

Natural Sinus Allergy Prevention and Treatment

INTRODUCTION

What follows is a list of ideas and treatments relating to allergies and chronic sinusitis. In some cases the information is simply my personal experience, some is what has been reported to me by patients, some of it is folk remedies passed down from person to person and some of it is from scientifically validated research. What ties it all together is that it works for somebody at least some of the time. It is my hope that something in here will be helpful for you if you are one of the millions who sniffle too much, go through a box of tissues every week or have ever dropped a girlfriend because you were allergic to her cat.

The first thing to understand is that allergic response is a very complex process. In high school biology class we learned about the immune system and the white blood cells of the body. We learned that it is the job of the white blood cells to hunt down and eliminate invaders that might be attacking the body. They flow through the blood looking for bacteria and viruses. When they run into something that doesn't belong there, they attack. Part of the attack is a release of chemicals, like histamine, that attract other white blood cells. Those chemicals also cause changes in the cells that line the blood vessels that increase the blood flow into the area. The more cells that arrive the more chemicals are released and the more cells are called and so on. What is created is an "inflammatory cascade" meaning that one thing leads to another and pretty soon you have swelling and heat and a lot of extra fluid and cells in the area.

This is a great thing if there is really some foreign bug like a bacteria that needs to be eliminated but in the case of allergies the body reacts just as strongly, or more so, to relatively harmless things like cat hair or ragweed pollen. We were taught that this happens because for some reason the blood cells, particular ones called "memory cells", became sensitized to the allergy producing substance (allergen). Every time you are exposed to a little house dust it sends off the alarm and the inflammatory cascade starts all over. And where are you most likely to encounter these substances? Inside of your nose of course, where we filter thousands of gallons of air every day.

STRESS

We know now that this isn't the whole story. One interesting clue to the riddle of allergies begins in the most unlikely place. In the early 80s scientists studying canaries in the wild were trying to discover why canaries only seemed able to sing at certain times of the year. What they discovered was that during most of the year canaries don't have enough brain cells for the complex brain activity required for interpreting and producing music. Right before mating season, when singing becomes important for survival, their brains actually grow, gaining new active brain cells, until they have sufficient computing power to produce a song.

This astonished the researchers because it was always common knowledge that the number of brain cells is fairly constant after birth. There was no evidence in any animal

known until that time that brain cells could be added in adulthood. If that were not strange enough, when mating season was over the canary's brains shrunk again. Where did the cells go? And where did they come from in the first place? And what does any of this do with allergies?

The secret is in the white blood cells. When studying the canaries the scientists discovered that just prior to mating season that white blood cells from the canary's immune system migrated into the brain and began to change. They grew long thin extensions called dendrites and axons and made connections with brain cells. By the time mating season came the white blood cells were indistinguishable from ordinary brain cells. They added the extra processing capacity the birds needed and after mating season they migrated out of the brain and returned to their function as immune cells. This was also astonishing because the only time that mature cells in the body had ever been seen to re-differentiate into another type of cell was in cancer. Yet here was evidence that in the canary, for perhaps hundreds of thousands of years, this transformation took place every year.

What makes this important for the subject of allergies is a class of chemicals known as neurotransmitters. These are the chemical messengers that are passed between nerve cells to send messages from one cell to another along the nerve pathways from the brain down to the rest of the body and back. Every nerve cell has receptor sites on its surface which are sensitive to the neurotransmitters. When a neurotransmitter attaches to the receptor site it send a signal into the nerve cell to raise its level of excitation in preparation for sending the signal to the next nerve cell.

The scientists discovered that the white blood cells still retained the receptor sites even after they had left the brain and returned to circulation. In other words the circulating immune system cells could eavesdrop on the nervous system. These same receptor sites have since been found on human immune system cells. Our immune system can hear our thoughts and emotions by picking up on neurotransmitters being released by the nervous system. This helps explain phenomena like increased asthma attacks during stress and the appearance of rashes in times of emotional trauma.

It also suggests that calming the nervous system can help prevent allergic reactions. Meditation and other relaxation techniques have been observed to stop allergic reactions in progress. People on vacation often notice that inflammatory symptoms like allergies, headaches and joint pains go away, only to return when they come back home to their everyday stresses. By calming the nervous system in general we reduce the random stimulation on the immune system which keeps it at a high state of readiness. Stress is like putting the immune system on red alert. It goes into action at the slightest provocation. In psychology they refer to this state as hyper-vigilance. Your nervous system and immune system are looking for something to get excited about and even the thought of an allergy attack is enough to bring one on.

There is another detail about this phenomenon that is very interesting. Some people notice that their allergic symptoms increase by just thinking about being allergic. Some

people will get itchy eyes and a runny nose if they see a cat on TV. This is another example of hyper-vigilance. Frequently in cases of hyper-vigilance the symptoms go away if the person is distracted from the triggering thought. In these cases symptoms may also disappear at night when the person is sleeping only to reappear when the person wakes up and thinks stressful thoughts or is re-exposed to a trigger object. Hyper-vigilance is another indication that relaxation training or meditation would be helpful in reducing symptoms.

