INSIDERS' CURES

THE BEST OF INSIDERS' CURES 2012-2013

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CHAPTER1:

DIETARY FIBER: CANCER CURE—OR CAUSE?

The colon is an amazing part of anatomy. It's really a complex ecosystem within the body. Inside, its contents act as a growth medium for both intestinal bacteria and colonic cells. This growth medium, in turn, is influenced extensively by "host conditions." Primarily, the foods you eat.

For the most part, this colonic ecosystem adapts to whatever you throw at it (or *into* it, as the case may be). But there are limits to its flexibility. And pushing those limits can result in some serious consequences—like cancer and other diseases.

Of course, on the flip side of that coin, there must also be specific substances that offer a protective effect in the colonic ecosystem. And, for decades, fiber has been the most widely accepted colon protector.

But beware—fiber is more complicated than you've been led to believe...

The major source of fiber that's wreaking havoc on your health

The idea that a high-fiber diet lowers cancer risk first attracted attention back in 1971. All because one British pathologist named Denis Parsons Burkitt proposed that the reason Africans were at low risk of colon cancer was because their diets were high in fiber.

This hypothesis is attractive, but has actually proven to be problematic...

I've mentioned before how large amounts of fat weren't part of a "normal" human diet among our ancestors. But neither was a diet high in grains. Which, today, are considered a major source of fiber.

Grains weren't a part of a typical human dietary pattern until about 10,000 years ago (which is relatively recently in the overall history of the human species on this planet).

And archaeologists have shown how this move toward a more grain-based diet has actually created dietary problems. Most notably, it has completely altered the "feast or famine" situation our ancestors lived by.

All feast, no famine

Today, we live in a constant "feast" environment. And while that sounds like a good thing, it's not. We need the balancing effect of "famine" (or at least fasting). Constant exposure to so much food—and food so different from what human bodies originally adapted to—can have some extremely negative consequences on your health.

During "feasts," cell proliferation (the growth and spread of cells) in the intestines increases. This can actually have a disease-promoting effect. After all, unhealthy cells will spread as much as healthy cells.

Normally, this increased growth and spread would be negated during times of famine, as an energy-conserving mechanism.

But since most of us no longer experience periods of famine, our capacity to adapt has all but disappeared. Leading to obesity, chronically high G.I. hormone levels, and, again, elevated colonic cellular proliferation.

In other words, high intake of fiber in the form of grains results in *increased risk* of cancer. This may explain why there hasn't been any real evidence of lower cancer rates in the popular macrobiotic diet. The high-fiber content may perhaps be counter-productive.

It also explains why the association between "dietary fiber" and colon cancer has produced mixed findings. And why even the interpretations of the existing data aren't consistent.

Fiber <u>is</u> a common constituent in the foods that consistently appear to prevent cancer. But it isn't the only protective factor.

The whole package

What has never been clearly recognized by the NIH or statistical research is the most consistent finding in diet and cancer. And it's not a high intake of fiber. At least, not by itself.

It's a high intake of fiber-containing fruits and vegetables in *general* that lowers risk of cancer. And not just in the colon—but a wide variety of cancer sites.

Hundreds of studies looking at the role of vegetable and fruit intake in relation to cancer reveal a very consistent picture of lower risk in association with higher consumption. And these effects simply cannot be linked solely to the foods' fiber content. Fiber may just be a "proxy" for other protective nutrients.

Given the consistency of high fruit and vegetable intake as protective against cancer, and the opposite effect of grains, it's obvious that fiber itself isn't the answer.

But why waste time, money, and resources debating which nutrient (or even which food) is most crucial?

A better, simpler way to get the cancer protection you need

Fruits and vegetables contain a wide variety of substances besides vitamins and minerals that have anticancer properties. Phenols, isothiocyanates, flavonoids, indoles, lignans, etc. have all proven their anti-cancer potential in studies.

But it isn't really possible to provide required dosage estimates for these "non-nutrient" substances. Government food tables certainly don't provide this information.

In fact, most of the relevant analyses needed to determine these values haven't even been done. Besides, it's likely that whole classes of beneficial constituents of fruits and vegetables still remain to be identified.

So rather that grasping at straws, waiting for scientists to separate every nutrient in a particular vegetable or fruit, and test it for its potential effects, why not make it easy on yourself? Simply eat more of them in general.

Fruits and vegetables are "purpose-fitted" packages of required nutrients for humans.

After all, humans evolved in the presence of plants, not just nutrients. And people eat foods, not nutrients.

CHAPTER 2:

THE DANGEROUS DEFICIENCY NO ONE IS TALKING ABOUT

And how you can cure it with just a few sprinkles of salt

There is an increasing trend of iodine deficiency in this country. This problem certainly isn't as publicized as vitamin D deficiency (as I have discussed previously), but it can be just as dangerous.

Iodine is a critical component of hormones necessary for normal thyroid function and metabolism. But iodine also has other important functions in virtually every cell in the body—especially glands such as the adrenals and the pancreas.

The most well-known effect of iodine deficiency is goiter. When you don't get enough iodine, the thyroid can't produce enough thyroid hormone. When thyroid hormone is deficient, the pituitary gland in the brain sends more thyroid stimulating hormone (TSH). TSH makes the thyroid gland grow in a vain attempt to produce more thyroid hormone. And, eventually, you develop the enlarged thyroid of goiter.

Goiter has thankfully become rare in this country. But that doesn't mean iodine deficiency has gone away.

Just the opposite, in fact.

Thanks to inadequate government dietary recommendations, history may be repeating itself. The risk of iodine deficiency—and all of its consequences—is back with a vengeance. And, unfortunately, it's even more widespread than it was years ago.

The No. 1 cause of preventable brain damage

Goiter is only one of the problems caused by insufficient iodine intake. Deficiency has also been linked with fatigue, reproductive disorders in women, and prostate, breast, ovarian, and uterine cancers.

Prolonged iodine deficiency also has severe effects on the normal development of the brain and nervous system. In fact, according to the Centers for Disease Control, iodine deficiency is "the number one cause of preventable brain damage."

The key word here is "preventable." Indeed, iodine deficiency is easily preventable...if you don't follow the government's dietary recommendations.

Iodine deficiency makes a raging comeback

Sources of iodine have traditionally come from the ocean, where sea salt is naturally "iodized." So historically, only people living inland and at high altitudes were especially susceptible to iodine deficiency. In the U.S., the Great Lakes region and the Appalachian mountains were at highest risk. (In fact, these areas were once known as the "Goiter Belt.")

To combat this problem, salt manufacturers began adding iodine to common table salt.

But once again, so-called government health "experts" have sabotaged the health of millions of people by scaring them away from salt. Their misguided efforts to restrict salt intake are based on the premise that salt plays a role in hypertension. Not only is this notion completely unproven (as I told you in my Daily Dispatch "The Great Salt Scam"), it is probably contributing to the dangerous resurgence of iodine deficiency, particularly in young women.

This sad situation presents a hazard not only to this young generation but to the next generation as well. Which now risks being born to an epidemic of iodine-deficient (and otherwise malnourished) young women.

The easiest ways to get the iodine you need

In this instance, the government RDA is actually correct. Unfortunately, their other recommendations may be keeping people from reaching it.

The U.S. Institute of Medicine's (IOM's) recommended dietary allowance (RDA) of iodine is as follows:

• Adults and adolescents: 150 mcg/day

• Pregnant women: 220 mcg/day

• Lactating women: 290 mcg/day

• Children aged 1-11 years: 90-120 mcg/day

• Infants: 110-130 mcg/day

The World Health Organization's recommendations are similar, although they recommend 200 mcg/day for pregnant and lactating women and 50-90 mcg/day for infants younger than 1 year.

The good news is, protecting yourself from iodine deficiency is very easy to do. This is one instance where you don't even need to rely on a supplement. You can generally get all the iodine you need simply from eating salt-water fish and seafood (which is also very healthy in many other respects). And of course, iodized salt.

CHAPTER 3:

TEN MEDICAL PROCEDURES YOU MAY DO BETTER WITHOUT!

Hundreds of thousands of Americans are injured, poisoned, and killed each year by modern medical technologies. Even the most respected medical journals and institutions have confirmed in various reports over the past 10 years the failures of American "modern medicine." Including deaths from unnecessary surgery, medication errors, clerical errors, hospital-acquired infections, and even from the "expected" negative side effects of drugs. All the while, health care costs are spiraling out of control and insurance companies are requiring patients to pay a greater share of the cost.

So despite all our breakthrough technology, American medicine often appears to be doing more harm than good. In fact, you may be surprised at what can be done without it!

It's time to rethink some of the medical myths and rituals that result in millions of useless tests, procedures, and "interventions" that appear to do more harm than good. Besides the huge waste of time and money they represent.

And now the American Board of Internal Medicine Foundation is doing just that with a new project called "Choosing Wisely." The foundation consists of doctors from nine of the top medical societies in the U.S. And the Choosing Wisely program has identified 45 different medical procedures that are of little or no value, from tests, to surgeries, and even commonly prescribed medications. Below I'll review the most commonly performed tests that are now considered inappropriate. Removing this kind of waste and abuse from the healthcare system could save billions of dollars a year.

Even the benefit of the routine yearly "checkup" is being questioned for most patients now. As reported in a *New York Times* article, back in 1979 a Canadian government task force recommended giving up the standard top-to-bottom annual physical exam. They said it was "inefficient, nonspecific" and even "potentially harmful." That Canadian diagnosis was made the same year I graduated

from a U.S. Ivy League medical school where we all sincerely believed the annual "checkup" was just practicing good medicine!

But the potential danger or harm of unneeded exams is that they may show "false positives," potentially lead to risky procedures and treatments, and/or more tests, which leads to more of the same. It's a vicious cycle. And every step along the way comes with the potential for harm. The controversy over the PSA test to try to detect prostate cancer is a good example.

But from the first day out of medical school, there remains a lot of simple inertia about what doctors expect they should be doing for their patients, and about what patients expect from their doctors. Not to mention all the economic incentives from the health care industry to provide more "care" whether needed or not.

There are also perverse incentives in medical research to discover more and more "biomarkers" for screening and "early detection" of diseases like cancer, despite the repeated abject failures of this approach for decades (as I reported for ovarian cancer biomarkers in the *Daily Dispatch* "The cancer test women should avoid at all costs"). And now, as I also reported in my online *Daily Dispatch*, the new Director of the National Cancer Institute, Dr. Harold Varmus (a past director of the NIH) is back like a bad penny, poised for another jump over the precipice with an obsessive focus on finding ever more "biomarkers."

And, sad to say, there are many diseases where early detection, even if "biomarkers" are found, simply doesn't make any difference in the prognosis, management, or treatment of the disease. There are also many problems that may correct themselves over time due to the body's ability to heal itself without any need for dangerous tests, procedures, or treatments.

So, before you make your next doctor's appointment, be sure to consider the following very carefully. According to the American Board of Internal Medicine and National Physicians Alliance, these are the "top ten" most commonly performed tests you can actually omit:

1. **Annual physical exam:** On average for healthy adults, rather than detecting real problems, it is more

- likely to find false positives or meaningless results leading to useless and dangerous procedures and/or more tests that lead nowhere.
- 2. **Annual EKG:** On average for people without heart disease, it is more likely to mislead than to find early problems—leading to further needless and dangerous tests, drugs, and even surgery.
- 3. **Annual "blood panel" tests:** For people who feel well in the first place, it is more likely to lead to false positives than to detect new disease.
- 4. **Annual cholesterol test:** If cholesterol previously tested "normal" (although what is considered normal is constantly being manipulated by industry-motivated NIH "reviews"), this test is needed only once *every five years*.
- 5. **Annual Pap smear:** Although this is one very important and successful test for early detection of cervical cancer, it is only needed *every three years* in women who have tested normal.
- 6. Prostate Specific Antigen (PSA) to detect prostate cancer: Experts from the U.S. Preventative Services Task Force no longer recommend this test, saying it causes more harm than benefit. The harm is not from this test itself but that it is frequently misleading, resulting in useless procedures and surgery that frequently cause permanent disability or even death. Studies show that patients not given the PSA test have no higher mortality than patients faithfully screened for prostate cancer by this test.
- 7. **Pre-operative chest x-ray**: Many hospitals still require a routine chest x-ray prior to surgery but it is a wasted effort unless the patient has heart or lung disease. The annual routine chest x-ray as part of a yearly physical exam was given up long ago, since the risk from radiation far exceeded any benefit at detection of lung cancer. Of course, now you can give up the annual physical as well.
- 8. **Bone scans in women under 65 years:** Efforts to detect osteoporosis in younger women have resulted in many women taking dangerous drugs with terrible side effects that are unnecessary (besides, if you

wait until you're 65, Medicare will cover this test if medically necessary).

- 9. Radiologic tests for low back pain: If back pain is of short duration (less than 2–4 weeks), doing imaging studies adds no benefit or improvement in outcome. And, as I've said before, the vast majority of patients with low back pain should be treated first with spinal manual therapy, provided by physical therapists and chiropractors, rather than drugs or surgery. And one hospital in Seattle is now doing just that with success (see below).
- 10. Radiologic tests for headaches: The common headache is sufficiently diagnosed by taking a careful medical history and doing a comprehensive neurological exam. Find a doctor who still knows how to provide that.

These 10 recommendations are not just theoretical. They are already being tried with positive results.

Local health care providers and some insurers are already improving the system by treating their patients better by providing less care. Following are just a few examples as reported in an editorial in *The New York Times*. ²

Premier Inc. is an alliance of hospitals around the country that has ceased doing useless blood tests and screenings. Over three years in 157 hospitals in 31 states they have saved almost 25,000 lives and reduced costs by almost \$5 billion, saving 12 percent of their overall spending.

Virginia Mason Medical Center in Seattle stopped doing useless radiologic tests for headache and back pain, decreasing the use of CT scans by one-quarter. Also, in collaboration with Seattle-based Starbucks and Aetna Insurance they stopped sending people with low back pain to expensive orthopedic specialists (who could only see them after lengthy and painful waits, and then order a costly CT scan before providing any therapy). Instead they sent back pain patients directly for spinal manual therapy to physical therapists on the same day. Most patients were pain free and back to work in less time than

it would have taken them to wait to see a medical specialist. And they avoided dangerous drugs and surgery.

That's true healthcare reform.

So what are the most common regular tests you *should* get?

They are actually few and simple. For women over 40 it is useful to get a mammogram every two years.

After much controversy about the risks of mammograms, the optimal screening interval and hundreds of millions of dollars spent on research, the data indicate that it's simply not necessary to get a yearly mammogram. Bi-annually is just fine. However, women should perform frequent breast self-examinations (while standing in the shower or otherwise).

For heart disease, getting your blood pressure checked regularly is the single most important step you can take to prevent or control your risk. Unfortunately, as I reported in my *Daily Dispatch*, the healthcare system is failing miserably to detect and treat high blood pressure—which is an extremely treatable condition. (For more on how to address high blood pressure effectively, see your *Insiders' Library of Confidential Cures*, which you received free with your subscription).

It's time to give up on all the dangerous and wasteful testing and focus on the things that really make a difference—and can literally mean the difference between life and death.

