Know the Signs to Prevent Disease

You might think that after decades of working with patients, reading countless clinical studies, and doing endless research, my personal nutrition would be set in stone. But that’s far from the case. I’m constantly tweaking, experimenting, and trying new things. My core program and overall philosophy remains pretty much the same. But trying to optimize and adapt my nutrition to help address various symptoms and changes I observe in my aging body is a never-ending process. And, by default, my vocation often necessitates that I serve as my own guinea pig for the sake of research.

I would hope that you’ve taken a somewhat similar approach when it comes to your health. It’s important to listen your body and recognize that symptoms you experience are often subtle warning signs that indicate you need to change your nutrition, habits, activity level, and maybe even your thoughts and attitude. Part of my job is to help clarify the connection between what causes certain symptoms and what action is necessary to correct the underlying problem. It might not be so evident in today’s society, but that’s really the most important aspect of being a doctor.

Before they started to rely so heavily on laboratory tests, doctors actually took the time to physically examine their patients and look for the telltale signs of “dis-ease.” They picked up on the subtle signs in an effort to prevent future problems.

Nowadays, those types of doctors actually took the time to physically examine their patients and look for the telltale signs of “dis-ease.” They picked up on the subtle signs in an effort to prevent future problems.

As we age, there are numerous recognizable signs that indicate the need for lifestyle or dietary changes. Here’s a short list of some of the more common ones and what they might mean:

- **Shortness of breath** can be a sign of congestive heart failure and possibly excessive salt intake.
- **Pale skin with concave fingernails** indicates an iron deficiency.
- **Follicular hyperkeratosis** (permanent “goosebumps” that won’t go away when you rub your skin) is caused by vitamin A deficiency.
- **Bitot’s spots** are the buildup of keratin on the conjunctiva or white portion of the eye. It typically looks like a dry, scaly patch with a foamy appearance. This is another sign of vitamin A deficiency.
- **A loss of the outer portion of the eyebrow, cracked heels/hands, and dry, flaky skin** are common with underactive thyroid and/or iodine deficiency. Hair loss or poor quality hair texture and color are other signs of an underactive thyroid. The best standalone iodine supplement I’ve found is called IOSOL. I’ve been personally using and recommending it for more than 30 years. And if you have read any of my past articles, you know I’ve continually stressed the importance of proper thyroid function and outlined very specific...
ways to check and improve its function.

- “Fruity breath” can signal ketoacidosis, a complication of diabetes that occurs when your body produces high levels of blood acids called ketones.

- **Intermittent fluid accumulation** that manifests as swelling in the hands, ankles, and feet is often a sign of hypoadrenia (weak adrenal gland function).

In addition, here are some of the larger issues commonly seen in aging adults and what can be done about them.

## Sarcopenia

A depression or pit at the temple or in the webbed area between the thumb and index finger, depression between the ribs or in the thigh area, bony knees, prominent collar bones and/or squared off, bony shoulders, and loss of grip strength are all indications of muscle loss (called sarcopenia).

Muscle loss is rapidly becoming one of the most common problems of our aging population. Studies have shown that after age 50, the body starts to experience a rapid loss of muscular tissue, size, and strength. Without any intervention, all individuals aged 60 or older will develop sarcopenia. Are you actively doing anything to stop or prevent it? If not, you need to.

In the next few years, I predict you’re going to hear a lot about sarcopenia. It will definitely be the next disease of the masses that needs to be managed, if/when the pharmaceutical companies get one of their “solutions” approved by the FDA. Considering all the problems linked to sarcopenia, it should be an easy sell, regardless of the side effects or whether or not the drug actually works. Loss of muscle tissue leads to blood sugar problems such as diabetes, as well as instability, falls, bone loss, knee and hip failure, loss of mobility and independence, heart failure, and premature death. *(Muscle Nerve 1986 Sep;9(7):585–91) (J Gerontol A Biol Sci Med Sci 2003 Oct;58(10):M911–6)*

### Strength Training

Regardless of what the pharmaceutical companies might say, there’s no drug that will safely promote muscle growth. The only way to truly build muscle is through exercise—specifically weight-bearing or resistance exercise. Resistance/strength training triggers muscle stem cells to rejuvenate mitochondria, the “energy plants” located in cells. Aerobic exercise, while great for circulation and the cardiovascular system, doesn’t significantly increase muscle mass.