This stress/immune response was probably valuable in earlier times when acute stress was caused by actual physical danger such as attack from predators. If bitten by a wild animal you want your immune system to be ready for action immediately. Today's stress is almost always more chronic and mental or emotional. This leads to a chronic state of immune excitation, which in turn drains the body and may be a contributing factor in syndromes such as chronic fatigue and fibromyalgia.

A positive way of looking at the symptoms of allergies is to think of them as messages from your body. We have become so disconnected from our bodies that we often don't even recognize the subtle shifts in feeling that are supposed to warn us intuitively of danger. In today's culture we actually seek out the sensations of danger and call it entertainment. Movies like Halloween and amusement parks like Cedar Point rake in millions of dollars by stimulating the emotional centers that were designed to alert us to situations that may not be healthy for us.

We are so used to that type of stimulation as entertainment that when we encounter it in our daily lives we don't recognize it as a danger signal. The body responds to our indifference by increasing the intensity of those signals until they actually create visible symptoms in our bodies like rashes and runny noses and wheezing lungs. Then we run to the drug store to stock up on nasal sprays and anti-histamines to shut down our body's warning signs. We put up with situations and people, jobs and "friends" that are making us sick because we don't recognize the damaging effects. We know that every time we visit Uncle Bob's house our nose runs, is it the cat or is it our body telling us that we really don't like Uncle Bob?

A couple of other unique approaches to the emotional and memory component of allergies have come to my attention recently. A psychological procedure called Neuro Linguistic Programming is often cited as a technique that can break the emotional connection between allergens and the physical allergic response. There are a number of tapes and books on the techniques available at bookstores and libraries. Many of the techniques can be performed alone although there are professional NLP practitioners who can help walk you through the exercises.

Another technique that seems to work in a similar manner is called Neuro Emotional Technique or NET. This is a derivation of Applied Kinesiology that uses muscle response tests to discover hidden weaknesses in physical, emotional and mental function. NET requires a trained professional to assist you. Most of those currently trained in NET are chiropractors or psychologists. Because this is a fairly new procedure there are only a

couple hundred trained practitioners in the country. The best way to find one is probably to look for a chiropractor who practices Applied Kinesiology. Even if they have not been trained in NET they will probably know who in the community is.

A similar technique that was created specifically to work for allergies is NAET or Natural Allergy Elimination Technique. There are trained practitioners in most major cities.

EXERCISE AND MUSCLE WORK

Exercise seems to be an effective prevention strategy for allergies as well. It is well accepted that exercises such as swimming can reduce the incidence and severity of asthma attacks. I have noticed myself that a regular exercise program reduces sinus allergy symptoms. I am unsure of the reason. It may be that it improves overall health, it may provide an outlet for built up anxiety and calms an over stimulated nervous system. It most certainly improves circulation and lymphatic drainage and so makes the immune system more efficient at eliminating allergens.

I have noted that some people with chronic sinus problems have areas within their muscles that are connected somehow to the sinus problem. The muscles contain knotted areas, or trigger points, which are very sore to touch and when pressed cause sensation in the sinuses. Sometimes pressure or massage on these points will stop a sinus attack. The points are generally in the upper shoulder area, along the base of the skull, along the edge of the shoulder blade closest to the spine and sometimes in the muscles in the front of the neck. On rare occasion I will also find these trigger points in the jaw muscles.

These are patients for whom chiropractic adjustment, massage, acupuncture and other physical therapy treatments may be of benefit in reducing sinus symptoms. Relaxation techniques and stress reduction activities will also help these people.

DIET

Many people have noted that diet seems to play a part in their allergies. I have often read and heard people remark that dairy products, wheat and sugar consumption cause more sensitivity to airborne allergens. What possible connection can food have to allergies? The answer may be found in the digestive tract. Dr. Jeffery Bland and his Functional Medicine research group have illuminated a series of events that they claim connect food to allergies and hold promise for a cure.

We need to understand a little bit about the workings of the digestive system to understand what Dr. Bland has discovered. Again we are going to review high school biology class and then go a few steps further. The upper digestive tract includes the mouth, esophagus and stomach. This part of the tract is what begins digestion and for this purpose it may also be useful to include the eyes and nose as part of the upper system as well. When we see and smell food our bodies begin the preparation for digesting it. Our mouth becomes moist with saliva and digestive enzymes, and our stomach begins to growl, contracting and creating stomach acids. The upper tract primarily digests starches and begins the process of digesting proteins.

The next part of the digestive tract is the upper bowel. This could be considered to include the small intestines, gall bladder, pancreas and liver. The purpose of the upper bowel is to complete the digestion of starches and proteins and emulsify fats, reducing the food to small molecules such as amino acids, peptides, fatty acids and sugars.

