



ALLERGY LINK
INTOLERANCE TESTING BY POST

Independent Alternative Specialist

Tripenhad, Tripenhad Road, Ferryside, SA17 5RS, Wales/UK

☎ 0345 094 3298 | info@allergylink.co.uk | www.allergylink.co.uk

Food Intolerance & Substance Sensitivity Test

Unique Combination of Foods & Non-foods

- Standard 150 -

Ref No: AL#438

Name: **Susan Sample**

Date: **01 October 2021**

SAMPLE REPORT

©Copyright – 2004-2021 Allergy Link

We hope that the Test Result & Report will give you satisfactory information and that it enables you, to make informed decisions.

Content & Reference:

| | | | |
|---|-------|--|-------|
| Part 1: Test -Table | 3 | Low Stomach Acid / Enzyme deficiency | 18 |
| Part 2: About your Report | 4-5 | Other possible cause of digestive problems | 19-20 |
| About Intolerances and 'Allergies' | 5-7 | Non-Food Items & Substances | |
| Part 3: Substances and Reactions Explained | 8 | Pet Allergies, House dust mite & Pollen | 20-21 |
| Dairy / Lactose | 8 | Environmental toxins | 21 |
| Eggs & Chicken | 9 | Pesticides and Herbicides | 21 |
| Fish, Shellfish, Glucosamine | 9 | Fluoride (now classified as a neurotoxin) | 22 |
| Coffee, Caffeine & Cocoa / Corn | 10 | Formaldehyde, Chlorine | 22 |
| Gluten / Wheat | 10 | Toiletries / Preservatives MI / MCI | 23 |
| Yeast & Moulds | 11 | Perfume / Fragrance | 23 |
| Alcohol - beer, wine | 11 | Detergents & Fabric conditioners | 23-24 |
| Fruit , Citrus fruit | 12 | Aluminium, Nickel, Teflon, Latex | 24 |
| Fructose / FODMAPs Cellery | 12 | | |
| Vegetables Nightshades, Tomato | 13 | Part 4: Beneficial Supplementing of Vitamins & Minerals | |
| Soya , bean, products & milk | 14 | Minerals and vitamins – a Brief Description | 25-30 |
| Nuts & Seeds / Peanuts / Aflatoxin | 14-15 | Water | 30 |
| Food additives Aspartame | 15 | Natural supplements for controlling allergies | 30 |
| Sorbitol, MSG, Sulphites , Benzoates | 16 | Part 5: How is stress related to allergy symptoms? | 31 |
| Associated Links: | | Adrenal fatigue (burnout) | 31 |
| Histamine Intolerance | 17 | Part 3: Management & treatment of allergies | 32 |
| Salicylates - Aspirin sensitivity | 17 | Additional Food for Thought | 33-34 |

Important information about your test result:

It is suggested to read the report notes thoroughly - especially Part 2.

The introduction-pages 4-7 following the test-tables provide information about your report, the ratings, reactions, explanation about allergies and intolerances and how to interpret your result.

Description of individual foods and substances follow in Part 3: 'Allergen's and Reactions explained', providing more understanding about the implications highlighted foods and substances may have.

The tests are designed to be self-explanatory. The comprehensive information provided will most likely answer any questions you may have.

However, please bear in mind, that not all the symptoms you experience are caused or aggravated by allergies or intolerances. Any symptom can always point to underlying, sometimes serious health problems, in addition to the frequency or severity of any reactions you may experience.

We also like to stress that 'Allergies and Intolerances' are not the cause of certain health conditions like eczema or asthma. However, potentially they can trigger, aggravating or worsen existing symptoms or health conditions.

If your symptoms persist or worsen, please consult your doctor.

People with probable allergy are urged to consult their GP whether immediate reactions, hives, itchy rash, swelling. Any person suffering an immediate IgE mediated reaction to a specific food should consult a medical practitioner to discuss avoidance, testing for type 1 allergy (IgE mediated), risk assessment for anaphylaxis and emergency medication.

How may this test be of help?

Dependent on the complexity of your health concerns and reason of taking the test, the implication of the findings may vary. For some this test may point to the actual culprit - trigger or cause of present health concerns - and thus the information has the potential to provide instant relief when changes are made accordingly. For others the test-result may present a 'piece of the puzzle' with regards to their more complex health condition/s or concerns and they may find improvement of their condition from applying the findings from their test.

After a period of app. 3-4 weeks of implementing changes to dietary and environmental factors, improvements should be observed. While this is different for every person, for some it may take several weeks or months to experience improvement in their health. Overall do people report positive effects.

Should you PRINT the test report? The explanation pages following the test-tables are quite comprehensive and not everything applies to everyone. Although we prefer environmental friendly solutions and would support that you refrain from printing the test report; we have found that **oftentimes important information is overlooked from just receiving the electronic Test-Report.**

We recommend that you consider printing the relevant corresponding pages (In the 'printer window' set the pages to print, and if possible print duplex / double sided).



Part 1:

Standard 150

Food Intolerance & Substance Sensitivity Test

Name: **SAMPLE**Year of Birth/Age: **1988**Date: **01.10.2021**

| DAIRY | GRAINS | FRUITS | LEGUMES | ANIMAL / DUST MITE |
|---------------------------|----------------------------|---------------------------|---------------------------|----------------------------|
| Lactose Milk sugar | Buckwheat | Berry fruits | Kidney beans | Cat hair / dander |
| Milk Protein Casein/ Whey | Corn / Maize sweet corn | Strawberry | Peas Chick Peas | Dog hair / dander |
| Cows milk | Rice | Citrus Fruits (VitaminC) | Soya beans /milk | Feathers |
| Cheese | Gluten | Orange | Soya fermented / tofu | House dust mite |
| Yoghurt | Oats | Kiwi (Latex-link) | NUTS & SEEDS | POLLEN |
| Cream single / double | Rye / Rye sourdough | Apple | Almonds Link: Salicylates | Grass & Grain Pollen |
| Milk Chocolate | Barley | Apricot (Dried - sulphur) | Cashew nuts | Tree Pollen Mix |
| Goats milk | Spelt | Avocado (Latex-link) | Hazelnut | Weed Pollen Mix |
| EGG / CHICKEN | Wheat | Banana (Latex-link) | Peanut | Moulds & Spores |
| Egg white | Flour mites | Grapes blue / white | Walnuts | TOILETRIES |
| Egg yolk | YEAST (Y) | Melon all | Sesame seeds | Lanolin (wool fat) |
| Chicken (Tetracycline) | Penicillin / Antibiotics | Peach / Nectarine | Aflatoxin (Y) (nuts) | Toothpaste / Mouthwash |
| Turkey (Serotonin) | Mycotoxin (mouldy grain) | Pineapple | Nut oil | Soaps / bath additives |
| MEAT | Mushrooms | Plum | SUGAR Beet / Cane | Skincare products |
| Beef | Yeast & Yeast extract | VEGETABLES | Fructose (FODMAPs) | Haircare products / dye |
| Lamb | Bakers yeast (bread) | Broccoli / Cabbage | Honey | Fragrance / Perfume |
| Pork | Brewers yeast | Beetroot (Oxalic acid) | FOOD ADDITIVES | Preservatives MI / MCI |
| ham / bacon | Yeast in Vinegar, pickles, | Carrot | Xanthan gum Guar gum | ENVIRO - TOXINS |
| FISH | ALCOHOL | Celery / Celeriac | E951 Aspartames | Pesticides / Fungicides |
| Shellfish Prawn/Shrimp | Beer - all (Gluten, Y) | Cucumber | E420 Sorbitol | Smoke (tobacco) |
| Cod | Cider (Y) | Courgette / Zucchini | Colourings E100-180 | Formaldehyde |
| Haddock | Red Wine (Sulphites, Y) | Garlic | Flavourings E620-635 | PVC (carpet / furniture) |
| Herring | White Wine (Sulphites, Y) | Lettuce / Lettices | E621 MSG | HOUSEHOLD CHEM. |
| Mackerel | Whisky (Y) | Onion raw / cooked | Preservative E200-297 | Chlorine (water) / Bleach |
| Pollock | Brandy / Gin/ Vodka | Pumpkin / Squash | E210-219 Benzoates | Air freshener (Ambipure) |
| Salmon | Ethanol / Ethyl alcohol | Spinach (Oxalic acid) | E220-227 Sulphites | Detergents |
| Tilapia | SPICES & HERBS | Nightshades | Additive 'Cocktail' | Fabric conditioner |
| BEVERAGES | Cinnamon | Aubergine | Associated Links | Fabric dyes (blue / black) |
| Caffeine | Pepper (black & white) | Peppers green | Histamine (intolerance) | Aluminium |
| Coffee | Mixed spices / Curry | Peppers yellow / red | Medicine e.g. Neurofen | Nickel |
| Cola / Pepsi | Mint Peppermint | Potato / Crisps (addt.) | Salicylates / Aspirin | Teflon |
| Diet soda/pop additives | Mustard seeds & greens | Tomato raw | Lectin containing foods | Fluoride / Fluorine |
| Cocoa | Celery Seed | Tomato cooked | Low Stomach Acid | Latex |

Possible Link: Histamine Intol. | Oxalate Sensitivity | Salicylate Intol. | Sorbitol intol. | Candidiasis | Helicobacter P. | Parasites

Further / complex test suggested: N/A

BENEFICIAL VITAMINS & MINERALS (see page 26)

| MINERALS | Silica (Horsetail) | VITAMINS | Evening Primrose EPO | Activated Charcoal |
|---------------------|-------------------------------|--------------------------|--------------------------|-------------------------------|
| Calcium (citrate) | Zinc (citrate) | Vitamin A | Flaxseed oil / Omega 3 | Turmeric |
| Chromium (GTF) | Multi - Minerals | Vitamin B6 B12 | Cod-liver oil | Astragalus Ashwaghandha |
| Iodine (Kelp) | Spirulina | Vitamin C | Probiotic - Acidophilus | Plant Protein pea / rice |
| Iron (yeast-free) | Multi - Vitamins | Vitamin D3 | Probiotic - Multi strain | Water: increase intake |
| Magnesium (citrate) | Multi Vitamin w.Minerals | Vitamin E | Probiotic - S.Boulardii | increase by 1-10% |
| Potassium | B-complex (yeast-free) | Digestive Enzymes | Colostrum (w.Probiotics) | increase by 10-20% |
| Selenium | Folic Acid | Bromelain Papain | MSM 99.9% pure | increase by 20-30% |

YF = Yeast free

Vitamins & Minerals may not apply for children, especially under the age of 6.

Legend: **S** Sensitivity 0-10 % **L** Low 10-35% **M** Medium 35-70% **H** High 70-100%**Beneficial Supplements**

Quality Supplements we trust: Lamberts Healthcare is UK's leading supplier of Vitamins, Minerals and Supplements - supplying practitioners since more than 25 years www.lambertshealthcare.co.uk.

Medical Disclaimer: Information and statements regarding dietary supplements are not intended to diagnose, treat, cure, or prevent any disease or health condition. We make no medical claims as to the benefits of any of the suggestions to improve medical conditions, or recommend any supplement as a drug, or drug replacement. Please continue taking your prescribed medication. We always recommend that you work in conjunction with your primary medical advisor, or nutritionist/dietician, particularly if you have an existing medical condition, and that you do not take any products during pregnancy or breast-feeding.

Important Test Information:

- **A test can only show an existing intolerance, sensitivity or adverse reaction - it can not forecast possible future reactions** or that a person will react to a substance or food at some point in their life. Especially children, who may not have been exposed to many foods, can react to any new food or substance they are exposed to, at any time.
- **In rare cases certain foods or substances may not show in the test report** (or show lower), especially if exposure to known 'offenders' has been avoided, or the offending substance eliminated for a period of time - usually more than 3 months. This occurrence is mainly due to the fact that there are no 'traces' of the offender, thus no stress in the system detectable (see also rain barrel effect). In addition may this also be an indication that prior reactions were indeed caused by an intolerance rather than an allergy, which are fundamentally different. Fortunately intolerances tend to fluctuate - depending on many factors (see further description about reactions, Allergies and Intolerances). However, due to this fact intolerance can become difficult to establish, especially after avoidance. Further is the body able to regenerate - as a complete cell renewal takes place in the body every month. Thus can we potentially overcome intolerances - through avoidance - especially children who sometimes even grow out of 'allergies'.
- **A negative result does not mean that you are not affected by that particular substance** (it is suggested to continue eliminating). However, the tolerance threshold might be low because of avoidance; and it might be possible that the substance may be tolerated in small amounts.
- **Adverse reactions and allergies can always appear suddenly - at any time and at any age.**
- **Severe, as well as potentially fatal anaphylactic reactions can still occur on exposure to any substance (allergen) at any time**, even if you found a negative rating from your test.
- **Not all symptoms are caused by allergies or intolerances**, they can always be symptomatic of an underlying medical condition.
- **When other factors are involved:** In some individuals, adverse reactions only occur when ingestion of a trigger food is combined with some other factor, e.g. Drug-dependant (food) allergy: There are individuals who only react to specific foods while taking a drug. The best recognised examples of this are individuals who only react to foods while taking salicylate (aspirin). Exercise-induced allergic reactions occur during or after exercise. Typically, symptoms triggered by exercise—asthma or an anaphylactic reaction—occur after 5 to 10 minutes of vigorous exercise. Exercise often triggers an asthma attack in people who have asthma, but some people have asthma only when they exercise.
- **Fluctuations:** It is a common, but poorly understood, observation that people or children with eczema and food allergy can often tolerate some or food triggers when the skin disease clears (usually when the child is on holiday in a sunny country)

The term 'allergy', as utilized by Allergy Link, refers to the generic term commonly used by the general public describing any form of an adverse reaction or negative reaction. 'I'm allergic to something' stands for something a person can not tolerate or has a strong aversion that causes a reaction. Thus it takes place of a descriptive term generalizing an 'experience'. True to our name we aim to highlight any adverse reactions – a link that may point to allergies. However, **the medical establishment has laid claim on the term 'allergy'** - that it can only be used when medically validated - by an approved IgE test.

Friendly Disclaimer:

This unique combination Intolerance & Substance Sensitivity Test is intended as information only. It is not a substitute for professional medical advice and is not to be used as a diagnosis. Any symptom or reaction can always point to underlying - sometimes serious health problems. **For the treatment or diagnosis of any medical condition, we strongly recommend consultation with your doctor or health care professional.**

We make no medical claims as to the benefits of the test, or any of the suggestions to improve medical conditions.

We always recommend that you work in conjunction with your primary medical advisor, particularly if you have an existing medical condition, and that you do continue to take any prescribed medication.

Allergy Link Testing Services are not responsible for any adverse effects or any results that may occur from the usage of the information contained in the test report or advice notes.

The test/s are further not designed to diagnose or forecast reactions, nor will the results indicate that the individual will or may suffer any adverse or negative reaction to the indicated foods or substances. Allergy Link shall not be held responsible for any claims made about this test by the clinic using our services. As with any information provided within this report, we recommend that everybody takes precaution to not apply, use or take anything without prior consulting or supervision of their primary healthcare provider.