It’s not necessary to go to a gym and pump heavy weights. You can use plastic milk jugs, elastic bands, or other items such as light hand weights. You can also incorporate movements that use your own body weight, including pushups, pullups, squats, lunges, and dips. (I outline these and other exercises in the March 2009 issue of *Alternatives* and also on my website, drwilliams.com.)

### Protein

You also need to make sure your diet includes adequate amounts of high-quality protein. This is an area where most people fall short.

I use whey protein in my morning shake, but another high-quality source of protein that gets overlooked is cottage cheese.

Cottage cheese is an uncured type of cheese made by curdling milk and draining off the liquid (whey). Cottage cheese dates back to the ancient Egyptians, Greeks, and Romans. It was popular because it was so inexpensive and easy to make. In fact, it was known as the “cheese for the poor.” And during the Great Depression and World War II,
it was often referred to as “the cheapest meat you can eat.”

My mother told me many times that when she was growing up, they used to make “clabber.” After making butter, the leftover milk was naturally allowed to sour. Clumps of cheese formed, after which the whey (liquid) was drained and the resulting clabber (or cottage cheese) was rinsed with water, then eaten. Sometimes a little cream was added to sweeten and enhance the flavor.

For most people, making cottage cheese at home isn’t feasible because raw milk can be hard to come by. If you let homogenized, pasteurized milk sour, the resulting product isn’t fit to consume. In pasteurized and homogenized milk, the natural mix of bacteria has been altered and fats have been removed. Instead of naturally souring, it rots.

Fortunately, cottage cheese is readily available in every grocery store. Many people like to add fruits or vegetables to cottage cheese, but personally, I like to eat my “curds and whey” plain, just like Little Miss Muffet did before she was frightened away by an arachnid.

You can also use cottage cheese as a substitute for protein powder in smoothies or shakes. When blended with skim milk and other ingredients, it helps thicken smoothies and make them more nutrient dense.

And cottage cheese can be substituted in recipes that call for ricotta cheese. It can be blended and mixed with various herbs to make high-protein dips or added to avocados to make a creamier version of guacamole.

Cottage cheese with flaxseed oil is also part of Dr. Johanna Budwig’s protocol for converting oil-soluble omega-3 fatty acids into water-soluble omega-3 fatty acids for preventing and treating cancer.

**Creatine**

Another valuable tool to help maintain lean muscle mass is the molecule creatine. One of creatine’s more noted benefits is that it promotes the creation of ATP, the cell’s short-term energy storage molecule. Just a few years ago, creatine was also shown to inhibit the hormone myostatin, which degrades various body tissues—especially muscle tissue. Myostatin levels rise with age. By naturally reducing myostatin, you can increase strength and muscle mass.

Numerous studies demonstrate that creatine supplementation can be significantly beneficial for those suffering from heart conditions. After just one week of creatine supplementation, patients with chronic heart failure exhibited increased skeletal muscle energy and performance. Not only does it improve cardiac muscle strength, but the strength of skeletal muscle as well. *(Curr Opin Support Palliat Care 2013 Dec;7(4):352–60)*

Other studies have shown that, even in patients who were unable to perform conventional forms of exercise, creatine combined with electrical muscle stimulation improved strength, peak oxygen consumption, and even 6-minute walking distance. *(Cardiovasc Res 1995 Sep;30(3):413–8) (Pharmazie 2006 Mar;61(3):218–22) (J Card Fail 2009 May;15(4):319–26) (J Appl Physiol 2005 Dec;99(6):2307–11)*

Creatine seems to be particularly effective when combined with resistance exercises, regardless of age. In one study involving men and women in their 70s, creatine supplementation increased lean muscle tissue mass and average muscle power. It also improved bench and leg press performance, arm muscle thickness, arm curl, and the ability to stand up from a chair and get up from a lying position on the floor. *(J Int Soc Sports Nutr 2013 Aug;10:36) (Eur J Appl Physiol 2013 Apr;113(4):987–96)*

Additionally, creatine supplementation positively influences brain function. Along with enhancing cellular energy production, creatine improves the oxygen-carrying capacity of hemoglobin in the blood. Better cognitive function results from the combination of these effects, particularly in the elderly and in vegetarians, whose creatine levels tend to be lower. *(Br J Nutr 2011 Apr;105(7):1100–5)*

Our body makes some creatine, but we get a substantial portion from our diet. Creatine-rich foods include red meat (2 grams per pound) and fish (4.5 grams per pound of salmon). Since most studies indicate that benefits begin to occur at a daily dose of 5 grams, it’s easy to see why most people aren’t getting optimal amounts from their diet. This is especially true for the elderly and vegetarians.

