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OSTEOPATHY

Allergy and Dysbiosis advice

Taking in all that is said when you are tested for allergy and dysbiosis is something of a mammoth task. With this in mind the basics are written here for your information.

Applied Kinesiology

Applied Kinesiology evaluation is a method of testing whether your body is tolerant of a particular stimulus, in this case the stimulus is a chemical substance. It is not entirely clear what physiological processes take place during the testing procedure. What is clear is that a change occurs in the neurological system that causes the muscles to lose their adaptability to a strength test when a detrimental stimulus is applied. This is the test that was performed to evaluate your body system.

Allergy

An allergy can be defined in many ways. Medically for an allergy to be present you must exhibit an immune response to a chemical stimulus that is not an infection with a micro-organism. There are blood tests available that can show this. This is probably the most relevant definition.

When a body responds to a chemical allergen it uses one or more of four processes:-

- HISTAMINE is released and the person exhibits a rash like nettle rash or eczema or if the reaction is in the lungs then symptoms akin to asthma are apparent.
- KININS are released. This tends to cause pain rather than a rash e.g. headache, allergic migraine or abdominal cramps associated with foods.
- CHOLINE is used at an increased rate. Choline is a B vitamin but it is an important factor in the production of Acetyl-choline. Most of the spinal cord nerve fibres use Acetyl-choline to transmit information from one nerve cell to another. If this is reduced then the main symptom is tiredness / lethargy which is particularly noted in the mid- afternoon.
- WHITE BLOOD CELLS are mobilised to combat and eliminate the foreign proteins recognised by the body.

You probably recognise some of these symptoms.

Do not confuse an allergy with sensitivity, they are different. A sensitivity is a similar reaction but the immune system is not reacting. These are very much more difficult to eliminate as the cause is not as easy to isolate. If you are told that you have a sensitivity you must eliminate the substance from your diet or environment in order to improve your wellbeing. You could spend a lot of time, effort and money chasing a sensitivity.

When you are first tested you will be tested for the above allergy processes as well as to various foods, if any of the processes show up it will not be possible to separate which are allergies and which are sensitivities. Sensitivities can only be implied when none of the allergy processes show up on testing.

It makes little sense that a body should react to a food as if it were an infection, when it is eaten for nourishment and is not toxic in nature. Therefore something else must have occurred in order for this to be taking place.

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Dysbiosis.

Dysbiosis is the condition where the normal bacteria lining the gut have been destroyed and replaced with organisms that are not suitable in that environment. This most commonly occurs after taking anti-biotic therapy or a food rich in anti-bacterial agents e.g. pork or blue cheese.

The normal gut organisms are killed off and replaced with organisms capable of surviving in the new environment. The most common organisms replacing these normal bacteria are fungi, yeast or parasites. The most noted of these is the candida group, although this is not always the case. These organisms can be eliminated with the correct treatment and, with supplementation, the normal gut flora restored.

This re-population may take some time (2-6 months) after the dysbiosis has been cleared. Dysbiosis takes approx. 3 weeks for fungi and yeast and considerably longer for parasites. Parasitic infections require very careful management in order to be successfully treated and eliminated.

The nature of a dysbiosis is such that the healthy wall of the gut is invaded and broken down by the roots of the organism concerned. This makes the wall raw, rather like the effect athlete's foot has on the external skin. The gut to becomes more absorbent.

The loss of the normal bacteria also has a detrimental effect on the digestion. The loss of acidity in the stomach makes protein digestion incomplete and the slightly longer peptide* chains (3 amino-acids and over) are able to leak into the bloodstream. These are then acted upon by the immune system producing the allergic response.

It should be clear that the allergic response cannot be cleared without also treating the dysbiosis. Dysbiosis and allergy can be treated concurrently.

The minimum time needed to treat an allergic response by desensitisation is 3 weeks (21 days) as this is the life span of the longest surviving antibody (IgE) produced during that response. If there is no further stimulus to make the antibody, the levels of that antibody in the blood will fall to nearly nothing. If foods are re-introduced too soon this prolongs the antibody production. Being able to re-introduce a food previously diagnosed as an allergic food is dependant on the peptide /protein* chains or offending chemicals not reaching the blood stream (see dysbiosis). If they do you will again display an allergic response.