AllergyLink is an independent Alternative Specialist working in conjunction with complimentary and alternative medicine practitioners, doctors and naturopaths. Alternative testing procedures as such are not subject of scientific research and therefore not yet recognized by conventional medicine. For more information visit www.allergylink.co.uk or Facebook: www.facebook.com/AllergyLink

****We reserve the right to change and alter our Test Formats as a continued effort to update our test service.**

Part 2:

About your Report

This Report provides you with a '**current picture**' of app. 150 specific food, and environmental substances -potential 'allergens', that may cause reactions or indicate that a food or substance poses some form of 'stress' to the body. Even though the term 'allergy' is generally used to describe any negative reaction, true allergies usually cause immediate reactions and affect only a minority of the population. Most people experience intolerances, sensitivities or substance sensitivities; while many people with digestive 'discomfort' would experience 'food related symptoms'.

'Allergy Links' aim is to establish any substance, that may cause a burden, or is 'disagreeable', and thus is likely to be the cause or contributor to any symptoms - specific and non-specific; rather than distinguishing between a true medical classed allergy, intolerance or hypersensitivity.

How to interpret your test results

Ratings are given in colour and give an indication as to the severity the 'substance' may have - unmarked means no reaction. **Some items covered in this holistic test are not 'typical' as such** e.g. heavy metals, electromagnetic stress, parasites, candida, etc, but they can play a role in the overall health picture or symptoms experienced. Thus they are indicated as '*Health affected by*' with the same rating as for food and substance reactions, but in a different colour.

The measured rating of 'affectedness' of food and substance reactions:

| | | | |
|-----------------------------|---------------------|------------------------|-----------------------|
| S Sensitivity 0-10 % | L Low 10-35% | M Medium 35-70% | H High 70-100% |
|-----------------------------|---------------------|------------------------|-----------------------|

- A **High rating (red)** usually equates to a high rate of affectedness and can be an indication of allergy. Avoidance/elimination is the most appropriate approach.
- A **Medium Rating (orange)** indicates a moderate to strong adverse reaction. For many people symptoms are activated at this rating and reactions can already be quite severe. The medium rating points to intolerance, but may also be an indication of allergy. Again, avoidance is the most appropriate approach. While for some people temporary avoidance (app. minimum 3 months) may lower the intolerance threshold and food may be tolerated occasionally in small amounts. Your keen observation can help you to determine the level/amount you can tolerate on a daily/weekly basis, to maintain a balanced diet.
- A **Low rating (yellow or green)** means that even though there is a sensitivity, foods may still be eaten - but in moderation. Bearing in mind, that some people can have a strong or even severe reaction to a food within a low or sensitivity rating (as observed in severe allergies such as Shellfish, Peanuts, etc.)

Some test providers only show items which test above 85%, because they believe that only then symptoms begin to develop from an intolerance. However, we have found that **there are always exceptions!**

Reactions are as diverse as there are people on the planet, and 100 people with the same rating may have 100 different complaints or symptoms.

Sometimes a high rating may not have any distinguishable or noticeable effects at all. While on the other hand some people can already react to foods within a low or sensitivity rating. Thus your test can neither indicate that you may suffer any adverse reaction, nor forecast reactions.

Any substance can become a trigger /'allergen' - and in turn - any symptom can be caused by a substance reaction.

Foods and environmental substances are also known to worsen symptoms or conditions.

Very often there are more than one substance/allergen involved in causing reactions such as - itching, swelling, sneezing, wheezing, and various other symptoms. It is primarily the immune system, that is affected or weakened, and may react or give rise to a vast number of complaints.

In **immediate reactions**, symptoms may occur within a few minutes after exposure, in **delayed reactions** after hours and oftentimes after several days - aggravating existing symptoms or health problems.

Reactions may vary from immediate intense physical symptoms like sneezing, hives, swelling, anaphylactic shock, oral allergy syndrome (OAS) or IBS; whereas other symptoms may have a delayed onset where a person may just feel generally unwell, tired and lethargic with little energy.

Some of the reactions are obvious as in hay fever or hives, involving a histamine related response (IgE mediated). Other reactions may be experienced from mild to severe, as physical inconveniences, irritation or rashes; but also **emotional reactions**- ranging through the whole spectrum from lethargy and depression to hyperactivity, anger and rage.

Many people experience reactions through food/substance combinations or 'cocktails'. Such combinations may include bananas with wheat, eggs on bread with cheese + tomatoes, MSG laden crisps with diet drink, etc,... Foods, beverages and medication also react in the stomach, and with stomach juices, although they may be fine when consumed on their own. Young people are increasingly afflicted by 'IBS' as they are 'weight consciously' consuming diet products or whey-protein. Numerous foods these days are prepared and engineered with artificial substances (including convenience foods and microwavable meals, etc.). These reactions occur frequently and are very difficult to establish through any form of testing. Only your observation can help you to identify those foods or food/drink-combinations that may be causing problems.

Reactions may also be due to the amount of substances the body can 'tolerate'.

Rain barrel effect - typically signifies Intolerance. When the barrel is very full, "high amount - in the diet or exposed to", even a drop of additional water "exposure" will cause the barrel to overflow "symptoms activated". But when the barrel is less full, it would take more water "exposure" to cause a response.

This phenomena - dictated by lifestyle, diet, physical and emotional stress or trauma, toxins and pathogens - can result in the weakening of the immune system and therefore cause an increase in adverse reactions. This explains why at certain times we are more prone to develop various allergies and/or experience varying degrees of reactions and heightened sensitivities. For some people, when the stress/trauma has passed, the body will regain homeostasis again and will no longer react to the offending substance.

Our health status underlies constant change! And so do Intolerance and sensitivity reactions. They fluctuate under the influence of any form of stress. **The cells in our body also change**, they renew at different intervals. Cells of Stomach and Intestines have a short life and typically renew every 5 days. Skin cells rejuvenate every 2 to 4 weeks.

The liver, as the body's detoxifier, purifies a large variety of contaminants and toxins from our systems; renewing itself with new cells every 150 to 500 days.

About Adverse Reactions: Intolerances and Allergies

Adverse reactions – Sensitivities, intolerances or Allergies - are associated with many common diseases; and can be either a contributing factor - minor or major; a temporary or chronic condition; or even the primary cause of ill health.

There are 15 common foods - causing adverse reactions. These foods make up app. 85% of all food related reactions:

Egg, Milk & Dairy (lactose, whey protein and casein), Crustaceans / Shellfish, Sweet corn, Soybeans, Peanut, Tomato, Wheat and cereals containing gluten, Orange, Kiwi, Citrus fruit, Tree Nuts (hazelnuts, walnuts, brazil nuts, cashews, ...), Sesame, Celery, Sulphur dioxide and sulphites, Mustard (mustard greens), Lupin.

However, any substance can become an 'allergen' and trigger reactions at any time and can develop at any age. Most often are reactions delayed and take many days, months or even years before they manifest and take form such as: skin problems, eczema, respiratory problems, sinuses, asthma, arthritis, and tiredness / lethargy, Irritable bowel (IBS).

Food Intolerance or 'non-allergic food hypersensitivity' is a term used widely for varied physiological responses associated with a particular food/chemical, or compound. Food intolerance is not caused by the immune system. Some argue that Intolerance is a carbohydrate mal-absorption. However, it can take 48 hours or more for a food intolerance reaction to occur. Food intolerance reactions are dose-related and thus can fluctuate and vary. Some people are more sensitive than others and will react to smaller doses while others are less sensitive and will only react to larger doses of the problem food/chemical. The inability to properly digest or to metabolise certain foods typically causes **delayed reactions** - after hours or even days - often involved in aggravating existing symptoms or health problems. When a person is in regular contact with a problem food/chemical the symptoms can appear to be a chronic condition rather than a reaction to food.

Enzyme deficiency: The gastro-intestinal tract in some people is simply unable to produce appropriate enzyme/s (or insufficient gastric juices) for normal chemical breakdown of proteins, carbohydrates or fats. In some cases food passes right through the body before digestion is complete - and is eliminated unprocessed or only partially processed (like milk - causing diarrhoea). As it lingers in the gut - fermenting, direct problems such as severe abdominal cramps, bloating, flatulence, diarrhoea and haemorrhoids are common. In other cases some foods have components which actually attack the lining of the gut and damage it every time that food is eaten (like Celiac with gluten). Fortunately most food intolerant people recover fully when the offending food is avoided.

However the indirect problems associated with poor absorption can be much more harmful. When food leaves the body only partially processed many vital nutrients are lost too. People with food intolerance typically catch viruses easily, may have dry skin, hair and nail problems and tire easily. Some become deficient in iron or calcium and suffer a further series of health issues like anaemia or osteoporosis. Impact on weight: Some food intolerant people are underweight due to their inability to get full nutrient value from foods. Of course with diarrhoea there is the constant risk of dehydration especially among children and elderly people. Other people can be overweight due to fluid retention – possibly an auto-immune response caused by eating foods that the body reads as poisonous.

Food sensitivities are much more common, although estimates vary. Sensitivities are abnormal reactions to food or food components that do not involve the immune system, but involve the body as a whole.

Food addiction It is thought that we can actually be addicted to the foods to which we are intolerant. The adrenalin rush - the classic "fight or flight" response - experienced after eating these foods is the 'hook' that keeps us coming back. But while sufferers feel good for a while, the 'high' soon passes and they go back to feeling drained and listless.

Toxic effect: There are a number of foods which contain naturally occurring substances that can cause a variety of symptoms such as vomiting and diarrhoea in some people.

Allergies / Food Allergies are an autoimmune response caused by the body 'misreading' a substance or food protein as an enemy, toxin or poison. An Allergy is a rather fast response by the body's immune system to a perceived invader. Reactions happen quickly – usually within 30 minutes. A food allergy reaction can occur from the tiniest amount of an allergen. When an allergic reaction occurs, the body responds by producing antibodies and/or releasing specific chemicals like histamines. When released into the system, these histamines trigger an inflammatory response otherwise known as an allergic reaction.

True allergies are signified by an - IgE mediated immune response - and usually cause **immediate reactions**; and in serious cases can cause life threatening anaphylactic shock. However only a minority of people is affected by medical classed allergies - app. 2% of adults and app. 8% of children.

A different look at why allergies occur may be that bodily responses may be no accident, but rather the body's way of protecting us.

Tell tale signs of an allergy especially in children:

Dark circles under eyes, swollen or red around eyes, red ears and cheeks, itchy nose / ears / eyes, behavioural or mood changes like 'sudden' irritability, hyperactivity or withdrawal symptoms, changes in handwriting / drawing.

Allergy-like reactions take the form of both physical and emotional symptoms. These reactions can be responsible for a myriad of symptoms including A.D.D., anxiety, depression, arthritis, respiratory problems, digestive problems, chronic fatigue, brain fog and panic attacks.

Anaphylactic shock is a life-threatening reaction involving a severe drop in blood pressure, loss of consciousness, and organ system failure. In severe cases there is an **anaphylactic** response, where tissues swell up to two or three times their normal size, swelling up so rapidly that they obstruct breathing. These allergy sufferers gasp for air and can suffocate and die if not given emergency treatment (eg. by the administration of adrenalin by paramedics, teachers, carers or medical staff). Anaphylaxis is an emergency situation that requires immediate attention and treatment with epinephrine (Epi-Pen). IgE-mediated anaphylaxis — In most people, anaphylaxis is caused by the presence of proteins called immunoglobulin E (IgE) antibodies. If a person is exposed to that allergen again, the cells may suddenly release large amounts of inflammation-causing chemicals (including histamine and tryptase) into the blood stream, causing the signs and symptoms typical of anaphylaxis.

The allergic reaction can be so severe that it becomes life threatening. In some people with anaphylaxis, the reaction is caused by a process that does not involve allergens and IgE. However, the symptoms and treatment are the same. Conventional management of anaphylaxis is composed of administration of epinephrine, antihistamine, and steroid and stabilization of airway, ventilatory, and circulatory function. **Food-dependant exercise-induced anaphylaxis:** In this unusual condition, attacks only occur when the exercise follows within a couple of hours of the ingestion of specific foods such as celery, shellfish, squid, peaches or wheat.

People affected by severe allergy or anaphylaxis should consult a medical practitioner to discuss avoidance, testing for type 1 allergy (IgE mediated), risk assessment for anaphylaxis and emergency medication.

Last but not least - Why are Allergies on the increase?

There are many reasons and factors for the increase in the various adverse reactions. Most obvious as we are being exposed to more and more substances that our bodies were never exposed to during our evolution. One of the main contributing causes is **stress** - physical and emotional. Followed by **over exposure** to artificial, synthetic or 'hazardous' substances both in our food and the environment, including medication, vaccines, additives; as well as an increased exposure to electromagnetic radiation in our home and work environment.

Today we are consuming 'estranged' foods; ingesting and inhaling chemicals - on a daily basis - whose names we can't even pronounce, yet assume our bodies will be able to determine if they are healthy for us. We believe that the food industry has our best interest at heart when manufacturing enticing food products - engineered for our health? Why is it that we humans assume that we can eat anything and everything and seem surprised when something goes wrong? While on the other hand we know for example, that animals shouldn't consume 'human foods' - as any pet or animal owner knows. Unsuitable foods can be downright noxious! In dogs can chocolate cause blindness and raisins cause diabetes and kidney failure... Is it a surprise then that we can experience adverse reactions - to any and everything - no matter the distinction?

'In the past children played outdoors exposed to soil, muck and pollen. Their immune systems learned to recognise and distinguish harmful pathogens from harmless things. Thus the price we pay for 'Western living standards' is a rise in allergies and adverse reactions of all kinds.

Part 3:

Substances and Reactions Explained

DAIRY (Milk Protein: Casein & Whey, Lactose)**Possible Link:** Histamine intolerance (HIT)

A very common allergen, **dairy products are mucus forming and have all been attributed to increasing your body's amount of mucus.** Milk protein intolerance produces a non-IgE antibody and is not detected by allergy blood tests. Milk protein intolerance produces a range of symptoms very similar to milk allergy symptoms. A person with milk allergy can be reactive to one of dozens of the proteins within milk. The most common one is casein (alpha S1-casein). **Many people lack the necessary enzymes to break down the milk proteins and/or lactose** (milk sugar - particles in all animal milk); because the production of the necessary enzymes - to break down milk proteins and or lactase - is reduced or has stopped - often after weaning. Few people produce enzymes until old age. (This appears to be true for almost all cultures, where dairy products are not part of a staple diet). About 60% of adults can't digest milk. In addition some people might be sensitive to either the Bovine Growth Hormone or BGH (in almost all commercial milk - not organic) or to antibiotics given to cows or both.

According to research, saturated milk fats can be responsible for gut problems such as inflammatory bowel disease (IBD) and colitis. The fats - found in processed foods and confectionary - upset the bacteria in the gut, which can trigger a range of immune disorders. Health problems can begin within six months of a diet high in saturated milk fats, which encourages the proliferation of the microbe *B. wadsworthia* in the gut (associated with appendicitis, and other intestinal inflammatory disorders). However, the reaction happens more in people who have a genetic predisposition, say the researchers.