If your doctor is recommending any of the other 10 tests above, it can't hurt to talk to him candidly about the real risks and benefits. You can refer to the "Choose Wisely" campaign of the American Board of Internal Medicine Foundation. And of course, you can always get a second opinion. And if he doesn't recommend these tests, before you argue to have them just because everyone else is...you may want to consider counting your blessings. Instead, focus on what's really needed to ensure optimal health for whatever area of concern you may have.

CHAPTER 4:

THE SURPRISING TRUTH ABOUT METFORMIN

The "natural" blood-sugar remedy that had been sidelined for far too long

What I'm about to tell you may be shocking. And it's sure to ruffle the feathers of many of the "natural knowit-alls." But the science is clear, so I'm not afraid to say it:

If you have unmanaged Type II diabetes, you should consider the drug metformin as a first line of treatment.

And you won't get the full story anywhere else, since the natural health industry wouldn't be caught dead recommending a drug. So, please allow me to do the honors here...

Think of it as your emergency "get out of jail free card"

Diabetes is deadly. High blood sugar coursing through your body destroys your eyes, kidneys, heart, brain, and more. So the sooner you bring it down the better. (Just like high blood pressure, for which I also recommend tried and true medications as a first-line treatment for unmanaged hypertension.)

And in this case, the science is clear—the drug metformin has been proven safe and effective for most people. And since it's now a generic drug, it's highly cost effective, too.

Now don't get me wrong...I'm not saying diet and exercise isn't important. In fact, they're the best means for preventing and even reversing Type II diabetes entirely. Something metformin can't do. And there are certainly dietary supplements that can help with maintaining healthy blood sugar (like berberine).

But Type II diabetes doesn't develop overnight. And let's face it, changing the habits that got us there in the first place isn't an overnight task either. So if you need additional help, this is one rare instance where you shouldn't be afraid to look at a mainstream therapy.

And when an option this effective comes along to help kick-start your efforts safely (when taken properly), even if it *is* a drug...it's something you should consider seriously.

Indeed, it's rare to find such a safe and effective "drug" as the popular diabetes treatment metformin. In fact, this is one "wonder drug" that is steeped in natural history—like aspirin or digitalis—and was in "historic use" for centuries.

One of Nature's wonder remedies

Originally, metformin was known under the trade name Glucophage. But it's now been around long enough to go off patent and become generic. Which means it meets one of my primary requirements when it comes to taking a drug: Make sure it has undergone the seven-year post-marketing surveillance period required by the FDA. Which means it's been proven safe by the tens of millions of patients who have taken it over at least seven years, and now much longer.

As a drug it was actually first synthesized in the 1920's. However, it was quickly overshadowed by the Nobel prize-winning discovery of the role of insulin in the treatment of diabetes. So metformin was swiftly set aside for a half-century.

However, its history goes back much further...where it was known throughout Europe as a traditional folk medicine for centuries. That's because this drug actually stems from a flowering plant called Galegaofficinalis, more commonly known as French lilac or goat's rue. The active ingredient is a chemical biguanide known as Galegine, after the botanical name of the plant.

As an herbal extract, Galegine was used traditionally to treat people with polyuria (excessive urination due to excess sugar in the urine) and sweet odor on the breath. Today, we recognize these as two leading symptoms of untreated diabetes.

References date as far back as ancient Egypt and it was in common use in Medieval Europe. The herbal treatment was featured in an English medical treatise by Culpepper in the 17th century. And it was studied at the University of Edinburgh, a leading medical center of the 18th century from which the first medical school in America was established in 1765. It has also been used in Asia to treat influenza and is said to have antibiotic, antiviral,

antimalarial, and antipyretic (fever) activities.

With such a long history as a potent herbal remedy, it's actually shocking that it took so long to be used for a major modern medical problem like diabetes!

So after languishing during the Great Depression and World War II, the French finally developed Galegine, or metformin, for clinical use in 1957. It was approved the following year in the United Kingdom, and made its way to Canada in 1972. But it was not approved by the FDA in the United States until 1994. And that was only after a U.S. drug company (Bristol Myers Squibb) acquired a French firm that manufactured the drug.

Getting to the root of the delay...

One reason for delayed approval in the U.S. was due to concern over a very rare side effect called lactic acidosis. This is a metabolic condition that results in a buildup of lactic acid in the muscles due to changes in levels of sugar and oxygen.

A poorly advised campaign was undertaken by the public advocacy group, Public Citizen, called "Do Not Use Glucophage." But when all the blowing smoke, and smoke-blowing, began to clear, a study found that the risk of this metabolic disorder was actually ten times higher with older diabetes drugs being used at the time (since discontinued). And eventually more studies observed no difference in risk between diabetics using the drug and those not using the drug—because the problem had actually been due to underlying medical conditions among diabetic patients, and not the drug itself.

So what's the final conclusion regarding the risk of lactic acidosis? <u>If you have underlying kidney or liver conditions</u>, then metformin is not for you.

Most side effects are minimal, and easily managed

The risk of lactic acidosis aside, the most common side effects associated with taking metformin are diarrhea and gastrointestinal upset.

But this is typically when first starting the drug, and

rarely persists. And, because it lowers blood sugar (hence its use for diabetes) it may cause symptoms like tiredness or weakness, unless and until the dose is adjusted and/or the body adjusts on its own.

Relatively speaking, compared to most other drugs, these side effects are minimal for the benefits you may gain. And are easily managed by monitoring and adjusting dosage accordingly.

At the same time, metformin is one of the few drugs that are safe for people with congestive heart failure. Though it can interact with certain blood pressure medications, so be sure to check with your doctor.

All that said, there are two concerns you need to know:

1. You must supplement with vitamin B12.

Research has found that prolonged use of metformin can cause a deficiency in vitamin B12. Especially in those suffering from peripheral neuropathy. And unfortunately, the NIH and many doctors have yet to catch up to the research on this risk. So to be safe, you can supplement with a high-quality B vitamin daily for as long as you take metformin.

Look for a vitamin B complex that contains 100 mg each of vitamins B1 (as thiamine), B2 (as riboflavin), B3 (as niacinamide), B5 (as pantethene), and B6 (as pyridoxine) and 1,000 mcg of B12 (as cyanocobalamine).

And ask your doctor to check your vitamin B12 levels regularly. If you are unable to absorb sufficient B12, injections may be administered by your doctor.

2. Beware of eating grapefruit.

As with other drugs, as I reported in the November 2012 issue of *Insiders' Cures*, eating grapefruit may interfere with the effectiveness of metformin. So it's best to avoid grapefruit.

Unexpected—and very promising—benefits

Metformin has ultimately gone on to be the most widely prescribed drug for diabetes in the world with over 120 million people taking it today. And with so many people taking the drug, some surprising beneficial "side effects" are now being observed.

In addition to controlling blood sugar, it has now been proven to prevent the common cardiovascular complications of diabetes, such as heart attacks and strokes. It also promotes healthy circulation to the limbs, kidneys, and eyes. And is the only diabetes drug that does not cause weight gain. (In fact, it's now being studied for use as a weight loss drug.)

It also helps reduce LDL cholesterol and triglyceride levels in the blood without the dangerous side effects of statin drugs. These are beneficial effects that are likely associated with metformin's effects on reducing blood sugar and helping to regulate normal metabolism.

But beyond these healthy effects, there is more...

Metformin is now the treatment of choice for the increasingly diagnosed condition of polycystic ovarian syndrome (PCOS) in women of all ages. It also appears to be effective in the treatment of multiple sclerosis (MS).

It is even being recommended as an "anti-aging" drug by some. This is likely due to the claims that it helps maintain healthy hormone levels such as estrogen in women and testosterone in men. MD Anderson Hospital, the largest cancer center in the country, has observed that it lowers the risk of pancreatic cancer (notoriously difficult to treat) by five times. And it reduces overall cancer rates, including cancer of the breast, colon, lung, ovary, and prostate. Most of these cancers can be difficult or impossible to treat by conventional means.

Regarding the remarkable effects on lowering pancreatic cancer, I might speculate that by keeping blood sugar levels low, metformin reduces any effects to stimulate the pancreas to produce ever more insulin in Type II diabetes to try to counter high blood sugar or insulin resistance in the tissues. Thus, it doesn't promote the growth of pancreatic cells, some of which are responsible for producing insulin.

Several mechanisms are being investigated on the anticancer effects of metformin. Canada appears to continue to be ahead of the U.S. and is leading the way with clinical trials on using metformin to <u>actually treat</u> (not just prevent) breast, endometrial, pancreatic, and prostate cancers. The National Cancer Institute is playing catch up with trials on colon and other cancers.

And it seems metformin is particularly active against lung and oral cancers. Which adds even more proof that there is more to the story with these cancers than just tobacco.

And beyond all this, metformin has just been found to show promise for the most mysterious and alarming disease of our time—Alzheimer's dementia.

So here we have a safe, effective, inexpensive drug that actually treats the condition of diabetes, by lowering blood sugar (and not just "managing" symptoms). It also reduces all the major medical complications commonly associated with diabetes such as cardiovascular diseases. And the main long-term "side effects" are a list of additional health benefits such as reducing the risk of common cancers and probably helping to maintain healthy weight.

So the only mystery is why has it evaded comprehensive investigation of its multiple health benefits for so long?

Poisonous plant turned modern wonder "drug"

Ironically, the natural sources of G. officinalis are currently known in the U.S. as "Professor Weed" and the federal government lists it as a "Class A Noxious Weed" in their database of poisonous plants! This French lilac (also used for its fragrance) is just another weed to the U.S. government.

Perhaps the only answer to this modern government nonsense was provided by the 16th century Swiss physician, Philippus Aureolus Theophrastus Bombastus von Hohenheim (better known as Paracelsus), who would have known about the medicinal uses of this remarkable plant: "the right dose differentiates a poison from a useful medicine." Which could be said about many herbal remedies and almost all drugs as well.

Which is what makes the drug version of this herbal

remedy—metformin—such a breakthrough. This modern "wonder drug" is actually little different from the ancient herbal remedy Galegine, widely known and used in Europe in the Middle Ages. It benefits from chemical simplicity and detailed clinical investigation. And endless drug vigilance has long settled concerns by the FDA and ill-informed public advocacy groups.

Of course, metformin will only get you so far...

It is possible to actually reverse diabetes through diet and weight loss alone. Last year researchers in the UK completely reversed diabetes in patients who were placed on 600-calorie-per-day diets under direct medical supervision. But the usual minimum caloric levels for healthy weight loss, working on your own, in women and smaller individuals are no less than 1,000 calories per day, and for men and larger individuals 1,200 calories.

These are guidelines you can achieve on your own following a healthy diet of caloric restriction. These are the caloric lower levels for weight loss, not weight maintenance. Healthy weight loss diets include lots of fresh fruits and vegetables and eliminate sugars and processed foods and fats (see your *Insiders' Cures* report *Top-of-the-Food-Chain Cure for Obesity*). Lower body weight and body fat leads to lower blood sugar, cholesterol, and blood pressure.

Some dietary supplements may also help maintain healthy blood sugar levels.

• Alpha Lipoic Acid (ALA): 300 mg/day

• Vitamin B6 (as pyridoxine): 100 mg/day

• Berberine: 400-500 mg/day

• Cinnamon: 1 gram/day (food quantity)

• Coenzyme Q10: 150 mg/day

There are also some herbal remedies that are being investigated for their effects on maintaining healthy blood sugar. They include the traditional Chinese remedy bitter melon, cinnamon, blueberry leaf, dandelion leaf, as well as various traditional Ayurvedic herbs from India.

Finally, chromium, selenium, and vanadium are minerals and heavy metals that play important roles in man-

aging blood sugar and healthy metabolism. As metals, they have potential toxicities, so check with your health practitioner.

Beyond these dietary supplements, the natural products industry is pushing on other fronts to help with diet and diabetes:

- 1. Food ingredients that substitute for sugar and starches, so there is simply less sugar in the diet to be absorbed into the blood.
- 2. Other ingredients that block the uptake of sugars and starches that are already in the diet, thus theoretically stopping sugar from being absorbed into the blood. (Other inevitable effects on healthy digestion must also be addressed.)

Metformin for "Type III diabetes"?

New research has shown that metformin also stimulates neuron generation and memory, at least in laboratory animal models.³ Of course, metformin is now being used for its metabolic effects, including healthy metabolism of glucose in diabetes.

But as my professors at the University of Pennsylvania would always reiterate, "any drug can have any effect." Any substance that can be absorbed by the digestive tract and make its way into the bloodstream, tissues, and cells, and interact with normal metabolic mechanisms indeed has the potential to show many different effects. After all, the body itself has many different active processes going on all the time, all at the same time.

Such substances can act like a drop of oil lubricating all of the complex gears and mechanisms in a clock or fine piece of machinery. We also know the same is true of active natural remedies. We are constantly seeing that modern science finds new benefits from old remedies that have been used historically for various purposes.

One key to metformin's multifarious benefits appears to hinge on the enzyme called "atypical protein kinase." This enzyme is present throughout the body—and is responsible for metformin's primary metabolic effects in the liver. But protein kinase is also active in the brain for

transforming stem cells into neurons.

The true miracle here is not necessarily the drug, but that the body uses the same enzyme efficiently and effectively for different critical functions among different tissues. Again, the key to all healing is stimulating the body to find ways to heal itself—as we often find in Nature when we look.

CHAPTER 5:

TYPE III DIABETES-THE BRAND NEW, DEADLY EPIDEMIC NO ONE SAW COMING

You've probably heard the old saying "bad things come in threes." And after nearly a century of research, it appears that may be the case with diabetes.

You're likely familiar with Type I and Type II diabetes. But now it looks like there's yet another form on the horizon—Type III diabetes. And it may be the most sinister, dangerous form of the disease yet.

A modern-day disaster 90 years in the making

For centuries diabetes had been known primarily as a condition of excess fluid loss through frequent urination, with sugar in the urine.

But in 1922, two researchers won a Nobel prize when they discovered that diabetes mellitus was a primary deficiency of insulin. Insulin is responsible for moving glucose (sugar) from the blood into the tissues. Without it, the tissues, including the brain, literally starve to death in a sea of plenty.

Since then, there have been many more discoveries regarding this condition. Like the difference between Type I and Type II diabetes.

The Nobel-prize winning researchers discovered what has come to be known as Type I (or "juvenile") diabetes. With Type I, from childhood, the pancreas simply does not make insulin. Type I diabetes is treatable by injecting synthetic insulin over regular time intervals.

But as the 20th century progressed, an initially mysterious new type of diabetes emerged. People with this form of the disease produce adequate insulin. But their tissues become resistant to the actions of that insulin. And, as a result, glucose can't enter the tissues. Instead, it accumulates in the blood. This "insulin-resistant" diabetes became known as Type II diabetes.

Now, I believe we are witnessing a third form of the disease—Type III diabetes. And it may have been masquerading as the No. 1 medical mystery of our time—the

modern misery of Alzheimer's Disease.

Elevated blood sugar shrinks your brain

A recent Australian study found that high blood sugar levels appear to actually cause the brain to shrink.⁴

Even in people who don't have Type I or Type II diabetes.

This study of 250 men and women showed that high blood sugar levels appear to damage the brain. Specifically, they cause the areas associated with memory, cognitive function, and emotional processing to shrink. And impairments in these areas are the hallmark symptoms of Alzheimer's dementia.

