complementary and Alternative Medicine (NCCAM) showed once again just how out of touch they all are...

The agency issued a blanket statement that “there is not enough evidence to suggest that any dietary supplement can help prevent or manage type 2 diabetes.”¹

This conclusion is more than a little ironic. Especially coming from an organization whose mission is “to define, through rigorous scientific investigation, the usefulness and safety of complementary and alternative medicine interventions and their roles in improving health and health care.”

And this new proclamation would be laughable—if it weren’t for the confusion it will undoubtedly cause well-intentioned health practitioners.

Not to mention the damage it will cause diabetic patients. Who will miss out on the real and necessary health benefits supplements can provide.

Of course, this misguided statement is just the latest example of the reductionist, over-simplified perspective we have come to expect from the government. But it’s not just misinformed. It’s also dead wrong.

And downright dangerous.

The nutrient still desperately needed by 40 percent of diabetes patients

Just look at the outright dismissal of magnesium.

According to the November 2013 edition of the NCCAM’s online *Clinical Digest*, “There is no evidence... that magnesium is beneficial in managing diabetes in the absence of magnesium deficiency.”

Sounds simple enough. Except *nearly 40 percent of people with diabetes DO have magnesium deficiency!*

And even diabetics who aren’t clinically deficient can benefit from magnesium.

One clinical trial found magnesium improved blood glucose and insulin resistance.² Another study found low magnesium levels increase risk of depression in diabetics.³ And, most importantly: When people with diabetes are critically ill, they're more likely to die if they have low magnesium levels.⁴

So how can the NCCAM just ignore all these benefits? Simple: They take a drug research approach to dietary supplements.

The type of research we need can only be done by clinicians trained in nutritional biochemistry, dietary assessment, and clinical nutrition therapy. And unfortunately you won't find such real experts in our government health agencies.

Which means countless natural therapies that show promise for diabetes aren't being used as effectively as they should be.

I'll tell you more about all of those below. But first let me explain why a truly integrative approach to diabetes is so important.

What an "integrative approach" really means

By now you're probably used to the "natural know-it-alls" who refuse to ever consider drug therapy, no matter what the circumstances. If you ask me, these practitioners' blinders are just as big as the government's. And just as dangerous.

I choose to embrace true integrative/complementary medicine.

Instead of relying on one modality, I embrace all of them. Lifestyle, diet, nutritional supplements, herbal remedies, mind-body therapies, and, when appropriate, even pharmaceutical drugs.

All the recommendations I make are based upon the scientific knowledge and medical experience I've garnered over the years. And sometimes the natural approaches I recommend actually go hand-in-hand with drugs.

In fact, that's what the term "complementary" is really supposed to mean! Using natural therapies in

conjunction with mainstream drugs and procedures. To help enhance their potential. Or to offset any toxic side effects.

Sadly, this potential is often ignored by mainstream medicine.

But when it comes to managing diabetes, an integrative approach is absolutely essential. The stakes are just too high.

Diabetes is a primary risk factor for a number of chronic disabling conditions. Heart disease, stroke, circulatory disorders, kidney disease, and eye disease—just to name a few. And of course, diabetes itself can wreak havoc on your health on a daily basis.

It's also an increasingly common problem. The reasons why are a topic of hot debate. But it's safe to say our modern diet, poor beverage choices, sedentary lifestyle, and the misinformation handed out by the government-industrial-medical complex over the past several decades have stacked the deck against us.

So it's critical to approach diabetes from all available, effective avenues.

The good news is, there ARE effective treatments. And the cornerstone of my integrative approach for managing diabetes is metformin.

This popular diabetes "drug" is actually derived from a traditional herbal remedy—French lilac. And unlike a lot of pharmaceuticals, metformin is safe and effective. In fact, its one major "side effect" is that it lowers the risk of dangerous cancers. It's also the only diabetes drug that has been shown to reduce all the long-term complications of diabetes.

So metformin is truly the best of both worlds. It's an effective natural remedy available as a pharmaceutical grade treatment. And it has many additional benefits. Plus, it has been around long enough now that it is available as a generic. Which means low cost and a proven safety profile.

But metformin certainly isn't the ONLY thing diabetics need.

I mentioned the benefits of magnesium above. And how a startling number of diabetics have low levels of this essential nutrient. So it should certainly be added to your daily regimen. But there are also a dozen more nutritional supplements no diabetes protocol should be without...

The nutritional side of diabetes

The NCCAM's dismissal of supplements for diabetes does more than just miss the boat. It also belies the agency's fundamental lack of understanding of human metabolism and nutrition in general terms.

In diabetes, your body is literally "starving in a sea of plenty." Blood sugar is high. But that sugar can't get into the tissue cells that need it.

Metformin is great for getting blood sugar into those cells. But we know certain nutritional approaches can help nourish cells further.

Getting sugar into the cells is critical so they can make their own energy and generate their own hydration. This process is supported by **coenzyme Q10 (CoQ10)**. CoQ10 is even more important for diabetics taking statin drugs because statins reduce levels of this nutrient in the body. In fact, many of the well-known side effects of statins may result from this CoQ10 depletion. A good general dose of CoQ10 is 50 mg daily. Preferably in the form of ubiquinol, which is more readily absorbed. But people on statins or recovering from statin poisoning may need 100 to 200 mg per day.

Another key player in cellular hydration is red bush, or rooibos, (400 mg/day). This herb from South Africa helps stimulate the cells to generate energy and hydration. And new research shows red bush can do even more to help with diabetes. It helps lower blood sugar and supports getting sugar into the muscle tissues.

Sutherlandia frutescens (400–500 mg/day) is another herb from South Africa. As an adaptogen, it helps support all the body's metabolic functions. Including blood sugar metabolism.

Blood circulation also needs to be a target of any diabetes treatment plan. It's especially critical to ensure

proper blood flow to the central nervous system and eyes. In diabetics, the blood vessels that supply these essential areas can be damaged. To help prevent that damage, look for nutrients that can cross the blood-brain barrier, such as the carotenoid **lutein** (5–15 mg/day) and herbs like berberine (300–400 mg/day). **Berberine** has the added benefit of lowering blood sugar—a double benefit for diabetics.

In all metabolic disorders, including diabetes, it's important to provide the body optimal nourishment. That means following a healthy diet. And getting enough of vitamins **A** (15,000 IU), **Bs** (9 mcg B12, 3 mg B6, 1-5 mg folic acid), **C** (2,000 mg), **D** (5,000 IU) and **E** (100 IU).

In addition to magnesium, two other minerals are essential for supporting cellular metabolism in diabetics: **selenium** and **chromium**. And remember, you can't get optimal levels of these nutrients by following the RDAs alone. For selenium, 50 mcg per day is a good general dose. The chromium doses used in clinical studies vary. For diabetes, the daily amount ranges from 200-1,000 mcg, split into two or three doses. (Never exceed 1,000 mcg per day.)

You won't see mainstream medicine recommending this plan

Unfortunately, the government "experts" are still intent on dismissing natural supplements. But the good news is, we don't need to wait for them to remove their blinders.

With this comprehensive guide, you finally have a truly integrative approach to diabetes management.

Yes, metformin is an indispensable part of any diabetes protocol. In a sea of modern pharmaceutical disasters of Titanic proportions, metformin is an effective, affordable drug. And it remains the cornerstone of my diabetes treatment plan. But it's even better when combined with the nutrients I've just described. Not to mention the helpful herbs I list below.

Herbs for diabetes

Many herbal remedies could be excellent candidates for natural management of diabetes. Unfortunately, the necessary research hasn't been carried out to develop real-world clinical protocols. So we have limited information to go on.

But the research that is available points to a number of different ways herbal remedies may work. They may directly drive blood sugar into tissues, stimulate insulin production, and/or block formation of sugar in the first place.

Here are some of the most promising herbs for diabetes.

- **Aloe vera gel** has a number of effects that may help people with diabetes. In a recent study, it helped obese people with early-stage diabetes or prediabetes lose weight and reduce insulin resistance.⁵
- **American ginseng** (*Panax quinquefolius*) may improve hyperglycemia and obesity associated with diabetes.⁶
- **Asian ginseng** (*Panax ginseng*) may improve glucose tolerance, reduce serum insulin levels, and promote weight loss.⁷
- **Bilberry** (huckleberry) contains potent antioxidants. It has been shown to protect against damage to the eye's retina—one of the most devastating side effects of diabetes.⁸ Animal studies have shown it also lowers blood sugar and improves insulin resistance.⁹
- **Bitter melon** (*Momordica charantia*) is sometimes called "vegetable insulin." It contains at least three compounds that appear to help regulate blood sugar.¹⁰ It is a common remedy in Asia, Africa and Latin America.
- **Cinnamon bark**, as we reported in December, lowers blood glucose in people with Type II diabetes.¹¹
- **Curcumin**, a compound found in turmeric, may have a number of antidiabetic properties. Research suggests it improves insulin resistance, reduces body fat, and prevents or reduces diabetic retinopathy.^{12,13}
- **Fenugreek** seeds help stimulate insulin in

the presence of high glucose levels. A recent, comprehensive review of published studies found fenugreek has a beneficial effect on glycemic control in people with diabetes.¹⁴

- **Gymnema sylvestre** is known as gurmar in Ayurvedic medicine, which means "destroyer of sugar." Research shows extracts from this tropical plant reduce blood sugar in people with diabetes.¹⁵

As I said, there's simply not enough research on any of these herbs yet for me to feel confident making general recommendations about dosage to control diabetes. Dosages should be determined on an individual basis, according to your particular needs.

So if you are interested in adding any of the above to your integrative diabetes protocol, you should work closely with a practitioner skilled in nutritional medicine who can help determine the ideal doses for you. The American College for Advancement in Medicine (800-532-3688; www.acam.org) can help you find such a practitioner in your area.

CHAPTER 9:
FROM COLD CURE TO CANCER FIGHTER
The emerging healing potential of vitamin C

If you need clear evidence that the government has no interest in real nutritional science—or in our health—look no further than vitamin C.

We've known for decades that vitamin C is a powerful immune booster. And it can prevent more than just colds. Science is overwhelmingly clear that vitamin C, when given intravenously, is a bona fide cancer fighter. Unfortunately, the "political scientists" in Washington, DC, are just as blind to this fact today as they were when I was working at the National Cancer Institute (NCI) 30 years ago.

As a senior investigator at NCI, at the outset of their research program on diet, nutrition, and cancer, I saw the potential for vitamin C firsthand. And I also saw how it was blatantly ignored.

My team and I were investigating which nutrients to select for definitive testing in human cancer prevention studies. I witnessed a colleague bring the entire collection of research studies on the anticancer effects of vitamin C to our political bosses. She dropped the monumental pile on their desks—with a deafening thud. And it must have been deafening indeed, because the political bosses remained deaf to our arguments about selecting vitamin C for testing.

Instead NCI chased after then-obscure, unproven compounds such as beta-carotene. They made overnight anticancer celebrities of unqualified, ineffective nutrients—while the perfectly capable vitamin C waited in the wings.