Milk protein - CASEIN is the predominant protein (phosphoprotein) that accounts for nearly 80% of proteins in cow milk and cheese. Like other dairy products, cheese contains casein, a substance that when digested by humans breaks down into several chemicals, including casomorphine, an opioid peptide. In the early 1990s it was hypothesized that autism can be caused or aggravated by opioid peptides.

Milk protein - WHEY is the protein contained in whey, the watery portion of milk that separates from the curds when making cheese. Whey protein is 'likely safe' for most adults when used appropriately. If you are allergic to cow's milk, avoid using whey protein. High doses can cause some side effects such as increased bowel movements, nausea, thirst, bloating, cramps, reduced appetite, tiredness (fatigue), and headache, as well as all symptoms listed below. (Whey protein alternatives: hemp protein (50%), pea protein. Spirulina. Avoid soya protein)

Possible reactions/Symptoms: anaphylactic shock. **Behavioural changes**, such as irritability, hyperactivity, ADD/ADHD and night-waking. Symptoms may occur within a few minutes after exposure in immediate reactions, or after hours in delayed reactions - and in some cases after several days. **Digestive** reactions, stomach and intestinal: IBS, abdominal cramps, bloatedness, constipation, colic, diarrhoea, wind, nausea and vomiting, gastro-oesophageal reflux, colitis, abdominal pain and bloating, vomiting, gas/wind. **Skin reactions:** Hives, eczema, dermatitis, rashes, rosacea, itchy skin and irritations, swelling of lips, mouth, tongue, face or throat. **Respiratory** reactions: asthma, sinusitis, runny nose, sneezing, watery and/or itchy eyes, catarrh, coughing, phlegm wheezing. Ear Infections, earache, 'gluey ear'. Headache, migraine, fatigue, and bad breath.

Joint Inflammation and Pain - because the immune system identifies the dairy proteins as dangerous, the body produces immunoglobulin E antibodies, histamine and other chemicals to attack the allergen. During an allergic reaction to milk, histamine is created in an excessive amount, which causes inflammation. The tissue between your joints becomes inflamed, placing pressure on the surrounding areas, which causes pain - a few hours after consuming dairy or even a day later.

Alternatives: dairy free (vegan products) milk, yoghurt & cheese substitutes - such as soya, rice, oat. Good **milk substitute:** rice milk, oat milk, soya milk, almond milk. If cream is tolerated, diluting both dairy or soya cream (SoyaDream).

Since milk protein may be transferred from a breastfeeding mother to an allergic infant, lactating mothers are advised to eliminate dairy from their diet during the breastfeeding period.

Yogurt and Kefir are easier to digest than milk, because the culturing process makes yogurt more digestible. The bacterial enzymes created by the fermentation process, partially digest the milk protein casein, making it easier to absorb and less allergenic. Most people who are moderately lactose-intolerant can consume yogurt without ill effects because much of the lactose in the milk precursor is converted to lactic acid by the bacterial culture. **Butter** is almost entirely fat so people with a mild to moderate milk protein allergy/intolerance should have little problem with butter. While casein is still present in butter there is typically less than 1g of protein per 100g of butter making side effects from the consumption of butter very rare. **Cream** is about 50% fat and 50% milk, though the milk in cream is not exactly regular milk. It is mostly water and has only few milk proteins per quantity. Many people with mild milk protein intolerances can tolerate cream (in moderation).

LACTOSE intolerance, also called **lactase deficiency** (hypolactasia) is the inability to digest and break down the milk sugar Lactose. **Lactose intolerance is a non-allergic food sensitivity.** Lactose intolerant individuals have insufficient levels of lactase in their digestive system. The digestive enzyme Lactase should be produced by the body in the small intestines, however if little or no lactase is produced or if production is impaired, undigested lactose moves into the colon where it is fermented. This leads to the production of hydrogen, carbon dioxide and organic acids resulting in cramps, wind and diarrhoea. In most cases **symptoms** such as abdominal bloating, flatulence, nausea, rumbling stomach (borborygmi) diarrhoea, cramps, and/or vomiting. Lactose intolerance is considered the normal state for most adults on a worldwide scale and is not typically considered to be a disease condition. Intolerance to lactose is not life threatening, however it can make people feel very unwell and although eliminating milk based products is one solution, it can prove impractical as well as resulting in dietary restrictions. A significant number of people who have symptoms associated with lactose intolerance may have similar symptoms from consuming **fructose, sorbitol** or other sugars that are not easily digested in the small intestine

Taking lactase enzymes can help digest lactose in milk and dairy foods, such as 'Lactase Complex' by Lamberts (200mg is equivalent to 4000 FCC - enzyme activity measured and expressed in Food Chemical Codex (FCC) units). Lactase enzymes are safe and can be used on a long term basis to reduce the symptoms of lactose intolerance - daily intake 1 to 3 tablets. Ripened cheeses like Cheddar contain only about 5% of the lactose found in whole milk, and aged cheeses contain almost none. Nevertheless, people with severe lactose intolerance should avoid eating dairy cheese. As a natural product, the same kind of cheese may contain different amounts of lactose on different occasions, causing unexpected painful reactions.

How do you get your calcium? Dairy is not the only source of calcium, nor is it the best. Three quarters of the world's population don't consume cow's milk or dairy products at all. Huge numbers of people across the world can't digest dairy and still get plenty of calcium. Contrary to popular belief, many non-dairy foods contain calcium, while (pasteurized, homogenised) milk actually has a relatively low amount.

Children and calcium: A major review of recent scientific studies on calcium and bone health was published in the journal of the American Academy of Pediatrics in 2005. It shatters the misleading notion that children need cow's milk for good bone health. This review examined the effects of dairy products and total dietary calcium on bone health in children and young adults and found that dairy products are NOT needed for strong bones. For **dairy-free sources of calcium** please see under Calcium.

The consumption of too many acid producing foods such as dairy (also eggs, poultry, meat, fish grains, legumes, sugar, coffee and carbonated soft drinks) decrease the body's ability to absorb minerals and other nutrients. Furthermore, in an attempt to neutralise the acid, the body leaches calcium from its bones. Worth mentioning is that absorption of calcium (and magnesium) is also interfered by sugar intake. (alkaline forming foods include: most fruits, green vegetables, peas, beans, lentils, spices, herbs and seasonings, and seeds and nuts). Research suggests that physical exercise is the most critical factor for maintaining healthy bones, followed by improving diet and lifestyle (getting enough sunlight).

EGGS & CHICKEN

Eggs cause a large variety of problems, although the best source of protein – being closely related to the human protein. Some people who are allergic to eggs are also allergic to chicken. Most people with an egg allergy are allergic to the egg white proteins, but many are allergic to the yolk. The egg yolk contains different allergenic proteins than the egg white. Egg-white is often responsible for early development of eczema, urticaria and atopic dermatitis (AD) during infancy. Many of today's vaccinations are suspended in egg white protein as a preservative (except MMR vaccines). A person can have an intolerance or allergy to chicken eggs, or to chicken meat alone, or be allergic to both chicken meat and chicken eggs - a condition known as "Bird-Egg Syndrome", which involves the feathers too.

Adverse reactions result from a specific protein present in chicken meat, known as **chicken serum albumin**, and contains other allergy-causing substances called **purines**. As contributing factors, they predispose to conditions such as gout and kidney stones. Chicken has more calories, fat and cholesterol. The good news is that even though Turkey and Chicken are both in the poultry meat group, many people are able to eat turkey even if they are allergic to chicken.

Possible Reaction: the most common egg allergy reaction is skin inflammation or hives. **Digestive system** and stomach problems: aches, abdominal cramps, constipation, diarrhoea, nausea, vomiting, swallowing problems. **Respiratory tract:** Asthma, breathing difficulties, chest tightness or shortness of breath, coughing and sneezing, ear infections, nasal congestion, nasal problems, sinusitis, allergic rhinitis, watery eyes. Itchy /tingling of mouth, swelling of tongue, throat, **Skin problems:** eczema, dermatitis, rashes, rosacea, redness around lips, Hives/urticaria, skin changes, redness, inflammation. **Other symptoms:** Fever, insomnia / disturbed sleep, migraine / headaches, fatigue, depression. Joint pain. Rapid pulse/ fast heartbeat, anaphylaxis, Shock, with a severe drop in blood pressure /dizziness, light headedness.

Found in: Eggs are found in numerous processed foods and most often as hidden ingredient! Sweet & savoury baked goods, batters, sauces, and many sweets. Some medicines and vaccines may also contain traces of egg. **Alternatives:** Aquafaba (chickpea water – whip to make egg-free meringue, pie topping or mayonnaise. Egg replace powder, Baking powder & soda.

Found in: numerous processed foods and most often as hidden ingredient (albumin, ovalbumin) such as batters, sauces, baked goods and sweet & savoury and many sweets. Additives like E1105 Lysozyme and E322 Lecithin are egg derived.

Possible Link: Histamine intolerance (HIT) - especially uncooked Egg White.

Alternatives: Aquafaba (chickpea water – whip to make egg-free meringue, pie topping or mayonnaise. Egg replace powder, Baking powder.

Management: Some people find relief through Antihistamines. Several natural and over-the-counter antihistamines can relieve from mild reactions - stomach pains, nausea and hives to chicken allergy. Stronger types of antihistamines need a doctor's prescription.

Mayonnaise contains only traces of egg yolk (typically less than 5%) and as it is considered a food condiment it is usually not consumed in large quantities or on a daily basis. Most people with intolerances can tolerate these small amounts. On the other hand, people with a severe egg allergy would react to minute traces and the test result would show this. If Mayonnaise does not show a reaction in your test, it is most likely safe for occasional consumption

MEAT

Possible Link: Histamine intolerance (HIT) - Pork sausage, Beef sausage, hot dogs, salami and ham, especially 'dried' (cured), smoked meats.

FISH

common triggers are: pollock, salmon, cod, tuna, snapper, eel, and tilapia. Allergy to fish - such as cod and other white fish - may begin in childhood and is likely to be lifelong. Fish allergies are similar to shellfish allergies and less likely than other allergies to be outgrown Because of the protein- *parvalbumin* , there is a high cross-reactivity among different types of fish and people reacting to one type are likely to have (or to develop) reactions to others.

Possible reactions/Symptoms: linked to an increased risk of severe asthma in adults. Oral allergy syndrome (in which the mouth itches or tingles after eating an allergen), anaphylaxis, a severe systemic reaction in which the body releases large amounts of histamine, causing tissues throughout the body to swell. This can cause life-threatening breathing, cardiac, and gastrointestinal symptoms. Anyone with a fish allergy should carry any medication prescribed by their doctor at all times.

Fish Parasites: Anisakis Simplex, may masquerade as a fish allergy. This parasite is considered a major allergen and like fish allergies, Anisakis can cause severe gastric and intestinal pain, vomiting, diarrhoea and severe allergic reactions (fever and blood in the stools possible) including anaphylactic shock. **Anisakiasis is often misdiagnosed as stomach ulcers or appendicitis.** Acute allergic reactions may occur with or without the gastric symptoms. If you have a severe allergic reaction after eating fish, but tests come up negative, you might very well have an allergy to this parasite. Note: while *Anisakis* larvae can be killed by freezing or cooking, since their proteins remain. They can still trigger allergies after being killed, so people with *Anisakis* allergies should avoid fish and shellfish altogether.

SHELLFISH (be aware of Glucosamine) Shellfish allergy is the most common food allergy among adults. Unlike many food allergies, shellfish allergy is more likely to develop in adulthood than in early childhood. Shellfish allergies tend to be severe, lifelong food allergies. Cross-reactivity with species that are not closely related is common in shellfish allergy, as many of shellfish allergens are widely distributed panallergens in invertebrates. Cross-reactivity with house dust mites is well known, but other species can also be involved in this phenomenon. People allergic to one type of shellfish are often advised to avoid all shellfish. Biologically speaking, shellfish are aquatic invertebrates rather than fish. People allergic to one type of shellfish are often advised to avoid all shellfish. People who have reacted to one type of shellfish (e.g. crab) are likely to react to other members of the same group (in this case, other crustaceans). **Crustaceans** (e.g. crab, lobster, crayfish, shrimp, prawn), **Molluscs:** **Bivalves** (e.g. mussels, oysters, scallops, clams) **Gastropods** (e.g. limpets, periwinkles, snails). **Cephalopods** (e.g. squid, cuttlefish, octopus). **Symptoms of shellfish allergy usually appear within minutes to two hours of eating shellfish.**

GLUCOSAMINE is mainly derived from shellfish - the shells of shrimp, crab and lobster, and therefore people with shellfish allergy are advised against taking this supplement. (Alternatives: Boswellia and Catsclaw, Vegetarian Glucosamine HCl from Lamberts)

Possible reactions/Symptoms: may include: Skin reactions such as flushing, urticarial rashes or hives, eczema. Allergic conjunctivitis: Itchy, red, watery eyes. GI reactions such as nausea, sickness, abdominal pain or cramps, vomiting, or diarrhoea. Airways symptoms such as wheezing or coughing or runny nose or rhinitis. Angioedema and dramatic swelling of lips, tongue, or face. Shellfish allergies may cause a severe reaction called anaphylaxis. Shellfish allergy is the most common cause of Exercise-Induced Anaphylaxis, in which the combination of eating a food allergen and exercising causes anaphylaxis. People who are shellfish-allergic may be able to eat fish, and vice versa - unless they have both allergies. But be aware of the risk of cross contamination in restaurants, markets and open fish counters. Inform staff in restaurants of your allergy. Possible Link: Histamine intolerance (HIT): Most fish, including canned fish, Mackerel, Sardines, Anchovies. Smoked fish.

COFFEE, CAFFEINE & COCOA

COFFEE - Allergy isn't a common occurrence and problems aren't always associated with the coffee itself as other components in coffee could be the cause. The difference may lie in the specific bean or roasting. Coffee is actually the most *heavily* chemically-sprayed crop on the planet. Any gastrointestinal issues could also stem from lactose, if you add dairy products to your coffee. Being lactose-intolerant means that your body doesn't have enough of the enzyme to break down lactose, so it may travel through your gut and cause bloating, nausea or diarrhoea. Possible Link /cross reaction: Nightshades. **Possible reactions/Symptoms:** irritability, nervousness or anxiety, Skin Irritations, itching red, hives. Stomach and Intestinal Issues, flulike symptoms, runny nose or congestion sneezing, dry cough, wheezing. Nausea, vomiting, loose, watery stools and belly cramping. Respiratory Problems, chest pain, Severe Symptoms: swelling around your lips or tongue. a weak pulse and turning blue, confusion, Anaphylaxis.

CAFFEIN - It might be the caffeine in coffee that's triggering symptoms, not necessarily the coffee itself. Caffeine is a stimulant and the only drug that is widely added to the food supply. Caffeine stimulates the nervous system and increases heart rate. If you suspect caffeine is the culprit, switching to a decaf version of coffee could help alleviate problems. **Symptoms of a caffeine allergy** may include one, or a few, of the following: Heartburn, diarrhoea, nausea, vomiting. Abnormal blood sugar levels, Cold- and flu-like symptoms, extreme jitters, cold sweats, racing heart or palpitations, angry, irritability, restlessness, nervousness, anxiety and panic attacks, bad mood, can't focus or concentrate. Sleep problems, insomnia, tremors,. Tightness of chest, chest pain, shortness of breath, delusions or hallucinations. Skin problems such as hives, eczema, rashes, acne, severe itching. Vision problems, headaches or migraine. Swelling of tongue, glands, or throat. Fatigue, dizziness, depression. Muscle pain, numbness in face, hands, or feet. Anaphylactic Shock.