Finally we come to the lower bowel which consists primarily of the colon and the appendix. The lower bowel's job is to selectively absorb the useful parts of the food and prepare the remaining waste products for eventual elimination from the system. But it is far more complex than it sounds, as we will see in a little bit. The lowly lower bowel has several characteristics that make it unique. First of all is life! Residing in the lower bowel are billions of microorganisms. Over a dozen types of microorganisms, mostly bacteria and yeast, have been identified in the lower bowel. There are more microorganisms in the lower bowel than there are cells in our bodies. From a strictly numerical point of view our cells are the minority in our own bodies. This just begins to underscore the importance of what goes on there.

Some of these microorganisms perform functions that are known to be vital for the health of the host body. They produce vitamins and hormone like substances that the body depends upon. On the contrary some of these organisms can be harmful to the host body. Many of them produce toxins that are highly poisonous to our own cells and if they should somehow break through the thin lining of the lower bowel and enter the circulation of the body they can grow wild and cause severe damage. The good thing is that because of competition between these different microorganisms, under "normal" circumstances there are more good bugs than bad bugs swimming around our insides.

But our body does not rely just on the good nature of friendly bacteria. Because there is a very thin lining, usually just a few cells thick, between the contents of the lower bowel and the circulatory system of the body, occasional bad bugs do slip through. By design, the body has posted half of all of the immune cells along the borders of the lower bowel. The body's greatest concentration of lymph nodes, which could be considered the private highway of the immune system, is around the lower bowel.

Under normal conditions the system works flawlessly. The problem is, we don't live our lives under normal conditions. We don't put the types and quantity of foods into the system that it was designed to handle. We put it to the test every day. So now that we have been introduced to the players in this drama let's go back to the top of the system and let the play unfold.

There are differences in opinion as to the value of adequately chewing your food. It is very common in folk medicine and folklore to find advice about how much to chew your food before swallowing. Macrobiotics, for example, recommends extensive chewing to allow the digestive enzymes in the mouth and the teeth adequate time to do their job. On the other end of the spectrum is advice based on a research study that analyzed fecal samples from volunteers. The test subjects were divided into two groups. One group was instructed not to chew at all, in fact they swallowed their food in the largest chunks possible. The other group was instructed to chew their food completely

before swallowing. Analysis of the fecal samples of the two groups showed no statistical difference in the amount of undigested material passing through the gut.

The conclusion of the research study was that it is not necessary to chew your food. There are a number of flaws in reaching this conclusion from the study, however. First of all the test subjects were all college age students. As we age our digestive capacity decreases and it is unrealistic to generalize conclusions across the spectrum from a group at the peak of their physical health. Another flaw is that they did not measure stress levels on the body from having to work harder to digest the food. In my opinion chewing is an essential part of eating. The fact that we have teeth is evidence enough that there must be some reason to use them. On the other hand I have witnessed people who devotedly chewed every bite 100 times. That was probably too much of a good thing.

The next major step in the processing of our food is the stomach itself. This may be the key to understanding the food/allergy connection. The stomach is really nothing more than a muscular sack with a hole at both ends. Along the inside lining of the stomach are mucous and acid producing cells. The stomach has a limited capacity to hold food, a limited capacity to produce acid and a limited capacity to knead and mix the food via muscular contractions. If the food is not properly processed at the start then it cannot be properly digested by the end. The most common problem for Americans is overeating, literally exceeding the capacity of the stomach to digest food.

The digestive capacity of the stomach is not the same as the physical capacity. You can continue to pack food into the stomach because it is somewhat stretchy. But at a certain point you reduce the efficiency with which it can saturate the food with acid. Most digestive problems are not too much acid. Most digestive problems are too much food. Antacids work to relieve the discomfort because the discomfort you feel when the stomach is too full is acid and food being forced back up into the esophagus which is not designed to handle any acidity. A common rule of thumb often quoted in natural healing literature is that the efficient digesting capacity of a person's stomach is about equal to the amount that person can hold in two hands cupped together.

FOOD COMBINING

Another common reason for digestive problems is bad combinations of food. Some foods naturally digest better together than others because they require similar conditions of acidity and enzymes. When we eat different types of foods together the body is less capable of matching the digestive enzymes and level of acidity that will best digest the food. Many books have been written on this subject. Most of these sources agree on a few basic rules. First, fruit should never be eaten within a half-hour before or two hours after any other food. High protein foods such as meat, poultry or fish should not be eaten together with high starch foods such as potatoes, breads or pasta. Other non-starchy vegetables can be safely eaten in combination with anything. The typical American meal of meat and potatoes, or burgers and fries is not an easy one to digest. Witness the huge market in antacids. Digestion would be easier if the baked potato were the main course at one meal and the steak were saved for another.