Fortunately, creatine powder is an inexpensive supplement, particularly when purchased in bulk. The cost of a therapeutic daily dose is less than 5 cents. That’s an extremely small price to pay.
for all the potential benefits it can provide, especially when combined with a little exercise.

There are several forms of creatine. Most of the studies so far have utilized creatine monohydrate at a daily dose of 5 to 20 grams. (Typically, there’s a “loading” phase that involves taking 20 grams for the first week, then reducing to 5 grams per day thereafter for maintenance.)

There’s nothing wrong with creatine monohydrate, but a newer form, creatine hydrochloride (creatine attached to hydrochloric acid) is far more absorbable. The same results can be obtained with as little as 750 milligrams per day.

Creatine is one of the most heavily utilized supplements in professional and college sports, bodybuilding, and weightlifting. There are numerous myths about the potential dangers of creatine, but the research has shown these to be unfounded. The potential side effects are mainly temporary water retention, stomach discomfort, or intestinal distress (diarrhea), which occur when you simply take too much in a single dose. And these side effects are only an issue with creatine monohydrate, not the hydrochloride form.

Since creatine can cause a degree of fluid retention, if you have polycystic kidney disease, focal segmental glomerulosclerosis, or any other kidney disease characterized by tissue swelling, you should probably avoid using it. Otherwise, it’s a safe supplement that should be part of everyone’s anti-aging program.

I purchase creatine hydrochloride from PowderCity.com and I add 750 milligrams (1/4 teaspoon) to my morning protein shake. Both forms of creatine are available in bulk from several online sources including PureBulk.com, Herbstoreusa.com, and Bulksupplements.com.

If you aren’t yet convinced about the importance of adding resistance exercise, protein, and creatine to your daily regimen, ponder this fact: Without any intervention, there is a 100 percent guarantee that you’ll experience some degree of lean muscle mass loss, decreased metabolism, loss of aerobic capacity, and increased body fat—all of which contribute to frailty and less independence.

**Easy Bruising**

We’ve all seen the intense bruising on the forearms and hands that is so common in the elderly. Bruises occur when small blood vessels (capillaries) near the surface of the skin break after a blow or injury. Blood then leaks out of the vessels, which appears as the telltale black-and-blue mark.

Bruising occurs more frequently when the connective tissue in the skin starts to lose its elasticity and the blood vessels just below the skin’s surface lose their matrix support, become fragile, and break. Taking medications or compounds that thin the blood (NSAIDs, warfarin, antidepressants, fish oil, etc.) increases the leakage.

If you bruise very easily, there are at least three areas that may need to be addressed: making sure your blood is able to clot normally, strengthening your capillaries, and restoring your skin’s elasticity.

**Bioflavonoids, Vitamin K, and Probiotics**

Bioflavonoids (sometimes called “vitamin P” many years ago) are antioxidants and anti-inflammatory compounds that enhance the action of vitamin C. They are naturally found in fresh fruits and vegetables, including red bell peppers, red sweet peppers, strawberries, tropical fruits like mangoes and papayas, black and green tea, onions, and tomatoes, to name a few. A good multivitamin/mineral will include bioflavonoids.

If the bruising is more advanced (where the bleeding continues after the blood vessels break and blood-filled–like blisters develop), then more than likely there’s a problem with clotting, and this could be caused by a vitamin K deficiency.

Normally, the beneficial bacteria in our gut produce the fat-soluble vitamin K2. Unfortunately, most people don’t eat enough fermented food products, which are rich sources of these beneficial bacteria. We also drink chlorinated water, regularly consume food preservatives, and take a variety of medications, all of which tend to destroy and alter the normal bacterial flora in our intestinal tract. A deficiency of vitamin K is just one of the side effects of this lifestyle.