COCOA, from which chocolate is made, contains tannin and many known chemicals such as caffeine, tyramine, theobromine, phenylethylamine (cocoa is toxic to pets - theobromine poisoning). Among its ill effects, tannin interferes with the release of digestive enzymes, which leads to indigestion. It also is a dehydrator, leading to constipation and dry skin. Theobromine, the primary chemical in chocolate, can cause headaches, central nervous system irritation, sleeplessness, itching, depression, and anxiety. It is not to be dismissed lightly. The caffeine in cocoa acts similarly to a narcotic, leading to addiction. It gives a quick, chemical "lift" to the mental processes, but always ends in slower, lower mental alertness than before ingestion. Methylxanthines, of which caffeine and theobromine are two, are linked to increase cell growth in certain glandular tissues. They interfere with enzyme signals, which can result in uncontrolled cell growth: the development of cysts and benign tumors, especially in the breast.

Possible reactions: Cocoa can cause headaches, migraines, constipation, nausea, vomiting, stomach cramps, heartburn, itchy and dry skin, Hives, swollen tongue, lips, or throat, Anaphylaxis. trouble breathing, a wheezing cough. Rosacea, rectal itching, coronary problems, and emotional problems such as mood swings, feelings of anger, irritability, confusion, insomnia and depression.

Cocoa (Cacao)stimulates the nervous system and increases heart rate. **Possible Link:** Histamine intolerance (HIT).

CORN / MAIZE

Corn/Maize allergy or intolerance can be difficult to manage due to the high number of food products as well as cosmetics, which contain various forms of corn. Hence, it is important for people with corn allergies to avoid all these. It is an allergy that often goes unrecognized. Cornstarch powder is frequently used in latex gloves (added to help slip the glove on). Allergen: Corn protein - Zein, highly allergic.

Possible reactions/Symptoms: inflammation and swelling of joints as well as chronic and acute sinus problems are most common symptoms. Anaphylaxis, Asthma attacks and/or shortness-of-breath, Breathing and/or swallowing difficulties, Drop in blood pressure, Intestinal issues, such as stomach discomfort/cramps/pain, diarrhoea, nausea and/or vomiting, Migraine headaches, Rashes and/or hives, Tongue, face and/or throat swelling and/or tingling. Depression, Disturbed sleep, Eczema, Fatigue, Brain Fog *Fuzzy thinking*, Joint pains, swollen ankles, Hyperactivity (especially in children), Moodiness, Inability to concentrate, Lethargy, Mood swings and/or behavioural changes (especially in children), Increase in OCD symptoms (ticks, nail biting, etc), Night sweats, Recurring ear infections, Respiratory conditions, Sinus conditions, runny or stuffy nose, Urinary tract infections (UTI).

Found in: obvious corn products, polenta, corn starch, corn syrup citric acid, modified food starch, vinegar, and vanilla, dextrin, fructose, sorbitol dextrose, caramel, baking powder etc. Corn is found everywhere Many other food products like the dairy products, baked foods, meat products, creams, salad dressings, chips, soft drinks, chips, sauces, candies and various others etc. contain corn.

WHEAT (also Bulgur, CousCous)

Wheat allergy refers specifically to adverse reactions to one or more protein fractions of wheat, including albumin, globulin, gliadin and glutenin (gluten).

Possible reactions/Symptoms: Skin problems (eczema, urticaria/hives, angioedema /swelling due to allergy), the gastrointestinal tract (abdominal cramps, bloatedness, constipation, wind, nausea and vomiting, oral allergy syndrome) and the respiratory tract (asthma or allergic rhinitis). Wheat is also known to be implicated in emotional disturbances such as lethargy or depression.

Found in: Wheat is often found in many processed foods, obvious baked goods such as bread and cakes, but also in less obvious foods such as icecream or baked beans. **Alternatives:** Wheat free products - such as Rye-Ryvita, Corn- cornflake/crackers/pasta, Oats, Rice – crackers/noodles, millet, Quinoa...

Flour mite

Flour mites are often present in food products (wheat, dry industrial foods such as meat, cheese, dry fruits and cereals), in which they often proliferate when exposed to the correct conditions (excessive heat and humidity). Cases of **severe allergic reactions from baked food** made with **mite infested wheat flour** have been recorded since 1993. In 2009 the World Allergy Organisation recognised this phenomenon as 'Pancake Syndrome', or **oral mite anaphylaxis (OMA)**. Oral mite anaphylaxis is a syndrome characterized by severe allergic manifestations occurring in atopic patients shortly after the intake of foods made with mite-contaminated wheat flour. Although more frequently observed

in tropical/subtropical environments, it is more often triggered by pancakes and for that reason it has been designated "**pancake syndrome**". Because the allergens are thermo-resistant - cooked foods are able to induce the symptoms. People at risk are those who have an established allergy to dust mites and manifested in diseases such as; rhinitis, asthma, atopic dermatitis, conjunctivitis, or any combination of these diseases. Anaphylaxis can also occur during physical exercise and therefore has been named dust mite ingestion-associated exercise induced anaphylaxis. **Symptoms** include breathlessness, vomiting, wheezing, coughing, itching, skin rash, angioedema, anaphylaxis etc. Symptoms typically appear within the first 10 to 45 minutes after ingestion.

GLUTEN

There are hundreds of different kinds of gluten proteins found in grains, especially in **wheat**. Gluten is the 'sticky' substance, favoured for baking and bread making. We usually eat large quantities of gluten containing foods, which is a very hard-to-digest protein that requires a specifically strong acid for the stomach to process it. Without optimal digestive 'fire', gluten will not be broken down in the stomach. If gluten passes through the stomach undigested, it will - if eaten in excess - cause irritation to the intestinal villi, and encourages the growth of unfriendly bacteria, which are responsible for producing toxic substances and gas. Gluten can damage the intestine and makes it leaky. Researchers now believe that a leaky gut is one of the major predisposing factors for conditions like obesity, diabetes and autoimmune disease. Gluten sensitivity is a very real condition. Most doctors are as in the dark about gluten as the average person because the focus in medical school is nutrition deprived.

Current laboratory testing for gluten intolerance only tests for the two components of gluten implicated in celiac disease (alpha-gliadin and transglutaminase). But wheat contains several other components (*including lectins like wheat germ agglutinin (WGA), other gliadin proteins like beta-gliadin, gamma-gliadin and omega-gliadin, another protein called glutenin, an opioid peptide called gluteomorphin, and a compound called deamidated gliadin*). Everyone with celiac disease is gluten sensitive, but not everyone with gluten sensitivity will develop celiac disease. There are over 200 medical conditions that gluten can either cause, contribute to, or make worse. It can take 3 years to fully recover from gluten induced disease. Vitamin C can help heal inflammatory damage caused by gluten. Children with learning disorders often respond well to a gluten free diet. Sometimes gluten gets blamed for health problems caused by other proteins found in grain, or that are caused by exposure to pesticides. Processed food can be cross contaminated with gluten up to 41% of the time. As many as 92% of the people following a gluten free diet continue to have health problems because of cross contamination, processed food, and consumption of corn, rice, sorghum and other grains. **Please be aware** that a positive rating of Gluten in this test is not indicative of Coeliac Disease. **Celiac disease is not a food allergy or intolerance, it is an autoimmune disease** (thus may gluten not show in your test report. However if you suffer from Celiac disease it is crucial to avoid gluten). Celiac disease is a well defined, serious illness where the body's immune system attacks itself when gluten is eaten.

Possible reactions: wind, bloating, indigestion, IBS, constipation, chronic diarrhoea, nausea, vomiting, mouth ulcers, depression, chronic fatigue, coeliac, crohn's, diverticulitis, weight loss, anaemia, iron deficiency, joint pain, Fibromyalgia, osteoporosis, sinusitis, glue ear, mood swings, behavioural problems especially in children. **Gluten can cause universal inflammation:** Gluten can cause the immune system to literally attack the muscle and joints leading to chronic pain and inflammation. Gluten can cause autoimmune disease, leaky gut, IBS, joint pain, vitamin B12 deficiency, unexplained iron deficiency anemia, dizziness, loss of balance (Ataxia) seizures, thyroid disease, 6 types of skin disease, nerve pain and neuropathy, autoimmune arthritis, asthma symptoms liver damage, gallbladder malfunction Gluten is a migraine headache trigger. Excessive gluten consumption can cause both excessive weight gain or loss. **Joint pain** (often misdiagnosed as rheumatoid arthritis), is a very common symptom of gluten intolerance.

Found in: Wheat, barley, rye, graham flour and to a lesser degree in oats. **Casein, a protein in dairy, can mimic gluten.** Gluten in cosmetics and skin products can cause health problems. Beer is traditionally made from malted barley or malted wheat. Since both of these ingredients contain gluten, people with gluten intolerance will likely experience an adverse reaction after drinking beer. However, some types of beer contain more gluten than others.

Alternatives: Gluten-free bread, Gluten free - flour mix. Though there is no such thing as a gluten free oat. **Common foods that cross-react with gluten:** Amaranth, Buckwheat, Chocolate, Coffee, Corn, Dairy - Milk and Cheese (Alpha-Casein, Beta-Casein, Casomorphin, Butyrophilin, Whey Protein), Egg, Hemp, Millet, Oats, Potato, Rice, Sesame, Sorghum, Soy, Tapioca, Yeast. If you are gluten-intolerant and you are still having health issues even after removing gluten from your diet, try eliminating the above foods for at least two months and see if your symptoms improve. Make sure you heal your gut as well. Then, after two months you may reintroduce the above foods one at a time to determine which ones you are cross-reacting to, if any at all.

An overlap exists between a gluten-free diet and a low-FODMAP diet: the gluten-containing grains wheat, rye and barley also happen to be high-FODMAP foods. (It is the type of carbohydrates in these foods, however, not the gluten protein, which makes them high FODMAP.) So, when these foods are eliminated on a gluten-free diet, this source of FODMAPs is also reduced. Some individuals who believe they have gluten sensitivity and experience an improvement in IBS-like symptoms when on a gluten-free diet may be benefitting from reduced consumption of FODMAPs rather than from elimination of gluten. It has been concluded in some research that gluten may not be a trigger of IBS or other Gastro Intestinal(GI) symptoms in some individuals once FODMAPs have been reduced.

YEAST & MOULDS (Y&F Bakers yeast, Brewers yeast, Myco-toxin, Afla-toxin, Penicillin, Mould and Mould Spores)

All Yeasts belong to the family of fungi, as are moulds. Yeast - ingested or inhaled - can cause severe, toxic reactions within the body. They have been linked to many ailments and are known to worsen existing conditions. Reactions to yeast can also mimic similar symptoms in people who are affected by fungal overgrowth (Candida) - where symptoms can be similar to those of allergies or intolerances to yeast. Moulds typically reproduce through their spores that are released into the air; thriving in damp, moist, or wet surroundings. Numerous mould types produce myco-toxins (nuts - aflatoxin).

Possible reaction: respiratory and ear problems, skin complaints, itchy skin to rashes and hives/Urticaria, eczema, psoriasis, muscle and joint pain, arthritis, muscle cramps, bladder infections/Cystitis. Mood swings, anxiety, irritability, hyperactivity, depression, headaches, difficulty concentrating, dizziness, fatigue, lethargy and chronic fatigue (ME), "feeling bad all over". Digestive tract / IBS problems, abdominal pain, bloating, excess wind, diarrhoea, constipation, weight gain (unexpected /difficulty losing weight), cravings for sugar or alcoholic beverages.

Possible Link: Histamine intolerance (HIT)

Found in: Foods - mushrooms, nuts, and various foods processed using yeast (fermented or malted) like beer, wine, cheese, quorn, soya sauce, stock cubes & bullion, vinegar etc. Mould - on foods (e.g. bread, fruits) or in fridges. Mould spores - in the air, in damp houses and outdoors. Some vitamins & minerals are made available through the use of yeast cultures- especially the B-vitamins, iron and selenium. (These supplements are available yeast free). **Alternatives:** Soda bread, scones, Ryvita, rice cakes & corn cracker, pancakes.

Mycotoxins: are produced by moulds and can make a person very ill, and potentially even cause death. The worst mycotoxin is Aflatoxin, found in some foods especially nuts, produced by at least three strains of *Aspergillus*. **Aflatoxin (Nuts)** is a potent carcinogen. Mould exposure appears to be cumulative, especially the damage caused by some mould mycotoxins, which means it takes lower and lower levels of exposure to become highly affected by the mould.

MOULDS typically reproduce through their spores that are released into the air; thriving in damp, moist, or wet surroundings. Numerous mould types produce myco-toxins (nuts - see aflatoxin). The **Moulds Mix** contains: *Alternaria tenuis*, *Botrytis cinerea*, *Cladosporium* sp., *Curvularia* sp., *Fusarium* sp., *Helminthosporium* hal. / *Aspergillus* sp., *Mucor mucedo*, *Penicillium* sp., *Rhizopus nigricans*, *Pullularia pullulans*, *Serpula lacrymans*.

ALCOHOL (Beer, Wine)

Pure alcohol also known as ethyl alcohol or ethanol is found in: aftershave, perfumes, nail polish. Antibacterial, in mouthwashes and cosmetics. Medicinal, as sedative, blood vessel dilator and as a topical antiseptic. Solvent in sweets, beverages, ice creams etc.

Allergy-like symptoms after ingesting alcohol are frequently reported. Reactions to a certain type of wine for example, can be very specific, but sometimes all types of alcohol cause problems. True allergy to alcohol, involving the allergy-producing IgE antibody, is extremely rare. It is much more common that adverse reactions to alcohol are caused by an intolerance to alcohol, or to the food on which the drink is based (e.g. grapes for wine, grains for beer, whisky etc.), or other substance found in the drink - which produce symptoms similar to an allergic reaction. Alcohol intolerance can cause immediate, unpleasant reactions after alcohol consumption.

Alcohol intolerances may arise when the body is lacking an enzyme that is needed to properly digest and eliminate a food or substance (or in this case, the alcohol itself). Alcohol also increases the permeability of the gut, which allows more food molecules into the body. This may explain the reactions of mildly food sensitive individuals who may not react to the food alone but only when it is combined with alcohol. Alcohol intolerance is caused by a genetic condition in which the body is unable to break down alcohol.

Red wine seems to cause the most problems, followed by whisky, then beer and then other wines. Most frequently, the likely cause of a reaction is not the alcohol itself but the chemicals - congeners - which give the drink its body, aroma and flavour.

Possible reactions/Symptoms: flushing, irritant reactions, toxic reactions and psychological effects, vomiting, shortness of breath, or swelling of the lips, mouth, or throat. The ethanol in your favourite drink may cause blood vessels to expand, which makes absorption of irritating agents a lot more likely.