Unfortunately, the evidence was never good for beta-carotene, as I tried to tell them. After wasting decades—not to mention hundreds of millions of tax dollars—all the NCI proved was that beta-carotene does not reduce cancer. In fact, it even *increases* it in some populations!

Wondering why the government would ignore the science and throw its weight behind ineffective and harmful remedies instead? As always, you can find the

answer by following the money. The NCI scientific advisory board included members from the industry that makes and sells synthetic beta-carotene!

As for vitamin C, it lost out for ridiculous and political reasons. Namely, the NCI felt it had been given a "bad name" by Linus Pauling, who had brought so much attention to it.

Yes, you read that right. The fact that a two-time Nobel prize winner was such a strong and vocal advocate of the scientific truth was actually a mark against vitamin C in the eyes of the NCI.

But facts are stubborn things, and the truth will always win out. Eventually, researchers persisted and I was able to bring different lines of research together that established the effective use of vitamin C to treat cancer patients.

Unfortunately, you can't reap the vitamin's anticancer benefits by drinking more orange juice or popping a pill. The doses required for such intensive therapy are only achieved by continuous IV infusion of vitamin C directly into the bloodstream. In the August 2013 issue, I also shared the details of the various kinds of research studies that allowed us to determine the correct dose and rate of infusion needed to maintain effective levels in the blood.

And just in case there's any remaining doubt, studies have shown that these levels of vitamin C in the blood are safe and well tolerated by patients. Especially when compared to toxic intravenous chemotherapy treatments.

**To treat cancer, first you have
to understand it**

Aside from long-standing, half-baked, and oversimplified theories about "antioxidant" effects, several other studies have proven vitamin C's numerous specific anticancer effects. It supports the immune system to stop cancer, limits the multiplication of cancer cells, and hinders the growth of blood vessels that support the growth of cancerous tumors.¹

But the NCI is missing vitamin C's huge potential in cancer care by taking a narrow and oversimplified view

of cancer “treatment.” In their minds, if a treatment doesn’t kill cancer cells outright (a property known as “cytotoxicity”), then it’s worthless. But they’re missing all the other anticancer effects that nutrients and natural plant compounds have. That leaves us only with the worst, most toxic forms of cancer treatment. (Think chemotherapy and radiation.)

New research drives the point home

A recent study on IV vitamin C focuses on the inflammatory component of cancer.² When cancer tumors are growing, there’s typically an inflammatory response in the local area. Elevated inflammation can worsen prognosis and shorten survival times in many forms of cancer.³

The new study recognizes vitamin C can play a part in both preventing and treating cancer. But it has to be given at doses significantly higher than the ridiculous RDAs. These researchers treated 45 patients with lymphoma or prostate, breast, bladder, pancreatic, lung, thyroid, or skin cancers with high-dose, IV vitamin C.

In three-quarters of the patients, vitamin C treatment resulted in decreased levels of tumor markers. Which suggests that, over the long term, treatment with IV vitamin C would improve prognosis and survival rates in cancer patients. And the authors believe these effects could also benefit other inflammation-related diseases too. That finding could be huge, since inflammation may be at the root of countless diseases—ranging from asthma and sleep apnea to diabetes and atherosclerosis.

Just think of all the progress we could have made in preventing and treating cancer (and other diseases) if the NCI had bothered to listen to that initial thud of research 30 years ago. None of these new findings would be surprising. The only surprise is that it took so long and wasted so many years, taxpayer dollars, and lives to start to understand vitamin C’s full potential.

CHAPTER 10: THE SINISTER SECRETS SWIRLING INSIDE YOUR TEAPOT

As carbonated beverages come under increasing attack and researchers debate just how good or bad coffee is for you, more Americans are trading in their Big Gulps and venti lattes for cups of tea. This ancient beverage—whether it be black, green, white, oolong, or herbal—is considered by many to be the original health drink. Both folklore and research shows that tea can offer a cuppa hot cures for everything from obesity to cancer.

But as tea becomes bigger business in the U.S., we are now finding out that the preparation, manufacturing, packaging, and marketing practices of many popular tea brands leave a lot to be desired.

In fact, a surprising number of teas can actually be health hazards.

Of course, the manufacturers that tout their teas as miracle cures don’t want to reveal this steamy secret. But I will.

Here’s everything you need to know about how to get all of tea’s health benefits... without putting yourself at risk.

Tea is big business

Black, green, white, and oolong tea all come from the leaves of the same plant (*Camellia sinensis*, or Chinese camellia), but are cured and prepared differently. This distinction accounts for each tea’s unique color and flavor. Herbal teas, on the other hand, are made from a variety of botanicals.

Tea has been an important plant commodity for thousands of years. It motivated early European exploration and trade expeditions into China and India, and helped spur the Dutch and British mercantile empires. And of course, it contributed to the American Revolution when British King George III imposed a tax on tea in 1773. Although this tea tax was miniscule compared to the multiple open and hidden taxes heaped on Americans by our own government today, it was enough to spark the Boston Tea Party. Americans took

their tea, and their liberty, seriously in those days.

Today, tea is the most widely consumed beverage in the world. Production is estimated at over \$15 billion a year, with Americans accounting for more than \$2 billion of that total.^{1,2} On any given day, more than half of all Americans drink some type of tea, according to the Tea Association of the USA.²

The supply of black, green, oolong, and white tea is tightly controlled by a vertical near-monopoly. According to The United Nations' Food and Agriculture Organization, only seven companies account for 85 percent of the world's tea production.³ Two main tea packers, India's Tata Global Beverages (which makes Tetley tea) and the Netherlands' Unilever (Lipton), dominate the trade through strong influences on sourcing, supplies, and transport.^{iv} Although tea, as with other natural plant products, cannot be patented, the dominant players effectively control it as if it were.

When it comes to herbal teas, there is still some independence. Although Celestial Seasonings is the star of this market, there are a variety of smaller natural, organic, and medicinal herbal tea manufacturers.

And today, tea has become more popular than ever before, thanks to the powerful health claims made about it in recent years.

Does the proof support the promises?

People in the U.S. are increasingly attracted to tea because it can theoretically help prevent chronic diseases. You've probably seen teas touting everything from "weight-loss" to "anti-aging" benefits. But science doesn't support all of these marketing claims.

Tea is very rich in polyphenols—natural compounds that have been shown in scientific studies to have anticancer, anti-inflammatory, and antioxidant properties. A typical cup of brewed green tea contains between 80 to 100 mg of polyphenols. One of the most potent of these polyphenols—epigallocatechin gallate (EGCG)—accounts for about 25 to 30 mg of that total.⁴

However, the typical amount of EGCG that is proven in

scientific experiments to have beneficial health effects is 300 to 400 mg. So to get the right "dose" of EGCG in terms of proven health benefits, **you would have to drink 10 to 16 cups of tea per day.** I doubt even the most avid tea drinker could guzzle down that much.

So practically speaking, drinking tea may not be the "cure-all" it's been made out to be. But there are much darker sides to the tea story you need to know about.

The darker sides of tea you haven't heard about

Not all of tea's polyphenols are as beneficial to your health as EGCG. For instance, black, green, white, and oolong teas are naturally high in tannins and tannic acid—polyphenols that have strong astringent properties. Tannins have a powerful effect on animal cells and tissues and are traditionally used to tan leather. So imagine what too many of these compounds can do to the lining of your stomach and intestines. No wonder some people experience gastric irritation from the strong tannins in teas.

Tea also naturally contains oxalic acid. Too much of this compound, especially if you are chronically dehydrated, can lead to the formation of painful kidney stones.

In addition, tea typically contains theophylline, a stimulant that expands respiratory passages. Which sounds like a generally good thing. Except theophylline can also keep you awake at night. What's more, theophylline is a powerful diuretic that, in essence, pumps water out of your cells and tissues and causes dehydration. Thus, tea is certainly not a healthy substitute for the water and electrolytes you need for normal hydration.

If you think you can counteract this problem with a "caffeine-free" tea, remember that there is no such thing in nature. Removing the caffeine from tea involves the use of artificial chemical solvents.

Limiting your tea consumption to a few cups per day can help control the problems caused by tannins, oxalic acid, and caffeine/theophylline. But then you're not drinking enough to get optimal, active doses of tea's

beneficial health ingredients.

So there is a natural conundrum inherent in tea. And that doesn't even take into account what modern cultivation and manufacturing has done to this plant...

A teacup full of toxins

Recent investigations into what is really going on with teas today are truly shocking. In ancient China, tea leaves went directly from the plant to the pot. But today's teas are often laden with artificial flavors and ingredients, genetically modified organisms, pesticides, and other toxins. And these toxins may be hiding in some of the most popular tea brands.

A recent independent analysis commissioned by Glaucus Research Group found that 91 percent of Celestial Seasonings teas contained pesticide residues that exceed U.S. limits.⁵ Celestial Seasonings denies these findings based on its own research, but hadn't released that research as of November 2013.⁶

THE BEST WAY TO GET THE BENEFITS OF GREEN TEA

There is no way to know precisely how much green tea you have to drink to get the desired effects. For example, each cup of green tea contains different amounts of the active ingredient EGCG.

Manufacturing practices and products vary. And you may steep your tea longer than I do. So it's a guessing game. (And remember, when I report on green tea, I mean the real green tea infusion that you steep. You can't know how much EGCG might be in the sugary, bottled green teas sold at the convenience store. So don't be fooled.)

Fortunately, there's a way to get around all of these problems.

Scientists now know accurately and precisely how much EGCG you need in order to get the health benefits associated with green tea. And it's actually much easier to get this exact amount by taking a green tea extract supplement instead of drinking green tea. This lets you avoid the guessing games.

With a supplement, you know exactly how much EGCG you get in each capsule. You also avoid the kidney stone issue because green tea supplements don't contain oxalic acid. Plus, the supplements don't contain caffeine or theophylline. So there is no diuretic effect.

Most studies show benefits from 300 to 400 mg of green tea extract.

The Glaucus analysis found that Celestial's Sleepytime Kids Goodnight Grape Herbal tea contained 0.26 ppm of propachlor, which has been determined to be a carcinogen at any level under California's Safe Drinking Water and Toxic Enforcement Act of 1986. That's some "goodnight" for your children. Meanwhile, Celestial's "Wellness" tea line was found to contain traces of propargite, also a known carcinogen, and a teratogen, which causes birth defects. That doesn't sound like "wellness" to me.

To the credit of the FDA, it has already issued two warnings to Celestial Seasonings for poor quality control in the company's manufacturing practices. But warnings aren't the same as a recall. And teas containing these toxins are undoubtedly still on supermarket shelves across the country.

So are you better off with freshly prepared teas versus the packaged teas that sit on grocery shelves? People line up to pay for overpriced teas at places like Teavana, just like they pay for overpriced coffees from Starbucks (which, unsurprisingly, is now Teavana's parent company). But are they getting anything healthier for their "Teavana experience"? As with the coffee at Starbucks, Teavana makes a big show of preparing tea. But are the "tearistas" simply like magicians, misdirecting your attention away from the reality of what you're drinking? That may be worth shedding a few "tear-istas" right there.