Since our bodies are only able to store very small amounts of vitamin K, deficiencies seem to come quickly and are often hard to correct. (Most go unrecognized and are written off as just another sign of getting older.)

As we’ve systematically disrupted and destroyed our normal
bacterial flora over the last several decades, we’ve seen a corresponding rise in the problems linked to vitamin K deficiencies. These include osteoporosis, insulin resistance that progresses to type 2 diabetes, prostate cancer, atherosclerosis (calcium buildup in the arteries), and arthritis.

Hopefully by now I’m preaching to the choir, but I hope you are incorporating fermented foods into your diet and taking a quality probiotic every day. By reestablishing and maintaining proper bacterial flora, you can help increase your vitamin K levels.

Taking additional vitamin K may also be necessary to correct an outright deficiency and bring levels back to normal. A daily dose of 150 micrograms of the MK-7 or MK-4 form is recommended.

Skin Elasticity and Joint Stiffness

Restoring skin elasticity and thickness is the holy grail of the cosmetic industry. There’s a never-ending quest to find compounds that can be injected, applied topically, or taken orally to thicken the skin, improve its elasticity, and smooth the wrinkles associated with aging. Some products work, to a degree. Others don’t. I won’t even attempt to cover or evaluate all the products. But from a natural standpoint, a few compounds really stand out in this regard.

Isoflavones

Isoflavones are phytoestrogens (plant estrogens) that are similar to the hormone estrogen and can trigger estrogenic activity in the body, one of which is increased skin tone and thickness.

Collagen is the fibrous protein that contributes to skin firmness. Approximately 30 percent of skin collagen is lost in the first five years after menopause. Estrogen, taken either orally or applied topically, has been shown to boost skin collagen and help reverse this trend. But, as you know, estrogen therapy is also suspected of raising the risk of certain forms of cancer.

To a limited degree, phytoestrogens can help boost collagen levels as well. Phytoestrogens are classified in three categories: isoflavones, coumestans, and lignans.

Of the isoflavones, genistein and daidecin are considered the most important and are the two most prominent forms found in soy.

Research has shown that soy’s estrogen-like activity can be a double-edged sword. In some instances, it is associated with lower rates of cancer, but it has also been linked to pancreatic disorders, disrupted endocrine function, infertility, hyperthyroidism, and interfering with the assimilation of calcium, copper, iron, magnesium, and zinc while increasing the body’s need for vitamins D and B12. These potential dangers can be avoided, and many of its positive effects enjoyed, by consuming in limited quantities the fermented forms of soy, such as miso soup and tofu.

Carnosine

Increasing your intake of carnosine is another effective method for improving the elasticity and suppleness of your skin, blood vessels, and underlying connective tissue.

Carnosine was discovered at the turn of the last century in Russia and was pretty much kept a secret for some time. As word got out and studies were completed around the world, the many benefits of carnosine started to emerge. There was an amazing amount of good, quality research performed that detailed exactly how and why carnosine was such an extraordinary anti-aging compound. But, like many beneficial natural remedies, charlatans flooded the market with products that contained either very

Dr. David Williams
poor quality carnosine or amounts that were too small to provide any value. Many buyers didn’t experience any of its benefits, so carno-
sine fell out of favor and the public and marketers moved on and
started hawking the next great anti-
aging “breakthrough.” However,
the research is still valid and has
demonstrated just how beneficial
this forgotten compound can be.

Carnosine has been shown in
laboratory experiments to actually reverse some of the signs of aging in
senescent cells (cells that are alive and metabolically active but have
lost the ability to divide). Human
senescent cells placed in a medium
containing carnosine took on an
entirely new rejuvenated appear-
ance and many regained their ability
to divide again. Carnosine also in-
creased the lifespan of both younger
and older cells. Overall cell life was
increased by 300 percent. (Ecol Cell

In another experiment where
carnosine was fed to mice, the
mice were twice as likely to reach
their maximum lifespan compared
to those not given the compound.
It also reduced the cosmetic signs
of aging. Almost half of the mice
taking the carnosine exhibited
shiny, healthy coats similar to
those of younger mice. (J Anti-

In addition to preventing dam-
age to cellular proteins, carno-
sine is a strong antioxidant that
protects against the formation of
advanced glycation end products
(AGEs). AGEs are compounds that
form when the body’s proteins
react with sugars during a process
called glycation.