Inhaled Allergens

Substances producing an allergic response can also be inhaled. They enter the blood through the lung, bronchial or nasal mucosa (e.g. hay fever). These are much more difficult to treat.

It is possible to evaluate and inform you of the inhaled substance causing the problem but it will be more difficult for you to eliminate it from your environment.

Treatment for hay fever is best done after the high pollen season but success cannot be measured until the following year.

Asthma and wheeze can be isolated and treated. There is very often a single cause that can be identified as the causative item.

Dysbiosis also exists for these patients. Tolerance is often improved by eliminating the dysbiosis although no direct link can be implied as in the case of food allergy.

*a peptide is a short chain of amino-acids; a long amino-acid chain is a protein.

Intestinal Health

The gastrointestinal tract is routinely defined as "a tube approximately 15 feet long, running through the body from mouth to anus. The World Book Dictionary adds that the intestine is "the lower part of the alimentary canal. Food from the stomach passes into the intestine for further digestion and for absorption." This boring, simplistic concept of intestinal function, combined with its indisputable lack of glamour, is reason enough for most people to never give the importance of intestinal health a second

thought. This is unfortunate, possibly even dangerous, and needs to change. The reality is that healthy intestinal function is critically important to overall health.

The Intestine as a Protective Barrier

Consider as an analogy the atmosphere surrounding the earth and its role in protecting our environment. It parallels the function of the intestine and its role in protecting our overall health. The earth' 5 atmosphere provides a protective barrier to support and sustain an abundant variety of life. But it is important to note that balance is the key! The atmosphere is composed of a critical balance of different gases that enable it to provide the earth with important filter-like protection to support the life of its 30 million different species of inhabitants.

In principle, the intestine provides a very similar protective barrier. The intestinal wall is coated with hundreds of different species of microorganisms, both healthful and unhealthful bacteria numbering in the billions. This rich, protective coating of microorganisms acts in concert with the physical barrier provided by the cells lining the intestinal tract and other factors, to provide the body with important filter-like protection. Damaging substances like unhealthy bacteria, toxins, chemicals and wastes are filtered out and eliminated. Simultaneously, the critical factors needed for life, such as nutrients and water, are absorbed into circulation and made available to the billions of cells in the body that need them.

Just as the atmosphere selectively filters out excessive amounts of ultraviolet radiation to protect life on earth, the selective barrier function of the intestine is equally protective. In the healthy state, the absorption of small sugars, fats and proteins proceed through the intestinal wall and circulate throughout the body. They are required for a myriad of essential reactions. At the same time, damaging substances from unhealthful bacteria, incompletely digested food, toxins, or chemicals, are largely prevented from being absorbed and transported throughout the body.

Bad Habits That Negatively Impact Intestinal Health

Unfortunately human beings have developed bad habits that promote imbalance in both the atmosphere and the intestinal tract. For example, pollutants such as chlorofluorocarbons (CFCs) have punctured holes in our ozone shield. The ozone hole has widened and deepened every year since scientists began measuring ozone levels in 1985. Scientists feel that the continued depletion of the ozone layer will cause greater amounts of ultraviolet radiation to reach earth, resulting in greater cancer risk, as well as other health problems.

In a remarkable parallel, other bad habits in our society in general have contributed to an imbalance of intestinal protective factors in an alarming percentage of the population. These bad habits include widespread consumption of a diet high in fat and refined, simple sugars, and deficient in nutritious, whole, unprocessed foods and fibre. This type of diet could potentially tip the intestinal balance toward the overgrowth of unhealthful bacteria and the proliferation of yeast or fungal organisms. It is also associated with less frequent bowel movements and a number of forms of chronic intestinal dysfunction.