Teavana asserts that it rigorously tests its tea. And that each batch conforms to European Union pesticide standards. Yet, Glaucus Research also commissioned independent lab testing on Teavana tea. And the lab found that fully 100 percent of the Teavana tea samples it tested contained pesticides that violate U.S. food pesticide standards.⁷

It also found that 77 percent of the samples violated E.U. pesticide import standards for dry tea. Meaning those teas couldn't be sold to E.U. consumers. And 62 percent of the tea samples contained endosulfan, a pesticide banned in the U.S., the E.U., and 144 other countries because it may impair fertility and cause birth defects. And one Teavana tea, Monkey Picked Oolong, actually contained 23 different pesticides. So now who's the monkey?

So much for “rigorous testing.”

And these are just the disturbing facts about pesticides—which wind up in teas unintentionally. What about the ingredients manufacturers are intentionally adding to teas?

Just how natural is that “natural flavor”?

Many popular tea brands try to get away with using the term “natural flavors.” But just because the flavor may be found *in* nature doesn’t necessarily mean it comes *from* the natural source. Tea companies can break down anything found in nature and if it ends up tasting like the flavor they want to use, they can add it to any product and claim “natural flavor” on the label.

And then there are the teas that actually list “artificial flavor” or “artificial color” on their packages. These artificial ingredients typically come from petroleum or coal tar sources.

Some tea companies also add modified corn starch to their products. This additive is likely made from genetically modified corn. As I’ve pointed out before, the vast majority of corn grown in the U.S. today is genetically engineered.

Plastic—it’s in the bag

Beyond the tea itself, there are also problems with the packaging.

Regular tea bags are commonly made from rayon, nylon, PVC, polypropylene, or polyethylene terephthalate (PET). And the popular new sachets and mesh bags may look pretty as they showcase loose-leaf teas. But they often contain polylactic acid (PLA), a biodegradable plastic that is likely made from a GMO-corn-based material.^{viii} While these chemicals are generally considered to be inert and safe, the plastic may still leach out and break down when exposed to heat—like the boiling water used to prepare tea.

Unfortunately, paper tea bags can actually be worse than plastic. Some paper tea bags are treated with

epichlorohydrin, a chemical primarily used to create epoxy resins and glues. Epichlorohydrin is also used as a pesticide and is considered a potential carcinogen by the National Institute for Occupational Safety and Health. ^{vix} When epichlorohydrin gets wet (as in tea brewing), it breaks down into chemicals that have been shown to cause cancer, infertility, and birth defects in animals.

All the antioxidants in all the tea in China can’t counter the effects of these chemical additives and toxins.

The only tea I recommend

Whatever you do, stay away from Lipton, Celestial Seasonings, Tazo, Teavana, Bigelow, Republic of Tea, Twinings, Yogi, Tea Forte, Mighty Leaf, and Trader Joe’s brands of tea. These are among the worst offenders when it comes to toxic ingredients.

However, there are a few teas that appear to be free of pesticides, artificial flavors, GMOs, and harmful packaging: Allegro, Numi, Rishi, Choice, and Traditional Medicinals.

But the only tea I really recommend comes from the South African red bush plant. Red bush (or rooibos) is naturally free of caffeine, oxalic acid, and tannins. Plus, research shows that rooibos can lower blood sugar.^x In addition, rooibos has even more natural disease-fighting compounds than green tea. And it hydrates you at the cellular level.

The brand I helped formulate, Red Joe Rooibos Powder, is also 100 percent certified organic—meaning no pesticides or chemical fertilizers were used to grow it—and it has no added ingredients. You can add Red Joe powder to water or any beverage, hot or cold.

CHAPTER 11: THE SOUTH PACIFIC SECRET WITH A 99% SUCCESS RATE AGAINST LUNG CANCER

You won't see any colored ribbons flying when it comes to lung cancer. I've written about how little the government-industrial-medical complex has to offer when it comes to this deadly disease, even though it's the No. 1 cancer killer in the U.S. today.

But recently, researchers at the University of Minnesota and Texas Tech University found that an extract of kava root—a South Pacific herb—prevented the formation of lung tumors in 99 percent of laboratory animals they studied.¹

That's an unprecedented result among cancer studies using nutrients and natural products.

So why haven't you heard about this until now?

Deadly bias

There are many reasons why lung cancer doesn't get the attention of other, less deadly cancers. First of all, nobody is pushing lung cancer screening the way the multimillion-dollar colonoscopy industry is relentlessly pushing an overly costly, dangerous, often unnecessary procedure.

In fact, the "experts" at the National Cancer Institute (NCI) have even made light of a new imaging technique for lung cancer screening. Even though this screening method is safe and appears to be at least as effective as the other cancer screening programs they push.

NCI experts claim people at high risk for lung cancer don't care enough about their health to get cancer screenings. In fact, lung cancer victims are made to feel guilty and ashamed. And health professionals are often biased against these victims—many of whom have to hide their diagnosis.

All this, of course, because the assumption is that only smokers get lung cancer.

But believe it or not, people who have never smoked a cigarette in their lives also get lung cancer. In fact,

according to the NCI itself, nearly a third of all Americans who are diagnosed with lung cancer are nonsmokers.² So what does the government's obsessive anti-tobacco campaign for smoking cessation and prevention have to offer them? After all, you can't quit if you never started (or have already quit).

That's why it was such a disaster when government scientists made a political decision (which I sadly had to witness) 30 years ago to focus only on "behavioral modification" for misguided smokers. It left real science frozen in the past, with little or no support or interest for developing better lung cancer screening, treatments, and even prevention.

In fact, a recent panel convened by NCI itself concluded that the only real strategy for "controlling cancer" is to finally focus on prevention, since mainstream treatment and screening (early detection) strategies have been such a failure. Cancer screening statistics are routinely trotted out to create the illusion of progress while, in fact, the "war on cancer" is a stalemate reminiscent of the deadly trench warfare of World War I.

Cancer cures hiding in plain sight

The sad truth is that there are many natural products hiding in plain sight that appear to be effective at preventing and treating cancer. Yet they're ignored by the mainstream for two reasons. First, because they cannot be given as drugs (and rake in massive profits for Big Pharma). And second, because they modify the growth of cancer cells and tumors instead of killing them outright.

You see, when the government screens natural products for "anticancer" activity, it looks only for the ability to *kill* cancer cells. But unfortunately, chemicals that can kill cancer cells will also kill your normal cells, which has led to the tragic and unnecessary disaster of cancer chemotherapy today.

But there are other important types of anticancer activity, including preventing new blood vessels from supporting the growth of malignant tumors (anti-angiogenesis), boosting the immune system to naturally eliminate cancer cells, transforming cancer cells back to "normal"

cells, and other proven mechanisms.

And yet, because of the bias in the cancer industry, natural products that effectively address these issues aren't able to make the leap from laboratory studies to hugely expensive human cancer treatment trials.

And the recent kava study is just one example.

A worry-free treatment for lung cancer

Kava (*Piper methysticum*) has long been used in Hawaii, Samoa, and other parts of Polynesia as an effective anti-anxiety agent. U.S. presidents ranging from Lyndon Johnson to Bill Clinton have sampled kava drinks during their "goodwill" trips to American Samoa. What's more, the herb is a member of the pepper family, which is known for its anticancer activities. *Piper nigrans*, or black pepper, contains piperine, which research has shown to be a very potent anticancer natural ingredient.³

But kava has met with its share of controversy. About 10 years ago, there was a "scare" about possible liver toxicity associated with the herb. At the time, I was the editor of the medical journal *Seminars in Integrative Medicine*. So I invited and published an article from my colleague Jorg Gruenwald in Germany that showed there was no real evidence against kava. Instead, Dr. Gruenwald demonstrated that drugs were likely responsible for the cases of liver toxicity originally attributed to kava.

For the kava lung cancer study, researchers gave mice a kava-derived dietary supplement on a daily basis. As I noted above, this supplement prevented formation of 99 percent of tumors.

Some mice actually developed no tumors at all. And the type of DNA effects typically associated with heavy tobacco use were also significantly reduced. In addition, there was no liver toxicity in the mice that were given kava.

This lab evidence supports the long-held observation that people living in the South Pacific have dramatically lower rates of lung cancer. Despite comparable rates of tobacco use, incidences of cancer in Fiji, Vanuatu, and

Western Samoa are much lower than in countries where the people don't regularly consume kava. In fact, in Fiji, the rate of lung cancer diagnosis is only 5 to 10 percent of the U.S. rate.¹ That's a 10-to-20-time reduction in lung cancer, potentially just from using kava!

The amazing bottom line: Kava can **reduce** the risk of lung cancer as much or more than cigarette smoking is said to increase it.

A look ahead

The results from the new kava study are so striking that the American Botanical Council (ABC) issued a press release about it in January 2014. Normally, ABC, which is a nonprofit organization devoted to evidence-based herbal medicine, focuses its efforts on educating the media and the public about the results of human clinical trials. But this study was so groundbreaking that ABC made an exception, hoping to focus more human clinical research toward the modern crisis of lung cancer.

Of course, the University of Minnesota research team doesn't think any of the commercially available kava supplements currently on the market would be effective against cancer. Although that could have something to do with the fact that they're working on developing their own (patented) kava-derived drugs.

But there's no harm in trying kava. To find an appropriate dose for your particular needs, consult a knowledgeable health practitioner who is open to natural approaches.

One thing to note: Kava doesn't cause liver toxicity as long as it's not taken with potentially liver-damaging drugs like acetaminophen (Tylenol). But it does have a natural relaxing effect. So it's best to take at night.

CHAPTER 12:

REVEALED! THE BIGGEST HEALTH SCAM IN THE HISTORY OF NUTRITIONAL SCIENCE

How following this “healthy” diet is a surefire way to starve yourself to death

For the last half century, the government has force-fed the public misinformation that animal fats, eggs, and meat are somehow unhealthy. These myths have been drilled into our heads so relentlessly that you may think a strictly vegetarian or vegan diet must be a healthier alternative.

Nothing could be further from the truth.

In fact, in my opinion, vegetarianism is the biggest “health” scam in the history of nutritional science. And following one of these “healthy” lifestyles is a surefire way to starve yourself to death. But not in the way you might expect.

I’ll explain more in a moment. But first, let’s take a closer look at the motives behind these potentially deadly movements.

The “healthy” choice with disastrous consequences

Of course, some vegetarians and vegans are driven by the environmental impacts of producing various foods. Others are motivated by religious tenets or ethical concerns.

Thinking deeply about food choices and their environmental, social, and spiritual impacts is to be respected, appreciated, and commended. It is what I encourage you to do every day.

But choosing vegetarianism or veganism for health reasons is a huge mistake. One that, as I said above, could very well starve you to death.

Not in a caloric sense, mind you. You can certainly take in enough food, quantity-wise, to survive on one of these diets. But make no mistake...vegetarian and vegan diets are almost completely devoid of many critical nutrients. Nutrients required for human nutrition and metabolism. These deficiencies are not arcane biochemicals you have never heard of—but common vitamins and minerals.

In other words, vegetarian and vegan diets starve your body of essential nutrients it needs to operate at peak performance. Which chips away at your health, little by little.