You could compare the process
to that of cooking a hamburger
patty. When the patty is uncooked,
it is soft, pink, and supple. As it
cooks and AGEs and cross-links
are formed, it turns brown, hard,
and less malleable. (With cross-
linking, molecules of collagen link
to adjacent collagen fibers, leading
to crystallinity and rigidity, which
is reflected in stiffness and a loss
of elasticity.) The browning effect
glycation) takes place when the
proteins react with the natural
sugars in the meat. A similar thing
takes place in the body.

AGEs and cross-linking are two
of the main culprits that erode skin
elasticity, appearance, and turgor.
Turgor can be tested by pulling up
on the skin on the back of your
hand. The time it takes to return
to normal is a rough indication of
the amount of cross-linking and
aging that has taken place—the
quieter, the better. A decrease in
skin turgor can also be a sign of
dehydration. Carnosine and ben-
footiamine are two very effective
natural compounds to help prevent
the formation of AGEs.

Carnosine won’t just help
with the obvious signs of aging.
Additional studies have shown it
helps stabilize blood sugar levels,
improve wound healing, and pro-
tect brain function.

Carnosine is far more expen-
sive than creatine, but it’s still
readily available and it works.
Recommended doses vary depend-
ing on age, overall health, and diet
(vegetarians get less from their
diet). But a typical daily dose
would be anywhere from 500 to
1,500 milligrams.

You can also significantly in-
crease your carnosine levels by
consuming homemade chicken
broth. Most store-bought broth
consists of chicken flavoring and
salt. You are better off from a
health standpoint to make your
own chicken broth. It’s about as
simple a process as you can find.

Throw a whole chicken (with
the bones, joints, feet, neck, skin,
etc.) into a pot, add a little salt and
pepper and enough water to cover
the chicken, bring the water to a
boil, and then let it simmer for 45
minutes to an hour. Then remove
the chicken, separate the meat, and
return the carcass to the water.
Continue simmering for another 30
minutes. You may need to add more
water to keep everything covered.
Remove the carcass and discard.
(Or, if it has softened enough, you
can throw it into a Vitamix with
some water and make a “chicken
milkshake” for your dog, like I do.)

Strain the broth through a fine
sieve over another pot and press
down on any remaining solids to
squeeze out all the broth. Once
cooled, the broth can be refriger-
ated and used over the next two
or three days. Or you can freeze it
and it will keep for several months.

Whenever you make broth
(chicken or beef), it best to utilize
whole chickens and/or include the
joints and bones of beef cuts. The
cartilaginous bone and skin of the
animal provide some of the higher
levels of carnosine. And they also
provide another amazing com-
ponent: gelatin.

**Gelatin**

In the September 2012 issue
of my newsletter, I wrote a very
detailed article on the history and
benefits of gelatin. I suggest you
read it again, if you get a chance.
It helps explain why the reduction
of gelatin in our diet over the last
couple of generations has resulted
L-Lysine for Herpes

**Question:** In your September 2014 issue, you mentioned that taking modified citrus pectin (MCP) on a regular basis may stop recurrences of the herpes virus. You also said it was relatively expensive, and I agree. Do you have any other suggestions that are less expensive?

**Answer:** The old standby is the amino acid L-lysine, which can help inhibit replication of the herpes virus. The recommended dose is around 500 milligrams a day. The minerals selenium (400 micrograms daily) and lithium (15 milligrams daily) can also help inhibit this virus.

Keep in mind that replication of the herpes virus can be stimulated by the amino acid L-arginine. MCP seems to counteract this for the most part, but since you’re not taking MCP, you might want to limit arginine-rich foods. That's not always easy to do since these include most nuts, peanuts, beans, seeds, and grains.

At the first sign of a lesion (swelling, itching, pain, etc.), you can often stop its development or at least shorten its duration by directly applying oil of oregano (Oreganol P73) several times a day. At the same time, increase your dosage of L-lysine to 1 to 2 grams (in divided 500-milligram doses spaced out throughout the day).