As we age, our bodies gradually lose the ability to produce digestive enzymes

and stomach acid. Because of this, as we get older we are more prone to the negative effects of poor digestion and find that we can't eat the same things or the same way we used to eat and get away with it. Limiting the quantity of food at each meal and combining the food properly is even more important the older we get. Many people find it helpful also to take digestive enzymes and hydrochloric acid supplements with meals. Indigestion, chronic constipation, bad breath and "bad" gas are clues that your food is not being digested fully and you need to do something to help your digestion work more efficiently.

MICRO-ORGANISMS

But other than some minor inconvenience, what does it matter if the stomach can digest the food completely? Let's follow your Thanksgiving turkey, with mashed potatoes, dressing, candied sweet potatoes, wine, corn nibblets, pumpkin pie and ice cream as it passes out of the stomach. If the stomach does not do a good job of digesting this conglomeration then partially digested food passes into the upper bowel. In the upper bowel the body secretes other enzymes and bile that neutralizes the acid and tries to break up the fat into little globules that can be absorbed. The enzymes also are supposed to complete the digestion of protein that was begun in the stomach. But again, there is a limited capacity for digestion and the acid has now been neutralized so that portion of digestion will never be completed. Once it passes into the lower bowel the digestion, as designed by the body, is all over. But ...

Remember the bacteria? Imagine billions of bacteria, lots of partially digested food, a nice warm moist environment, and time. You are going to get a lot of rapid growth of bacteria, some of which are not healthy for the host body if they become too numerous. Some of them actually produce toxins as a protective mechanism, some just as a byproduct of their growth. We experience this rapid growth of bacteria in a number of ways. None of them are pleasant for us or for those around us. A lot of gas is produced as a byproduct of bacteria. We get cramping and bloating and release gasses into the air around us. We feel groggy because of elevated blood sugar and because of waste products entering the blood stream. Our breath becomes foul because of the rotting food in our bowel.

What happens that we don't even notice is the worst part. Because of the toxins released from the bacteria the lining of our bowel becomes irritated and inflamed. Our lower abdomen may get "puffy" and tender. As the lining of the bowel becomes inflamed the connective tissue between the cells that line the bowel gets "leaky". Partially digested food particles and bacteria begin to infiltrate through the lining of the bowel and can enter the blood stream via the extensive bed of capillaries that surround the gut.

When this begins to happen the immune cells take notice and go to work to protect the body from these foreign protein and bacterial invaders. They

release inflammatory chemicals and immune stimulating proteins like IgE that alerts other immune cells in other parts of the body to be on the lookout for invaders too. They will be extra sensitive to common stimulation like a little dust in your lungs or some cat fur in your nose. You will find over then next two or three day after such a meal that your allergy symptoms are worse than usual. Because the nervous system is listening to the immune system it also becomes more alert and your heart may race, you may have trouble sleeping or you may have unusual dreams.

When the immune cells in circulation are exposed to an allergen they retain a memory of that allergen by creating receptor sites on their surface that are sensitive to specific protein molecules in the allergen. Because of this we can actually build up an immune reaction to certain foods. The foods most likely to be involved in this are foods that we eat most commonly and foods that we overeat most commonly. In the American diet the two most common foods that are overeaten are dairy products and wheat products. Not surprisingly these are the two most common foods that people report sensitivity too. Because their bodies are already sensitized to those foods it takes very little of them to elicit an elevated immune response. For this reason most books and articles about natural allergy cures recommend avoiding dairy and wheat products as much as possible.

Another product that is frequently over-consumed in our society is sugar. Sugar reacts differently than dairy or wheat in that it obviously contains no proteins so an actual cell mediated allergic response cannot be developed directly to sugar. What happens however is that sugar is a very good food for a number of bad microorganisms in the gut and elsewhere in the body. Yeast for example, including *Candida Albicans*, thrives in a sugar rich environment. The more sugar, the more yeast grows at the expense of the beneficial bacteria and your own body cells which do not do as well with sugar. When the yeast cells multiply they can sometimes enter the blood stream, once there they can elicit a severe immune response.

Another side effect of sugar consumption is slowed bowel movement. Research by Dr. Bland's group has confirmed that sugar slows peristaltic action. As far as I know there is no adequate theory to explain this phenomenon but it is true. The ancients recognized this fact and Ayurvedic literature from India four thousand years ago discusses it. So what is so bad about slow peristalsis, whatever that is?

Peristalsis is the rhythmic contraction movements of the intestinal tract that moves material along. Like squeezing a tube of toothpaste, muscles lining your digestive tract contract to move the semi-liquid bowel contents along. Without it the digesting food would just sit in one place and not move through the system. Lack of peristalsis causes constipation and worse it causes the bowel contents, including all the toxins and unhealthy bacteria, to remain in the bowel longer where they can irritate the lining and be absorbed into the blood stream. Additionally even though sugar decreases peristalsis in the lower bowel where toxins can be absorbed, it conversely increases the rate at which food moves through the upper bowel so that digestion is not as complete, further

contributing to the problems. Dairy products and wheat also contribute to the yeast growth because they contain sugars and starches that the yeast thrives on. A glass of milk has more sugar than three average cookies. Wheat is about 80% starch. This makes for a double whammy on the immune system when it responds to the proteins in the wheat and dairy foods and also to an overgrowth of yeast.