The effects may be so incremental you won’t even realize what’s happening. Why you’re constantly cold. And tired. And sick. But the long-term effects of living this way can be downright devastating—even deadly.

Why fruits and vegetables—and even supplements—aren’t enough

Sure, you can get some of these “missing” nutrients from supplements. But remember, dietary supplements are meant only to *supplement* a good, balanced diet. Supplements may not be able to fully replace key nutrients and foods, let alone entire food groups.

Of course, plant-based diets emphasize fruits and vegetables, which are unarguably very good for your health.

But plant-based diets also typically include large amounts of grains and beans, as well as certain nuts and seeds. Not only are many of these foods low in readily absorbed nutrients, but they’re actually high in “antinutrients” like gluten, phytates, and antitryptic factors. These antinutrients interfere with digestion and make it difficult for your body to get nutrients from whatever foods you **do** eat.

Consider that a cow needs several stomachs to digest and obtain all of the required nutrients from a purely plant-based diet. Human vegetarians must do this with only one stomach. So it’s no wonder archaeological studies show that human health declined and growth became stunted about 10,000 years ago. Precisely when our ancestors first began switching from a hunting-and-gathering-based diet to an agricultural, grain-based diet.¹

Four key nutrients vegetarians and vegans are missing out on

Vegetarians and vegans risk some very serious nutritional deficiencies. Specifically, they come up short on the following nutrients:

1.) Fat-soluble vitamins. Probably the most obvious problem with vegetarian and vegan diets is their almost complete lack of two critical fat-soluble nutrients: **vitamins A and D**. In fact, one study found that vitamin D levels are 58 percent lower in vegetarians and 74 percent lower in vegans.²

Vitamin D is critical for calcium metabolism and immune system regulation. It also reduces inflammation and lowers the risk of certain cancers, heart disease, mental illness, multiple sclerosis, and other diseases. And vitamin A promotes healthy eyesight, immune function, reproductive function, and skin health.

Vitamins A and D are found almost exclusively in animal-based foods, especially eggs, dairy, organ meats, and seafood. Some species of mushrooms can provide sufficient amounts of D, but you'll rarely find them in grocery produce sections.

There is a common myth that plants can be high in vitamin A. It is true that plants are rich in powerful antioxidants called carotenoids, as my colleagues and I demonstrated 30 years ago. But among the many carotenoids, there are only two—alpha- and beta-carotene—that are sources of vitamin A.

The human body can convert alpha- and beta-carotene into vitamin A, but the conversion is very inefficient. And many people can not carry out this conversion at all.

Plus, as you know, the health benefits of beta-carotene proved problematic at best in that infamous study conducted by the National Cancer Institute.

2.) Essential fatty acids. Heart and brain health are among the many benefits of the essential omega-3 fatty acids **EPA and DHA**. And the best sources of these essential fatty acids are fish and fish oil.

Plants also have some essential fatty acids—linoleic acid (omega-6) and alpha-linolenic acid, or **ALA** (omega-3). But these compounds have to be converted into EPA and DHA in the body, and the conversion rate is poor in humans. Only 5 to 10 percent of ALA is converted into EPA, and 2 to 3 percent into DHA.³

Furthermore, vitamin B6 and zinc are necessary to change ALA to DHA and EPA, and both of these minerals are lacking in plant-based diets.

The result is that vegetarians have up to 37 percent lower levels of DHA and 52 percent lower levels of EPA compared to meat eaters who follow a balanced diet. It's even worse for vegans—up to 65 percent lower EPA and DHA.⁴

3.) Minerals. Intake of **calcium**, which comes primarily from dairy, eggs, and meat, can theoretically be similar between omnivores and vegetarians because both eat dairy. However, it is much lower in vegans, who don't eat any animal products.

But even vegetarians may not get the full benefits of the calcium in the foods they eat. You see, some natural phytochemicals in calcium-rich vegetables like kale and spinach act as "antinutrients." These antinutrient substances actually counteract some of the beneficial nutrients in foods. For instance, the antinutrients in kale and spinach inhibit the body's ability to absorb the calcium naturally present in these vegetables. In fact, one study showed that it takes 5 to 6 cups of cooked spinach to equal the amount of available calcium in one 8-ounce glass of milk.⁵

This deficiency is particularly worrisome because calcium does so much more than build strong bones. This essential mineral also aids in heart health and weight management, and may protect against colorectal and prostate cancer.

Zinc intake for vegetarians and vegans often falls below recommendations as well. While plants contain some of this mineral, antinutrients can interfere with its absorption. As a result, vegetarians may be 50 percent lower in zinc than their meat-eating peers.⁶ A huge disadvantage when you consider this mineral is essential for immunity, wound healing, and preventing macular degeneration.

4.) Vitamin B12. I have saved this vitamin for last because deficiency is especially common in vegetarians and vegans.

Vitamin B12 is critical for the synthesis of DNA and red blood cells, and for development of the myelin sheath that protects sensitive nerves throughout the body. The many problems of vitamin B12 deficiency have been known for a long time—anemia, fatigue, weakness, memory loss, and neurological and psychiatric problems.

Unfortunately, there's a pervasive myth in the vegetarian and vegan communities that it's possible to obtain enough B12 from plant sources such as fermented soy, seaweed, and spirulina. But these plants only contain chemicals that masquerade as B12. These substances actually block B12 intake. And as a result, you need even *more real* B12.

Recent studies have found that 68 percent of vegetarians and 83 percent of vegans are deficient in vitamin B12. In stark contrast, only 5 percent of omnivores are deficient in this essential vitamin.⁷

But the effects on children are even more alarming. One recent study showed that children raised on vegan diets until age 6 still remain deficient in B12 years after adding animal foods to their diets.⁸

The researchers noted “a significant association between cobalamin [B12] status and performance on tests measuring fluid intelligence, spatial memory, and short-term memory” in formerly vegan children compared to kids who are raised eating animal foods.

The deficits in fluid intelligence are particularly troubling because, as the researchers put it, “it involves reasoning, the capacity to solve complex problems, abstract-thinking ability, and the ability to learn. Any defect in this area may have far-reaching consequences for individual functioning.”

So now we understand that some of the flawed arguments and thinking used to support vegan diets may simply be a result of nutritional deficiency!

But don't vegetarians live longer?

You may still be thinking, “Well, everyone knows that vegetarians live longer.” In fact, early observational

studies did seem to indicate that this was true. But these studies were invalidated by the “healthy-user effect.”

This is a well-known bias by which scientists observe that people who follow one behavior perceived to be healthy are also more likely to engage in other behaviors that really **are** healthy. For example, vegetarians and vegans tend to eat more healthy fruits and vegetables and are less likely to abuse alcohol, drugs, junk foods, or tobacco than the general population.

To counteract the “healthy-user effect,” scientists did a large study on omnivores and vegetarians who were all health conscious. The researchers recruited 11,000 health-food store shoppers and analyzed their overall health and mortality over a 17-year period.⁹

They discovered that both the vegetarians and the meat eaters lived significantly longer than the general population. And there was no difference in death rates between the two groups. Nor was the vegetarian group less likely to suffer from heart or vascular disease or strokes than the omnivore group.

With everything we know about human biology and ecology, it is simply hard to scientifically justify a vegetarian or vegan diet from a health perspective. And now that the myths about natural animal fats, eggs, and meats have been debunked, there is really no health-related reason not to follow a balanced diet.

Call vegetarian and vegan diets what you will, but no one can call them truly balanced diets. And balance and moderation are the keys to almost everything in life and health.

Vegetarians ignore nature's truly perfect foods

When subjected to the clear light of science, there is simply no evidence that saturated fats, eggs, or meat in moderation are unhealthy.

In fact, their nutritional density and quality make them some of nature's perfect foods.

If an egg can provide total nutrition to a growing chick, how can it not be a good food? Eggs are rich in protein,

vitamin D, choline (important for brain development), and lutein and zeaxanthin (key nutrients for eye health).

And meat is packed with protein, vitamins, and essential minerals like calcium, copper, magnesium, selenium, and zinc.

It's "what's for dinner," or at least it should be, in moderation.

CHAPTER 13: SEVEN CRITICAL HEART HEALTH MARKERS MORE IMPORTANT THAN CHOLESTEROL

I've said before that cholesterol isn't the best way to predict your heart disease risk. In fact, there are four other markers that are much more important in assessing your heart health: fasting blood glucose, fasting insulin, hemoglobin A1C, and homocysteine levels.

Recently, a reader asked me for specific target ranges for these tests. I'll get to that in a moment. And I'll also tell you about a few other important factors to consider in assessing your overall heart health. But first, a little background on why these particular markers are so critical.

Blood glucose (sugar), insulin, and hemoglobin A1C are usually associated with diabetes. So why are we looking at them for heart disease as well?

Because researchers are realizing that many people who are diagnosed with heart disease today tend to be different from their stressed-out, hard-charging, under-exercising fathers and grandfathers who also smoked and drank too much.

Instead, these people most likely have metabolic disorders that result from a lifetime of eating the wrong foods and drinking the wrong beverages. And it turns out the same diet choices that lead to diabetes also lead to heart disease.

Doctors routinely measure fasting blood glucose and insulin levels as well as hemoglobin A1C in people with diabetes. The first two of these tests are well known, but you may not be as familiar with hemoglobin A1C. This test gives a good long-term measure of your average blood sugar numbers over time.

Unfortunately, many doctors still don't measure homocysteine levels and do not take them seriously. But they should. Your body uses homocysteine to make protein and to build and maintain tissue. However, too much of this substance may increase your risk of stroke, certain types of heart disease, and peripheral artery disease.

So, without further ado, here are the targets for these four critical heart disease markers.

Fasting blood glucose. The ideal range is 65 to 99 mg/dL. However, if your hemoglobin A1C is at a healthy, lower level, your doctor will likely be less concerned if your blood glucose is over 99 in a single test.

Fasting insulin. A normal level is below 5 uIU/mL, but ideally you'll want it below 3.

Hemoglobin A1C should be between 4.4 and 6.5 percent.

Homocysteine. The Mayo Clinic says a normal level is between 4.4 and 10.8 $\mu\text{mol/L}$.¹

To help get all of these numbers where you want them, focus on improving your diet. Eat like you're on top of the food chain. Specifically, you should incorporate plenty of foods that are rich in folate and B vitamins (dairy, eggs, and meat).

Recent research also shows that red bush (rooibos) lowers blood sugar.

I also recommend talking with your doctor about the possibility of taking metformin. This diabetes drug is actually based on an ancient herbal remedy called goat's rue or French lilac. Studies have proven metformin to be both safe and effective. And it is the only drug that lowers blood sugar while also reducing the risk of heart disease.

But as I mentioned above, there are a few more important factors to consider in assessing your overall heart health. And, unfortunately, your doctor is even less likely to monitor these markers. Unless, of course, you insist on it.

Three more heart health markers you should keep close tabs on

Other important measurements you should consider are C-reactive protein (CRP) and fibrinogen. CRP is a marker of inflammation. Research has linked CRP to increased risk of coronary artery disease. And fibrinogen is a protein involved in blood clotting. Elevated levels can lead to dangerous artery-blocking clots.