In fact, these researchers found that highly-educated people in their 60s, with even mildly elevated blood sugar, had the brains of unhealthy people in their 70s.

While prior studies have shown that diabetics have higher rates of dementia, this is the first study to show these effects even in people who are not diagnosed as having Type I or Type II diabetes. So, are they suffering from Type III diabetes?

In non-Type I or -Type II diabetics, high blood sugar can result not only from consuming too much sugar in the diet, but from generally poor diet, lack of exercise, and chronic stress. So, blood sugar is a problem for *everyone*, not just diabetics. And now we're seeing just how significantly it can affect your brain (as well as other parts of your body).

I first heard about this link in 2011, and have been looking into it ever since. And, indeed, a large body of evidence is now suggesting that Alzheimer's is primarily a metabolic disease, just like diabetes. But different enough from the already well-known Types I and II to warrant its own classification. Type III diabetes.

Why your brain needs insulin

As I mentioned above, an association between Alzheimer's dementia and Type II diabetes is already longestablished. In fact, the risk of dementia among Type II diabetics is *two to three times higher* than in the general population. There are also associations between Alz-

heimer's and obesity, and Alzheimer's and metabolic syndrome (a pattern of diet- and metabolic- related disorders).

Some researchers first proposed that Alzheimer's was actually another form of diabetes back in 2005.⁵ The authors of these original studies investigated the brains of people who had died of dementia. They found that the levels of both insulin and insulin-like growth factors in the brains of Alzheimer's patients were sharply reduced. And insulin levels were lowest in the parts of the brain that appeared most affected by dementia.

Insulin in the brain has a number of important functions in addition to glucose metabolism. It helps regulate transmission of signals from one neuron (nerve cell) to another. And it influences their growth as well as their ability to adapt to changes and survive.

Experiments conducted since then appear to support the link between diet and dementia. As ever, these observations show the biochemistry of dementia to be fantastically complex, involving inflammation, stress, oxidation, the accumulation of a certain brain protein and the transformation of another—among other factors. This is one case where more research does, in fact, need to be done. And this is the kind of research that NIH should really be doing.

However, if current indications hold true, Alzheimer's disease could be yet another catastrophic impact of poor diets.

Perhaps one of the worst thus far

Around 35 million people suffer from Alzheimer's disease worldwide and based on current projections, with the rate at which the population is aging, this epidemic will rise to 100 million by 2050.

But if, as many scientists now believe, it is caused largely by the brain's impaired response to insulin, those numbers could rise much further. In the U.S., the percentage of the population with Type II diabetes has almost tripled in just 30 years.

If Alzheimer's dementia—Type III diabetes—acts the

same way, the potential for more human suffering is immense.

But while U.S. government research on Alzheimer's flounders around, there <u>are</u> steps you can take to help protect yourself and your family now. In fact, there are some exceptionally effective tools for combating this burgeoning epidemic.

Starting with one that I'm particularly excited about.

The latest blood-sugar darling tackles Alzheimer's, too

Berberine is quickly becoming one of the new "darlings" of the nutritional medicine world. And the "buzz" has focused largely on this herbal remedy's ability to balance blood sugar and combat diabetes. But the new research on berberine that caught my eye recently had nothing to do with blood sugar or diabetes—or so I initially thought.

Several new studies have shown impressive results using berberine for Alzheimer's.⁶⁻⁸

But now that Alzheimer's is emerging as Type III diabetes, the link between these two fields of research on berberine makes perfect sense.

But berberine defends against Alzheimer's not only by helping to regulate blood sugar.

3-tiered brain protection you won't find anywhere else

New experimental results have found that berberine protects the brain in at least three more distinct ways:

- 1. It can safeguard your brain from the dangerous oxidation damage that can "eat away" at brain tissue.
- 2. It targets and destroys memory-killing enzymes that have long been considered key in the development of Alzheimer's.
- 3. It promotes healthy blood flow directly to the brain—an essential element to conquering dementia.

Berberine also seems to be able to block certain nerve receptors, which may partly explain its anti-Alzheimer and neurotransmitter-modulating properties.

Add these specific actions to berberine's well-established blood sugar benefits and it appears that this herb may hold the key to preventing and even slowing the progression of Alzheimer's disease (Type III diabetes) like nothing before it.

I recommend 500 mg per day, taken over the course of two or three doses to achieve a steady state.

The first step in avoiding and managing ANY type of diabetes

Of course, no discussion of metabolic disorders is complete without addressing the importance of diet.

The food industry engineers its products to bypass the neurological signals that would otherwise prompt people to stop eating. Filling them with unhealthy fats, sugars, and high fructose corn syrup. Essentially ensuring they're completely devoid of any real nutrients. Which makes processed, packaged foods a disaster not just for your waistline, but also for your blood sugar, your brain—and your health in general.

Cutting out overly processed foods should be the first step in avoiding—or treating—ANY disease, including diabetes (Types I, II, and III).

For many more natural approaches to preventing and treating dementia, refer back to the special report

The Insider's Answer for Dodging Dementia, which you received with your subscription to Insiders' Cures.

CHAPTER 6:

WHY THOSE TIRED, OLD NATURAL ARTHRITIS "FIXES" DON'T WORK

Plus, the long-forgotten ancient remedies that DO

I would have bet my right knee that at least 90 percent of my readers think glucosamine and chondroitin are a one-stop solution to arthritis pain. But since I researched the secrets to real natural joint relief, I am going to keep that knee after all. Which just goes to show that "it pays to advertise," or *marketing works*.

If only glucosamine and chondroitin actually worked as well.

If glucosamine and chondroitin were truly the wonder nutrient supplements that marketers claim they are, we wouldn't still be talking about arthritis. In fact, with all the "solutions" that have been dumped onto the public for decades, joint pain should have gone the way of the dinosaurs years ago.

Yet, as long as there have been joints, there has been joint pain.

Historians tell us that, unlike many common diseases that have become more prevalent in our modern industrialized era (think cancer and heart disease), arthritis has been afflicting humans since prehistoric times. In fact, paleopathologists estimate almost half of early humans—as far back as Neanderthal man—suffered some sort of joint condition.

Unfortunately, the best-documented health problem in human history is plaguing us still. And it will for generations to come—if we keep putting faith in supplements that get it all wrong.

But the good news is when an ailment has this much history, we have the benefit of millennia of trial and error before us. And our ancestors—from many cultures around the world—have left us clues that point us to real solutions for joint pain.

I've spent years investigating history's clues, and I've found alternatives to glucosamine and chondroitin that actually work.

I'll tell you in a moment about that solution, but first we need to understand what causes joint problems as you age.

The REAL cause of joint pain is something glucosamine can't touch

Joint pain fits into one of four categories:

- 1. *Osteoarthritis*. Deterioration from "wear-and-tear" on joints that leads to painful inflammation.
- **2.** *Rheumatoid arthritis*. The immune system itself attacks joints, causing pain and deterioration.
- 3. Degeneration of the discs. The discs between the vertebrae in the spine wear down, causing neck and back pain.
- 4. *Pains of undetermined nature*. These may be linked to mind-body-immune system connections, as explained in my book with Mike Jawer, *Your Emotional Type* (www.drmicozzi.com).

But while there are different types of joint pain, they ultimately have one thing in common—inflammation.

So if we can treat inflammation, we can do away with these ailments. Simple, right? But here's the thing: glucosamine and chondroitin—the most common natural products used to treat joint deterioration and pain do not have the power to correct inflammation in the joints.

Joint remedies that actually do the job need to address the cause of joint damage. And the fact is that inflammation plays a central role.

Here's what you need to know about joints and bones, and why you can't treat joint pain effectively without treating inflammation:

- 1. Our body is constantly absorbing and replacing old bone with new, healthy bone.
- 2. Where one bone meets another, the bones are covered in cushioning called cartilage. This keeps bones from rubbing against each other.
- 3. Cartilage is nourished by fluid called synovial fluid,

which fills the spaces in the joints, between the bones.

- 4. When the joints are inflamed, cartilage can't get the nourishment it needs from the synovial fluid. So inflammation destroys normal cartilage tissue and gets in the way of new, healthy cartilage being formed.
- 5. If inflammation is controlled, the body can again begin forming and nourishing new, healthy cartilage. The result? **Normal**, **healthy**, **comfortable joints**.

In some cases of joint pain, such as rheumatoid arthritis, inflammation comes first and destroys cartilage and—if left unchecked—bone.

In other cases, like osteoarthritis, the "wear and tear" destruction of cartilage leads to inflammation in the joint tissues. Either way, what results is a vicious cycle that can only be interrupted in one way: by **controlling inflammation**.

Here's why that's so important: once you control inflammation, the damaged joints and underlying bones can begin to heal themselves. This self-healing ability of bones and joints is the basis of all natural healing in all tissues of the body. No matter how many so-called bone-supporting nutrients you pour into the system (assuming they even make it into your joints), they won't work if you don't stop the inflammation cycle.

Can your body even use glucosamine and chondroitin?

Many doctors and medical scientists have questioned for decades whether glucosamine (a sugar amine) is even sufficiently absorbed into the joint tissues, believing that it is destroyed in the gastrointestinal tract and/ or the bloodstream before it can even enter the joints. It is, after all, a combination of glucose or sugar (which is readily metabolized for energy) and an amine, which like most protein constituents, are broken apart by digestion and enzymes.

Chondroitin comes with its own list of issues. Concerns have been raised about the source it comes from and how well the body can actually absorb it, and to what

extent. It seems like most all the "new" discoveries over the years when it comes to chondroitin have to do with some new, exotic species or location from which this common natural substance is harvested. This has made for some putatively attractive marketing pitches...but not evidence that it is absorbed into the body and actually works for joint pain. That's why chondroitin has become widely regarded in the medical community as worthless.

Side effects of glucosamine include digestive complaints such as abdominal pain, poor appetite, nausea, heart-burn, constipation, diarrhea, and vomiting. Which makes sense for something that is not being absorbed properly in the gastrointestinal tract.

History holds the secret to joint relief

Modern science is proving what our ancestors knew: Natural remedies can curb inflammation and promote bone and joint health.

Do you remember what the wise men brought as gifts to celebrate the birth of Jesus? Gold, frankincense, and myrrh. Believe it or not, all three of those are proven arthritis remedies (and you can trust men who just walked halfway around the world to know what soothes achy joints!). No wonder they were so valuable.

Gold injected into the joints actually does help arthritis, but its expense puts it out of reach for most of us. Frankincense and myrrh, on the other hand, have a long history in supporting joints—and new research continues to support their use.

Frankincense, also known as Boswellia, is best known in the West as a potent incense that fills churches with a familiar fragrance. But far beyond smelling good, frankincense is valued for its medicinal properties. In fact, it has held an important place in Asian medicine for millennia. Ayurvedic practitioners have known for ages that Boswellia is a key treatment for joints. And the reason it works: It stops inflammation.

And, again, that allows your cartilage to rebuild itself. Like most natural healing, rebuilding healthy bone and cartilage to a permanent solution is a slow and steady process that takes time. But if you take care of the inflammation in the meantime, it helps stop the pain and increases mobility, while allowing the joint to repair itself over time.

Myrrh, found in abundance in the Middle East, is valued for its anti-inflammatory effects too. In fact, it's held in such high esteem that it was one of the gifts the Queen of Sheba brought to King Solomon.

If you're looking for a joint supplement today, you'd do well to find one that has these potent herbal anti-inflammatories, as well as some specific nutrients whose effectiveness is proven by modern science.

The first is *vitamin D*, which even the government recognizes as being critical for bone health (though it largely ignores vitamin D's other health benefits). A healthy dose is 1,000–2,000 mg per day.

The second is best known for preventing and treating colds—and even cancer—but it's rarely discussed for bone health. However, the importance of vitamin C for bone and connective tissue health should not be overlooked. An effective dose of vitamin C is in the range of 500 to 1,000 mg a day. But even without supplements, dietary sources alone can be extremely effective for bone and connective tissue health if you get enough of the right foods (see the *Insiders' Cures* bonus report "Topof-the-Food-Chain" Cure for Obesity that came with your subscription).

A little bit of "un-learning" goes a long way

I hope this article has helped you un-learn what the natural products marketing masterminds have led you to believe about protecting and rebuilding joints, but just to make sure, let me put the issue to rest once and for all...

Glucosamine and chondroitin are NOT your one-stop arthritis cure!

Because *they do not stop joint inflammation!* If you want to stop arthritis pain today and give your joints a chance to heal naturally tomorrow, you need to stop inflammation. And to do that, trust the natural anti-inflammatories with centuries of history backing them up.

CHAPTER 7:

THE BRAIN-PROTECTING NUTRIENT THAT ALMOST SLIPPED THROUGH THE CRACKS

Why not even your doctor knows the secret to boosting your brainpower

If you're concerned about preserving your mental function (and you *should* be, considering Alzheimer's dementia is an epidemic in this country) you need to read this. Because it's the only place you'll hear about the unsung nutrient that suddenly has real scientists and researchers talking.

That's right. While the mainstream medical world was bickering about beta-carotene—a carotenoid found in vegetables—my colleagues and I were doing some real science and discovering some true plant-based powerhouses.

Our discoveries went largely unnoticed (or perhaps intentionally buried). But today I'm going to tell you about one in particular that may very well make all the difference in helping you keep your memory from slipping through your fingers.

The fallacy of the "magic bullet"

Since the British Empire Cancer Campaign of the 1920s (described in more detail in my report *Classified Cancer Answers* that you received when you first subscribed to *Insiders' Cures*), green, leafy vegetables have consistently been proven to lower the risk of just about every common cancer. This observation holds up today—nearly a century later. And not only for cancer but for other diseases as well.

Of course, 20th century biomedical research scientists have been focused on finding the single-ingredient "magic bullet" in these vegetables responsible for their disease-preventing benefits.

But the power of plants is not in a single component it's in the hundreds of natural vitamins, minerals, and phytochemicals they contain. And many of those are the ingredients that my colleagues and I learned about through thorough scientific analysis at the USDA Human Nutrition Research Center.

Here's the really interesting thing, though: Among the hundreds of nutrients found, one <u>did</u> emerge as a powerful antidote to the cognitive decline that is plaguing our nation. Only you never heard about it—partially because deadwood government science bureaucrats were busy bungling their research looking for a supposed "magic bullet" (like beta-carotene).

As it turns out (and as we predicted), beta-carotene is only one of the many carotenoids found in some leafy green (and yellow-orange) vegetables. Carotenoids act as antioxidants to protect plants—which is an important reason plants can stay outside all day, exposed to solar radiation, heat, and other climatic assaults without just withering away. Carotenoids are also responsible for the brilliant colors we see in nature, especially in the fall when the green chlorophyll in leaves goes away, leaving the colorful carotenoid pigments behind.

And they can have just as dazzling an impact on the human body—if we're using the right ones for the right purposes.

When research goes wrong

When the National Academy of Sciences in the United States finally began to recognize that food and nutrition play an integral role in cancer in the early 1980s (more than half a century after the British Empire's observations), the National Cancer Institute (NCI) launched an effort to discover the "magic bullet" ingredient(s) in foods that could be isolated and used to help control cancer.

While largely ignoring the massive evidence already supporting vitamin C as an anticancer ingredient, NCI decided instead to focus on a then-obscure carotenoid, beta-carotene. This was before they knew to what extent beta-carotene was even present in the healthy vegetables that had been proven to fight cancer.