When I talk about the bad effects of sugar I am primarily talking about table sugar including white, brown and "raw" sugar and about the sugary by-products of excessive starch consumption. Fruit sugar, called fructose or "invert sugar", does not have the same bad effects because most of the "bad" bacteria do not grow as well on it. The "good" bacteria and our own cells that line the intestinal tract do very well on fructose. The sugar in most fruits is actually healthy for the intestinal tract and the body as a whole. The major exception to this rule is grapes. Grapes actually have a greater concentration of sucrose than fructose. So the rule for fruits are to eat them as much as you wish, keeping in mind the food combining rules, but avoid excess grapes and foods that are sweetened with grape juice.

Drinking fruit juice is not the same as eating whole fruit. Even though "bad" bacteria do not like fructose very well they can grow on it. Fruit juice has a very high sugar content, sometimes higher than soda pop. A little juice now and then is O.K. as a treat but it should not be your primary source of fluids.

HEART DISEASE AND STROKES

Another very serious side effect of bad digestion is the effect it has on the cardiovascular system. Despite all of the publicity that cholesterol has gotten as the bad boy of heart disease it is only a secondary character in the development of arterial damage. Cholesterol is absolutely necessary to the proper functioning of the body. Over 85% of all of the cholesterol in your body is actually manufactured in the liver. Only 15% is from food sources. The role that cholesterol has in heart disease is in the attempted repair of damaged arteries. The body uses cholesterol like we might use cement to seal a leaky basement. In the body cholesterol is used to seal scarred and weakened arteries.

What scars the walls of the arteries? Free-radicals. Where do the free radicals in the blood stream come from? Many of them come from normal metabolism of the body. Our bodies are generally capable of neutralizing a certain number of free radicals but the inflammatory chemicals our immune cells produce are some of the most powerful free radicals in the body. The more undigested food particles and bacteria that leak into the blood stream the more free radicals are released and the greater the risk of arterial damage.

This brings us to the topic of fish oil. Undeniable evidence supports the use of fish oil supplements for the prevention of circulatory disease. Fish oil contains Omega 3 fatty acids that are known to reduce the tendency toward inflammatory reactions. This

reduces the damage done to the arterial walls and in turn reduces the development of blockages that lead to heart attacks and strokes. Consequently, it also slows the inflammatory processes that contribute to swollen sinus passages.

It is probably safe and prudent for anyone who does not regularly eat fish three or more times per week to be on a daily fish oil supplement containing eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). The typical fish oil capsule on the market contains 180 mg of EPA and 120 mg of DHA per capsule. A typical recommendation is to take at least three capsules each day.

Some people find the taste of the “fishy” burps after taking fish oil capsules to be unpleasant. For those people, enteric-coated capsules are available.

ACUTE CARE FOR SINUS ATTACKS

So far we have talked about preventing allergies through diet and behavior modification. What about acute attacks? What do you do when your sinuses are going crazy and you have an important meeting in half an hour? High dose anti-oxidants, particularly vitamin C are often cited as being effective at reducing allergic symptoms. This is most likely due to reducing the free radical effects that occur in an acute attack. Vitamin C, E and beta-carotene are also recognized as important nutrients in prevention of heart disease for the same reason.

Some recent research raises questions about doses of vitamin C higher than 500 milligrams per day because at higher doses vitamin C actually begins to act like a free radical itself. However, some people find that doses of up to 4,000 milligrams per day of vitamin C are helpful. I think the jury is still out on the absolute right dose of vitamin C. Most likely it is a very individualized thing and each person will have to find the level that works for them. Vitamin E doses of 400 iu per day are generally recognized as very safe and levels higher than that have never been shown, to my knowledge, to afford any additional benefit. Beta-carotene is a very safe form of vitamin A and the only known side effect of overdosing is that your skin turns yellow.

An interesting anti-oxidant nutrient that has special application to allergies is Quercetin. Quercetin is chemically related to vitamin A and has a distinctive yellow color. Quercetin is known to strengthen the cell membrane, the outer coating, of mast cells. Mast cells are a specific type of white blood cell. During an acute allergic response mast cells burst open to release free radicals and other inflammatory chemicals. They are like the "depth charges" of the immune system. But when they are too fragile they tend to burst at little provocation and add fuel to immune reactions. Over-reactive mast cells arriving on the scene is like throwing gasoline on a campfire.

Quercetin reduces the likelihood of mast cells bursting prematurely thus slows down the allergic response. The presence of Quercetin in the blood stream is like throwing water in the fire. Quercetin can be taken at a level of 500 milligrams per day as a

preventative and as much as 2000 milligrams per day in times of acute allergic symptoms. Quercetin is known to reduce the incidence of allergic asthma attacks as well as sinusitis.