Combined with the other parameters I mentioned above, these tests can help your doctor assess your overall risk of heart disease.

Your CRP level should be less than 1 mg/L, and your fibrinogen level should be between 200 and 400 mg/dL. To achieve this, follow a healthy, balanced diet. High-quality fish oils are particularly helpful at reducing the chronic inflammation that can boost your CRP level.

And keep in mind that research is also showing that your vitamin D level may be just as important as other tests in determining your risk of heart disease. A blood level above 50 ng/ml is healthy, and a daily dose of 4,000 to 5,000 IU of vitamin D is safe and appropriate for everyone.

One final heart-healthy tip: Avoid excess iron. It can potentially accumulate in your heart muscle and other tissues, eventually leading to organ failure in some people. I've also conducted research with Nobel laureate Baruch Blumberg that showed that excess iron in the body increases the risk of cancer in both men and women.² Never take a supplement containing iron unless you have been diagnosed by a doctor with an iron deficiency.

CHAPTER 14: THE FUTURE OF MEN'S HEALTH GROWING IN YOUR YARD

As a young child in Philadelphia, each Spring, I would go with my uncle and his friends from the Department of Public Works to Cobbs Creek Park on the western reserve of the over-crowded city. Even then, the term “public works” was becoming an oxymoron. Case in point: The task at hand? To rid the park of dandelions. But these workers knew better than to toss the weeds in the trash. Instead, they saved the leaves and used them to make fresh salads for their families.

Of course, as far as history goes, my boyhood wasn't all that long ago. But the men who brought home these tasty leaves knew something people have known for centuries, in countries across the world.

Dandelions can do far more good in our bodies than they can in a landfill.

In fact, recently, researchers have been investigating a novel use for the lowly dandelion. This line of research is so new it hasn't been picked up yet by either mainstream medical researchers or the “natural know-it-alls”. More on this brand new breakthrough in just a minute. But first, let me give you a little insight into dandelion's remarkable healing potential.

More reasons to ditch the weed killer

Dandelion gets its name from the serrated shape of its leaves. The french called it *dent de lion*, literally “tooth of lion.” But its other French name is more indicative of its medicinal use: *pis-en-lit* (“wet the bed”) to describe its diuretic effects. Indeed dandelion has been used as a folk remedy in Europe, Asia, and the Americas to improve urine production.

As a traditional folk remedy, dandelion was also used to detoxify the blood, support liver health and treat various dermatologic disorders and systemic illnesses. Today, scientific studies substantiate the ability of dandelion to induce liver enzymes that metabolize and detoxify blood and tissues.¹

As early as 1931, research demonstrated that dandelion was also a “cholegogue,” meaning it stimulates release of bile from the liver's biliary system and gall bladder into the intestines. This is a critical step in the body's process of digesting and absorbing essential fatty acids and fat-soluble nutrients into the blood. That's probably why many traditional European digestive drinks contain “bitters” (herbs like dandelion)—to stimulate the liver and the bile ducts for better digestion and metabolism.

Modern research points to new uses

Modern science shows a number of other health benefits of dandelion. Here are a few of the most notable.

- **Heart health.** Dandelion reduces the risk of atherosclerosis, a cause of many cardiovascular diseases. Its antioxidant and anti-inflammatory properties are thought responsible for this effect. In addition, dandelion reduces several risk factors for heart disease, such as obesity and hyperlipidemia.²
- **Blood sugar control.** People with blood sugar issues may find relief in dandelion, which appears to decrease insulin resistance in tissues.³ It also may stimulate the pancreas to make more insulin.⁴ That would help the pancreas avoid a condition known as “beta-cell burn-out.” This condition causes constant stimulation of pancreatic cells, which may be a risk factor for pancreatic cancer.
- **Gastrointestinal health.** Dandelion, together with other herbs, has been shown to drastically improve the symptoms of chronic colitis.⁵

Dandelion in cancer care

Some research also suggests dandelion may be able to stop breast and prostate cancer cells, though exactly how is unclear.⁶ But perhaps more importantly, dandelion may fight angiogenesis, the process that creates new blood vessels in the body.⁷ It's what allows cancerous tumors to survive and grow. And as I've said before, stopping angiogenesis in its tracks is the future of cancer care.

This approach prevents cancer cells from robbing the body's blood supply to become cancer tumors. It is a

much less toxic way of stopping cancer than are typical chemotherapeutic agents. Those treatments poison your normal cells together with cancer cells, which is what makes them so damaging to the body.

As you can see, dandelion already has an impressive roster of benefits associated with it. But recently, this lowly weed has caught the eye of cutting-edge botanical chemists because it appears dandelion phytosterols can improve prostate health in men. But that's actually just the start of how dandelion benefits men's health.

Breakthrough combination gives aging men a vitality boost

A recent Korean study found that an extract of dandelion—together with red bush or rooibos—supports a man's innate ability to produce testosterone.⁸

Testosterone production can falter with age. Which is why you see ads for dangerous and useless drugs to fix "Low T" everywhere you look these days. But this dandelion–red bush combination was able to boost testosterone production naturally. It also improves vitality in cells, both in lab animal experiments and in human clinical trials.

In fact, men taking a dandelion–red bush supplement showed marked improvements in physical activity, vitality, and measures of longevity *after just 3 to 4 months!*

Unfortunately you won't find such a supplement on the open market...not just yet, at least. But I will keep you updated regarding more developments about a real "anti-aging" supplement in coming issues of *Logical Health Alternatives*.

In the meantime, you can start incorporating dandelion into your daily diet starting today.

And this advice goes for both men and women. After all, dandelion is one of the richest sources of carotenoids, which are important for the brain, nerves, and the eyes. This versatile plant also provides loads of fiber, minerals, protein, vitamins, and trace elements—more than either lettuce or spinach.

Not sure how to use dandelions? Well, all parts of the

MAKE YOUR OWN HEALTHY "ANTI-AGING" TEA

Ingredients

- 1 ounce dandelion root, roasted and ground
- 1 ounce leaves and stems, roasted and ground
- 2/3 ounce fennel seeds
- 2/3 ounce mint leaves
- 1 packet Red Joe red bush (or rooibos) powder

Instructions

- Steep mixture in one cup of hot water for 10 minutes.
- Strain and enjoy.

dandelion plant are edible—flower, leaves, stems, and roots. So try tossing them in salads—alone or with lettuces, shallots (another French favorite), or chives. The leaves may also be boiled and drained, seasoned with pepper and other spices, and moistened with butter or olive oil. Or try adding a handful of the leaves to soups.

But for the men's health benefits I described earlier, use the recipe bellow. It's an easy—and delicious—way to replicate the combination studied by those cutting-edge Korean researchers.

You can find dandelion greens in specialty stores and farmers markets. But you might want to ask your grocer to carry them. Many supermarkets have started sections for local produce and requests.

And of course, this Spring when dandelions start poking up from the ground, feel free to put them to good use. Just make sure you avoid picking and eating dandelions from areas where you aren't sure about pesticide use. Your best bet is to avoid using pesticides on your own lawn, and stick to the dandelions that grow there. That way you can eat your dandelions and help protect a healthy environment at the same time.

CHAPTER 15: NEW MALE BREAKTHROUGH COMBO BENEFITS WOMEN TOO

I have previously presented important research about how a combination of dandelion extract and red bush (rooibos) can boost testosterone, improve physical performance, and even increase longevity in men.

There is also plenty of research that applies to women as well. And the benefits are just as impressive.

Weeding out the science on dandelion's health benefits

There has been a great deal of research over the years on both dandelion and red bush, otherwise I would not recommend them.

Modern science shows that the simple dandelion has many health benefits for men and women. It has both anti-inflammatory and antioxidant properties, which reduce the risk of atherosclerosis (hardening of the arteries) and heart disease.¹

And as you know, heart disease isn't just a problem for men. In fact, it's the leading cause of death for postmenopausal women. Dandelion also reduces several other risk factors for heart disease, including obesity and excess fat in the blood.²

In addition, dandelion helps with blood sugar control—an issue not only in heart disease but type 2 diabetes as well.^{3,4} This is particularly important for women, because researchers have found that females with type 2 diabetes tend to die sooner than males.⁵

Some research shows that dandelion may also be able to prevent breast cancer.

It does this by potentially interfering with angiogenesis, the process by which cancer cells rob the body of its normal blood supply and feed tumors.⁶

And, of course, dandelion's ability to detoxify blood, support liver health, help with dermatologic disorders, and improve general health applies to both women and men.

An equal-opportunity red bush breakthrough

Like dandelion, red bush is an antioxidant. In fact, it contains a rich mixture of polyphenols and other antioxidants similar to those in green tea. But it doesn't have the downsides associated with green tea (see "The sinister secrets swirling inside your teapot" on page 24).

I've written many times about red bush's health properties, and now there's even more good news. A brand new study has found that red bush can promote healthy weight loss.

This study shows that just a cup of red bush tea can prevent the accumulation of fat in the body's fat cells by a substantial 22 percent.⁷

So, as you can see, the benefits of these two powerful natural remedies aren't limited to one gender. They help promote a long, healthy life in everyone. Just as nature intended.

Recent study proves red bush works at the cellular level

I have been convinced after 12 years of observation that red bush actually works at a cellular level. Now there is laboratory evidence that proves my point. A recent study shows that red bush helps cells increase their sugar-burning capabilities, which generates more energy and water for the cells.⁸

So how does this affect your health? Because red bush encourages cells to use more sugar, they suck it out of your blood. This reduces your risk of diseases associated with high blood sugar, including type 2 diabetes and heart disease.

And these "super-energized" cells don't need extra fat to provide energy, so they release it. Meaning your body is literally shedding fat.

The result: more energy, improved muscle performance, and weight loss.

**CHAPTER 16:
NINE BIG FAT MYTHS STILL BEING MOUTHED
BY “EXPERTS”**

“Fat and cholesterol are bad.” How often have you heard that? Even though these innocent nutrients are so essential that we literally could not live without them, we’re still barraged every day by old myths and misconceptions promulgated by fat phobics and cholesterol choleric.

Even worse, these myths continue to come straight from the mouths of paid experts who really should know better by now.

It is astounding to me that decades-old, ill-informed comments and recommendations about fat and cholesterol are still being made today. Despite the lack of any real proof—and a bunch of evidence to the contrary.

Here’s a look at nine commonly repeated fat and cholesterol “facts” that are as mythical as the nine lives of a cat.

**Myth 1: Fat will make you
fat and unhealthy**

Yes, fat does have more calories than carbohydrates or protein. But this caloric density actually makes fat more nutritious. It’s the only food source of vitamins A, D, and E, for example. And we all know how important these vitamins, especially D, are to good health—and how deficient most people are today.

Fat also tends to be very filling and satisfying, so there is less of a tendency to overeat.

Which leads me to Myth 2...

**Myth 2: Low-fat is the
optimal weight-loss diet**

During the 1960s and ‘70s, some influential scientists came to believe that saturated fat was the main cause of heart disease and some cancers. Although there was not a single study in humans that proved this misguided notion, politicians jumped on board. And the low-fat diet was recommended to all Americans beginning in 1977.

It became the largest uncontrolled experiment ever foisted on the American people.