And that's just the beginning of how they missed the mark...

New funding to help find anticancer agents in food went to the usual fat cats of government research at NIH (who knew next to nothing about human nutrition) instead of the government's true nutrition experts at the USDA Beltsville Agricultural Research Center in Maryland.

I had just been recruited into the NCI's new program on nutrition and cancer, and the other young scientists and I were hamstrung by the stodgy pen pushers (who had been "re-organized" instead of replaced with knowledgeable researchers). But we didn't let that stop us. The new team quickly realized we would have to collaborate with the USDA to get any real answers.

So we did, and quickly. But while we were entrenched in discovering the basics about the nutrient composition of foods, and the metabolic effects of these "new" carotenoids, the bureaucrats at NCI prematurely launched their infamous human clinical trials on beta-carotene.

In essence, doing the expensive "advanced" research before the basic research was ever done.

We warned them, but they didn't want to listen to the REAL SCIENCE. Instead, they persisted. Even after we tried to warn them about our own results—that betacarotene is simply not present in the healthy foods that do protect against cancer—they went ahead with human trials on beta-carotene. And all they proved is that betacarotene had no effect on cancer...and in fact it actually increased it in some groups of people.

In my case, they didn't just ignore the results of the basic science—they effectively tried to suppress them. And I was not permitted to publish them until after I left the NIH myself. When I ultimately did publish them they earned me the Young Investigator Award at Walter Reed Army Medical Center.

So the NCI put the cart before the horse. And the public has been looking at the wrong end of the horse ever since!

They wasted MILLIONS of taxpayer dollars, all because they didn't do their homework. And the public is still paying the price.

But not only did they miss out on finding the nutrients that actually *could* make a difference—they set back true

understanding about nutrition and cancer by decades in the minds of many physicians, scientists, and the public.

Of course Big Pharma was quick to pounce on the botched beta-carotene results as "proof" that nutrients are ineffective against cancer. Out of one side of their mouths, anyway. Meanwhile, they had launched a lucrative new industry for themselves selling synthetic carotenoid supplements.

Beta-carotene may have been a bust, but on the positive side, our own team of scientists did discover the importance of other carotenoids in human metabolism. And now I'll show you what we ultimately learned about one in particular that is a true standout in the area of brain health.

The unsung brain-boosting hero

If you've heard of the carotenoid I'm about to tell you about, I can almost guarantee it wasn't about its ability to protect brain function.

Lutein is best-known as a vision helper. But recent research highlights its cognitive effects as well. And it's little wonder that something that helps the eyes would be good for the brain as well. The eye itself is a very specialized organ originating from brain and nervous tissue.

But there's another obstacle when it comes to nourishing the eye and the brain: The blood-retina and blood-brain barriers are highly selective in granting entry. This normally protects the delicate eye, brain and nervous tissues against many toxic effects, but it also means that it takes a very special nutrient to get in.

Lutein is one of only two carotenoids that can penetrate the blood-retina barrier and the blood-brain barrier. Which makes it a critical tool in the emerging medical epidemic of Alzheimer's dementia. But it's important to note that lutein also has cognitive benefits for people without dementia.

Scientists have discovered that higher levels of lutein-related pigments in the eye are correlated with improved brain function. Global cognitive function, verbal fluency, and memory retention were all increased, and dementia decreased, in people with higher levels of these lutein-related pigments. Even in subjects who were 100 years old—or older.⁹

Yet another study found that giving lutein alone or in combination with an omega fatty acid improved cognitive function, verbal fluency, learning ability, and memory in older women.

Bottom line: It appears lutein can improve cognitive function in older people in general—and also help prevent dementia. In the world of natural remedies, this finding is even more significant because the best-researched herbal remedy for cognitive function, Gingko biloba, has been proven to improve memory in people with documented cognitive impairment but not in the general population.

So, what do research scientists conclude about all these new findings? "Lutein warrants further research." But for the millions of aging Americans watching their memory slip away, waiting for further research isn't an option.

In the meantime, a dose of 12 mg per day of lutein just might be the natural memory enhancer you need. Boost the results by combining it with 800 mg/day of DHA omega fatty acids. And don't forget to add berberine (500 mg per day, divided into two or three doses). 10

CHAPTER 8:

THE ABSOLUTELY FREE, NO-RISK HOT FLASH CURE

Think you must have drugs or herbs to treat your menopause symptoms? Think again.

Women spend one-third of their lives in menopause an awfully long time to struggle with its exasperating effects. The hot flashes alone are enough to drive women to extreme lengths, including shelling out hard-earned money on the latest herbal promise, or even taking medicines with unbelievable risks.

In fact the most popular hot flash medication (estrogen) can increase the risk of heart disease, stroke, blood clots, and EVEN CANCER! And other options—including anti-depressants and, believe it or not, anti-seizure medications—may not be much better for you.

The cure within

But here's the surprising news: Hot flashes can be slashed by more than two-thirds without spending a dime or taking a single pill.

A just-published study in the journal *Menopause* found that postmenopausal women who learned a technique called applied relaxation were able to prevent an average of *five hot flashes a day!* What's more, the results remained the same three months later.

Applied relaxation is just one way of learning how to release tension and relax muscles. And it makes sense that it would be effective in controlling hot flashes, which happen when blood suddenly flushes a particular region of the body due to rapid shifts in blood vessel tone The mind influences blood flow by communicating with the small muscles in arteries and adjusting the blood vessels' tone, size, dimensions, and flow.

So learning a mind-body technique to relax the blood vessels is a perfect no-stress way to get a handle on hot flashes without the dangerous drugs.

Your custom-tailored relaxation technique

Applied relaxation is a great technique for some people, but not every relaxation technique works for every individual. The good news is there's something that's right for each individual. Find the right fit for you in my book with Michael Jawer, *Your Emotional Type*.

HOT AND COLD

Hot flashes are one end of the spectrum, but how about cold flashes? Or a cold shoulder anyway...

Research shows that when a woman gives you the "cold shoulder," it's more than a figure of speech—it's a physiologic reaction.

The chill of isolation and rejection actually causes the skin to become colder, according to researchers at the University of Tilberg in the Netherlands.

Working with graduate students as subjects, researchers found that when certain students were consistently left out of social interactions, they had lower temperatures in their fingers.

Why the physical reaction to an emotional experience? Because when someone is isolated and alone, the mind through the autonomic nervous system shifts blood flow back to the central core of the body as a self-protective measure, since the safety and protection of participating in a group (safety in numbers) is being denied.

CHAPTER 9:

THE (PAIN) KILLER IN YOUR MEDICINE CABINET

For safe and effective pain relief, don't look to drug manufacturers...look to nature

Pain may be a part of life, but lucky for us, pain relief is a part of nature. Which is why a natural approach should reign supreme.

For as long as humans have existed, they've experienced pain...and turned to plants for relief. Which is only natural. After all, plants pre-dated animals—dinosaurs and humans alike. This is why animals are "pre-adapted" to use plants as a source of nutrition and medicine.

And through the millennia, the plants we've turned to are those that either reduce inflammation, or pain sensations. These sensations are felt by the nerves and perceived by the brain and central nervous system.

Plants pack a powerful punch

The most powerful pain relievers of all come from the opium poppy (*Papaver somniferum*). The poppy contains morphine and related plant alkaloids. These plant chemicals deaden the brain and the central nervous system's perception of pain, and makes the patient indifferent to pain sensations.

Other plant chemicals such as cocaine (from the coca plant) are used as local anesthetics. These include related drugs procaine and novocaine. Cocaine was once used routinely as a local anesthetic for ear, nose and throat surgery. It even appeared in popular beverages and tonics for a quick "pick-me-up" during the 19th century.

Indeed cocaine can affect the body in many ways. Native Americans of the Andes chew the coca leaf to help digest complex carbohydrates, for energy. And probably to even help thin the blood. The blood can become thick and "sludgy" at their high altitude.

In comes the strong arm of the law

Of course morphine and the opiates (such as the synthetic opiate diacetyl-morphine, or heroin), as well as cocaine, are all either illegal or highly regulated as

controlled substances by the federal Drug Enforcement Administration (DEA).

And in case you didn't know, the power of the DEA far exceeds that of the Food and Drug Administration (FDA). And thanks to the government's ineffective "war on drugs," many physicians are outright restricted from prescribing the most effective drugs in many cases. Or, are intimidated by the DEA and afraid to prescribe what actually works. And laws on prescription narcotic pain relievers just keep getting tougher. (See the premier issue of *Insiders' Cures* and back issues of my *Daily Dispatches* for more on the ineffective "war on drugs"—all searchable online at drmicozzi.com.)

In the meantime, an over-the-counter pain reliever—one that I can almost guarantee is in your medicine cabinet—has long been proven to cause liver failure. But it still gets the green light from the government! I'll explain more on that shortly. But first...

Is inflammation the cause?

Narcotics work by interfering with pain signals and perception. But many pain relievers work by controlling or reducing inflammation. Redness, heat and swelling are the cardinal signs of inflammation. But what causes these symptoms in the first place?

When a tissue, body cavity or joint space is inflamed, blood flow increases, fluids accumulate, swelling occurs, and immune cells rush into the area. The immune cells release histamines, enzymes and other biochemicals. All these effects aggravate sensitive pain fibers. These fibers send signals through the spinal cord to the brain... indicating all is not well. Those signals are discomfort, irritation and pain.

Steering away from steroids

The most potent (and dangerous) anti-inflammatory agents are corticosteroids. But here's something you may not realize—steroid hormones are actually produced naturally by the body.

The center of the adrenal gland produces the "fight or flight" hormone adrenalin, or epinephrine. While the

outer core produces steroid hormones.

The steroid hormones have a wide range of important physiologic effects. Including causing growth and "body-building," reacting to stress, balancing fluids and electrolytes, playing a part in reproductive and other metabolic functions, as well as influencing inflammation and pain.

Problems can arise, however, when steroids are used as drugs. They can be given as injections directly into painful areas, applied topically to irritated skin or taken internally as prescription medication. And while they may work, steroid medications have serious side effects.

Steroid drugs circulating in the blood stop the normal metabolic production of steroid hormones. This means that when the course of drug treatment is finished, the patient must be slowly weaned off—cutting back on the dose a little each day to give the body a chance to restore normal metabolic function. Otherwise the consequences are dangerous...even deadly.

So you can probably see why I advise avoiding steroids if at all possible.

Take two of these and call the doctor in the morning (for a liver transplant)

Fortunately, there are some over-the-counter drug and herbal remedies that are effective—and safe—anti-inflammatory agents. But you may be surprised to learn that Tylenol (acetaminophen) is not among them.

Also known as paracetamol, acetaminophen was originally an industrial chemical developed in Germany. Since then, it has caused more pain than it has cured. In fact, it has become the leading cause of acute liver failure in the United States.

Tylenol was actually one of the first drugs for which we developed protocols to monitor therapeutic and toxic blood levels when I worked with a technical team at McDonnell Douglas (now Boeing) on instrumentation from the manned space program.

Our job was to adapt analytical technology from the NASA space exploration program to everyday clinical use. We were also looking at other potent and potential-

ly dangerous drugs, like anticonvulsants, amphetamines, barbiturates and psychoactive drugs. That's right: All of these dangerous toxic potential killers were treated in the same category as a common household pain-reliever.

I have known otherwise intelligent people who kept taking more and more Tylenol until their knee pain went away...just so they could keep their appointments to play handball or basketball. They may have won the match, but at what cost? I guarantee you they won't be thinking about those victories when they're diagnosed with liver failure.

Don't get a headache over aspirin

Aspirin has seen its share of controversy. But it still has its merits when used appropriately.

This remarkable product of nature (acetyl salicylic acid) originally came from the white willow tree (Salix alba). It was well known to Native Americans. They used it to reduce fevers among other things. Salicylates are prominent in nature, also occurring in wintergreen. They are also used in many digestive aids and in topical pain relievers.

Aspirin is indeed the "granddaddy" of all over-the-counter pain relievers. It was grandfathered into approved use by the FDA, since it was already in common use before the FDA was created in 1906.

But some argue that the gastrointestinal irritation and bleeding it causes (it is an acid, after all) would prevent it from being approved by the FDA today.

Taken in low doses long-term, aspirin has been found to lower the risk of heart disease (perhaps by inhibiting blood clots). And recent research shows it lowers the risk of cancer (see my August 21, 2012 *Daily Dispatch*).

People who are taking blood thinners or who have a certain type of age-related macular degeneration should consult with their doctors before taking aspirin (or other pain relievers).

Avoid "sugar" coating

There's another debate surrounding aspirin related to a

commonly used coating on the tablets. This is done to theoretically protect the stomach. However, some question whether or not these coatings make a difference. And they may in fact obscure the benefits, leading doctors to prescribe more expensive prescription drugs. This is according to a recent study published in the journal *Circulation*. ¹²

The conclusion about coated aspirin was only one finding in the study. The main goal was to test the hotly disputed idea that aspirin does not really help prevent heart attacks or stroke in some people.

For more than a decade, cardiologists and drug researchers have speculated that anywhere from 5 to 40 percent of the population is "aspirin resistant." But some prominent doctors say drug makers with a commercial interest in disproving aspirin's benefits have exaggerated the prevalence of aspirin resistance.

In fact, the new study did not find a single case of true aspirin resistance among the 400 healthy people who were examined. They claim the coating on aspirin interfered with the way that the drug entered the body, making it appear that the drug was not working.

The study was partly financed by Bayer, the world's largest manufacturer of brand-name aspirin, much of which is coated.

And, aside from whether coating aspirin conceals its heart benefits in some people, there is little evidence that it protects the stomach better than uncoated aspirin.

A rare modern therapeutic breakthrough

I had the opportunity to witness the development of a true breakthrough pain reliever when ibuprofen (Motrin) came on the market while I was still in training.

Many patients with a variety of conditions from arthritis to menstrual pains who could never find relief suddenly were swearing by ibuprofen.

Initially, it was available only by prescription in 800 mg tablets, but later the generic form (Advil) became available in 200 mg tablets.

Ibuprofen is one of the original "non-steriodal antiinflammatory agents" or NSAIDs. This approach to pain relief did represent a rare, therapeutic breakthrough. It provided pain relief with something other than aspirin. And without having to resort to potent and metabolically disruptive steroids. (Of course, effective narcotic pain relievers were already off the list due to government political agendas.)

Then, in the late 1990s and early 2000s, "cox-2" inhibitors became the new pain relievers *du jour*. They work by preventing formation of certain prostaglandin hormones (originally discovered in the prostate gland) that cause pain. There was a rush to market these new drugs, but their side effects have been so intense that one of them—Vioxx—was quickly taken off the market in 2004 because of its toxic effects on the heart.

So, in short, ibuprofen is the only over-the-counter (OTC) pain reliever I would recommend, in addition to aspirin. Though, you may need to take the full 800 mg dose, since the OTC 200 mg dose may not be effective. I would steer clear of ALL other OTC pain relievers. And if aspirin and ibuprofen don't work, you need to talk to your doctor about other options, including natural approaches.

Effective natural remedies

Luckily there are a number of safe, effective anti-inflammatory compounds that appear to function as natural cox-2 inhibitors but without the dangers.