Wine contains proteins from grapes, bacteria, and yeast, as well as sulphites and other organic compounds. Any one of those may cause an allergic-like reaction, and may also be found in your favourite beer. A specific type of protein allergen called "LTP" is found in the skins of grapes, which makes red wine more likely than other types of alcoholic beverages to cause a reaction. Meanwhile, white wine is fermented without the grape skins. **Histamine:** This is present in many alcoholic drinks, particularly red wines and can cause headache, flushing, nasal symptoms, gut symptoms or asthma. Some people are particularly intolerant of histamine because of a deficiency in the breakdown and elimination of histamine from the body.

Yeasts: Yeasts are a possible cause of a true allergic reaction to alcoholic drinks. However studies show that there are only low levels of yeast allergens present in alcoholic drinks. **Sulphites/Sulphur Dioxide:** Sulphur dioxide is particularly common in beers and wines as sodium metabisulphite. Around 1 in 10 asthmatics are sensitive to sulphites and may have a wheezy reaction to alcoholic drinks. Rashes and anaphylactic reactions are rare. **Additives:** Additives e.g. Tartrazine, sodium benzoate - can trigger urticaria and asthma. Wine can also contain tannins or egg albumin. Some beverages have added enzymes like papain. **Plant-Derived Allergens:** The fruit (grapes, apples, juniper berries, coconuts, and oranges), flavours (hops) or grain (malt) from which the drink is made can also be the cause of a true allergic reaction, although fruit and other plant-derived allergens are mostly destroyed by processing. One unusual potential source of trouble is fungal spores (mould) from the corks of wine bottles.

It is important to remember that alcohol can increase the likelihood of severe allergic reactions (anaphylaxis) to other foods. Alcohol can exacerbate underlying conditions such as asthma, urticaria and rhinitis. Allergic people may get wheezy, headaches and skin flushes.

If all alcoholic drinks affect you, it is probably an exaggerated response to the alcohol itself or an exacerbating effect on an underlying condition. In rare instances, reactions to alcohol can be a sign of a serious underlying health problem that requires diagnosis and treatment.

Possible Link: Histamine intolerance (HIT) - especially Beer, (including some non-alcoholic beers and home-made root beer) Cider, Wine, red Wine (especially Chianti), Port, Sherry, Vermouth, Whisky and distilled spirits.

BLACK PEPPER

Most individuals with a black pepper allergy react to it when it is in the form of cracked pepper corns and powdered pepper — the black pepper you find in tabletop pepper shakers. Important to note is that if you are allergic to black pepper, then you will more than likely be allergic to white and green pepper corns in the same forms, as they come from the same fruit (seed pod) in different stages of growth and processing. It can be difficult to avoid pepper, as it is found in many prepared foods. Cross-reactivity has been reported between green and black pepper and other foods and pollens involved in cross-reactivity in the "Mugwort-Celery-Spice-syndrome". Many people allergic to black pepper and paprika also showed reaction to mugwort pollen. **Symptoms of a black pepper allergy:** Hives, mild to severe skin rash, Itchy or watery eyes, Tingling or itching in your mouth, Swelling of face, tongue, or lips, herpes-style blisters, mouth ulcers, uncontrollable coughing or wheezing, itching and sneezing, Lightheadedness or dizziness, Vomiting, Diarrhoea, Abdominal cramps, Anaphylactic shock.

FRUIT / CITRUS FRUIT

The fruits that mostly cause fruit allergies are Strawberries, Apricots, Kiwis, Cherries, Bananas, Water melons, Papayas, Peaches, Pineapples, Plums, musk melon and Citrus fruits commonly cause allergic reactions: Oranges, Mandarins, Clementine's, Satsuma's, lemons, lime, Grapefruit, Tangerine. The most common of the citrus fruits to cause allergic reactions is the orange. **Strawberries** are the most allergenic berries, they belong to the Rosaceae (Rose) Family, as do black raspberry, blackberry, boysenberry, dewberry, loganberry, red raspberry.

Possible reactions/Symptoms: Oral Allergy Syndrome. This usually includes allergic reactions in mouth and throat, causing swelling, tingling and itching of mouth, lips, tongue and throat. Further symptoms include: nausea, vomiting, abdominal pain, diarrhoea, respiratory problems, wheezing & asthma, itching, rashes, hives (urticaria) cramps and in severe cases anaphylaxis shock.

Possible Link: Fructose intolerance or mal-absorption. Histamine intolerance (HIT): Citrus fruit, Strawberries, Raspberries, Avocado, Banana, Pineapple, Papayas.

Apple allergy is a common form of oral allergy syndrome (OAS). If you experience tingling, itching or swelling of the lips, tongue and throat after eating raw apples (and you have pollen allergies) you may have OAS. The proteins found in raw apples are similar to those found in

birch pollen and Mugwort pollen (a type of weed). Between 50 and 80 percent of people with birch pollen allergies react to raw apples. The proteins in apples break down when cooked, so you may be able to tolerate applesauce or baked apples but not raw apples.

Fruits that are riper or over-ripe tend to have higher **tyramine** content: avocados (especially overripe), bananas, canned figs (overripe), red plums, raisins may provoke a serious reaction. But a piece of fruit that is fresh and firm may be well tolerated.

Associated with **Birch pollen**: Apple, cherry, pear, peach, plum, and kiwifruit. **Japanese Cedar**: Melon, apple, peach and kiwifruit.

Melon, watermelon, apple allergies are associated with **Mugwort**. Melon, watermelon, orange, cherry allergies are associated with **Grass pollen**. Melon, banana, allergies are associated with **Ragweed**. Banana, avocado, kiwi and papaya allergies may be cross-reactive **Latex**.

FRUCTOSE - FODMAPs (Fructose malabsorption)

What are FODMAPs and how do they affect or cause a sensitive bowel and IBS?

Also known as fructose malabsorption, FODMAP intolerance is a digestive disorder in which absorption of fructose and other poorly absorbed sugars is impaired; and malabsorption is found in up to 30% of the population of Western countries. (Not to be confused with hereditary fructose intolerance, a potentially fatal condition in which the liver enzymes that break down fructose are deficient.) FODMAPS stands for **F**ermentable-**O**ligosaccharides-**D**isaccharides-**M**onosaccharides-**A**nd-**P**olyols; a collection of short chain carbohydrates and sugar alcohols found in foods naturally or as food additives. After digestion of a meal, these poorly absorbed simple and complex sugars pass through the stomach and small intestine unchanged and are either fermented by colonic bacteria releasing gas or are expelled together with fluid (diarrhoea). FODMAPs can be difficult to digest for people with functional gut disorders, and cause serious and painful symptoms in those with IBS and Crohn's disease. Fructose, lactose and polyols tend to retain water in the bowel and may result in loose motions. FODMAPs accumulate in the body until they are released through going to the toilet; once expelled there is nothing left to disturb the intestines - so you feel great - for a while. An overlap exists between a low-FODMAP diet and a gluten-free diet: the gluten-containing grains wheat, rye and barley also happen to be high-FODMAP foods (carbohydrates - not the gluten protein).

Symptoms include: Bloating, diarrhoea and/or constipation, distension, excessive wind (flatus), Stomach pain (as a result of muscle spasms, with intensity varying from mild and chronic to acute but erratic). Nausea and vomiting (if great quantities are consumed).

Aching eyes, fuzzy head, poor concentration, fatigue. Psychological symptoms: depression and anxiety.

Foods containing FODMAPs: **Vegetables:** artichokes, asparagus, onions and garlic, leeks, pulses, brassicas (cabbages, cauliflower, broccoli, sprouts), Beetroot, Coconut products. **Grains:** wheat, rye and barley. **Fruits:** Stone fruits such as plums, prunes, peaches, nectarines, apricots. Apples and pears and some berries. Guava, honeydew melon, watermelon, mango, papaya. Dried fruits, Fruit juice concentrate. **Milk** and dairy products containing lactose. **Some sweets:** Sorbitol in chewing gum and sugar free mints, Xylitol, mannitol. Agave nectar, high fructose corn syrup (many drinks, ready meals, etc.). Healthy food seems to aggravate the problem.

A diet low in FODMAPs (Low FODMAP Diet) is scientifically proven, and is now used internationally, as the most effective dietary therapy for Irritable Bowel Syndrome (IBS) and symptoms of an irritable bowel, and has been found to reduce symptoms of fatigue, lethargy and poor concentration. (Sources: IBS Network www.theibsnetwork.org, www.fodmapfriendly.com)

NB: Foods containing fructose or FODMAPs may not show in your tests results, because they occur naturally in a variety of foods.

This is because sensitivity reactions are not due to the specific foods, but are due to the FODMAPs they contain.

While most people with IBS are FODMAP intolerant, consuming FODMAPs does not actually cause IBS; it simply exacerbates symptoms.

CELERY, CELERIAC (*Apiaceae* family, *Apium graveolens*)

Allergy to celery (including tuber celeriac) belongs to the most frequent pollen-related food allergies in some European countries. Allergy to celery is associated with allergy to birch pollen and also allergy to mugwort pollen, also called birch-mugwort-celery-syndrome. Raw celery, cooked celery and celery spice have all caused reactions although some individuals may not react to cooked celery. Processed or heated celery roots, as dried powder is used as a cheap spicing ingredient in many processed foods such as spice mixtures, soups, broths and salad dressings. Highly associated to celery allergy are carrot and spices. Celery allergic patients may develop a spice allergy, in particular to members of the *Apiaceae* family such as parsley, coriander, cumin, aniseed, but also to bell pepper and pepper.

Symptoms: The most common symptom is oral allergy syndrome (OAS) as for several other pollen related food allergies. Local reactions- e.g. itchy mouth. Systemic reactions affecting the skin, the nose and lungs and the stomach. Severe life threatening reactions (anaphylaxis).

CUCUMBER

Raw Cucumber most commonly causes a condition known as oral allergy syndrome OAS. Many cosmetic products contain Cucumber as an ingredient. Cucumber is related to ragweed as well as latex allergy, and those with an allergy to ragweed or Latex bear a higher risk of having a reaction to cucumbers. Many people with adverse reactions to cucumbers may also react to foods such as melons or bananas.

Possible Symptoms: can range from mildly inconvenient to potentially life threatening. Most have mild local symptoms, such as redness around the mouth, red rash around or in mouth, or itchy, watery eyes, runny nose, and sneezing. Skin reactions, a rash all over the body, hives, eczema-type appearance. Sometimes, gastrointestinal symptoms, such as nausea or stomach pain. Severe Symptoms: extreme nausea or stomach pain, facial and throat swelling, breathing difficulties or even impossible, Anaphylaxis. **Cross reaction:** Ragweed and Latex.

Adverse reactions to banana, all melons and zucchini.

However, reaction to one or more foods in any given category does not necessarily mean a person is **allergic** to all foods in that group.

NIGHTSHADE

Possible Link: Histamine intolerance (HIT), Salicylate intolerance.

The **Solanaceae**, or **nightshades**, include Aubergine/eggplant, Tomato, Potato, Bell Pepper, Chili Pepper, Goji Berry (wolfberry/Lycium barbarum), (*Solanum nigrum*). Tobacco and ornamental plants such as Petunia, Browallia, and Lycianthes, and of course the deadly nightshade Atropa Belladonna (also used as homeopathic remedy).

Nightshades naturally produce substances as a defence mechanism against insects, disease, and predators. They contain potent alkaloids, and some are highly toxic, even though many cultures eat nightshades, in some cases as staple foods. Certain plants are universally known for their medicinal uses, their psychotropic effects, or for being poisonous. **Alkaloids:** are naturally occurring substances, nitrogen-based (nitrogenous organic substances) can be both desirable, or toxic to humans, and have an intense physiological action on animals even at low doses. Plants containing alkaloids have been used for centuries as poisons. **Solanine:** A toxic glycoalkaloid found in leaves, fruit, and tubers of various Solanaceae such as the potato and tomato. **Solanaceae** found in plants contain varying amounts of alkaloids, some of which are toxic such as **nicotine** and **caffeine**, and some are not such as **flavonoids**. **Capsaicin:** is structurally different from nicotine and the tropanes. It is found in species of the genus Capsicum, which includes chillies and habaneros (also used to make pepper spray). The compound is not

noticeably toxic to humans. However, it can cause a burning sensation little different from a burn caused by fire. Nightshades also contain **lectins**, which are hard on digestion and can lead to health complications, including food allergies. "The lectins in **nightshades** are not digested by the body and are said to be gut irritants in **sensitive** individuals, also setting off the same leaky gut response as alkaloids. Leaky gut, or gaps in the lining of the gut increasing permeability and over time leading to food allergies and autoimmune diseases,"

Symptoms: Substance intoxication or poisoning is primarily displayed by gastrointestinal and neurological disorders; including nausea, diarrhoea, vomiting, gas, bloating, stomach cramps, burning of the throat, cardiac dysrhythmia, neurological disorders, headache and dizziness, painful joints, headaches and depression. Can either cause or exacerbate arthritic condition. In more severe cases, hallucinations, loss of sensation, paralysis, fever, jaundice, dilated pupils, hypothermia and death have been reported. Symptoms usually occur 8 to 12 hours after ingestion, but may occur as rapidly as 30 minutes after eating high-solanine foods. The lowest dose to cause symptoms of nausea is about 25 mg solanine for adults. **Tropanes:** Atropa (the belladonna genus). **Nicotine:** is a pyrrolidine alkaloid produced in large quantities in the tobacco plant (*Nicotiana tabacum*), but is also found in lower concentrations in potato, tomato, and pepper. Nicotine has been used for many years as an insecticide. Its function in a plant is to act as a defence against herbivores, as it is an excellent neurotoxin.

Nicotine has a synergistic action with solanine as it stimulates the production of acetylcholine (whereas solanine inhibits it). This means that **some people may be specifically allergic to tomatoes, but fine with other nightshades.**

The chemical and energetic qualities of potatoes and tomatoes produce extreme, expansive effects and can weaken the bones, joints, teeth, gums, and all body organs. In a study published in the Journal of the International Academy of Preventive Medicine, 5000 arthritis sufferers eliminated Nightshades. Seventy percent of participants reported relief from aches, pains, and disfigurement.

Some people cannot tolerate nightshades in their diets. Choosing to avoid them can help alleviate a variety of problems (including mental, emotional and physical). Especially people with arthritis, eczema, psoriasis, cystitis, lupus, gastro esophageal reflux disease.

Sweet potatoes do not belong to the nightshade family. They belong to the family of Convolvulaceae - only distantly related to the potato.

TOMATO

Most people actually have an intolerance to tomatoes rather than a tomato allergy. Many people who have a known tomato allergy or intolerance can actually tolerate well cocked tomatoes with little or no reaction. Other people can consume low acid tomatoes. Tomatoes are considered as part of the nightshade allergy family and also contain a high degree of a natural chemical known as salicylate which is related to aspirin and is a derivative of salicylic acid. Some people can not tolerate any amount of salicylate in their diet. Another link is Histamine, present in high levels, which can trigger symptoms that mimic allergy (especially tinned tomato, tomato puree and ketchup).