But the low-fat diet has now been thoroughly studied. And it should have been put to rest following the largest controlled clinical trial in nutritional history—the Women’s Health Initiative, which I originally helped to put together.

One Women’s Health Initiative analysis of nearly 50,000 postmenopausal women showed that participants who followed a low-fat diet only weighed one pound less after eight years compared to the women who ate a normal, well-balanced diet.¹ Plus, the low-fat group didn’t have any lower rates of heart disease or cancer.

In other studies, a low-fat diet was actually associated with lowering HDL “good” cholesterol² and reducing the size of LDL “bad” cholesterol.³ And while it seems counterintuitive, smaller, denser LDL cholesterol molecules are actually more likely to build up in arteries than larger, “lighter” particles.

So not only will you not lose weight on a low-fat diet, but it can potentially kill you. Talk about a big fat myth.

**Myth 3: Processed, low-fat foods
are healthy alternatives**

When the low-fat craze took hold in the ‘70s and ‘80s, food manufacturers figured out how to remove fat from their products and make a bundle selling these higher-priced “healthy” alternatives. The problem was, without fat, the foods tasted terrible. So to combat this problem, manufacturers simply loaded low-fat foods with sugar, corn syrup, and tasty artificial chemicals instead.

But sugar—not fat—is the real culprit behind obesity and obesity-related diseases like type 2 diabetes and heart disease.

Nevertheless, sales of low-fat, high-sugar foods have skyrocketed as consumers attempt to follow faulty nutritional advice without having to give up their favorite foods.

In fact, according to a new study published in the *American Journal of Clinical Nutrition*, processed foods

account for 75 percent of the added sugar in the average American's diet.⁴

Of course, the best course is to avoid food that requires processing to make it low fat, low carb, or low anything. The purpose of eating is not to consume "low" foods with empty calories, but to eat highly nutritious foods.

Myth 4: You'll have a heart attack if you eat saturated fat

The idea that saturated fat raises the risk of heart disease was initially based on flawed studies that clueless politicians, abetted by political scientists, somehow made into public policy.

The saturated fat myth is based on a chain of misconceptions. We've since learned that consuming saturated fat does not really appear to raise LDL "bad" cholesterol by much^{5,6} (Even assuming that cholesterol is the culprit behind heart disease in the first place—see Myth 6).

Saturated fat actually appears to change LDL from small, dense particles that can clog arteries to larger, lighter particles that are mostly benign.⁷ Further, saturated fat appears to raise HDL "good" cholesterol.

So, if anything, saturated fat seems to actually *improve* cholesterol profile in terms of supposed heart disease risk factors.

Still not convinced? Consider this: In 2010, researchers reviewed data from 21 studies involving 347,747 participants and found no evidence that saturated fat consumption increases the risk of heart disease.⁸

You can't get much more proof than that.

Myth 5: Saturated fats are the same as trans fats

Trans fats are also known as partially hydrogenated fats. They do not occur in nature, but instead are manufactured in a highly artificial—and toxic—process that makes liquid fats solid and thus easier to cook with. Trans fats extend the shelf life of processed foods, which is why you'll find them in everything from cakes to chips.

Trans fats pack a double health whammy: They raise bad cholesterol and lower good cholesterol, increasing your risk of heart disease, stroke, and diabetes.⁹ Even the FDA recognizes trans fats' harm and has belatedly banned them.

Many experts and organizations lump trans fats and saturated fats together and label them all as "bad fats." But as we learned above, saturated fats are safe. It's the artificial trans fats that are totally toxic and have no place in any diet.

Myth 6: Foods that contain cholesterol will kill you

Cholesterol in food is broken down during digestion and has no correlation to the cholesterol that circulates in the blood. Nor does dietary cholesterol intake correlate to heart disease.

I repeat: Cholesterol in food is not the same as the cholesterol we've all been taught (misguidedly) to fear.

This tragic lack of basic knowledge and understanding has led to excellent, healthy foods such as eggs, lobster, and shrimp being consigned to the "bad list" simply because they contain cholesterol. To this day, so-called experts still drone on about how many eggs or shellfish servings you can "get away with."

There is nothing wrong with eating shellfish if you enjoy it. And eggs are actually nature's perfect food, packed with minerals, vitamins, and other nutrients. But keep in mind these nutrients are found in the yolk, which is also the part of the egg that contains cholesterol. Advising people to throw out the yolks and only eat egg whites is just about the most ridiculous and wasteful advice in the sad history of diet and nutrition recommendations.

Myth 7: LDL cholesterol is evil

Mainstream medicine is obsessed with lowering total and LDL "bad" cholesterol in the blood. But while cardiologists drop the LDL limit ever lower, endocrinology doctors who are experts in human metabolism are crying foul.

Studies have found that total and LDL cholesterol levels are poor indicators of heart disease compared with other risk markers.¹⁰

I also recently reported on a study of 231,986 patients hospitalized for heart disease. Half of them had normal LDL cholesterol levels.¹¹

And in older people, there are studies that show that the higher the cholesterol, the lower the risk of heart disease.¹²

My late colleague, Dr. Arthur Schatzkin of the National Cancer Institute, first showed that low cholesterol is a risk factor for cancer nearly 30 years ago. Recent studies have found low cholesterol is associated with higher mortality worldwide—not only from cancer, but also suicide.¹³

Myth 8: Margarine is better than butter

As the U.S. government made the saturated fat myth official in 1977, margarine manufacturers and their ad agencies stepped up the opportunity to sell their unpalatable, slick chemical sticks as “healthy” substitutes for real butter.

But the truth is, most margarines contain large amounts of unhealthy processed vegetable oils and added trans fats. In fact, the well-respected Framingham Massachusetts Heart Study shows that eating margarine substantially increases the risk of heart disease, while butter has no effect.¹⁴

And an Australian study of 458 men who had recently had a cardiac event found that those who increased their margarine and vegetable oil consumption were a whopping 70 percent more likely to die of heart disease than their butter-eating peers.¹⁵

“Margarine, the toxic toast topper.” Now that’s an ad I’d like to see.

Myth 9: Corn and soy oils are heart healthy

I’ll finish with a myth that seemingly came out of nowhere: The corn and soy oils sold in grocery stores are somehow healthy.

Vegetable oils contain unsaturated fats, and thus are touted as a healthy substitute for saturated fats like butter. But, the practice of irradiating corn seeds over many decades has created a genetically modified food and oil that is now virtually devoid of nutritional content.

Soybeans are even worse—93 percent of all soy planted in the United States in 2013 was genetically engineered.¹⁶

And that’s not all. Research shows corn and soybean oils are high in omega-6 fatty acids.¹⁷ Too many omega-6s can lead to inflammation—one of the chief markers for heart disease, type 2 diabetes, and other serious diseases. Furthermore, a study showed that soybean oils commonly sold in the U.S. can actually contain trans fats, which have been linked to heart disease.¹⁸

Despite all the research showing that these nine myths are nothing more than fairy tales that haven’t come true, I continue to see warnings from nutritional “experts” about the evils of fat and cholesterol.

But now you know better. Just say no to these outrageous misconceptions that have been promulgated upon the American people over the last four decades. Your body and your brain will thank you.

CHAPTER 17:

EXPOSED! HOW BIG PHARMA'S "LITTLE WHITE LIES" ARE PUTTING YOU IN GRAVE DANGER

And 5 critical steps for separating scientific fact from media-hyped fiction

It takes a lot to make a great big business like big pharma. You have to influence the scientific and medical establishments. You have to lobby government regulators like the FDA. And you have to persuade the media.

One key way big pharma does all this is by controlling the research. Either by sponsoring studies themselves and/or by manipulating how the findings are presented.

That's right—many of the supposedly "unbiased" scientific studies you read about in the lame-stream media are actually rigged in favor of the drugs big pharma peddles.

How does big pharma get away with this? First of all, the media rarely has the initiative (let alone the competence) to really dig into scientific data. So they often rely on press releases—issued by none other than the pharmaceutical companies themselves.

Secondly, most doctors don't have the time to read pages and pages of new scientific research. In fact, a 2001 American Medical Association membership survey revealed that a whopping 91 percent of all doctors do not get their current information from medical journals. Instead, they rely on drug company salespeople to deliver the latest scientific "news."

So more often than not, a doctor can be counted on to parrot the latest spin from big pharma when it comes to your health.

And if that weren't troubling enough, dozens of pharmaceutical companies even sponsor nonprofit front groups like Research!America.¹ These groups lobby for more government funding for studies that—you guessed it—supply basic research for big pharma. All while purportedly representing the interests of the citizens.

Unfortunately, these aren't the only underhanded tactics big pharma uses to influence public perception.

7 more tricks big pharma has up its sleeve

At the turn of the 20th century, Frank Norris published *The Octopus*, about the monopoly over wheat production and distribution by the railroads. And a few years later, Upton Sinclair published *The Jungle* about the practices of the meatpacking industry. These two "muck-rucking" exposes about our daily meat and bread, literally, motivated President Theodore Roosevelt to exercise reforms, including the 1906 Pure Food and Drug Act, which became today's FDA.

One hundred years later, the Octopus has become big pharma, extending its tentacles into every aspect of "public health": the medical profession, the Congressional and Executive Branches of government (by way of legions of high-paid lobbyists and the FDA, respectively), and the medical and mainstream media.

Especially the media.

You see, big pharma employs a legion of medical writers, many of them freelancers, to prepare and present their bidding to the public. I was invited by the American Medical Writers Association to give the keynote speech at their annual convention in Atlanta on my 40th birthday. I spoke about the importance of history in understanding the status of health and medicine today. But it seemed to me that the majority of the work available for "medical writers" was from big pharma.

So, here are some of the dirty tricks big pharma uses to present "new medical information" to the public.

Telling only part of the story. Nearly one-third of all clinical drug trials are never made public—often because the research actually shows that the drugs either don't work or have serious side effects.² Tamiflu is a perfect example. A whopping 90 percent of the studies on this toxic flu drug were never published.

Disguising marketing as research. Big pharma likes to brag about how much of its budget is spent on research and development. Of course, pharmaceutical companies have been known to disguise marketing schemes as legitimate scientific drug studies.

A notorious example is the “research” behind Vioxx, the deadly arthritis drug manufactured by Merck, one of the biggest of the big pharma companies. Merck’s *marketing division* actually conducted the so-called scientific study that was given to doctors to prove the drug was safe.³

No wonder Vioxx turned out to be a deadly disaster.

Ghostwriting. Even when a legitimate study is presented as “independent,” it may actually be conducted by drug companies and then published under a doctor’s name.

But what about university-published research?

Big pharma, as well as the chemical industry and the food industry, all fund many public and private universities. This money goes toward everything from university-wide endowments to research labs and positions. Rampant conflicts of interest are common in today’s corrupt higher education university system. So it’s hardly a surprise when these “independent” university researchers publish studies in big pharma’s favor.

Using only “perfect” study participants. The design of some so-called “gold-standard” clinical drug trials routinely excludes participants who may be most at risk for dangerous side effects. Plus, it regularly includes only those people who are most likely to show some benefit from the drug.