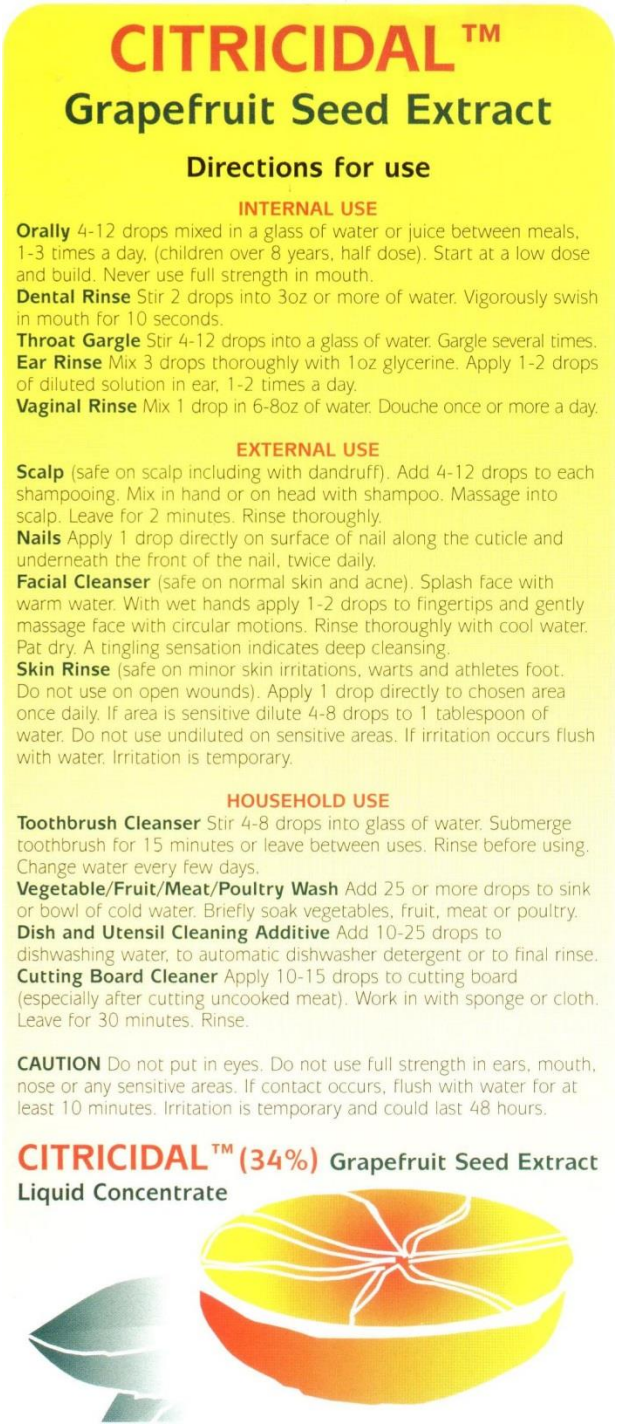
Other bad habits include the excess consumption of alcohol and the use of antacids and non-steroidal anti-inflammatory pain relievers. These may contribute to a breakdown or deterioration in the physical integrity of the intestinal wall, much like CFCs create holes in the ozone layer. Scientists describe this state of intestinal breakdown as "leaky gut syndrome" and feel it may contribute to intestinal dysfunction.

A high-stress lifestyle combined with a poor diet, deficient in important nutrients such as L-glutamine, pantothenic acid, zinc, folic acid, vitamin B 12, vitamin A and others, may impair the healing of intestinal deterioration.

Another bad habit is the overuse of broad spectrum antibiotics. Researchers have acknowledged that virtually every antibiotic taken orally causes alterations in the balance of the bacteria in the intestine. As little as one course of antibiotics may deteriorate the rich, protective coating of microorganisms and upset the balance between healthful and unhealthful bacteria, reducing the resistance to intestinal and systemic ill health.

Helpful Suggestions for Achieving Optimal Intestinal Health

- To achieve optimal intestinal health the following suggestions may be helpful:
- Avoid excessive alcohol use and refined, sugar-rich, fibre -poor foods.
- Avoid the use of antacids and broad spectrum antibiotics whenever possible.
- Eat a diet rich in whole, unprocessed, nutritionally adequate foods and fibre.
- Drink plenty of pure water.
- Consume a diet rich in, and/or supplement the diet with, probiotic proteins (lactoperoxidase, lactoferrin) and globulin proteins that may support a balanced and healthful population of intestinal bacteria.
- Also, consider adding to the diet fructooligosaccharides (FOS) which act as a food source to nourish certain healthful bacteria, but not unhealthful ones.
- Finally, supplemental, high quality, healthful bacterial products such as bifidobacteria and the NCFM strain of Lactobacillus acidophilus may also be beneficial.



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