Possible reactions/Symptoms: gastro-intestinal problems, acid reflux, heartburn and indigestion, abdominal pain, cramps or vomiting, diarrhoea, headaches, burning sensation or tightness of the skin, swelling, rosacea, urticaria (hives), tingling lips, rashes, dermatitis, perioral dermatitis, oral allergy syndrome, rhinitis or asthmalike symptoms, tightening of the chest, difficulty breathing, dizziness, painful joints, headaches and depression and other symptoms. Can either cause or exacerbate arthritic condition. pollen may trigger rhinitis and/or conjunctivitis. Severe reactions to tomato can cause anaphylactic shock and death.

Possible Link: Histamine intolerance (HIT), Salicylate intolerance.

LEGUMES

Peas and beans are not listed as one of the top eight food allergens, and the incidence of an allergy to them is small. Peas and beans are part of the legume family, along with peanuts. About 10 percent of children who are allergic to peanuts are also allergic to one or more additional legumes, including peas and beans.

Possible reaction: itching or tingling sensation in your mouth, hives or rash, swelling, wheezing, stomach pain, cramps, diarrhoea, vomiting and dizziness, anaphylaxis risk. You may experience just a few of these symptoms or all of them.

SOYA (bean, products & milk) Soy bean is a legume, which means it is a pod, or seed used to make food. Soy (soya/soy bean/glycine max) is one of the most allergenic foods there are. Soy is found in many food products and other commercial produced products such as inks, soaps, and cosmetics. There are several controversies concerning soy and its safety. Asian cultures only consume Fermented Soy foods. Soy has very high amounts of phytic acid - an anti-nutrient that prevents absorption of minerals. Trypsin inhibitors in soy interfere with protein digestion. During soy food processing, free glutamic acid /MSG is formed and additional amounts are added to many soy foods.... etc.

Possible reaction/symptoms: Acne, asthma, swelling above or below the surface of the skin, nasal congestion (sneezing, itching), eczema, coughing, wheezing, cankers, diffuse small bowel disease/inflamed bowels (diarrhoea, rectal bleeding, loss of body fluids and nutrients), fatigue, loss of appetite/weight loss, conjunctivitis, breathing discomfort/significant breathlessness, fever, hypotension (low blood pressure), reflux, hay fever, hives, vomiting, anaphylaxis.

Found in: ingredients and foods contain soy: Hydrolyzed vegetable protein (HVPa protein obtained from any vegetable, including soy beans). HVP can be used in liquids to enhance food flavouring. By liquids, we mean: soups, broths, sauces, and gravies, Spice blends, Canned/frozen vegetables, Meats, Poultry, Lecithin (it's extracted from soybean oil and is used in foods that are high in fats and oils), Chocolates, Infant formulas, Miso, Salad dressings, Marinades, Pates, Mono-diglyceride, another soy derivative, is used for emulsion in many foods, Monosodium glutamate (MSG), Natto, which can be made from cooked whole soy beans, Natural flavours', listed on ingredient labels may be a soy derivative, and obviously **any ingredient with "soy" in its name. Edamame beans** - are also Soya beans - in fact green soybeans that can be eaten fresh/raw, and need to be avoided also if you have a sensitivity/allergy. The soy pods are picked before they fully ripen, typically 35 to 40 days after the crop first flowers. Soybeans harvested at this stage are sweeter because they contain more sucrose than soybeans picked later in the growing season. Other factors contributing to edamame's flavor include free amino acids such as glutamic acid, aspartic acid, and alanine. Often these unbound amino acids decrease as the pods fully expand and ripen.

NUTS & SEEDS (Aflatoxin)

Nut allergy and anaphylaxis are becoming more and more frequent, with varying symptoms and degrees of allergic reactions.

Possible reactions/Symptoms: itchy rash, urticaria, tingling on the lips, tongue or roof of your mouth, stomach pain, diarrhoea or sickness, facial swelling, difficulty breathing, weakness, and serious reaction such as collapse or anaphylaxis.

Almonds are used as drink flavouring, and in all kinds of goodies, such as ice cream, sweets, gelatines', puddings and CHEWING GUM! Almond oil is also used in cosmetics. **Brazil nuts** are seeds, high in protein, which may be the reason for their allergenicity. **Cashew nuts** are from the same family as poison ivy, poison oak, poison sumac, and lacquer sumac. Patients who are hypersensitive to cashew and pistachio nuts will likely react to Brazil nuts as well. **Coconut** oil is in many things, such as margarine, soap and detergents, and cereals. **Hazelnut**, filbert is

extremely versatile. It is a common "hidden ingredient" in otherwise innocent foods e.g. Nougat. **Pecans** (over 100 varieties) are powerful allergens and anaphylaxis has been reported following consumption of pecans. **Pine nuts** (pignoles, pignola, pinon nut) are included in chocolates, pastries, salads, and ethnic dishes. **Pistachio nuts** are seeds from a fruit & belong to the same family as mango and cashew. They are used to give colour and taste to ice cream and other bakery products. **Sesame seeds** are rich in oil, and are found in soaps and margarines. Severe anaphylaxis has been reported in patients who ingested sesame seeds.

PEANUT (belongs to the legume family) Many people are allergic to peanuts - they can be downright deadly. Non-organic peanuts are high in pesticides and contaminated with a potent carcinogenic mould/fungus called aflatoxin. They are also one of the most pesticide-contaminated crops. In England, an estimated 4,000 people are newly diagnosed with peanut allergy per year (11 per day); The most severe allergies in general can result in anaphylaxis, an emergency situation requiring immediate attention and treatment with epinephrine. The symptoms and degree of allergic reaction vary greatly. Most people develop symptoms immediately after coming into contact with nuts. Some people are so sensitive that they can have a reaction after touching another person who has eaten nuts.

Possible reaction/symptoms: asthma, itchy rash, urticaria (hives), tingling on the lips, tongue or roof of your mouth, angioedema (swelling of the lips, face, throat and skin), acute abdominal pain, diarrhoea, sickness or vomiting, exacerbation of atopic eczema, serious reaction (anaphylaxis / anaphylactic shock,) which may include facial swelling, difficulty breathing, weakness, and/or collapse.

AFLATOXIN - fungal pathogens - are mycotoxins found mainly in nuts, especially peanuts and other ground nuts some spices and a few other foods or spices. Aflatoxins are produced by certain molds (*Aspergillus flavus* and *Aspergillus parasiticus*) which grow in soil, decaying vegetation, hay, and grains. Aflatoxin is a poisonous carcinogenic toxin that has been linked to liver cancer and many other health problems. People who have been exposed to toxic levels of mould can have severe reactions to the mycotoxins found in nuts due to becoming sensitized to the moulds. Levels in ground nuts (peanuts) have been found to be significantly higher than those found in other nuts, and hard nuts like almonds are more resistant to mould. Because Aflatoxin contaminate and afflict nuts and foods in varying amounts, the specific foods may not show in your tests results. This is because sensitivity reactions are not due to the specific foods. For this reason are aflatoxin tested separately.

FOOD ADDITIVES (E Numbers)

Humans have been adding 'things' to their food for a number of reasons including preservation, binding and flavour enhancement, using artificial and natural chemicals. Today an ever increasing amount of food additives are used in packaged, processed and Take-away Foods, to modify visual appearance, taste, texture or the storage life of food. Although there are side effects to many of the additives they are still allowed to be used and its a matter of "Consumer, beware!". Only when increased and alarming adverse effects of certain additives have been found, have they been banned by different countries (taken responsibility!).

A great concern with food additives is that the majority of the population are unaware exactly what those numbers on the sides of packages mean, what it is they are consuming and their possible side effects. Many are also unaware that they may be unconsciously poisoning themselves and their children through their food choices. There is now enough evidence to show the adverse effects many additives have on people, including allergies. As well as the effect that some food additives have on health, behaviour and concentration in children.

There are over 3000 ingredients used to make foods, and the list of Food Additives - identified by E-Numbers - is enormous!

We like to encourage everybody to read the label of any processed food that may cause 'reaction/s' and research both, the ingredients and additives for possible adverse reactions. Below are the most common reaction causing additives covered in our test, including their uses and potential adverse effects on health.

ASPARTAME (E951)

Aspartame is widely used as sweetener in numerous products, BUT it has never been tested on humans for safety!

"Aspartame, is considered a highly hazardous compound for cells closely connected with the central nervous system (CNS), and the harmful effects of aspartame metabolites affected the neuron cells directly and indirectly." Each of the three ingredients in the synthetic, chemical combination Aspartame – which is comprised of 50 percent phenylalanine, 40 percent aspartic acid, and 10 percent methanol – pose their own dangers. Even just a single use of Aspartame (50 percent phenylalanine) raises the blood phenylalanine levels, which can be concentrated in parts of the brain, causing serotonin levels to decrease, leading to emotional disorders like depression (making it highly dangerous for infants and foetuses). It often takes at least sixty days without any aspartame to see significant improvements in health conditions (often accompanied by weight loss).

Excessive amounts of phenylalanine block the transport of essential amino acids to the brain, which contributes to reduced levels of dopamine and serotonin. While our brains need this amino acid, too much of it has been linked to emotional and behavioural disorders and brain damage. Furthermore, too much aspartic acid (amino acid) present in aspartame, can cause over-stimulation and death of brain cells. It leaks too much calcium into the cells and triggers excessive amounts of free radicals, which may damage and kill neurons. Aspartame contains toxins, extreme central nervous system toxins, also called "excitotoxins" which literally "excite" the neural cells to death. The second most toxic excitotoxin on the market is the all-too-familiar MSG (monosodium glutamate - E621). **Methanol** (10 percent of aspartame's content as wood alcohol) is a known carcinogen that, when heated by the human body, becomes formaldehyde (embalming fluid for corpses). This poison is distributed throughout the body, including the brain, muscle, fat and nervous tissues, and then enters cells and binds to proteins and genetic material (DNA). And last, but definitely not least: Ingestion of methanol causes both retinal damage in the eyes and horrendous birth defects.

Found in: Aspartame is found in thousands of foods, drinks, candy, gum, vitamins, health supplements, over-the-counter medications for adults and children, and yes, even pharmaceuticals. **Sweeteners containing Aspartame:** Canderel, Equal & Nutrasweet (Splenda contains sucralose, Sweetex contains saccharin).

Possible reactions: Aspartame has been found to create chemically-induced depression, anxiety and exacerbating anxiety and panic attacks. Over the years, more than 90 side effects – including vision loss, seizures, brain tumours, and cancer – have been associated with regular consumption of aspartame. Furthermore, it can mimic the symptoms of diseases such as fibromyalgia, multiple sclerosis, lupus, ADD, Emotional disturbances, diabetes, Alzheimer's, chronic fatigue and depression. Aspartame actually causes weight gain! Skin problems such as rashes, urticaria (hives) and swelling of the body; respiratory problems e.g. asthma and breathing difficulties. to name but a few.

Aspartame can break down into formaldehyde which can cause nausea, vomiting, diarrhoea, abdominal pain, inflammation of the stomach, ulceration, ... see paragraph on Formaldehyde. Early warnings from 1971, that excess amounts of aspartic acid caused holes in the brain of mice and posed a serious threat to human health have been ignored, and several toxicologist research findings that aspartame could cause brain tumours and brain cancer have been suppressed (by Monsanto's involvement).

Alternatives: Start cross-checking your food, drinks, sweets, gum and medicine; read the labels on everything you consume; filter synthetics; and end the aspartame nightmare.

Stevia and **Xylitol**, are both naturally-occurring sugars. **Stevia** has virtually no calories and is 250–300 times as sweet as sucrose and can be used for everyday cooking and baking situations. Stevia has a negligible effect on blood glucose, and may even enhance glucose tolerance. Stevia is available in liquid and powdered form and some products may have a slight liquorice-like aftertaste. **Xylitol** looks and tastes like sugar, but has about 40% fewer calories and 75% fewer carbohydrates. Both help regulate blood sugar levels, and are suitable for diabetics, individuals with hypoglycaemia and others on carbohydrate-controlled diets.

SORBITOL (E420)

Sorbitol is a laxative and frequently causes diarrhoea, stomach ache, cramps and bloating.

Sorbitol is a sugar alcohol, commonly used as a sugar substitute - a nutritive sweetener - in sugar-free sweets and chewing gum, diet and diabetic foods like ice creams, colas, cough syrups, amongst other products. Sorbitol is slowly metabolized by the human body. Absorption in the small intestine occurs passively and is much slower than the absorption of other sugars. This allows even small amounts of sorbitol to enter the colon and not be absorbed, reaching the colon for fermentation, especially in individuals with a rapid intestinal transit. Since sorbitol is a laxative, there is excessive water which enters the gastrointestinal tract and causes diarrhoea. A high proportion of healthy individuals develop abdominal bloating, gas, cramps and diarrhoea at doses of 3-5 g and above. **Sorbitol also occurs naturally in many stone fruits and berries, but not everybody reacts to natural occurring sources of Sorbitol.** Some people can develop an intolerance to all forms of Sorbitol. Sorbitol and fructose intolerance often co-exist and mutually aggravate intestinal symptoms. A significant number of people who have symptoms associated with lactose intolerance may have similar symptoms from consuming **fructose, sorbitol** or other sugars that are not easily digested in the small intestine

Possible reactions/Symptoms: Worsening IBS Symptoms, abdominal bloating, pain or cramps, severe stomach cramps, gas (flatulence), loose stools, excessive bowel activity, diarrhoea (resulting in unintentional weight loss), nausea, Vomiting, excessive burping and headache, inflammation, headaches & migraines, mood changes, dehydration, Dry mouth, Fluid and electrolyte losses, constipation, high blood sugar (hyperglycemia), swelling (oedema), weakness, dizziness, acidification of blood due to lactate production.

It is estimated that more than half of adults experience severe side-effects after consuming more than 5 grams of Sorbitol. Up to 70% of all cases of irritable bowel syndrome be associated with Sorbitol intolerance.

Found in: diet products, soft drinks such as diet soda/coke, sweets, gums, medicine,... but also occurs naturally in fruits.

Is also contained in some medicines (e.g. mouth washes, cough syrups and laxatives) and cosmetics to thicken them, and in soaps. One stick of sugar-free chewing gum generally contains 1 – 2 grams of sorbitol. Fruits (fresh and dried) stone fruits: prunes, peaches, Apricots, dates. Other fruits: pears, apples, blueberries, rosehip, grapes and raisins.

Alternatives: Stevia and Xylitol, are both naturally-occurring sugars. **Xylitol**, however is another sugar alcohol, can produce similar intolerance symptoms as sorbitol. It looks and tastes like sugar. **Stevia** can be used for everyday cooking and baking situations. Available in liquid and powdered form and some products may have a slight liquorice-like aftertaste. Both help regulate blood sugar levels, and are suitable for diabetics and others on carbohydrate-controlled diets and individuals with hypoglycaemia.

Possible Link: Sorbitol intolerance, as **Sorbitol also occurs naturally in a variety of foods.** These foods may not show in your tests results, because sensitivity reactions are not due to the specific foods, but are due to the Sorbitol they contain. **Management:** Reduction of the intake of Sorbitol to individually tolerated levels will rapidly lead to symptom relief in most individuals. Sorbitol levels in food varies, and also the tolerated amount from one person to another varies. Some people may have a low level of tolerance and experience symptoms that are dose-related. Reduction or elimination (short term) of the amount eaten will help relieve symptoms in most individuals.