This practice helps explain why so many drugs are found to be toxic only after they are approved by the FDA and released upon millions of unsuspecting people.

And you probably won’t be shocked to hear that many side effects only get revealed when a drug’s patent is about to expire. Case in point: Ambien. In 2013, a government agency reported that this sleeping pill was sending record numbers of people to the emergency room.⁴ The report came out *11 years* after the FDA approved Ambien.

The “perfect person” trick is also used for some studies on nutrients and dietary supplements. Researchers only choose people who are optimally nourished to begin with. So of course the nutrient or supplement shows little effect on these already healthy people. And big

pharma certainly makes sure you hear about these sorts of results—or lack thereof—from the media.

Dosing flaws. Speaking of research on dietary supplements, researchers often insist on using the woefully inadequate government “recommended” doses in their studies. No surprise—the research subsequently concludes the supplements don’t work.

An example: In 2013, *Annals of Internal Medicine* published an editorial titled “Enough Is Enough: Stop Wasting Money on Vitamin and Mineral Supplements.”⁵ This blanket dismissal was based on only three studies that used ridiculously low doses, not to mention pathetic, poor-quality big pharma daily multivitamins.

As I’ve emphasized many times before, dietary supplements are designed to supplement *a reasonably well-balanced diet*. Yet many studies don’t even bother to determine the diet and nutritional status of study participants in the first place. Other studies are based on imaginary dietary intakes determined by wholly inadequate research methods like dietary recalls, and dietary surveys. (And, with apologies to Philip K Dick and Arnold Schwarzenegger, these methods are far from “total recall”).

These research methods are totally inadequate. And the NIH has known about this real “dietary deficiency” in their research for decades. But the careerist nutritional statisticians in charge of this garbage are apparently too threatened to have anyone around who really knows anything about human biology, diet, and nutrition. And, sadly, this problem extends to the government agency in charge of investigating nutritional and natural approaches—the National Center for Complementary and Alternative Medicine, or NCCAM.

Rushing the research. Many studies are designed for only short periods of time—not long enough for permanent drug damage to emerge. And often not long enough to observe the full benefits of diet, nutrition, and dietary supplements.

Cherry-picking the data. A study can reach multiple conclusions, but big pharma press releases typically only highlight the most positive findings. Or there might be

dueling studies, and only the one that best suits the pre-established agenda gets the attention of the media.

For instance, a 2013 study of *only six people* (and some lab rats) proclaimed that eating red meat may lead to heart disease.⁶ Meanwhile, a much larger study showed the exact opposite.⁷ Guess which study got the headlines?

Probably the single worst example of all of the above tricks was a 2013 study proclaiming that not only does fish oil do nothing for your heart, but it also causes cancer. Those of us who really know the truth could only shake our heads.

Of course, considering big pharma spends an astounding \$27 *billion* a year to promote its drugs, it's no wonder that we're barraged with "research" that is questionable at best—and unconscionable at worst.⁸

5 steps for separating scientific fact from big pharma fiction

So how do you know if a study is truly reliable?

Well, there are a few things you should always watch out for when it comes to reading the popular headlines:

1. **Who is paying for the study?** If it's not disclosed in the article, beware.
2. **Is it just an epidemiological-statistical study?** Or are some real doctors and clinical observations involved? Epidemiological studies are designed to examine associations within a population. They can never prove causation in an individual.
3. **Is there a lot of "number crunching" involved in presenting the data?** Or can the results be stated in simple terms? As Mark Twain oft quoted, "There are three kinds of lies: lies, damned lies and statistics."
4. **Is the reporter writing about the study a qualified science journalist?** They seem to be a dying breed. But there are still a few at the better papers and news channels.
5. **Are the "experts" being quoted actually qualified?**

This deficiency is often a real problem when it comes to

reporting on alternative, complementary, and natural-medicine topics. Beware of regular physicians who have just "discovered" truths about nutrition and natural healing that would have been known to anthropologists and biologists for decades.

And of course, at the end of the day, you can always just stick with me.

I'll separate the scientific facts from big pharma's fiction for you—and show you what you *really* need to know for good health.

CHAPTER 18: REAL RELIEF FOR HEARTBREAKING CASES OF PSORIASIS

A thoughtful reader recently asked a question about psoriasis, and I quickly provided a short answer. But it got me thinking a lot more about this challenging condition.

Psoriasis is a mind-body disorder that presents a mystery to mainstream medicine. Conventional medicine likes to define every disorder as either physical or mental. (with all the stigma attached). But taking this “simple-minded” approach means all conditions that have connections to the mind and the body are inherently—and unfortunately—mysterious to the mainstream.

In fact, some years back, psoriasis was simply described as “the heartbreak” by a large, and seemingly relentless, big pharma advertising campaign. Indeed, psoriasis can be a heartbreaking condition. Unfortunately, the cures peddled as magic bullets by the mainstream won’t ease your pain. Worse, some toxic chemicals and treatments promoted as “natural” are anything but.

Fortunately, there are truly natural remedies that can effectively address both the mental and physical components of psoriasis. I’ll get to those in a moment. But first, let’s take a closer look at some of the disastrous mainstream AND natural “cures” that have been foisted on psoriasis sufferers.

Five psoriasis “miracles” that fall flat

Steroids. Psoriasis treatments that contain steroids knock out your immune system for a while, which can give some temporary relief. But using steroids to manage your psoriasis on an ongoing basis can lead to thinning of the skin, skin infections, and other complications, not to mention disruptions to your normal immune system.

And the last thing you want to have is thin, infected skin without a normal immune response, especially with dangerous and deadly untreatable skin infections like MRSA lurking around every hospital and many gyms.

Coal tar. There are a variety of ridiculously expensive

gels, lotions, and shampoos advertised as containing “natural” coal tar derivatives to treat psoriasis. Popular brands include Exorex, Elta Tar, and Psoriasin.

Coal tar is what’s left over after they clean out the bottom of the catalytic cracking tanks used to refine crude oil for petroleum products like gasoline, heating oil, and kerosene. (You may have seen my former colleague Mike Rowe cleaning one out on his TV show, “Dirty Jobs.”). The oil industry would normally have to pay someone to haul coal tar away, but the cosmetic industry figured out a way to get this residue for next to nothing and pass it on to consumers at its usual exorbitant prices.

The FDA does allow coal tar to be marketed for psoriasis, and coal-tar treatments have been used for decades to try to manage skin and scalp conditions.

But unless you are in the habit of bathing at the local tar pit or gas station, it really doesn’t seem very natural.

Neem oil. This plant oil is another “natural” remedy for psoriasis. Made from the seeds of the neem tree, it’s found in a variety of cosmetics, and is also used as a pesticide. Because it’s an oil, it may make your skin look less dry and flaky. But it may not really be treating the underlying psoriasis, and it has the potential to actually irritate your skin.

Nystatin. This drug is an oral antifungal cream sometimes used to treat psoriasis. The problem is, psoriasis is not caused by a fungus. And the side effects of this treatment include itching, irritation, burning, and skin rash. In other words, it may very well make psoriasis symptoms worse.

Zinc. Back in 1994, a clinical trial found that taking zinc supplements didn’t reduce psoriasis. But more recently, some studies have suggested that using zinc creams while taking zinc supplements may be beneficial.

I would not rely solely on zinc treatments to manage psoriasis, but it is important for everybody to maintain healthy zinc levels in any case. Your body does not store zinc, so it’s key to get adequate daily intakes from food or supplements. Oysters, crab, beef, and beans

are good dietary sources. A good starting point for zinc supplementation is 40 mg a day.

Unfortunately, the fact is that none of these “cures” is likely to offer significant, long-term relief of psoriasis.

But that doesn’t mean you just have to live with this painful condition.

Mother Nature knows best

I’ve found that what remains a mystery to modern medicine in regard to psoriasis seems like common sense to any natural practitioner: Follow the old-fashioned Nature Cure, including the following components:

Rethink bath time. Do not shower or shampoo too often—it removes the natural oils from your skin and scalp and dries them out. To stay clean, consider a bidet, douche, or sitz bath (European traditions), which keep your private parts clean without having to take a full shower or bath.

When you do bathe or shower, use warm water. Hot water removes skin oils. For a soothing bath, add sea salts, mineral salts, oatmeal, or fragrant nut oils like almond.

Moisturize. After bathing, use fragrance-free skin moisturizers. Cetaphil and Eucerin creams are reported to have good results. Lightweight lotions don’t have the staying power to provide much help.

Soak up the sun. For reasons that remain mysterious to dermatologists (the same experts who want you to avoid the sun altogether), exposure to sunlight is actually good for the skin.

Your healthcare practitioner may prescribe ultraviolet light treatments, but tanning beds don’t produce the same healing benefits and may actually be harmful. You’re better off spending 15-20 minutes per day in direct sunlight (without sunscreen). This exposure may improve your psoriasis symptoms as well as help maintain healthy vitamin D levels in your skin and body.

De-stress. Mind-body treatments like hypnosis, relaxation, biofeedback, acupuncture, yoga, and others

may all help with psoriasis.

You can also reduce stress by getting enough physical exercise and sleep and following a healthy, balanced diet.

Reach out to others. An estimated 125 million people worldwide have psoriasis, so you are not alone. Use in-person or online support groups to discuss your feelings—which may include depression, discouragement, and isolation—as well as the types of treatment you find effective or ineffective.

With psoriasis, one of the most frustrating experiences is that what works for one person may not work for another. We are all individuals. That’s another reason why my Emotional Type Quiz is important for anyone using any type of mind-body therapy.

Managing your psoriasis can be a lifelong pursuit, but don’t give up. Find out what works for you.

PSORIASIS BY THE SEASONS

You might find your psoriasis symptoms changing with the seasons. Now, at the height of summer, when the air has more moisture and you can spend more time in the sun, your psoriasis may improve. But with fall and winter coming, you may discover that the colder, drier air and reduced sunlight will begin to worsen your symptoms.

The key is to keep your skin hydrated year-round. When you’re indoors in the winter, you can increase the moisture in the air by turning down the heat and using a humidifier.

It’s also important to hydrate your skin from the inside. And the best way to do that is to stay hydrated at the cellular level by adding South African red bush water-soluble powdered extract to any hot or cold beverage—all day, every day. I recommend the red bush product I helped develop, Red Joe rooibos water-soluble powder.

CHAPTER 19: 7 SNEAKY FOODS THAT PRETEND TO BE HEALTHY

I previously wrote about a study that showed how people who take statin drugs are shooting themselves in the foot. Over time, statin users (now a whopping one-sixth of all Americans) eat 10 percent more calories and 14 percent more fat than the rest of the population. This is called the “statin gluttony” effect.

So all of these people are taking a pill to supposedly improve their health (despite sketchy-at-best benefits). Yet their resulting poor diets mean they end up losing the battle after all, in addition to suffering the awful side effects of these drugs.

But statin users aren't the only ones getting scammed in the quest for good health. Every day, people choose foods that seem healthy but really aren't. Here's a look at seven of these sneaky “health” foods.

#1: Banana chips. These snacks are made from a fruit that is naturally high in potassium—and fruits and vegetables are generally healthy foods. But just like their unhealthy potato chip cousins, banana chips are deep fried in high-calorie oil.