Herbs

One of the most frequently used natural treatments for allergies and sinusitis are stimulant herbs such as Mau Hung (also known as Chinese Ephedra), and Guarana. They work by stimulating the sympathetic nervous system and by drying up mucous membranes. These same herbs are often used in "natural" weight loss products because they are thought to speed up metabolism. Even though there have been few reported serious reactions connected with their use there are the same concerns as with artificial stimulants like amphetamines and other diet drugs. High blood pressure, kidney damage and risks of strokes or heart damage are concerns with frequent or excessive use. On the other hand, these products are remarkably effective at stopping an acute allergic attack and are likely no worse than their commercial or prescription counterparts. There are many formulas containing these herbs available at health food and drug stores. Look for one that has standardized levels of active ingredients and read the precautions on the package label.

There is another group of herbs that reduce allergic responses by a mild anti-histamine response rather than as stimulants. These herbs are usually thought of for their culinary uses and are probably in your spice cabinet right now. Because they are commonly used as food we can be pretty sure they are safe at even fairly high doses.

Ginger is the herb that is most commonly known for its anti-histamine effects. It can be taken fresh, powdered, in capsules, as a tea or in foods. In times of acute allergic symptoms it is most effective if taken straight but it is very potent and may be hard to tolerate because of its "heat". To take it straight, cut thin slices off of a fresh root, chew and swallow them. Ginger tea can be made by steeping either the shredded fresh root or 1/8th of a teaspoon of the ground powder in a cup of hot water. To make it more palatable it can be blended with other anti-histamine herbs with milder flavors such as basil, cardamom and cinnamon. Sweeteners are thought to decrease the beneficial effects.

Because of the anti-histamine quality of ginger it is also extremely effective for preventing or reducing the effects of motion sickness. Controlled studies have found it more effective than Dramamine, with none of the drowsiness. It is generally taken in capsule form for this purpose and may be found in health food stores in formulations with other nutrients and specific instructions on its use. Otherwise take it as directed for allergies and it will help with carsickness or seasickness, etc.

Crystallized ginger is not as effective for any of the above uses because it is coated in sugar that counteracts most of its beneficial properties. It is delicious though!

Basil is my next favorite herb because it has a combination of beneficial effects. First, it is a mild anti-histamine. Second, it has a mood altering effect that calms the nervous

system and may relieve mild depression. Basil can be taken as a tea prepared by steeping the fresh or dried leaves. A teaspoon of dried leaves makes a good strong cup of tea. The fresh leaves are delicious when eaten right off of the plant. Basil, of course, is also good in many dishes and the effectiveness is not lost unless it is added to allergenic foods or results in overeating.

Cinnamon is almost as effective as ginger but harder to take straight and so is best used in teas or added to foods. Cinnamon is widely touted as reducing the mucous forming qualities of milk when added to it before drinking. I find that adding cinnamon to hot cereals such as oatmeal (Skip, the brown sugar!) is a great way to take it and also adds to the enjoyment of the dish.

Cardamom is another herb with multiple uses. It is another mild anti-histamine about as potent as basil. But a very unique and useful property of cardamom is that it acts as an antidote to caffeine. A hot tea made with 1/16th teaspoon of cardamom and 1 teaspoon of basil is a great before-bed calmer-downer. A great natural remedy for insomnia that never fails (Well, I've never known it to fail.) is a cup of basil/cardamom tea and four tablets of calcium lactate taken half an hour before bedtime.

Because cardamom is a large seed it must be used in the powdered form. Even so it is still very grainy in texture and cannot really be taken straight. It just about has to be consumed as a tea or added to foods. Fortunately it is potent at small doses even without the heat that ginger has.

Black pepper is another potent anti-histamine herb that can be taken straight. Some people actually chew the whole peppercorns to quickly clear their sinuses. Pepper obviously can be added to a wide variety of foods and doing so makes it easier to take. The major shortcoming of black pepper is that the effects are very short lived and it has to be combined with other herbs to produce longer lasting relief

Add to the above list other herbs such as allspice and sage. Both of which have antihistamine effects but which I have found less useful just for palatability sake. When added to the proper dishes they can enhance the effects of your overall anti-allergy program.

One side benefit of most of the culinary herbs mentioned above is that they are gentle stimulators of the peristaltic action of the intestinal tract. That means they help move food through the lower bowel faster and are mild remedies for constipation. Moving the material through the lower bowel faster gives the bacteria less time to work. Most alternative health authorities, that have an opinion, say that we should have at least two and preferably three bowel movements every day. This keeps the material moving through the system quickly enough that toxins and bacteria are less likely to be produced and yet give adequate time for digestion and assimilation of nutrients.