MSG (E 621 - E635) Monosodium glutamate, is a flavour enhancer. It is used by food companies because it stimulates the nerve cells in your mouth, as well as the brain (it is a neurotransmitter - causing nerve cells to fire). It targets the centers of hunger and taste and smell. If it only worked in 2% of the population, there wouldn't be any money in it. It is basically a drug like alcohol or caffeine. However, the sensitivity response of any individual is simply a matter of degree. **There is a 'New' MSG –Ribonucleotides** which cause the so called 'Ribo Rash' Ribonucleotide E635 / Disodium Guanylate E627 / Disodium Inosinate – E631.

Possible reactions/Symptoms: **Cardiac:** Arrhythmia, Atrial fibrillation, Tachycardia, Rapid heartbeat, Palpitations, Slow heartbeat, Angina, Extreme rise or drop in blood pressure. **Circulatory:** Swelling. **Gastrointestinal:** Diarrhoea, Nausea/vomiting, Stomach cramps, Rectal bleeding, Bloating. **Muscular:** Flu-like achiness, Joint pain, Stiffness. **Neurological:** Depression, Mood swings, Rage reactions, Migraine headache, Dizziness, Light-headedness, Loss of balance, Disorientation, Mental confusion, Anxiety, Panic attacks, Hyperactivity.

Behavioural problems: in children, Attention deficit disorders, Lethargy, Sleepiness, Insomnia, Numbness or paralysis, Seizures, Sciatica, Slurred speech, Chills and shakes, Shuddering. **Visual:** Blurred vision, Difficulty focusing, Pressure around eyes, Bags under eyes, Eye damage.

Respiratory - Asthma, Shortness of breath, Chest pain, Tightness in the chest, Runny nose, Sneezing. **Urological / Genital:** Bladder pain (with frequency), Swelling of the prostate, Swelling of the vagina, Vaginal spotting, Frequent urination, Nocturia. **Skin:** Hives (may be both ..internal and external), Rash, Mouth lesions, Temporary tightness or partial paralysis, numbness or tingling of the skin, Flushing, Extreme dryness of the mouth, Face swelling, Tongue swelling". Obesity. **MSG may causes anaphylactic shock** in sensitive people, due the quantity of MSG and the absorption rate into the blood stream. Sometimes there are contributory factors - reaction with other ingested substances or intense exercise.

Found in: Many processed foods. Seasonings: low sodium salt substitutes, natural chicken, beef, pork flavouring, stock, bouillon and broth, malt extract or flavouring, soy sauce. Crisps and other potato snacks. Some Asian takeaway, dressings and many frozen foods. Also occurs naturally in tomatoes, parmesan cheese, walnuts. Ask when eating out!

SULPHITES (E220 - E228 Sulphur dioxide, Sodium sulphite, Sodium bisulphate, potassium bisulphate,...)

Sulphite is a preservative derived from **sulphur** stem from coal tar; all sulphur drugs are toxic and restricted in use. **Found in:** cold drinks such as beer & soft drinks, dried fruit, juices, cordials, wine, vinegar, potato products and fruit juice concentrates, and is sprayed onto fruits and veg to keep them fresh and prevent discoloration or browning. They are used to preserve smoked and cold meats, dried fruit and salads.

Possible reactions/Symptoms: may cause lung irritation, breathing difficulty and trigger asthma. sulphites can cause urticaria when ingested.

Sulphites are found naturally in some foods, which presents an additional challenge to sensitive individuals. Usually also affected by Sulphite Additive E220-E228. **Since Sulphites also occurs naturally in large number of foods - these foods may not show in your tests results.** This is because sensitivity reactions are not due to the specific foods, but are due to the Sulphites they contain. For this reason is Sulphite Sensitivity tested separately (under associated links). **Sulfite** sensitivity is found often in people with asthma who are steroid dependent.

Found in a number of foods such as: Peanuts, eggs, black tea, vinegar and other fermented foods contain natural **sulfites**. So do some otherwise healthy vegetables, including broccoli, cabbage, cauliflower, kale, garlic, **onions**, chives, leeks and asparagus. Grapes, oranges, Maple syrup, pectin, salmon, dried cod, corn starch, lettuce, tomatoes and soy product.

SULPHUR is one of the major elements in the atmosphere. It's all around you, including in the soil your food grows in, making it an integral part of many foods. Your body uses sulfur for various important functions, including building and repairing DNA, as well as protecting your cells against damage. Thus, including enough sulfur-rich foods in your diet is vital for your health. Anecdotally, some people report feeling better when following a low sulfur diet. However, there's currently limited research on sulfur intolerance. Instead, most studies focus on the side effects of **sulfites** — a preservative derived from sulfur that's added to some alcoholic beverages and packaged foods to prevent spoilage and extend shelf life. Around 1% of people appear to have a sulfite sensitivity that causes itching, hives, swelling, nausea, or asthma-like symptoms when exposed to foods rich in sulfites. In extreme cases, exposure may even cause seizures or anaphylactic shock. If you're sensitive to sulfites, make sure to check food labels and avoid ingredients like sodium sulfite, sodium bisulfite, sodium metabisulfite, sulfur dioxide, potassium bisulfite, and potassium metabisulfite.

Foods and beverages rich in sulphur - Sulfur is found in a large variety of foods. The biggest categories include:

- **Meat and poultry:** especially beef, ham, chicken, duck, turkey, and organ meats like heart and liver.
- **Fish and seafood:** most types of fish, as well as shrimp, scallops, mussels, and prawns.
- **Legumes:** especially soybeans, black beans, kidney beans, split peas, and white beans.
- **Nuts and seeds:** especially almonds, Brazil nuts, peanuts, walnuts, and pumpkin and sesame seeds.
- **Eggs and dairy:** whole eggs, cheddar, Parmesan and gorgonzola cheese, and cow's milk.
- **Dried fruit:** especially dried peaches, apricots, sultanas, and figs.
- **Certain vegetables:** particularly asparagus, broccoli, Brussels sprouts, red cabbage, leeks, onion, garlic, radishes, turnip tops, and watercress.
- **Certain grains:** especially pearl barley, oats, wheat, and flour made from these grains.
- **Certain beverages:** particularly beer, cider, wine, coconut milk, and grape and tomato juice.
- **Condiments and spices:** especially horseradish, mustard, marmite, curry powder, and ground ginger.

BENZOATES (E 210-219 Sodium benzoates, methylparaben, Propylparaben, phenylcarboxylic acid, carboxybenzene,...)

Parabens are hormone disruptive (used for their antibacterial and antifungal properties for prevention of food spoilage. **Found in:** added to alcoholic beverages, baked goods, cheeses, gum, condiments, frozen dairy, relishes, soft sweets, cordials and sugar substitutes; used in cosmetics, as an antiseptic in many cough medications and an antifungal in ointments.

Possible reactions/Symptoms: May cause rashes, urticaria, can cause asthma, especially in those dependents on steroid asthma medications, is also reputed to cause neurological disorders and to react with sulphur bisulphite (222), shown to provoke hyperactivity in children; angioedema.

HISTAMINE - Histamine intolerance (HIT)

Because histamine occurs naturally - in a variety of foods - these foods may not show in your tests results. For this reason is Histamine tested separately. This is because sensitivity reactions are not due to the specific foods, but are due to the histamine they contain or trigger — hence Histamine intolerance. It is not a 'food allergy' or 'intolerance', even though the symptoms usually mimic the same reactions as in food allergy. **Histamine is naturally present in many foods** and also a natural substance produced by specialized cells in the body known as mast cells. Many foods that either contain histamine or cause the body to release histamine when ingested and the gut bacteria is producing the excess histamine that is causing the symptoms. These intolerance reactions are different from food allergy in that the immune system is not involved. **In Histamine intolerance, the response is cumulative**, like the 'rain barrel effect'. When the cup is very full (high amounts of histamine in the diet), even a drop of additional water will cause the cup to overflow (symptoms activated). But when the cup is less full, it takes more water (histamine) to cause a response. This also makes histamine intolerance tricky to recognize. **DAO diamine oxidase deficiency.** If this enzyme is lacking or does not work properly histamine levels are likely to rocket sky high and cause us to feel unwell or very ill. Some people may have suffered from this condition - with predominant symptoms of diarrhoea - and likely been misdiagnosed with IBS.

Histamine-Releasing Foods: Foods that don't contain histamine themselves, but can cause your body to release more of it.

| | |
|--|--|
| Alcohol: Beer, Wine | Dairy: Milk & milk products |
| Cocoa: Chocolate | Eggs: especially uncooked Egg White |
| Fruit: Bananas, Citrus fruit, Oranges, Papayas, Pineapple, Strawberries | Fish: Shellfish & Fish |
| Vegetables: Tomatoes, Spinach | Meat: Pork / Chicken |
| | Nuts: some |

Histamine-Rich Foods:

| | |
|-------------------|--|
| Alcohol | especially Beer, (including some non-alcoholic beers and root beer) Cider, Wine, red Wine, Port, Sherry, Vermouth and distilled spirits. |
| Cheeses | Most Cheeses, especially aged mature Cheddar, Roquefort, Stilton, Parmesan, Camembert, Gruyere, Mozzarella. |
| Cocoa | Chocolate (tyramine & phenylethylamine) |
| Dairy | Sour cream, crème fraîche, sour milk, kefir, buttermilk, yogurt —especially if not fresh— |
| Fruits | Avocados, strawberries, papaya, pineapple, dried fruit, Apricots, Dates, Prunes, Figs and Raisins, Citrus fruit / Oranges (octopamine) (you may be able to eat dried fruits - without reaction - if the fruit is thoroughly washed). |
| Fermented | Very High: kimchi, sauerkraut, yogurt or kefir, kombucha, aged cheese, alcohol of any kind, soy products (soy sauce), Soured breads: Rye bread, pumpernickel. All fermented vegetables and Vinegar. |
| Fish | Very High: Most fish and Seafood, including canned fish, Mackerel, Sardines, Anchovies. Smoked fish. |
| Meat | Pork sausage, Beef sausage, hot dogs, salami and ham, especially 'dried' (cured). Smoked meats. |
| Vegetables | Avocados, Aubergine, Mushrooms, Spinach. Tomato (especially tinned tomato, tomato puree and ketchup) |
| Vinegar | and containing foods: salad dressing, ketchup, mayonnaise, relishes, pickles. |
| Yeast | Brewer's yeast, Bakers Yeast : Marmite, Stock cubes, Supplements |

Symptoms: similar to those of an allergy, food poisoning or flu. Too much histamine will cause inflammation, itching and swelling in soft tissues, such as in the lungs, the skin and sinuses. A number of symptoms including insomnia, light headedness, palpitations, low blood pressure/fainting, muscle pain/cramps, joint pain, tinnitus, depression, unexplained bruising and rosacea.

Digestive tract: abdominal pain, stomach cramps and diarrhoea, diarrhoea alternating with normal motions (Irritable Bowel Syndrome IBS), chronic constipation, flatulence and feeling of fullness, stomach ache, nausea, vomiting. **Symptoms affecting head and face:** headaches-similar to migraine, *Flu-like symptoms* - feeling like coming down with flu (for weeks), onset of sneezing and sneezing bouts, watery or itchy eyes, itchy and or runny nose, increased mucus, swollen tissue, especially around the mouth, eyes or throat. Tinnitus, fits of dizziness, Extreme tiredness/ feeling knocked out, oedema (swellings mostly appearing around eyes and lips, sometimes the throat area), flushing of face and/or chest. **Skin:** itchy skin, eczema, rashes, rosacea, urticaria (hives). **Respiratory tract:** Sinuses - become congested, and cause headaches. Lungs: congestion, asthma, wheezing, spasms, coughing, breathing difficulties. Cardiac arrhythmia, such as a fast beating or irregular heart beat, palpitations. **Other symptoms:** Chills and shivers, low blood pressure, circulatory collapse, sudden psychological changes (e.g. aggressiveness, inattentiveness, lack of concentration), sleep disorder, depressions. Implicated in Multiple Sclerosis.

Management: Vitamin C helps to stabilize mast cells so they are less likely to release these substances. The Best Natural Antihistamine is Salt and water. Research has shown that increasing hydration dilutes histamine and its effects, thus, water is the safest antihistamine known to man. A change of diet - avoiding histamine-rich foods - is most beneficial to those affected by HIT. However the avoided foods should be sensitively re-introduction periodically. The amount of histamine rich foods tolerated will vary from person to person. You will need to determine your own trigger foods, and reduce or eliminate them accordingly; in order to reduce symptoms without indefinitely following a strict low histamine diet. Medication like antihistamines may be helpful, as are a few herbs and supplements (see Natural Supplements for Controlling Allergies)

More information: www.histamineintolerance.org.uk . Natural AntiHistamine -The Consequences of Taking Anti-Histamines: www.watercures.org/natural-antihistamine.html. Literature about Histamine Intolerance and diet can be found on www.amazon.co.uk. For help figuring out what to eat, you may want to check out the 'Paleo Recipe Generator' or other resources for low-histamine meal plans like 'The Low Histamine Chef'.

SALICYLATE - ASPIRIN (including: Salicylic acid methyl ester - Methyl salicylate)

Salicylates occur naturally - in a variety of foods - these foods may not show in your tests results. This is because sensitivity reactions are not due to the specific foods, but are due to the Salicylates they contain – also referring to Salicylates intolerance. Salicylate is a natural chemical which occurs in many fruits, vegetables to prevent rotting and protect itself against harmful insects, bacteria and fungi. It is chemically related to aspirin, which is a derivative of salicylic acid. The reaction to a natural salicylate can be as severe as that to a synthetic additive if the person is highly sensitive. **Some people are troubled by only a very few, but some are troubled by all of them.** Some salicylate sensitive adults and children have a low level of tolerance to salicylates and may get symptoms that are dose-related.

Possible reactions/Symptoms: Rashes, hives, chronic urticaria & angioedema. Swelling of hands/feet/face/eyelids/lips/throat. Stomach aches and upsets, diarrhoea, nausea, vomiting, mouth ulcers, raw hot red rash around mouth. Headaches, asthma-like symptoms, such as trouble breathing and wheezing, nasal congestion nasal polyps, sinusitis, persistent cough, Frequent need to urinate/urgency to pass water, bed wetting, hyperactivity, dizziness, memory loss, poor concentration, depression, fatigue. Eye irritation, vision, ringing in the ears. Trigger for eczema, asthma, rhino conjunctivitis.

Found in: Aspirin, Wintergreen, analgesics (painkillers), muscle relaxants, cough mixtures, antacids, cold and flu medication and acne lotions. Fragrances and perfumes, shampoos and conditioners, herbal remedies, cosmetics such as lipsticks, lotions, and skin cleansers, mouthwash and mint-flavoured toothpaste and chewing gum, shaving cream, sunscreens or tanning lotions, muscle pain creams/liniments, Alka Seltzer.

Fruits: Apricots, Blackberry, Blackcurrant, Blueberry, Cherry, Cranberry, Currants, Dates, Grapes, Guava, Oranges, Pineapple, Plum, Prunes, Raisins, Raspberry, Melon, Strawberry, Tangerine, and their Fruit juices. **Vegetables:** Peppers / Capsicum, Chilli Peppers, Mushrooms, Champignon, Chicory, Courgette, Endive, Gherkins, Olives, Radish, Tomato, Tomato based foods: ketchup, paste, puree.