- Curcumin (Curcuma longa), or turmeric, is the spice that gives curry its bright yellow color. It is also an ancient Ayurvedic remedy that appears effective at a dose of 200 mg per day.
- Omega-3 fatty acids also appear to be cox-2 inhibitors and can reduce pain and inflammation, while providing a host of other health benefits.
- Capsaicin, an active ingredient in hot peppers, is also an effective pain reliever. It is generally used in topical creams and ointments. But it is also taken orally, including as a staple of several traditional cuisines worldwide.
- Resveratrol also appears to have these activities. It is

a prominent constituent of red wine, among other natural sources. The moderate levels of alcohol in wine, of course, are also well known as an effective pain reliever.

- A traditional Chinese herbal remedy known as Thunder God vine also appears effective.
- A number of flavonoids and phenolic compounds, which are prominent components of many fruits and vegetables, are also being investigated for these effects.
- **Boswellia** (the ancient fragrant incense known as frankincense) is another traditional Ayurvedic remedy with potent anti-inflammatory and pain-relieving effects (400–500 mg per day).
- Winter cherry (Withania somnifera, 500 mg per day), also known as Ashwaganda root, is another Ayurvedic remedy with potent anti-inflammatory and painrelieving effects. It is also considered an "adaptogen" like Chinese ginseng, or South African Sutherlandia frutescens.

There are also many specific herbal remedies for headache (such as butterbur and feverfew), which affects the majority of Americans either acutely or chronically. Some have now been recognized by the American Academy of Neurology, as we have described in previous *Daily Dispatches*.

Beyond oral pain-relievers

Since pain has its origins in the body, many therapies that work directly on the body, or through "mind-body," are also very effective for pain. For example, spinal manual therapy is the most effective and cost-effective remedy for back pain, which is the most common cause of pain and disability in working Americans.

Look to the next chapter on irritable bowel syndrome for a discussion of several other mind-body therapies. But before you choose one that's right for you, take my quiz at drmicozzi.com to find out which one is best suited.

In my book on the topic, *Your Emotional Type*, I go into even greater detail to help you find the best approach to start living pain-free—while reversing a number of other ailments as well.

The good news

As I've described, nature has provided us with countless ways to reduce inflammation and control pain. So there's no reason at all you should need to turn to the dangerous pain killers on pharmacy shelves. And remember: Pain is a signal that something is wrong in the body. So rather than masking it, pay attention to the pain and allow time for your body to heal.

CHAPTER 10:

THE DRUG-FREE WAY TO PUT AN END TO IRRITABLE BOWEL

To know the end of digestive distress, you first have to know yourself

Inflammatory bowel disease (IBD) is becoming more commonly known each day. Which is good, because it can be a debilitating problem. So the more people know about it and talk about it, the more comfortable sufferers will be to seek help.

However, it's critical to choose the right kind of help. And it's not just people with diagnosed IBD (a.k.a. Crohn's disease and colitis) who need to be concerned about it. Irritable bowel syndrome (IBS), with related symptoms that afflict up to 15 percent of the U.S. population, may be a warning sign that IBD is coming for those who don't make a change.

IBS is a prime example of how the mind and body are connected. It's no surprise that the people who experience it and the chronic gastrointestinal pain or discomfort it involves often have a history of childhood trauma such as physical or sexual abuse, parental divorce, major illness or accident, or death of a loved one. It's the body's expression of the mind's suffering.

IBS also runs in families, so biomedical scientists are quick to claim some kind of genetic basis—but lifestyle factors run in families just as much as genes do.

How thin are your boundaries?

Tufts University professor Ernest Hartmann developed a "boundary concept" to explain differences in personality type. He found that people have differing levels of boundaries, ranging from thick to thin. Thin-boundary people tend to be more artistic, more connected with their dreams, and more likely to see themselves "merge" in their relationships with others. Thick-boundary people see clear divides between themselves and others and tend to see the world in black-and-white.

My colleague Michael A. Jawer and I suspected that this boundary concept could explain some mysteries of physical health, and we were right. In our book *Your Emotional Type*, we demonstrate that people with thin boundaries are more susceptible to a dozen illnesses with mind-body components—including IBS.

A common denominator among these ailments? Low serotonin levels. Serotonin is a key neurotransmitter found in the brain—but 95 percent is found in the neuroendocrine tissue of the gut. (Ever wonder why we have "gut feelings," and feel like we've been "punched in the gut" when we get bad news? It's likely related to these neurochemicals—chemicals that relate to thoughts and feelings—that are actually present in the gut.)

A mind-body solution for a mind-body problem

If you have IBS, chances are you are a thin boundary type. Find out your boundary type at www.drmicozzi.com.) Since the mind is clearly a critical part of what happens in this syndrome, your best bet for treating it is using a mind-body therapy that is most effective for your type.

Hypnosis is perfectly suited for people with thin boundaries. (See the premier issue of *Insiders' Cures*.) Biofeedback is another safe and effective technique for thin-boundary types. And acupuncture can be a powerhouse across the board—even for many people who have had no luck with other therapies.

When the syndrome becomes a disease

If IBS progress to an inflammatory bowel disease like Crohn's, treatment is a lifelong process. For many sufferers, conventional treatments offer little relief. Experts recommend complementary and alternative medicine (CAM) approaches, even beyond the mind-body disorder of IBS, as a powerful treatment for IBD.

My colleague, Joyce Frye, DO, who has contributed several chapters to my medical textbooks over the years and is now associated with the Center for Integrative Medicine at the University of Maryland School of Medicine, was recently interviewed on this topic. "It's not a question of if you should use these alternative and complementary therapies," she emphasizes. "It's a question of using them correctly."

Another reason I urge you to find the CAM therapies that are proven to work for *you*—based on your individual type.

According to Dr. Frye, "The first goal is to treat the underlying imbalance that has caused a problem, so we can allow the body to heal itself. The second goal is to provide symptom relief in the meantime."

One of the best things about CAM therapies is that they are safe and unlikely to interfere with your conventional medical treatment. What's more, they can actually help you to replace essential vitamins and minerals your body is losing because of the disease. (See "Nutritional help for digestive disorders" sidebar on page 28.)

Here's a closer look at some of the most effective mindbody remedies for bowel disorders.

Acupuncture

A recent review of studies on acupuncture and gastrointestinal diseases found acupuncture treatments to be helpful. One study in particular found that quality of life for Crohn's patients improved significantly after acupuncture treatments.

Mind/body techniques

Meditation, guided relaxation, yoga, and tai chi do not treat Crohn's disease directly, but they do reduce stress—and stress is known to trigger flare-ups and worsen symptoms. (If you choose the technique best suited to your emotional type, you may have even better luck.)

Hypnosis

According to a review by the University of Maryland Medical Center in Baltimore, hypnosis may help the functioning of the body's immune system and also give you the expected relaxation benefits of other mind/body practices, such as **easing stress and anxiety**.

(We've already tried to clue in the University of Maryland as to the real reason for success—matching the specificity of hypnosis for a thin boundary condition—but they still have not caught on. As a reader of Insider's Cures, you'll learn of these connections even before the best-known academic CAM centers.)

Massage

Although it has no clear effect on Crohn's disease, massage is a popular stress reducer. If you experience the relaxation that comes from massage, ask your doctor for specific guidelines based on your medical condition, including whether the massage therapist should completely avoid your abdomen and how light or deep the massage should be.

POTTY MOUTH FOR THE LOWEST COMMON DENOMINA

In Washington, DC, organizations like the National Health Council seem to exist to make sure that every disease gets equal attention from the media, taxpayer funding from Congress, and private donations from the citizens. So much so that Congressional staff refer to these groups as proponents of the "disease of the month" club.

They have all become part of the apparatus of the permanent government-nonprofit bureaucracy that keeps tax dollars flowing to the medical status quo—without finding real causes and real cures.

There are so many now that we are beginning to run out of space on the calendar...and colors on the rainbow for the different ribbons. But a new campaign from the Crohn's and Colitis Foundation of America shows just how far (and where) some are willing to go to gain notice and notoriety.

A new IBD campaign shows a closed bathroom stall, with the gap below the door revealing enormous clown shoes worn by the occupant. The message?

"I.B.D. is no laughing matter. If you have inflammatory bowel disease (I.B.D.), life can feel like a three-ring circus."

Moving down the bathroom row, other stall-door ads show a view up to the shins of a woman in a wedding gown ("I.B.D. gave her a day she'll never forget").

The foundation hopes that by raising awareness it would help others understand that friends and relatives might be too embarrassed to disclose their condition.

Since this is all part of the competition among the Washington-New York disease-of-the-month crowd, it is unlikely to yield any real breakthrough findings in IBD. All the messages are devoid of any of the new insights into the true nature of this serious problem.

And the people running the campaign seem more set on shock value—and raising money—than on sharing useful health information.

NUTRITIONAL HELP FOR DIGESTIVE DISORDERS

Dietary fiber. Fiber, complex in any diet, is even more complex for people with Crohn's disease. Whether you should eat high-fiber foods or take fiber supplements depends on your specific condition and where you are at any given point in the disease. In some people, fiber supplements like psyllium powder (such as Metamucil) or methylcellulose (such as Citrucel) may stop mild diarrhea. On the other hand, if your Crohn's disease has caused adhesions and strictures, high-fiber foods will cause discomfort.

Probiotics. Probiotics are a type of normal bacteria that are found naturally inside our intestines and aid in digestion. According to Frye, "There is plausible rationale for why these would be helpful. If altered bacteria in the gut aren't the cause of the IBD, it certainly is an effect." Probiotics can be found in some yogurts with active cultures and other cultured foods, or they may be taken in capsule form. But make sure you are taking a truly effective probiotic supplement.

Omega-3 fatty acids are key nutrients found in fatty fish varieties, such as herring, salmon, bluefish, lake trout, and mackerel, and are available as supplements. Omega-3s have proven heart-health benefits, and they also have an anti-inflammatory effect, making them helpful in treating IBD. If you're going to supplement with fish oil, 1 to 2 grams is recommended.

Boswellia is an herb derived from the fragrant resin of a South Asian gum tree. I have written before about its anti-inflammatory effects on joint and bone health. It's also commonly used to ease symptoms of IBD. A recent study confirmed that it can be effective in controlling inflammation caused by Crohn's disease and ulcerative colitis (400–500 mg/day).

Bromelain, an enzyme derived from pineapple, is a potent source of digestive enzymes. A recent study found evidence that bromelain might have beneficial effects in the gastro-intestinal tract for people with IBD. A good serving of fresh pineapple or pineapple juice will provide bromelain in a food matrix together with other nutrients.

Additional herbs that quell inflammation associated with Crohn's disease are slippery elm, cat's claw, and marshmallow plant (as a tea made from the herb, *Althea officinalis*).

CHAPTER 11:

WHEN GETTING IT UP GETS YOU DOWN

The curious case of "erectile dysfunction"

If you're looking for a shining example of Big Pharma creating an illness where before there was none, just look down.

Ever since finding a "cure" for erectile dysfunction (ED), the pharmaceutical industry has convinced men across the country that there's something wrong with them (and that they need drugs to fix it). As a result, there's an "ED" and now "low-T" epidemic in this country, and the industry that created it keeps laughing their way to the bank.

The truth is, bedroom performance issues are much less prominent (and profitable) than Pfizer and friends would have you believe.

ED throughout the ages

When trying to gain new insights on natural healing, I like to look back toward ancient health traditions which usually had solutions now validated by modern medical science—and the test of time.

In India, men with performance concerns could consult the Kama Sutra and some of the (undiluted for western consumption) practices of tantric yoga (see my book, *Vital Healing*, London: Singing Dragon Press, 2011).

In China, men of the Ming Dynasty had a bevy of curious cures to choose from (usually administered by their ever-changing stable of concubines). These aphrodisiacs included a number of symbolic fruits and plants that served purely as visual aids, as well as some actual remedies. The most popular among them was a pair of red lizards (mini-dragons) caught while copulating and drowned in a jar of wine (*bi-jiu*). This idea was apparently down-sized to the red worm (*gusano rojo*) in tequila when the Spanish explorers exported what they had seen to Mexico (although a new book by retired Royal Navy Captain Gavin Menzies makes a compelling case that the Chinese set up shop in Mexico themselves during the visits of the Ming "Treasure Ships" in 1421-23, 70 years before Columbus).

And in Africa men turned to the bark of the yohimbe tree, which is now a popular natural ED remedy.

In comes Pharma...

So as you can see, the desire to improve sexual performance is as old as sex itself. But the pharmaceutical industry, with the launch of Pfizer's "little blue pill" (a.k.a. Viagra) has convinced us that this concern is a problem of epidemic proportions.

In fact, they even enlisted the respected, retired Republican Senator Bob Dole to serve as the national spokesman and embark on a national promotional tour in the late 1990s. And this campaign persists today, making it the largest, longest direct-to-consumer drug advertising campaign in history.

"Performance" pills catch lawmakers' attention

With the sudden innovation of "direct-to-consumer" marketing of modern new drugs and patents—and the expanding customer base buying into the hype—the practice of medicine has been bombarded with such force that state medical boards are busy rewriting the rules to keep up, so to speak. As traditionally trained physicians, from orthopedic surgeons to primary care practitioners, jump onto the ED and low-testosterone bandwagon, lawmakers are rightfully worried.

In New Jersey, Gov. Chris Christie's State Attorney General office is working with the state medical board to draft smart new guidelines for treating ED, low testosterone, and related problems. I have been invited to participate in their expert committee, and am very impressed with the balanced manner in which they are developing professional approaches to protect the consumer. They're also respecting natural and holistic alternatives, as well as the clinical judgment of legitimate private healthcare practitioners—while avoiding the hand of government from coming down too heavily on the private practice of medicine.

Part of the impetus for this effort was the fact that many government employees were clearly abusing state-sponsored health insurance, obtaining treatments for low testosterone for inappropriate reasons without proper diagnoses—all at taxpayer expense.

I hope more states tackle these problems with the professionalism and foresight now being shown by the leadership in New Jersey.

The solution without a problem

Don't allow yourself to be convinced that you have a problem requiring potentially dangerous and expensive drugs and hormones. The stress of thoughts like that alone are enough to "get you down!"

Getting older is a fact of life—and generally better than the alternative.

Don't let pharmaceutical fat cats convince you that aging is a medical condition that requires anti-aging drugs. Instead, embrace healthy aging by following the sensible guidelines provided in *Insiders' Cures*, together with regular updates on the genuine new science that comes to light.

If you do want to take a supplement to balance your testosterone levels, go with a balanced approach. For this, let's come back to a concept I've introduced you to before: the truly revolutionary category of supplements called adaptogens.

Adaptogens, like the classic ginseng in the Chinese tradition or Ashwaganda in Indian tradition, do as the name suggests—they help your body adapt to changes. They're so powerful and can help with so many conditions that I recommend that everyone take them every day.

A less well-known adaptogen out of South Africa, *Sutherlandia frutescens* is showing tremendous promise for its overall health and healthy aging benefits.

Any of these choices would be a better option than hopping on the little blue bandwagon. And if all else fails, take a page from ancient Indian medicine and pick up a copy of the Kama Sutra or Tantra. Your partner may thank you for it.