Alfalfa is something we usually think of as animal food but it is a great source of dozens of vital nutrients and phytochemicals. Phytochemicals are substances produced in plants that have biological activity in our own bodies. The most renowned of these activities

are the anti-oxidant activities, the ability to neutralize free radicals. Alfalfa, like ginger and some of the herbs discussed previously seems to be able to stop an allergic attack in process. Unlike the herbs discussed above it seems to do this without any antihistamine or drying effect, it's more like quercetin in that the attack is just doused like throwing water on a fire. I am not sure why it works but it is remarkably effective and obviously very safe since it is consumed by the tons by our animal friends.

The downside to alfalfa is the volume that must be consumed. The starting dose is five tablets every two hours until symptoms subside. Then you can start cutting back until you reach a supportive dose that usually seems to be five tablets two to three times per day. On the other hand alfalfa is relatively inexpensive. Five hundred tablets sell for about \$14 at most health food stores.

I think that if alfalfa works for you it is probably a strong indication that you have too few fresh fruits and vegetables in your diet. It would be good to improve your diet in addition to enjoying the allergy relieving benefits of the alfalfa.

WATER

This leads us to the next topic: Water. Water, as everyone knows is essential for health. Pure clean water is essential for controlling allergic responses as well. It helps move toxins and allergens out of the system through urination and through proper bowel movements. It also helps keep the sinuses and lining of the lungs moist to aid in the mechanical removal of allergens before they can cause an immune response.

Many people report a dramatic decrease in allergic symptoms just from increasing their water consumption. Six to eight glasses of filtered or spring water every day is the usual recommendation. Two glasses shortly after rising in the morning are particularly effective at stimulating bowel movement and cleansing the body of accumulated toxins.

Another very effective use of water is as a nasal douche to clear mucous and allergens out of the sinus passages quickly and effectively. There are a number of commercially available products that are saltwater solutions packaged in little plastic squirt bottles that can be used to sniff water into the nose. You can also make your own solution by adding half a teaspoon of salt to a cup of water and then sniff the solution into your nose. Be sure you are standing near a sink when you do this!

The salt added to the water helps buffer the water so that it is not as irritating to the sinus passages. Unsalted water creates an uncomfortable burning sensation when it contacts the sinuses. However, in my experience, the unsalted water is far more effective at stopping an acute reaction in progress. It may just provide a counterirritant or put the sinuses into shock. I really don't know why it works. But if you are having an acute sinus reaction that won't stop, if you can tolerate the burning sensation, straight tap water is the most effective way of quickly stopping a runny nose that I have found and the effect usually lasts for hours. The more it bums and the more that drains out the

better the effectiveness will be. Be near the sink and have paper towels and tissues handy. This is not something you will want to do in public!

Although it is not common in this culture, water sniffing is common in India and China and other places around the world as part of their personal hygiene practices. As strange as it seems to us there are small porcelain vessels available in oriental and health food stores designed just for pouring water up your nose.

OTHER HELPFUL THINGS

Obviously there are other anti-allergy practices that need to be considered. The standard approaches are all very valuable such as: air filtration, avoiding animal dandruff, reducing exposure to other allergens, using de-humidifiers to prevent mold growth, keeping carpets clean or eliminating them in favor of hard flooring, using non-allergenic bedding. These are all ways of reducing allergic response and decreasing the burden on the body from constant allergic reactions. As I said earlier, I believe that chronic low level allergic response is a contributing cause of chronic fatigue and many chronic emotional conditions, maybe even attention deficit, because of the strain it places on the body and the constant stimulation to the nervous system.

There is a definite correlation between allergies and a condition called Multiple Chemical Sensitivity (MCS) also. Exposure to synthetic chemicals that we have introduced into the environment adds additional stress on the immune system by requiring more activity of the immune cells and liver to contain, destroy and eliminate them from the body. These chemicals also become very powerful triggers for hyper-vigilance reactions because many of them are aromatic, which means that they are easily detected by smell. And smell is the sense most closely tied to emotional response and memory. Very frequently elimination of synthetic chemicals from the home will reduce allergic responses.

MEDICATION

I am often asked what I think of all the allergy medications on the market. Many of them are very effective with minimal apparent side effects. I remember years ago that the only thing available was Contact. You KNEW that it wasn't good for you because of the way you felt when you took it. But many of the newer drugs work on a different level and help block the allergic reaction in subtle and more effective ways.

So what do I think of all the new drugs? As with most technology they may be great for short-term solutions to acute problems but I would not want to rely upon them for the long-term. In fact the label directions state that they are for short-term use only. Unfortunately most people who use them continue for years and then move onto something stronger when it becomes available. At the same time they are under care for heart disorders and depression and inflammatory bowel disease, all possibly from a common cause or group of causes that could be dealt with in a natural approach. These medications allow us to ignore the underlying fact that there is some disorder in the system that is causing these symptoms. We may be able to stop the symptoms with

medication but the other processes continue. We don't know the long-term effects of medicines that have only been on the market for a few months or years. We do know the long term effects of healthy eating and living.