Anogenital Wart Solution

**Question:** Do you have any suggestions for how to deal with anogenital warts?

**Answer:** Roughly 90 percent of anogenital warts are thought to result from human papillomavirus (HPV)-6 or -11 infections. They are sexually transmitted and highly contagious. Sometimes they can be frozen or burned off, but most often they are treated with prescription ointment. One of the more effective ointments (Veregen) has green tea extract as its active ingredient.

You can make your own green tea extract ointment very easily. Veregen 10-percent ointment lists the following ingredients on its label: 1 gram contains 100 milligrams of green tea extract (dried) 55–72 percent EGCG, Vaseline, wax, isopropyl myristate, oleyl alcohol, and propylen glycolmonopalmitostereate.

To make your own ointment, all you need is Vaseline (petroleum jelly), dried green tea extract, and a small container with a lid.

You’ll want your mixture to contain 10 percent green tea extract. For example, if the capsule of green tea extract you’re using contains 700 milligrams of extract, you would mix it with roughly 7 grams of Vaseline (about 1½ teaspoons, if you don’t have scales).

Combine the ingredients well and keep the container tightly sealed when you aren’t using it. Using similar directions as those for Veregen, apply three times daily to affected areas for two months.

Studies show that green tea extract works better than other prescription ointments and causes less irritation. However, it does take a little longer to resolve the problem. (Obstet Gynecol 2008 Jun;111(6):1371–9) (Am J Obstet Gynecol 2009 Mar;200(3):233.e1–7)

Practically every health food store sells green tea extract capsules, or you can purchase 25 grams in bulk for about $7 from PowderCity.com.

Consuming gelatin, the cooked form of collagen, is one of the very best methods to boost your collagen levels. It provides the raw ingredients the body needs to maintain and replace collagen. Gelatin contains 35 percent glycine, 16 percent proline, 14 percent hydroxyproline, 11 percent alanine, and other amino acids.

Earlier, I talked about the importance of collagen in the matrix of the skin and blood vessels. But it is an essential compound found throughout your body. Collagen makes up 50 percent of all the protein in the human body. The most abundant material in the the second layer of the skin, the dermis, is collagen. In addition to the skin, it is the primary protein found in the connective tissue in tendons, ligaments, bone, and cartilage. It also forms the supporting matrix in tissues like blood and lymphatic vessels, the brain, heart, liver, and other organs.

Many age-related changes are a direct result of the body not having the raw materials necessary to
repair and replace collagen. For instance, when you start to notice stiffness in your fingers and other joints, it could be your body’s way of telling you that you could benefit from consuming bone broth and gelatin, or taking the compounds needed for collagen production. The quicker you nip the problem in the bud, the better your chances of remaining mobile and flexible as you age.

Stiffness in the small joints may be the only thing you feel at first, but the bigger joints and other supporting structures are being affected as well. It’s only a matter of time before larger joints like the knees or shoulders won’t be able to handle the stress and a problem develops in those areas. It’s no surprise that more than 1 million hip and knee joint replacements are performed in this country each year.

Most people who undergo these surgeries had the early warning signs but either ignored them or were never informed what they could do about them. They were simply told their joints had worn out and they had arthritis. They weren’t educated about the importance of collagen or the benefits of including bone broths and/or gelatin in the diet. Instead, they were instructed to take painkillers and told that arthritis was just an inevitable fact of life.

Granted, joints do eventually wear out with time, but what was once only a problem with the elderly has now become common in younger individuals. The fastest growing age group for joint replacement surgery is 45 to 55.

**Focus on Disease Prevention Today**

Today, the focus in health care continues to be on managing symptoms and diseases, not on prevention and curing underlying problems. Future generations will look back and be confused as to why our society took such a shortsighted approach to health. We have the knowledge, research, tools, and technology to prevent most diseases, but as a society, we don’t seem to have the discipline or desire to do so.

Doctors of the past were focused more on prevention than treatment. Maybe that was because there were far fewer drugs, laboratory tests, imaging options, and surgical techniques. Preventing the disease was recognized as the best way to actually save a patient’s life. Now that we can manage diseases and prolong life in the process, prevention has become an unfamiliar concept.

Unfortunately, doctors these days assume you’re in their office because you already have a problem, so that’s their only objective. If you have a doctor who actually does focus on and teach you about disease prevention via nutrition, exercise, and/or supplementation, count your blessings and hang on to him or her. Most can’t see the forest for the trees.

Until next month,