CHAPTER 12:

THE TRAGIC TRUTH OF ANTIDEPRESSANTS

Why you're better off passing on the SSRIs—and using natural solutions instead

If you're suffering from depression, the promise of relief in the form of a little pill can feel like a lifeline. So the fact that antidepressants have few—if any—real benefits is, well...depressing.

That's the conclusion published last month in the *Brit-ish Medical Journal*. And it's consistent with views I have presented before in *Insiders' Cures*. My practice in forensic medicine backs it up too. I've seen case after case of depressed patients committing suicide...<u>after</u> they start taking "antidepressant" drugs.

Making matters worse

It's not that antidepressants don't do anything—it's just that they do the wrong thing. The newer antidepressant drugs act as selective serotonin reuptake inhibitors (SSRIs). They artificially raise levels of serotonin in the brain by preventing its normal re-uptake into nerve cells after it's released into nerve pathways.

This is believed to help depression symptoms. And it does...but not the symptoms that need to be improved.

In my forensic medicine practice, I saw case after case of chronically depressed patients with suicidal thoughts. But they were too depressed to take action and do anything about it. *Until they got their dose of SSRIs, that is.* Once the drugs kicked in, the patients still had their suicidal thoughts, and now they had the energy to act on them. The results were tragic.

Even more tragic is that some mentally troubled, depressed patients have thoughts about harming others as well. Disturbing new analysis indicates many of the recent violent tragedies grabbing the headlines may be the result of antidepressants.

That's because depression has a built-in self-protection. It causes people to turn inward, close themselves off, and they lack the energy to carry out actions. Instead they just endlessly think these thoughts, many of them negative. Psychiatrists call this *thought substitution*. So even if people have thought of hurting themselves or others, they often don't have the energy or ability to do it.

Now give the depressed person Prozac. You haven't changed anything about the real causes of the depression. But, suddenly, the depressed person's brain is flooded with serotonin. And now they finally have the energy to act.

I'll leave it to statisticians to debate whether SSRIs cause suicide in depressed patients. But as a physician, the evidence in real cases of suffering human beings is all too obvious.

Still, serotonin is not just a loaded gun waiting to go off. And while I don't recommend artificially manipulating your serotonin levels as a treatment for any disease, I can tell you that there are natural approaches that really work. They help the body naturally restore its own proper levels of serotonin, acetylcholine, and other neurotransmitters. And that makes for a healthy mind and body.

I'll tell you more about these natural depression helpers in a minute. But first...

Antidepressants on the rise

Why are prescriptions for antidepressants going up and up, while the people taking them continue slipping down into their depression?

Some psychiatrists claim it's because of a small, but appropriate, increase in the length of treatment—not the number of patients being treated. That is, patients are being kept on the drug longer.

But why keep people on the same tired medication if it's not working?

The real issue is that too many people are being treated for something that's just a normal part of life—not a disease in need of a pharmaceutical cure. The current definition of clinical depression is two weeks of "low mood." I can think of a number of people whose moods were low for a couple weeks after the last election. But I

wouldn't call it a disease—and I certainly wouldn't want to medicate it away!

A more serious mental illness is being so delusional that you can't recognize when bad and sad things are happening in reality—and that's much worse than two weeks of "low mood."

But some parties have reason to be in a good mood about the overuse of antidepressants. Three-quarters of psychiatrists who write the definitions of depression used in the psychiatric manual have links to drug companies.¹³ So they have good motivation to put people on prescriptions and abandon more time-intensive—but effective—mental health treatments! (Think psychoanalysis, talk therapy, and even spiritual approaches.)

Depression may be the perfect condition for the drug industry: Incurable, common, long-term (even with these so-called "treatments"), and involving multiple medications. Some experts say contemporary psychiatry's relationship with the drug industry has created a pharmaceutical mindset to treat mental illness.

But the National Institute for Health and Clinical Excellence does not even support the use of antidepressants for mild depression. Instead it favors psychological talkbased therapies.

Of course, the government-industrial-insurance complex doesn't want to pay health professionals for the time it takes to really help patients. Instead they push the quick treatment—the few seconds it takes to scribble on a prescription pad (often with the name of the drug also advertised at the top).

Perhaps *that's* why antidepressant prescriptions increased by almost 10 percent in 2011.

The upside of being down

Occasional "low mood" may simply be a fact of life. In fact, research shows that mildly depressed people are actually better at assessing and dealing with life's circumstances. Sometimes low mood is just our way of seeing that all is not well, and that we need to protect ourselves.

Shakespeare was no stranger to low mood when he wrote the character of Hamlet. When Hamlet perceives that "something is rotten in the state of Denmark," it leads to his famous soliloquy: "To be, or not to be—that is the question...whether to suffer the slings and arrows of outrageous fortune, or take arms against a sea of troubles, and by opposing them, end them."

Sounds like an appropriate response to a dangerous situation, doesn't it? To most of us anyway... But not to some ever-alert psychiatrists, who have used that soliloquy to diagnose Hamlet as depressed.

Nature's answer to depression

While antidepressant drugs may be worse than worthless for many or most people, many natural approaches can enhance brain, mind, and mood. And of course all of those work together, especially when talking about neurochemicals like serotonin. Here are just a few natural ways to get serotonin levels to their natural, optimal levels.

Omega 3s. Omega 3-rich foods (salmon, sardines, walnuts, flaxseeds, and olive oil for example) may help depression. And we already know they're powerhouses in other areas of health. Researchers think omega 3-rich foods affect structural fats in brain membranes, making it easier for nutrients to enter cells.

Folic acid (and other B vitamins). Low levels of folic acid and high levels of an amino acid-like chemical called homocysteine are associated with depression. Folic acid, as well as vitamins B2, B6, and B12, have all been shown to decrease levels of homocysteine and protect against heart disease, as we document in *The Insider's Secret to Conquering High Blood Pressure and Protecting Your Heart*, which you received as a new subscriber. Find B vitamins in fruits, vegetables, nuts, whole grains, and legumes. If you're taking a supplement, look for 800 mcg folic acid, 2.5 mg thiamine, 5 mg B6, and 20 mcg B12.

Amino acids. Tryptophan is an amino acid needed to make serotonin. For many years higher tryptophan has been found to be associated with lower depression rates. Tryptophan is high in foods containing proteins (which

are chains of amino acids), such as meat, fish, beans, and eggs.

Nucleic acids. Research at McLean Hospital in Belmont, MA, has shown foods high in uridine improves mood. Uridine is a nucleic acid found at high levels in beets and molasses. Beets are also a rich source of betaine, which is critical in maintaining proper antioxidant balance in cells.

Carbohydrates. Carbohydrates are broken down into sugar your brain needs to function properly. However, simple sugar or too much carbohydrate can cause or aggravate depression. Avoid this problem by eating a diet low in refined carbohydrates and sugar and high in fruits and vegetables.

St. John's wort. This European folk remedy has been used for centuries as natural treatment for depression and anxiety. In Germany, for example, St. John's wort has long been approved for its effectiveness in treating mild depression. General dosage is 300 mg three times per day (at 0.3% standardized hypericin extract).

Antioxidants. A new study in the *Journal of the American Academy of Nutrition and Dietetics* found that foods high in antioxidants (but not dietary supplements themselves) help stem depression in older adults. This is not surprising since foods contain a biological matrix that is important for proper absorption and metabolism. Plus most antioxidant supplements are of poor quality and not based on real science.

Proper hydration. What and how much you drink can influence mood as well. A small study of 25 women suggests dehydration can cause headaches, loss of focus, fatigue, and low mood. Now here's the really interesting thing. Even minor dehydration (about 1 percent lower than optimal) was enough to cause serious effects.

South African Red Bush (Rooibos). Of course, water alone is not enough to prevent dehydration. You need fluid and electrolytes—but not from so-called sports "hydration" beverages. Instead, I recommend the little-known South African Red Bush (rooibos). You've heard me sing this herb's praises before for all sorts of conditions. But it also packs a one-two punch for depression. It keeps you hydrated while also providing antidepressant effects and benefits for brain, mind, and mood. As a true adaptogen (helping the body adapt to stress), red bush will refresh you during the day and relax you at bedtime. I generally recommend replacing your 8-glasses-a day with 4-6 glasses of rooibos tea—hot or iced.

A TRULY DEPRESSING DRINK

You know from reading my *Daily Dispatch* emails that diet drinks are chock-full of nasty stuff. A new French study shows that diet drinks pose a higher diabetes risk than *even regular soda!* And now we're finding out they can affect your mood as well.

A just-off-the-press study links artificially sweetened beverages—especially diet drinks—with higher depression risk in adults. (Coffee, on the other hand, slightly lowered risk).¹⁴

Researchers studied 263,925 people for about 10 years. Those who drank more than four cans of soda per day were nearly one-third more likely to develop depression than those who drank no soda. The same amount of fruit punch caused an almost 40 percent increased risk. The same amount of coffee, on the other hand, came with a 10 percent risk reduction.

Think it's just the sugar? Think again. As with the French study on diabetes, this study showed an *even greater* risk for people who drank diet versions of these drinks.

So, do your mood a favor. Pass on the sweet drinks and go for a cup of Joe or rooibos tea instedad.

CHAPTER 13:

ANCIENT CURE FOR COPD AND ASTHMA SYMPTOMS COULD MAKE INHALERS AND DRUGS OBSOLETE!

This ancient solution to lung disease is still the best one

Most people don't realize it. But there's another killer among us besides heart disease, diabetes, and cancer that's keeping Big Pharma in big business...

Chronic obstructive pulmonary disease (COPD).

COPD is the 4th most common cause of death in the United States. And just like America's other top killers, all mainstream medicine has to offer are drugs that barely keep symptoms in check and that are laden with side-effects that would (and often do) make your head spin.

All the while, a safe, proven, natural solution has been left in the wake of Big Pharma...and lost in the quagmire of what western scientists call "research."

The solution I'm talking about is *acupuncture*.

An acute solution, lost in research confusion

While acupuncture is finally being well-accepted for the treatment of pain, it still lags way behind as a treatment for anything else. Which is tragic.

Given its history and the science, acupuncture could safely and effectively help millions more suffering from all sorts of ailments.

But you're not likely to hear it from the "modern medical establishment" anytime soon. Of course, the Yellow Emperor of China had all the proof he needed 2,000 years ago. He based an entire healthcare system on acupuncture. For the world's largest population with the most advanced civilization, no less!

Unfortunately, western researchers have yet to embrace the obvious—acupuncture works. Instead, they're obsessed with trying to figure out the question of, "Why? Why and how does acupuncture work for different medical conditions."

In fact, every time a study proves acupuncture is effective, instead of focusing on the conclusion of "it works,"

western scientists are quick to think they have finally come up with an explanation as to *why* it works. And they tend to focus on *that* point, instead.

But then proof of its effectiveness for yet another "unrelated" condition sends them back to the drawing board. Because the reason why it works for one condition appears to be different from the reason why it works for another—at least as interpreted by the modern mainstream biomedical model.

It's a never-ending cycle that leaves practitioners with the same useless conclusion—*more research is needed*.

And it's all because western scientists are missing a very important tenet of Chinese medicine: *Everything* is related.

In Chinese medicine, there is no condition that exists independent of the whole body. So when you treat the whole body with a holistic therapy like acupuncture, you're going to get results for all sorts of unrelated conditions.

But our un-holistic western biomedical paradigm just can't make sense of the results—even though we can all observe them with our own eyes.

A breath of fresh air

Maybe that's why it's taking so long for the use of acupuncture in lung problems to catch on. While it's easy enough for mainstream doctors to accept that acupuncture is effective for pain, they're *speechless*, so to speak, about its breathing benefits.

But the fact is acupuncture provides serious relief for asthma, COPD, and other lung problems. Let's take a closer look at those conditions.

Emphysema. Emphysema is an example of COPD. It is marked by an obstruction to airflow in and out of the lungs.

Emphysema makes lung cells lose their elasticity. Normally when air comes into the lungs, they expand like a balloon. But in emphysema, the balloon is more like a paper bag. It has lost its "rubbery" ability to deflate.

So the person struggles to expel old air to make way for new air.

Emphysema happens when immune system cells and their enzymes enter the lungs to attack intruders. (Smoke and airborne pollutants, for example.) This destroys lung tissues. It's no surprise that smokers are susceptible.

House painters were also notoriously prone to emphysema. The reason? Paint fumes—plus a higher likelihood to drink and smoke too much. When I was a medical examiner, I autopsied many house painters who fell victim to this toxic combination.

But genetics can be an even bigger risk factor than smoke toxins. In fact, people with certain genetic variations can't neutralize the enzymes that break down tissue proteins in the lungs.

One of those enzymes is trypsin. Normally, lung cells protect themselves from trypsin with an enzyme called alpha-one anti-trypsin. Not so in people with a genetic abnormality of this enzyme.

That's another reason that smoking isn't the whole story when it comes to emphysema and lung disease. Back in the 1970's I did a summer student research project on identifying genetic variants of this enzyme, and then wrote an undergraduate dissertation on this topic for my major in chemistry. But since, we have never heard much about this important cause of emphysema—it seems to get lost in all the smoke about cigarettes.

Asthma. In asthma, the airways of the lungs constrict, becoming narrow and sometimes even closing off completely. So it has an "obstructive" component too. That means it's hard to breathe in...and even harder to breathe out again. Thus, causing the "wheezing" sound of breathlessness.

The western medical approach to asthma is to use drugs to open the airways. These drugs, called "bronchodilators" act like adrenalin.

Under normal circumstances, the body releases adrenalin when it senses danger and has to respond with "fight or flight." That's because adrenalin increases heart and muscle performance and reactions. It also expands airways, allowing more air to enter the lungs more quickly. That gets more oxygen to the blood, muscles, and other tissues.

But too much adrenalin causes problems too. And so do these drugs. They can cause heart arrhythmia and fatal acute cardiac arrest. In the 1970s, there was an epidemic of young people dying from using inhalers. The FDA finally took note in the 1990s and made some changes, which I'll tell you about in just a minute. But first, let's talk about some natural alternatives...

Nature's breathing helpers

As usual, better ways to deal with breathing problems can be found in nature.

Caffeine and theophylline in coffee and tea are both effective bronchodilators. In fact, for general congestion from allergies, I recommend a strong cup of coffee or tea in the morning. It will help get you going—without resorting to antihistamines and all their side effects. Or using decongestants that make you feel like the top of your head is coming off.

But for the serious breathing issues discussed above, we can look back to Chinese medicine. The Chinese had solutions for obstructive lung disease—not only with acupuncture, but also with a powerful herb.

This herb, *Ma huang* comes from the bark of a tree containing ephedra (the source of the drug ephedrine).

Ma huang was one of the first Chinese remedies western medicine picked up on. In the mid-20th century, Karl Schmidt and K.C. Chang studied it at my alma mater, the University of Pennsylvania.

Ephedra, too, acts like adrenalin. And that, unfortunately, led people to use it in unhealthy ways. Dietary supplement manufacturers put it into appetite suppressants and performance enhancers. And no surprise, people misused them. So ephedra was even implicated in some deaths (that also involved other factors). And the FDA banned it.

So in our culture of "more is better" we've managed to take

one of Chinese medicine's effective remedies off the table.

Luckily acupuncture hasn't been outlawed—it doesn't pose the risks of drugs or even some dietary supplements. But it almost wasn't an option!