Because a lot of the problem with allergies is run-away inflammation wouldn't one of the many anti-inflammatory drugs on the market help? What is wrong with a little aspirin? From the point of view of the digestion and its relationship to allergy there is a problem. All anti-inflammatory medicines have a negative affect on the digestive tract. Too much aspirin for example can lead to bleeding ulcers. These medications weaken the barrier between the blood and the digestive tract. Certainly a bleeding ulcer is a serious consequence but less noticed, and as serious in the long run, is that if blood can come out then bacteria and allergens can get in. Anti-inflammatory medications are known to increase the "leakiness" of the gut and increase the ability of undigested particles to flow from the gut into the bloodstream. Four hundred deaths occur each year from acute reactions to aspirin.

Even the use of low dose aspirin for prevention of heart attacks is somewhat controversial despite the constant barrage of ads on TV making it sound like aspirin is the missing vitamin in your diet. Studies overseas, particularly in England have found troubling evidence that long term aspirin use may cause an increase in deaths from stroke that cancel out the benefit from reduced heart attacks. Naturally, individual cases must be decided on an individual basis and generalization from large group studies may not be applicable for a given individual. It may be good to study this on your own and discuss it with your doctor if you have any questions about the long term use of aspirin for your own health.

What is almost certain is that, unless you are allergic to it, an aspirin now and then for acute symptoms probably will not hurt you, but I don't think anyone ever died of a good diet and a good diet will reduce the need for aspirin in the first place.

CONCLUSION

I hope that these thoughts and information will be helpful to someone. Obviously this is not the final word on the subject. There is new information coming out every day, and information I am not aware of that will make what I have written look antiquated and foolish in a year or ten. I welcome any input, ideas, observations or contributions that you may have on making the next draft of this paper more complete and useful.

Can I condense all this into an easy formula? O.K. Here is a three-step plan for ending the constant drip, sniff and stuffiness.

- 1) Test your sensitivity to common problem foods (wheat, dairy, sugar or any other that you may suspect) by elimination diets. For one week eliminate, as much as possible, any food containing one of these food. Look for improvement in your symptoms during that week. Then test your reaction to that food by eating it at

every meal for three days and look for increased symptoms. Go back to your “normal” diet for at least a week before testing the next item. Be thorough in your attempts to eliminate the food. Many packaged foods hide these products in the most unexpected places. Wheat shows up in some instant coffees, dairy products include cheese (think pizza) and many canned soups contain milk. Be careful of derivative products. For example, milk may be listed as “whey protein” and wheat may show up as “gluten”.

Do the best you can, even if you do miss some sources, you should notice a difference if you are truly sensitive or allergic to these foods. If you determine that one or more of these foods is contributing to your symptoms then you will need to permanently change the way you eat. You will be able to occasionally have these foods, but only once or twice a week. Don’t despair, there are lots of people out there with the same problems and food suppliers are responding by producing more and more wheat and dairy free foods and good tasting replacements.

- 2) Drink plenty of water. Drink two glasses first thing in the morning to facilitate elimination. Try to get six to eight glasses of water in every day in addition to whatever other liquids you drink. A cup of coffee or glass of beer does not replace a glass of water, in fact it increases the amount of water you need.
- 3) Focus on fresh vegetables and fruits in your diet. Avoid packaged foods. Follow or exceed USDA recommendations for fruits and vegetables. Eat at least 3 servings of vegetables and 2 of fruit each day. Try to eat a fresh green every day. Use fresh fruits for snacks instead of candy bars or chips. Follow simple food combining rules and limit food at each meal to the quantity that you can hold in two cupped hands. Eat only when hungry and stop when not hungry. Do not keep eating until you feel full. By that time you may have exceeded the effective digestive capacity of the stomach.
- 4) Take supplements that are known to help prevent allergic reactions and inflammation. The following are typical doses that are generally considered safe and effective.
 - a) Fish oil with EPA and DHA – 3 to 6 capsules per day
 - b) Quercetin 500mg per day
 - c) Alfalfa tablets – 3 per day
 - d) Vitamin C 500mg per day
 - e) Vitamin E 400 IU per day
 - f) 10,000mg Beta Carotene per day
- 5) Do some form of exercise for at least 30 minutes at least 3 days per week.

- 6) Meditate/pray/play/relax/explore NET, NAET and NLP
- 7) Listen to your body for clues about what stresses you. Avoid those people/situations/TV shows, etc.
- 8) If you are having an acute episode of sinusitis try the following:
 - a) Flush your sinuses with salt or tap water.
 - b) Take alfalfa tablets every hour until the symptoms improve.
 - c) Drink a cup of ginger/basil or ginger/cinnamon tea three times per day.
 - d) Take at least 15 minutes to rest quietly and take your mind off your stresses or do something relaxing and fun to distract you from your worries for a while.
 - e) Limit foods to those you know you are not sensitive to until the symptoms improve. A couple of days of just vegetables and steamed brown rice may be necessary.

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