Just half a cup of banana chips can have around 200 calories and 10 grams of saturated fat.¹

Meanwhile, a large, fresh banana is virtually fat free and contains only about 120 calories. Plus, it has more vitamins and minerals than banana chips, because frying can destroy vital nutrients. If you like bananas, you're much better off sticking with the whole, uncooked fruit.

#2: Energy bars. You can find energy bars sneaked into the grocery aisle with healthy foods, or even in the weight-loss section. But beware. Many of these crazed concoctions average 200 to 250 calories each.² And since most energy bars tend to be small, it's not unusual to down a couple a day as a supposedly nutritious “snack.”

But then you find that you've eaten as many calories as you'd get in a healthy, large lunch or moderate dinner. In that sense, energy bars are meal “replacements,” with all of the calories (and more) but few of the nutrients—

and none of the enjoyment, satisfaction, or benefits of eating a real meal.

The sugar content can also be quite high, accounting for many of energy bars' empty calories, and making some of them no better than candy bars. And they're not even as tasty.

If you need a portable, “on-the-go” snack, try a hard-boiled egg or a fresh banana.

#3: Muesli. This is a health food store staple and hard to pronounce, so it must be good for you, right?

Muesli is marketed as a healthy alternative to sugary breakfast cereals. And while there are some brands that have fewer than 200 calories per serving, there are others that have a whopping 600 calories per cup—with high fat content and ridiculous amounts of added sugar, to boot.³

If you like having some sort of cereal in the morning, you can make your own healthy version. Buy bulk oats, sunflower seeds, dried fruits (cut into small bits), and some nuts, mix them together, and add low-fat milk.

Alternately, eggs are a great, nutritious way to start the day.

#4: Prepared salads. There is nothing healthier than a fresh, green salad. But when you order a salad at a restaurant, watch out for the extra calories, fat, and sugar often used to dress it up so it tastes better.

If you trust the basic ingredients, ask for the dressing on the side. Or ask for olive oil and vinegar (or lemon) and dress your own salad at the table. And of course, you can also make these dressings at home. Don't ever buy or use prepared salad dressings. To keep your olive oil fresh, only buy as much as you will use in a three-month period.

#5: Sushi. This trendy food is bound to be good for you, right? After all, what could be healthier than raw fish (even if you're not a seal)?

While the nutrient content of sushi is indeed healthy, any uncooked food can pose a risk of infection or infestation with parasites. Although the high standards of real sushi restaurants present a minimal risk, watch out for the proliferation of “sushi-on-the-side”

eateries where chefs aren't well versed in proper sushi preparation.

You also need to be careful of mercury contamination. Mercury is common in fish, and because many of the fish used in sushi are large predators at the top of the marine food chain, they can have high concentrations of mercury.

Tuna is particularly problematic.^{4,5} Some experts say adults should avoid eating more than 6 ounces of tuna sushi per week to make sure they don't consume too much mercury. And pregnant women and children should eat even less.

#6: Low-fat yogurt. I have often warned that many of the processed foods labeled as "low-fat" contain extra sugar to make them taste better. And studies are showing this added sugar—not naturally occurring fat—is the real culprit behind many chronic diseases.

You are better off with a real, full-fat yogurt. Real yogurt is made from milk, which we all know is a good source of calcium and vitamins A and D. It also contains beneficial bacteria (probiotics) that digest the sugar found in milk and thus naturally lower yogurt's sugar content.

#7: Trail mix. We have now reached the end of the unhealthy food trail. Which seems appropriate because trail mix, while supposedly nutritious, may be the sneakiest snack of all.

A basic trail mix made solely of dried fruits and nuts is a good, healthy snack. Nuts and fruits eaten in moderation are natural, high-nutrient foods. In fact, they form a basis of the "Bear Diet," which I recommend for healthy weight loss and weight maintenance. (See the special report "*Top of the Food Chain Diet*" for more. *)

But prepackaged trail mixes typically contain lots of "tasty" ingredients like milk chocolate candies, sugar-coated nuts, yogurt-covered raisins, corn syrup, and fried banana chips. These ingredients are packed with refined sugars, and can boost the calorie content of a trail mix to a whopping 44 calories per tablespoon. That's more than 700 calories per cup!⁶

This caloric load can also include a hefty amount of trans-fats, which should be completely banned from any diet (and are finally being banned by the FDA over the next couple of years).

The alternative is to make your own trail mix with nuts and dried berries from your health food store. Not only will you save a lot of money and calories, but you'll also have a very nutritious snack that you can eat anywhere, whether you're waiting in traffic or scaling the Sierra Nevada mountains.

Why nuts and berries? Nuts are high in vitamins and minerals and are associated with a lower risk of heart disease, high blood pressure, diabetes, metabolic syndrome, cancer, gallstones, and obesity. Berries have been linked to a lower risk of cancer, cardiovascular disease, and urinary tract infections. They also boost immune function.

And if that weren't impressive enough, nuts and berries together are an antioxidant and immune-system powerhouse. The combo also shows benefits for brain and nerve function. A growing number of clinical studies demonstrate that moderate consumption of berries and nuts improves cognitive performance. The dynamic duo may also delay, or even reverse, the effects of age-related dementia.

The truth is, eating healthy doesn't have to be a guessing game. A little common sense goes a long way. And when in doubt, you can't go wrong by always opting for whole, natural foods over processed, prepackaged products—no matter how sneakily nutritious they may seem.

CHAPTER 20: COFFEE— A JOLT OF GOOD HEALTH

If you've always thought of coffee as a vice, it's time for a wake-up call. Coffee is actually a natural product with much more healing potential per cup than the highly (and erroneously) touted green tea.

You may have to drink 16 cups a day of green tea to get the optimal health benefits. But with coffee, you can get substantial health benefits from as little as *two* cups a day.

Recent research on coffee and caffeine continues to show benefits for both body and mind. A few cups a day can help lower your risk of diabetes, keep your liver healthy, stave off depression, and dramatically reduce your risk of developing Parkinson's disease.

And another recent study of more than 400,000 men and women ages 50 to 71 years found that over a 13-year period, people who drank coffee were *less likely to die* from any cause than those who didn't.¹

I'll share more details on these benefits in just a moment. But first, it's interesting to examine the evolving attitudes towards coffee.

Attitude change is brewing

When I was a child, I was routinely given "café au lait" which is milk with a little coffee, warmed up together (it has a different taste and texture than adding cold milk to hot coffee). But as I got older, I became aware that coffee was considered a stimulant, a crutch, and even a vice.

I didn't want any of that, so I gave up this tradition, and all through college, medical school, and even my hospital medical residency, I never drank coffee (to the amazement of friends and colleagues).

In the early 1980s, a study published in the *New England Journal of Medicine* appeared to back up my choice. It reported that coffee drinking was associated with an increased risk of deadly pancreatic cancer.

But not long thereafter, it was found that this research only applied to decaffeinated coffee, which can use toxic chemical solvents during the decaffeination

process. I realized it wasn't the caffeine that was bad; it was the chemicals.

So, finally, when I became a Florida State Medical Examiner in Miami-Dade County, I started drinking coffee regularly. Really, it became a matter of survival. I would be called in the middle of the night and had to navigate territory larger than the size of Rhode Island, including large portions of the (then-trackless) Everglades, to conduct scene investigations—then go straight to the morgue that morning to conduct the post-mortem examinations. My record was 10 cases over a 24-hour period. And, thanks to coffee, I was able to get through it.

But it wasn't just helping me get through long nights and days. I also found that drinking a cup of coffee helped me with congestion from seasonal allergies without antihistamines and their awful side effects. This effect makes perfect sense, since the caffeine expands respiratory passages.² An ingredient in tea called theophylline has the same potential, but I found a couple cups of tea didn't do the trick—it just isn't strong enough.

From a medical standpoint, I saw the tide begin to turn toward coffee about 20 years ago. Around that time, I was asked to talk about coffee for a syndicated health TV program hosted by Mike Rowe (more recently, you might know him as the host of the popular show "Dirty Jobs" on The Discovery Channel). I figured it would involve cautioning viewers about possible detriments to their health. But as I did the preparatory research, all I found were early hints about all of coffee's possible health benefits.

I enjoyed being interviewed by Mike Rowe and found him to be an unusually well-informed and perceptive reporter. He struck me, even then, as a guy who was always willing to get his hands dirty for a story.

Since then, the health research supporting coffee has just kept expanding. Let's take a look at the latest science showing how coffee and caffeine can help keep both your body and brain healthy.

Coffee, no sugar

A recent study reports that drinking just two cups of coffee a day reduces your chance of getting diabetes by 12 percent.³

And another recent study of more than 130,000 men and women shows for the first time that increasing your coffee consumption by as little as one cup a day reduces your diabetes risk by 11 percent.⁴

How does coffee do it ? Researchers, always wanting to find the single “magic bullet” active ingredient, believe the caffeine in a cup of coffee may increase a hormone called adiponectin that affects insulin and blood sugar levels. Although, as usual, this is really only part of the explanation. A natural compound like coffee has many different physiologic activities.

Love your liver

We’re hearing a lot more these days about liver toxicity, which is often caused by acetaminophen (Tylenol), anti-depressants and other drugs. In fact, liver disease—including liver cancer, hepatitis, and cirrhosis—is the 10th leading cause of death in the United States.⁵

Of course, the new drugs to treat liver problems are minting more new multibillion-dollar biotech companies. But what big pharma doesn’t want you to know is that a few cups of coffee a day can keep your liver healthy, without the side effects of drugs.

A recent study of more than 60,000 people in Singapore found that over a 15-year period , there was a strong association between higher coffee intake and lower risk of liver inflammation and death from liver failure.

In fact, researchers found that drinking two or more cups of coffee per day reduced the chances of dying from liver failure by a whopping two-thirds, or 66 percent.⁶ Meanwhile, green tea, black tea, and fruit juice had no impact on the risk of liver failure.

What’s on your mind?

Antidepressants like Prozac, Zoloft, and Paxil have been shown to cause liver toxicity and are only really effective

for about 15 percent of people who are clinically depressed.

But now, there is evidence that coffee is effective at treating both liver toxicity and depression.

In the study of 400,000 people I mentioned above, researchers looked at all types of beverage consumption, including coffee. They discovered that people who drank four or more cans of soft drinks a day had a 30 percent higher chance of depression. That number increased to 38 percent for people who drank fruit drinks.

But for people who drank four or more cups of coffee a day, depression risk *decreased* by 10 percent. No association was observed for iced tea or hot tea.

But there is a caveat. Adding artificial sweeteners (but not sugar or honey) to your coffee actually increases your risk of becoming depressed.

Finally, a recent review of 13 studies found the risk of developing Parkinson’s disease was 31 percent lower for coffee drinkers.

This research backs up other studies showing that coffee can have a powerful effect on Parkinson’s disease. The caffeine in coffee is thought to affect the parts of the brain that control the onset and progression of the disease.

Considering all of this evidence, it seems coffee has a lot more going for it than helping to keep you awake. In fact, my “Miami vice” may very well end up being touted as the next health drink.

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