Acupuncture's "approval" almost didn't happen...

In 1997, the National Institutes of Health (NIH) looked at the science behind acupuncture. Their conclusion: It helps dental pain, certain chronic pain, and nausea and vomiting associated with chemotherapy and pregnancy.

Still, many mainstream medical practitioners and the FDA aren't sold. After all, we already have many "good" drugs for pain, nausea, and vomiting, so why bother with something exotic like acupuncture? (Could it maybe have something to do with the fact that acupuncture takes 15 minutes to administer, while writing a prescription and popping a pill only takes seconds and results in more revenue?)

But other results of acupuncture on lung disease (missed, of course, by the NIH) did catch the attention of FDA. These guys were located a mere three miles down the pike from the NIH, but they didn't manage to share their knowledge. Same old government bureaucracy...

FDA knew that the drugs available for asthma were dangerous. In principle, the FDA should be concerned not only with finding more effective treatments, but also with finding safer treatments. So, if acupuncture (perfectly safe) were effective for asthma and lung diseases, it should be very interesting to the FDA.

Meanwhile diligent attorneys such as Jim Turner had been petitioning the FDA to stop classifying acupuncture as an experimental device. Experimental devices are only allowed to be used in research experiments approved by the FDA.

And at the same time, I had started the first medical research journal on complementary and alternative medicine in the United States. In the very first issue, we published a massive collection of research (mostly published in the U.K. and Europe) on acupuncture for the treatment of (you guessed it) lung disease. The new

journal and this article got a lot of attention... including by the FDA.

In typical government fashion, the FDA bumped the reclassification of acupuncture. Which means it would be left sitting on the shelf somewhere.

But fortunately for you and me, some dedicated and courageous FDA scientists petitioned their boss to be allowed to work on it on their own time. They gave up their evenings and weekends to complete the approval process, without interfering with the regular 9-to-5 priorities of the "overworked" agency.

To save time and trouble, these scientists asked me to send them the computer disc with the hundreds of scientific citations and references I had compiled for the journal.

Sure enough, the FDA approved the acupuncture needle as a therapeutic device in the late 1990s. And we can all be thankful that a lot of pain and suffering is now being legally alleviated. Especially given all the government interference with effective pain-killing drugs (see the 11/9/12 *Daily Dispatch* "DEA or DOA?" for more on that topic).

But there is always room for more news about proven treatments that are thousands of years old.

New developments in old medicine

Shortness of breath is a major problem with COPD (not surprising). This is called dyspnea. It's particularly bad during physical exertion. Dyspnea on exertion (DOE) is a major symptom of COPD. It's notoriously difficult to control—even with the drugs currently available.

A new study performed by Japanese researchers—in which acupuncture was actually performed properly, instead of blundered as it often is in western studies—proved acupuncture beats placebo in improving DOE in patients with COPD receiving standard medication.

Apparently the "standard" medications were not helping. They were still considered standard—but of course, for ethical reasons, the patients still had to be given the drugs that weren't working anyway, because the experimental acupuncture treatment might not have been effective!

The researchers concluded that acupuncture is a "useful add-on" therapy. So if you suffer from COPD, keep taking those drugs (that apparently don't help for shortness of breath). But for real relief, also try something safe that really does work.

Safe, effective, and available

As the researchers continue trying to prove this age-old medicine, I believe the evidence is more than strong enough to trust that acupuncture does work. Not just for the standard uses (pain and nausea), but even for more complicated problems like COPD and asthma. And all without side effects.

Now that should give you cause to breathe easier.

CHAPTER 14:

THE SINGLE MOST IMPORTANT THING YOU CAN DO TO PREVENT PREMATURE DEATH

As the U.S. government science bureaucrats continue dithering over recommendations about vitamin D intake, some real scientists in Germany (and yes, even some right here at home) are making it perfectly clear: Vitamin D prevents premature death. Plus, it reduces death rates from all causes.

So why is the U.S. hemming and hawing—and confusing patients and doctors alike?

Blind leading the blind

Over the past three decades, many scientists who study chronic diseases have stumbled into studying diet and nutrition. They often lack any understanding of nutrition as a fundamental part of human biology and behavior. And despite their ignorance on matters of nutrition, they publish their findings. And the government science bureaucrats jump on the research—and the politically correct bandwagon.

But one source has always been an exception to the rule. *The American Journal of Clinical Nutrition* (AJCN) doesn't report spurious statistical findings like those that can be found in other journals.

And across the Atlantic, German scientists tend to put out reliable information on nutrition. That's because they know how to conduct scientific investigations on human biology. They have consistently been way ahead of the United States in investigating natural and nutritional approaches to health and medicine.

Research you can trust

The trustworthy team at *AJCN* published a report in the April 2013 issue that takes a close look at vitamin D.¹⁶

In it, a team of scientists measured vitamin D levels in nearly 10,000 people ages 50 to 74 years. Another 5,500 participants were measured at 5 year-follow-up. All deaths were recorded during an average follow-up period of 9.5 years. During the follow-up period about

10 percent of study participants died: 43.3 percent from cancer, 35.0 percent from heart disease, and 5.5 percent of respiratory diseases.

People with the lowest vitamin D levels were more likely to have died of any cause, and of cancer, heart disease, and respiratory disease specifically.

They also found a dose-response relationship between low vitamin D levels and death—that is, the lower the vitamin D, the higher the mortality rate.

This is the best kind of epidemiological study, with the strongest kind of results that can be performed on human populations. It makes it perfectly clear: Higher vitamin D levels protect against premature death—as well as all the leading causes of death.

It's never too late to up your D

Plenty of studies prove the dangerous effects of lack of vitamin D in childhood, but these highlight the fact that even in adults—and older adults at that—low levels of D have bad health effects.

On the flip side, that means that even later in life, you can improve your health and longevity by increasing your vitamin D intake.

And here's some more good news: Vitamin D can be free. All you need to do is expose your skin to the sun and your body will activate its own vitamin D.

Of course, you can also build up healthy vitamin D levels with appropriate high-quality supplements. If you have any reason to believe you are not getting enough vitamin D, ask your doctor to measure your levels the next time you have a routine blood sample taken for testing. If you're below 75 nmol/L—and especially below 30 nmol/L—it's time to add a high-quality supplement.

CHAPTER 15:

RHEUMATOID ARTHRITIS: ONE OF MEDICINE'S MOST AGONIZING MYSTERIES—UNRAVELED!

Plus 5 true complementary therapies that can help soothe your pain, starting today

Modern medicine botches a lot of things. But the way it treats rheumatoid arthritis may be one of the worst examples.

For centuries, rheumatoid arthritis (RA) has largely been a mystery. A very painful one at that. The problem is, once again, that western medicine only focuses on ONE aspect of the disease. Modern medicine has classified RA as an auto-immune disease. Of course, when I was in training during the 1970s, that's what the experts ended up calling a lot of diseases they simply didn't understand.

Today, we know there is indeed an immune component involved in rheumatoid arthritis (RA). But, as is the case in many other auto-immune disorders, there's also a strong mind-body connection. And, more recently, yet another factor has come to light—the nervous system connection.

Finding real relief from this mysterious chronic condition requires treating all three aspects. Unfortunately, most doctors simply aren't.

That said, make no mistake: RA is a dangerous systemic condition that requires management by a competent rheumatologist. And the good news is, more and more doctors are recognizing that there are also complementary approaches that can help soothe RA. More on that in just a minute. First, it's important to understand how it all ties together.

It's all connected

I've talked a lot about the mind-body connection in *Insiders' Cures*. But I have to—because western science separated the two long ago. And that was—and is—a huge mistake. Other ethno-medical traditions in Asia and around the world never separated them. This is one reason these other medical traditions appear more "wholistic" to us today.

But even based on modern science, growing evidence shows the mind and body are linked—or "married." For better or worse, in sickness and in health.

It boils down to three inter-connected components:

- 1. "Psycho"—the mind/brain connection
- 2. "Neuro"—the nervous system connection
- 3. "Immunology"—the immune system connection

In fact, today there's an entire field of medicine called "psycho-neuro-immunology." Which provides a tangible scientific approach, a physiologic model, and a growing body of data proving the mind-body connections.

Here's how each component works...

For the "psycho" component, we know that the mindbrain is connected through thoughts, emotional feelings, and levels of consciousness to influence the body. But it's not just a one-way street. The biochemicals, called neuro-peptides, that we associate as being in the brain, such as neurotransmitters, are actually present throughout the body. In fact, neurotransmitters are found in even greater quantities in the gut, for example, than they are in the nervous system.

Further, the production of specific hormones (which occurs throughout the body in the thyroid, pancreas, adrenal glands, and ovaries or testes) is controlled by specific neuro-peptides released by the pituitary gland of the brain. These hormones are released into the circulatory system and carried to all parts of the body in the blood.

For the "neuro" part of the equation, the nervous system originates in the brain and spinal cord as well. Nerves also travel to all parts of the body, both sensing and influencing all tissues at both voluntary (conscious) and involuntary (unconscious) levels.

But now there's a third piece being added to the puzzle—"immunology."

Like neuro-peptides and nerves, the immune system is also present throughout the body. Immune cells (white blood cells) travel throughout the blood. And there are specialized concentrations of these cells in the adenoids, tonsils, spleen, appendix, and throughout the gastrointestinal tract (without fully understanding their role, 20th century surgeons considered them all to be expendable). They are also concentrated in the thymus gland during childhood.

When you look at how each of these three components impacts the body from head-to-toe on their own... it's not hard to see how they are all inter-related as well. The psycho-neuro-immunology connection becomes quite apparent.

So what causes rheumatoid arthritis?

One way the immune system works is by making antibodies that match to antigens on invading bacteria and viruses. Antigens are foreign substances that stimulate the immune system. The antibodies attack the antigens and then white blood cells can destroy the microbes.

These microbial antigens are often made up of proteins and/or polysaccharides that are commonly found in nature. These are some of the same proteins and polysaccharides that exist in normal, healthy biological substances as well. Unfortunately, when the immune system can get out of synch, some of the antibodies it makes against microbes get confused and cross-react with certain normal tissues. Thus, the immune system can attack our own bodies—causing an "auto" immune disease.

RA is the result of your immune system attacking the cartilage in your joints. This confusion can stem from a true bacterial infection, like "rheumatic fever" (see sidebar at the end of this article). Or it can appear more mysteriously from a stress-related immune imbalance—this is the mind-body-immune connection.

While there is accordingly a mind-body component, caution must be exercised with rheumatoid arthritis. It causes real, physical damage with serious complications that require experienced medical management. The best thing you can do is to consult a rheumatologist who can help determine which of the drugs for RA appear to be safe, effective, and appropriate for you. And whether there older ones that are more reliable (as in the case with blood pressure medications).

That said, doctors and patients alike are realizing that there are also natural approaches you can take to help alleviate RA. Especially when it comes to addressing the mind-body connection.

True "complements" to RA treatment

A wide range of "mind-body" approaches can reduce the stress that inevitably accompanies the pain with which RA patients struggle on a daily basis. For those best suited to your emotional type take the short quiz featured on www.drmicozzi.com, or in my book with Michael Jawer *Your Emotional Type*.

Gentle movements—as in traditional yoga or tai chi—can also be helpful. Likewise, swimming can provide just the right kind of low-stress movement and physical exercise. Light massage, low-impact exercise, and just getting outdoors (walking, riding a bike, or light gardening) can also be good.

For the pain itself, acupuncture can often work wonders.

In China and India, rheumatic conditions are associated with "cold and damp." So while the inflammation may seem hot, it actually helps to seek warmth and avoid cold and damp circumstances and climates. In fact, one ancient Ayurvedic treatment involves immersing the joints in warm sand.

This can easily be accomplished on a sunny beach (while also providing you, and your bones and joints, with some much-needed vitamin D).

Whatever complementary therapy you decide to try, don't go it alone. The best way to ensure you get the most relief is to work with a rheumatologist who can recommend the best complementary therapies for your particular needs.

THE HEART OF THE MATTER

Rheumatic fever was relatively common through the mid-20th century. It's less common now...but it has left some lasting damage. You see, when a child came down with rheumatic fever, their immune system made antibodies to fight it. Unfortunately, these antibodies also attacked the heart valves. So the children would recover from the infection, but they would grow up with damaged heart valves ("leaky" valves) that didn't work.

When open heart surgery was first developed it was a blessing for adults who suffered from rheumatic heart disease. They could have their damaged heart valves replaced, either with valves harvested from pigs (as they seemed to provide the best match from nature), or mechanical valves.

Heart valve replacement was a very effective use of open heart surgery. However, by the 1970s only about 20 percent of open heart operations were being done for heart valve replacement. What kept the heart-lung bypass machines pumping was the new technique of coronary-artery-bypass grafts, whereby blood vessels are cut out of the legs to sew into the heart to bypass blockages of coronary arteries.

More recently, there are approaches where blocked coronary arteries are opened from within with stents and balloons, introduced through the blood vessels of the legs.

Unfortunately, as I described in previous *Daily Dispatches*, there remain a lot of questions as to whether these dramatic but dangerous, expensive, uncomfortable procedures, actually have any real benefits in terms of reducing heart disease and mortality. But don't count on surgeons and "invasive" cardiologists to give them up any time soon.

RA STRIKES RICH AND POOR ALIKE

During ancient and historic periods, many infectious and inflammatory diseases were associated with lower socio-economic status. But it was noted that even members of the elite came down with "rheumatic" conditions—showing there's "rheum at the top."

CHAPTER 16:

THE LITTLE-KNOWN-BUT DEADLY-SIDE EFFECT LURKING IN SOME OF BIG PHARMA'S BEST SELLERS

I've pointed out the shortcomings of government Recommended Daily Allowances (RDAs) numerous times in *Insiders' Cures* and in my *Daily Dispatch* e-letter (for example, "The RDA to nowhere"). Most RDAs are outdated. And some can be downright lethal (like the RDA for vitamin D, for example, considering today's science).

Despite all the academic posturing and public funding poured into "updating" RDAs, serious nutritional deficiencies are <u>still</u> an alarmingly frequent problem in the general U.S. population. And unfortunately, nutrient deficiency is often the <u>last</u> thing doctors consider when diagnosing patients.

Instead, they typically put patients on countless medications to alleviate symptoms. Then those drugs cause more symptoms (side effects), requiring even more drugs. It's a vicious circle. But a brand new study from the University of Geneva in Switzerland revealed another glaring problem with this "Band-Aid" approach...

Researchers found that the very drugs doctors rely on to treat millions of patients each and every day may actually be making them sicker—by depleting their levels of some critical nutrients.

Now, as you know, I'm a firm believer that scientific facts warrant that some medical conditions merit pharmaceutical intervention. And there are still a few truly effective and innovative medications available by prescription, and over the counter.

But turning a blind eye to the potential negative effects these drugs might have on nutrient levels could make things a whole lot worse in the long run. Especially when the use of these drugs is so widespread. Not to mention, many people take multiple medications.

For instance, 40 percent of residents in long-term care facilities are given 9 or more drugs on a daily basis.

When I had my training in gerontology, experienced doctors advised that when an elderly patient came in

with new complaints and there was no clear diagnosis, the best course of action is to simply stop all medications for 24 hours. And sure enough, 90% of the time, the patients improve immediately!

So let's take a look at some of the most common drug classes, the nutrients they deplete, and how you can protect yourself—beginning with blood pressure medications.

That bitter taste may be signaling a bigger problem

While many non-drug therapies can help you effectively reduce stress and maintain blood pressure, hypertension isn't something to take lightly. Elevated blood pressure is the most serious, proven risk factor for heart disease. This is why I generally recommend taking one of the safe, proven drugs to get and keep your blood pressure as low as possible (within a safe lower floor, of course).

But as the new Swiss study points out, even some effective <u>blood pressure drugs</u>—the renin-angiotensin-aldosterone axis inhibitors (such as Captopril)—cause zinc depletion.

If you also suffer from congestive heart failure or diabetes, which frequently accompany high blood pressure, these other conditions already compromise your zinc levels.

So adding a blood pressure medication to the mix can put you on the fast track to full-blown zinc deficiency.

And zinc deficiency can cause serious problems—from impaired immune function to slow wound healing to abnormal cell division

Of course, those aren't necessarily problems that you would notice on a day-to-day basis. But there is one tell-tale sign that's much easier to spot. If you notice a bitter or sour taste while taking these drugs, it's because they have resulted in zinc deficiency. (This taste occurs not when actually swallowing the drugs, or even food, but when your mouth is empty.)

But taking 25 mg of zinc each day should easily prevent blood pressure drugs from depleting your levels. (Of course, this amount of zinc is three times higher than the RDA. Which just proves the point, once again, that these recommended allowances are nothing short of useless in most instances.)

And don't forget that certain foods—such as organ meats, red meat, seafood, nuts and certain legumes—are also high in bioavailable minerals like zinc.

Of course, diabetes is close on hypertension's heels, when it comes to potentially deadly diseases that do warrant a prescription drug. Because high blood sugar can be just as much a killer as high blood pressure, I generally recommend patients with Type II diabetes take the drug Metformin. And while Metformin offers the life-saving benefits of reigning in excess blood sugar (while also lowering the risk of cancer, dementia, and other chronic diseases), it's not without its potential drawbacks...

Keep an eye on your Bs

Overall, Metformin has the properties of a "good" drug. Its benefits far exceed any toxicity at normal, therapeutic doses. Which is not surprising since Metformin is actually the ancient natural herbal remedy

Galegine (or French lilac—a.k.a. goat's rue). It was well-known and commonly used in ancient Egypt and Rome right through the Middle Ages and Renaissance in Europe.

And it enjoyed its own "renaissance" in Europe and the US once drug manufacturers were able to offer it as a patented drug (it has now gone generic).

But anyone taking Metformin needs to be aware of one downside: It depletes vitamin B12.

I told you about this in the December 2012 issue of *Insiders' Cure*. But it bears repeating. Especially since studies have shown an almost three times increased rate of vitamin B12 deficiency in people taking Metformin. Vegan and vegetarian diets further increase this risk, since these diets are a poor source of B12 (not to mention many other bioavailable vitamins and minerals).

How can you tell if your vitamin B12 levels are low?

Some of the common symptoms include weakness, fatigue, easy bruising or bleeding, and tingling or numb-

ness in your extremities. This last symptom sometimes gets mis-diagnosed as diabetic neuropathy.

But if you increase your vitamin B12 levels, it may very well go away.

In fact, when my own blood sugar began inching up two years ago, I quickly started taking a low dose of Metformin. Three months later, and 30 pounds lighter (on my "Top-of-the-Food-Chain" diet, detailed in the free bonus reports you received as a new subscriber), my blood sugar was back to normal. But I began noticing numbness in my feet. Fortunately, it wasn't due to diabetes but to simple vitamin B12 depletion. And I was able to reverse it in just three months taking the vitamin B ingredients found in my Core Brilliance and CoreCell Essentials supplements. (The combination provides an optimal amount of the B vitamins, which are best taken as a complex).

In general, a 2 mg per day dose of B12 should be plenty to get your blood levels above 200 picomoles/Liter—and avoid any potentially dangerous deficiencies. (And, yes, in case you were wondering—this dose is higher than the RDA. By nearly 1,000 times, in fact.) Or you can get a vitamin B12 injection (usually 1 mg intramuscular injection weekly).

But B12 isn't the only essential B-vitamin that Metformin can interfere with. It can also deplete your folic acid levels. Supplementing with 1 to 5 mg per day should keep blood levels normal. (Once again, these doses are higher than the RDA—up to 20,000 times higher.)

So, yes, even "good" drugs—like proven blood pressure medications and Metformin—can have their drawbacks. But the Swiss study I mentioned earlier also turned up more bad news about a couple of already questionable "bad" drugs.

Statins go from bad to worse

<u>Cholesterol-lowering statin drugs</u> may be blockbusters for the pharmaceutical industry. But they're an all-around disaster in every other respect. While these are among the most prescribed drugs in the world, their effects on micronutrients have been rarely studied. It's

already relatively well-known that they deplete coenzyme Q10. (In fact, Merck took out a patent on a statin/ CoQ10 combination years ago...but never brought that product to the market). But now you can also add vitamin D to the list of statin-depleted nutrients.

Since CoQ10 is critical for muscle health, including the heart muscle, and vitamin D is now proven to lower heart disease and mortality, this is troubling indeed for your heart health.

If you're going to take a statin (and, again, I don't necessarily think you—or anyone—should), then supplementing with 1,500 to 2,000 IU per day of vitamin D should be required. (This is two to three times higher than the government's confused and clearly inadequate recommendations.)

And you'll also need 100 to 200 mg per day of CoQ10 (three to six times higher than the RDA amount).

Problems with PPIs are enough to give you heart burn!

I have always thought proton pump inhibitors (or PPIs), are a bad idea. They're also ridiculously over-prescribed.

PPIs (e.g., Omeprazole) treat heartburn, or "acid reflux," basically by interfering with digestion (reducing acid levels in the stomach). Not surprisingly, they also interfere with absorption of several key vitamins—including vitamin B12 and vitamin C.

PPIs also interfere with the complex metabolism of the key minerals calcium, magnesium, and even iron, causing iron deficiency. They also interfere with the normal flora of the intestine, or the microbiome. This could have potentially far-reaching effects on health (see Chapter 5 on, Type III diabetes).

Anyone taking a PPI should supplement with 2 mg per day of vitamin B12 and 500 mg per day of vitamin C (which is five to six times the RDA). Cranberry juice can also help reverse interference with nutrient absorption caused by PPIs.

Keep in mind many of these common drugs are prescribed in combination, which potentially depletes micronutrients even further.

And beware of vegetarian diets, which put you at a disadvantage in the first place from an optimal nutrition standpoint for many of these micronutrients.

Between the inadequacy of RDAs and the common use of nutrient-depleting drugs (even ones I generally recommend as a first-line defense against the common killers of diabetes and high blood pressure) it would be wise for essentially everyone to at least supplement with vitamin B12, vitamin C and vitaminD as well as the minerals zinc, selenium, and magnesium.

THE ASPIRIN WARNING YOU HAVEN'T HEARD

Prescription drugs aren't the only medications that can deplete your body of valuable nutrients. Even common, over the counter drugs can have these unintended consequences.

For example, aspirin (acetyl-salicylic-acid) can cause vitamin C deficiency over time (after three years or so of treatment). Especially when it's used in high doses, like those typically needed to relieve inflammation or rheumatic conditions.

NO ONE IS "IMMUNE" TO NUTRIENT DEFICIENCIES

Of course, it's important to note that, common as they are, these four types of drugs aren't the only cause of nutrient deficiencies. And people taking them aren't the only ones who need supplements. In fact, there's increasing evidence that many common diseases and medical conditions—such as age-related eye diseases, depression, heart disease and chronic inflammation—actually occur primarily as a result of vitamin and mineral deficiencies.

Ideally, you would be able to get all—or at least most—of the nutrients you need from a healthy, well-balanced diet. Unfortunately, it's becoming clear that even if your diet consisted of the healthiest foods available, the average American couldn't possibly eat enough of them for optimal health and nutrition. Some of the essential vitamins, minerals, fatty acids, and amino acids humans need simply <u>cannot</u> be made in the human body, and you can't get enough from foods available today.

In fact, my little old, neighborhood medical school and hospital (Harvard University and Massachusetts General Hospital) just did some research on this topic. They set out to determine whether or not women could possibly eat enough of the recommended foods to get sufficient intakes of the nutrients they need every day.

To make a long study short, the answer is "no."

The researchers concluded that a woman cannot meet her nutrient needs, even on an "optimal" diet of 1,500 calories per day.

For instance, some researchers have concluded you would need to eat 13 to 14 oranges per day to get optimal vitamin C levels. Meanwhile,

the government recommends five servings of fruits and vegetables per day. And now, the FDA is in the process of mounting a new "war" on apples and oranges and other healthy fruits, as I told you in the Daily Dispatch "Big brother takes away those tempting apples" back in May.

So the case for supplements is becoming more and more compelling.

Unfortunately, the dietary supplement industry is full of non-science based sales and marketing firms that promote their products based solely on the latest fads—not on the latest medical and scientific findings.

Information you can trust is the first step. And that's why I began writing *Insiders' Cures* and the *Daily Dispatch*. And why I developed my Smart-Science Nutritionals line of nutritional supplements.

Just as the name implies, the products are based on science—not hype. And I'm also proud to be able to say we're working with what I have found to be the highest-quality, science-based dietary supplement formulators and manufacturers in the world (which I found after two decades of searching and due diligence on site).

The bottom line is, if you're going to take supplements—and, based on the mounting evidence, it certainly appears that you should—it is necessary to seek out the highest-quality formulas available. Otherwise, you will not get the results you seek and may come to the incorrect conclusion that nutrients don't work well enough. Which would be a shame...considering the alternatives.

CHAPTER 17:

THE SIMPLE VITAMIN "C-CRET" TO LIFELONG, STRONG, HEALTHY MUSCLES

We've known of the importance of vitamin C for bone and joint health for a very long time. But recent research indicates that vitamin C may also be critical for maintaining muscle mass. So let's extend that thought for a moment to the entire musculo-skeletal system—which accounts for about 85 percent of the body's weight, mass and size.

Maintaining skeletal muscle mass, as well as healthy bones and joints, is critically important as you age. And unfortunately, the government recommendations for daily meat intake are woefully inadequate to help anyone maintain healthy muscle mass. So it's more important than ever to be sure you're getting enough vitamin C.

And, yes, you have to make a conscious effort to do it.

This nutrient is so important in so many ways—in every cell in the body—that most animals make their own, as part of normal metabolism. In fact, all animals make their own vitamin C except for two—humans and guinea pigs. (This is one reason why guinea pigs originally became such an important laboratory model in scientific experiments.)

A minimum daily intake of vitamin C is 2,000 mg.

CHAPTER 18:

BREAKTHROUGH STUDY REVEALS THE SECRET TO FISH OIL'S HEART BENEFITS

It seems not a day goes by without seeing another study on the health benefits of omega-3s. The big story for years now has been their ability to protect against heart disease. More recently, studies have suggested that omega-3s have an "anti-inflammatory" or (perhaps more correctly) an immune-modulating effect—helping to keep the immune system in balance. At the same time, other studies are showing that heart disease may be caused by inflammation (or again, an imbalanced immune system).

These ideas are getting us closer to understanding the all-important "mechanism of action"—or *how* omega-3s actually work in the body to reduce disease. For most doctors, and certainly for all patients, it is enough to know that something does work. But medical researchers don't rest until they establish how it works.

So this new research is especially interesting. And one recent study in particular caught my eye.

It tested whether fish oil could reduce blood pressure, heart rate, and nervous system responses—by blunting the body's reactions to mental stress.¹⁷

These researchers were smart enough to recognize something I've told you many times—that the main culprit behind high blood pressure and heart disease isn't salt... or saturated fat...or tobacco.

It's STRESS.

The link between mental stress and heart disease risk is well-documented. Yet, until now, no study ever examined how fish oil (omega-3) supplementation affects this link.

Researchers subjected 67 participants with normal blood pressure to a 5-minute mental stress test before and after 8 weeks of fish oil supplementation or placebo.

They found that fish oil significantly reduced both heart rate and overall nervous system reactivity to mental stress.

The researchers (perhaps focusing too much on their own study rather than the bigger picture) expressed concern that, despite its other benefits, fish oil did not lower blood pressure. But considering the study participants all had normal blood pressure to begin with, this particular finding makes perfect sense.

Other studies have shown that fish oil can reduce blood pressure in people who DO have elevated blood pressure, or hypertension. So this simply appears to be another instance where we should credit the "wisdom of the body" (and basic physiologic processes) for not "fixing" problems that don't actually exist!

And it certainly isn't cause to "throw the baby out with the bathwater," so to speak. Because this research revealed a real breakthrough if you can see the bigger picture.

A valuable insight that moves us closer to understanding *how* omega-3 fish oils have their benefits in heart disease.

Short-term results indicate long-term benefits

Over the short term, blood pressure constantly goes up and down—but settles out at a resting "set point."

Chronic stress causes that "set point" to rise. The body eventually readjusts at a higher blood pressure—causing ongoing "wear and tear" damage to our heart and blood vessels. Stress also causes increases in nervous system reactivity and heart rate.

The ability of fish oil to reduce heart rate and nervous system responses to stress within just 8 weeks is a good sign it will also help keep blood pressure normal and the heart healthy over the longer term.

And don't forget that fish oil has previously been shown to reduce triglyceride levels in the blood and decrease growth of atherosclerotic plaques in blood vessels—which result after the wear-and-tear of elevated blood pressure and inflammation.

When you have a vicious cycle of patho-physiologic factors causing a disease, you need a real cure that knocks out all the negative effects (not just a drug that has one

effect). And fish oil offers the "whole package" when it comes to heart health.

I recommend everyone take at least 1 to 2 grams per day of omega-3 fatty acids from fish oil.

Ideally, you should be looking for dietary sources of omega-3s, such as salmon, sardines, and other fatty fish. Of course, if you don't like fish, purified omega-3s and fish oil supplements are widely available (Nordic Naturals makes some good quality products that I have personally tested over the years).

CHAPTER 19:

VITAMIN BREAKTHROUGH COULD PUT AN END TO HYPERTENSION AND HEART DISEASE

I've reminded you many times about the health benefits of vitamin D—and the fact that most people are deficient in this critical nutrient.

Now, a large-scale genetic study involving over 155,000 participants has made a truly tremendous discovery...

Low levels of vitamin D cause high blood pressure.

While other studies have found an <u>association</u> between low vitamin D and high blood pressure, this is the first to demonstrate that low vitamin D actually <u>causes</u> hypertension.¹⁸

And increasing your vitamin D levels can have a significant impact on your heart.

In fact, for every 10 percent increase in vitamin D levels, there was an 8.1 percent decrease in the risk of developing high blood pressure. That's a nearly one for one benefit. These researchers concluded that vitamin D may very well be *the best* means to reduce high blood pressure and heart disease.

As I mentioned in a recent *Daily Dispatch* (7/1/13, "Can you get too much vitamin D in the summer?"), other recent studies indicate that you can't get "too much" vitamin D. So everyone should supplement with 1,000 IU per day. It won't harm those who have sufficient levels—but it will do a world of good for everyone else.

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