Nuts, sweets, and snacks to avoid: Almonds, mint flavoured sweets, Fruit flavours, ALL jams jellies, marmalade (except pear), Honey and honey flavours, Fish paste / Meat paste, White vinegar, Worcester sauce, Commercial gravies & sauces. **Herbs, spices & condiments:** Aniseed, Cayenne, black pepper, Curry, Dill, Mint, Thyme, Tea (except fruit and camomile tea), Coffee, Cider, Wine, Liquorice, Peppermints.

Management: Salicylate level in food can vary with raw foods, dried foods and juices containing higher levels than the same cooked foods. The occurrence of Salicylates is so wide spread, that it is almost impossible to cut all sources. Individuals have differing sensitivity thresholds to Salicylates, and the tolerated amount varies from one person to another. Some people are troubled by only a very few, while others are troubled by all of them. Some adults and children have a low level of tolerance to Salicylates and may get symptoms that are dose-related.

Only your observation can help you to identify those Salicylate containing foods that may cause problems. Temporary avoidance is suggested, followed by introduction of a small amount of a single food, to determine the level/amount you can tolerate on a daily basis. Often all of the foods can be tolerated provided they are eaten in small amount (eg. Half a tomato per day) and provided that not too many of Salicylate containing foods are eaten at any one time /day. Bearing in mind that this may fluctuate due to circumstances, conditions and overall health as described in the 'rain barrel effect'.

LECTINS (considered food toxins)

Link: leaky gut syndrome

Lectins are a large family of carbohydrate binding proteins that are found throughout the food supply but are especially common in grains and legumes. In plants, Lectins are natural insecticides, one of the most insidious chemical weapons plants have in their arsenal to fight back against predators - micro-organisms, pests, and insects. In humans Lectins are resistant to being broken down as part of the digestive process. They are difficult to digest and irritate the brush border of the small intestine. Consequently, the micro-villi of the gut lining are damaged which can lead to numerous disorders of the gastrointestinal tract and autoimmune diseases. Lectins are in part also responsible for 'leaky gut syndrome'. Plant Lectins have been found attached to other organs, the lymphatic system and blood, indicating that some do get through the gut wall. Some people are also more sensitive to Lectins than others.

Lectins are one of the hidden **"Dangers of a Plant Based-Diet"**. Lectins appear to aggravate existing inflammatory such as rheumatoid arthritis. Some experts hypothesize that it's no coincidence the top 8 allergens also contain some of the highest amounts of lectins (including: dairy, egg, wheat, soy, peanuts, tree nuts, Nightshades, fish/shellfish).

Immune response and toxicity: Lectins are thought to play a role in immune function, cell growth, cell death, and body fat regulation. They can promote inflammatory responses such as Crohn's Disease, systemic Lupus, asthma, rheumatoid arthritis and cause leaky gut and gastrointestinal dysbiosis. **Because we can not digest Lectins, we often produce antibodies to them.** Almost everyone has antibodies to some

dietary Lectins in their body. This means our responses vary. Some individual can have full blown allergic reactions. Certain foods can become intolerable to someone after an immune system change or the gut is injured from another source. The presence of particular lectins can stimulate an immune system response. When Lectins affect the gut wall, it may also cause a broader immune system response as the body's defenses move in to attack the invaders. Adverse effects: Lectins are categorized as antinutrients since they block the absorption of some nutrients - leading to nutritional deficiencies. Lectins may also cause leptin resistance, which may translate into diseases, particularly weight loss issues (obesity) in individuals who consume high levels of leptin.

Symptoms can include: most commonly associated with digestive complaints, flatulence, nausea, diarrhoea and vomiting. (Researchers speculate that many apparent causes of bacterial food poisoning may actually be lectin poisoning). skin rashes, joint pain, and general inflammation. Urinary tract infections. Other chronic disorders may be correlated with leaky gut — for example, researchers have even noted that children with autism have very high rates of leaky gut and similar inflammatory GI tract diseases.

Lectins are found in: cereal grains, Wheat and wheatgerm, Soybeans, and nightshade vegetables like Aubergine, Peppers Potatoes, Tomatoes. Nuts & seeds. legumes - Lentils, Peas, Peanuts, Red kidney beans, mung beans, lima beans, fava beans, chickpeas, carob, green peas and yellow peas. But also Dairy, Egg and some Fruits and seafood. Genetically modified crops: wheat, corn, soya beans have high amounts of agglutinin to ensure high yields. Lectins are resistant to dry heat, so using raw legume flours in baked goods should be done with caution. The content of Lectins in foods differs year to year and crop to crop.

Certain seaweeds and mucilaginous vegetables have the ability to bind lectins in a way that makes them unavailable to the cells of the gut. While many types of lectins cause negative reactions in the body, there are also health promoting lectins that can decrease incidence of certain diseases. The pressure of plant-based diets focusing on legumes as meat alternatives has overlooked the damage that lectins can cause in the gut. So toxicity of Legumes needs to be considered within food choices.

Omitting toxic lectins (prolamins and agglutinins) from the diet is critical for gut health. Prolamins predominantly found in plant seeds get their name from the high content of the amino acid proline. **Gluten** is the most widely known source of prolamins. Research studies have shown that the prolamins in quinoa, corn and oats can damage the digestive tract in people with Celiac Disease yet these grains are frequently included in the 'gluten-free' diet. **Our ancestors found a solution to the problem of Lectins.** Soaking, fermenting, sprouting and cooking will decrease Lectins and free up the good nutrients.

Low Stomach Acid - Imbalance

The condition of both, **low** and **excess** stomach acid can lead to various stomach-related problems - resulting in discomfort and irritation, burning sensation, indigestion, gastric ulcers and basic gastritis. The digestive system secretes enzymes, intrinsic factors and gastric acids - necessary for proper digestion in the stomach, breaking down and digest the food we consume. Gastric acids consist of hydrochloric acid, sodium chloride, potassium chloride and protein-digesting enzyme pepsin, with a pH of 1-2 in the lumen of the stomach. Secretion is induced by smell, sight or sensing of food in the mouth. Only about 1 in 10 people with acid problems actually do have too much stomach acid – the rest actually has insufficient stomach acids (hypochloridia) or a different problem altogether such as a food intolerance.

Causes: One of the primary causes for stomach acid problems is the deficiency of vitamins and minerals needed for acid production and absorption. Poor dietary habits and malnutrition cause nutrient deficiency in our body. Stress - even in children, Adrenal fatigue, excessive alcohol, sugar and substance consumption also hinder the cells that produce gastric acids, while stress also contributes in decreasing or increasing the production of gastric acid. Presence of bacteria; *Helicobacter pylori* inhibits the stomach ability to produce appropriate amounts of gastric juices - acids, often leading to conditions such as acid reflux problems. Advancing age is also one of the causes for acid-related problems. HCL production decreases with age and the production capacity of a 50 year old individual is only one-fourth as compared to that of a 20 year old individual.

Most people have difficulty digesting food due to decreased stomach acid, not too much as we've been led to believe.

Insufficiency of stomach acid leads to indigestion, leaving food undigested in the stomach, where bacteria and other micro-organisms start to grow. This imbalance can hinder your body's ability to absorb nutrients, even if you eating healthy foods. Long-term deficiency of nutrients can cause more serious health issues, mostly arising from weak immune system. All other symptoms that are associated with low stomach acid arise due to the presence of undigested foods in the stomach.

Symptoms include: bloating, belching, burning and flatulence after meals, a feeling of fullness even after eating little, upset stomach; coupled with indigestion (diarrhoea or constipation). Heartburn and/or gastric reflux (sometimes too much HCL but most often not enough), bad breath, foul smelling stools, loose stools in the early morning, acne in adults, rosacea (dilated blood vessels on the cheeks and nose), pernicious anaemia or iron deficiency, anal itching, nausea especially after taking vitamins and minerals, bacterial dysbiosis or infections in the gut, parasites - or at least increased susceptibility to parasitic infections, chronic yeast infections, asthma, food intolerance and allergy, fatigue. Another common symptom of poor digestion is vertical ridges in the nails, or nails which tend to split, peel or break easily.

I have low stomach acid now what?

Try to reduce the levels of stress and eating 'on the go'. Eat small meals frequently and chew well. products. Drink plenty of water and fresh juices. Avoid: oily and stale food, sugar and white flour, alcohol and other carbonated drinks.

In the short term, supplement your acid levels to allow the rest of the digestive process to work properly with Digestive enzymes or Betaine HCL to aid your stomach to get to the correct pH levels. Long-term you may need to work on finding the root cause problem and taper off the supplements. Betaine HCL supplementation is a safe way to good digestion and make sure your getting the nutrients you need from you foods. An indicator if Betaine HCL is beneficial, is when you feel nothing upon taking it after a meal – suggesting that you are not producing enough HCL. A normal response to HCL is a feeling of warmth in the stomach.

Natural supplements include digestive enzymes, apple cider vinegar and digestive bitters. Centaurium (A.Vogel) rebalances stomach acid - evens it out if it's too acidic or not acidic enough; and makes sure enzymes needed to digest protein properly are produced (helpful: acid reflux, hiatus hernia, and indigestion of upper digestive tract). Yarrow Complex reduces bloating – bubbling and boiling sensations from foods that didn't 'agree'. Most people experience these symptoms when their diet revolves around wheat, cheese and coffee. Yarrow Complex reduces inflammation from irritating foods and calms spasms (good for general indigestion, bloating, wind, food intolerances). Cynara (Milkthistle) improves the way the liver handles fat –helping that fats are being digested more efficiently, so you are less likely to get bloated. Aiding in good bowel movement and low cholesterol. (good for: tendency to constipation, difficulty losing weight, high cholesterol and chalky coloured stools). Silicea Liquid calms inflammation and painful digestive tract by instantly putting a buffering layer over the gut lining – actively reducing inflammation and help heal any damage to the gut wall (great for acid reflux, gastritis and diarrhoea).

Disclaimer: The information provided here is for general guidance only and should not be treated as a substitute for medical advice from a health care professional. If you are concerned about any aspect of your health you should visit <http://www.nhsdirect.nhs.uk/> or contact your GP.

Other possible cause of digestive problems:

Gut flora imbalance, Candida, Helicobacter p., Parasites, Oxalate sensitivity, Sorbitol Intolerance.

GUT FLORA IMBALANCE - DYSBIOSIS / SIBO - The gastrointestinal tract is with up to 70% a prominent part of our immune system. When the intestines contain a balance of good and bad bacteria - optimal for good health - they are described as being in a state of *sympiosis* - 'living in harmony.' A *dysbiosis* is a bacterial / microbial imbalance - on or inside the body - which can compromise the immune system. Dysbiosis is most prominent in the digestive tract or on the skin, but can also occur on any exposed surface or mucous membrane such as the vagina, lungs, mouth, nose, sinuses, ears, nails, or eyes. Dysbiosis can result from a deficiency of good bacteria or an overgrowth of harmful organisms. In either case, organisms that are not usually predominant in the intestines, such as unfriendly bacteria, yeast (*Candida*) and protozoa, and can actually induce disease. **SIBO** (small intestinal bacterial overgrowth) is a condition where the gut flora and microbiome migrates from the colon into the small intestine. Dysbiosis and SIBO are a disease of microbiome dysfunction. When bacteria invade and take over, it can lead to poor nutrient absorption, symptoms commonly associated with IBS, and may even lead to damage of the stomach lining

Signs and symptoms of dysbiosis, mal-absorption and other Gastro Intestinal (GI) problems:

Dysbiosis (also called dysbacteriosis) has been associated with different illnesses, such as inflammatory bowel disease, as imbalances in the intestinal microbiome may be associated with bowel inflammation, and chronic fatigue syndrome. When dysbiosis exists, we may fall prey typically harmless microbes that can lead to serious health concerns.

Dysbiosis has been cited as a cause of arthritis, autoimmune illness, vitamin B deficiency, chronic fatigue syndrome, cystic acne, eczema, food allergies and food sensitivities, inflammatory bowel disease, irritable bowel syndrome, psoriasis and more. Typical Symptoms include: IBS, bloating, belching, burning, flatulence after meals, a sense of fullness after eating, indigestion, diarrhoea, constipation, cramps, abdominal pain, indigestion, systemic reactions after eating, nausea or diarrhoea after taking supplements, headaches, rectal itching, weak or cracked finger nails, dilated capillaries in the cheeks and nose in the non-alcoholic, post-adolescent acne or other skin irritations such as rosacea, iron deficiency, chronic intestinal infections, parasites, yeast, unfriendly bacteria, undigested food in the stool, greasy stools, skin that's easily bruised, Nail fungi, fatigue, Thrush, Depression, Weight gain, chronic vaginitis (vaginal irritation), Fibromyalgia, joint problems, Chronic fatigue, Fatigue, Mental fog. Some other symptoms, such as muscle atrophy, cramps and joint pain, are also linked to malabsorption. A fair amount of research supports this connection.

Complications Associated with SIBO: If left untreated, can cause potentially serious health complications. It's vital to get rid of the bacterial overgrowth as soon as possible. **Further info about SIBO and Diet:** <https://draxe.com/sibo-symptoms/>

(Testing for Dysbiosis and SIBO is included in the Digestion 300 and Comprehensive 500 items test)

CANDIDA Albicans - a natural inhabitant (yeast) that lives in our digestive tract. It can 'overgrow' and cause various moderate to severe symptoms - including constant fatigue, sinus problems and lots of mucus; aches and pains in the joints, increased headaches, constipation and or diarrhoea, gas and abdominal bloating, unexplained rashes, feeling foggy, feeling faint or light headed, lack of concentration, short term memory loss, sugar cravings, white coating on the tongue, digestive disorders, depression, ear infections. Symptoms of Candida or fungal overgrowth can be similar to those of allergies or intolerances to yeast. (Testing for Candida Albicans is included in the Complex 250, Digestion 300 and Comprehensive 500 items test)

HELICOBACTER pylori (a bacterium / germ) can infect the lining of the stomach and duodenum and cause digestive pain, heartburn, bloating & IBS. It is one of the most common infections in the UK. More than a quarter of people in the UK become infected with *H. pylori* at some stage in their life. Infection of Helicobacter pylori can cause or contribute to these **symptoms: Stomach/digestive pain, Gnawing feeling in stomach**, heartburn, bloating & IBS, indigestion, acid reflux, bloating, belching and burping, constipation, diarrhoea, nausea, bad breath / halitosis, pain between shoulder blades, anxiety, reactive arthritis, chronic fatigue, urticaria, rosacea, sleep problems, headaches, psoriasis, depression, palpitations.

PARASITES & Worms - It is not uncommon at all that we may be affected by parasites or worms during our lifetime. Especially when living with pets and animals. We don't even have to travel abroad; undercooked meats and fish are common culprits as are unwashed fruits and vegetables – and of course unwashed hands. Food and water are the most common sources of parasite and invading organism transmission. Since most of us eat three times a day and drink water frequently throughout the day, our exposure to these sources is constant. Intestinal worms, most commonly hookworm, roundworm (ascariasis) and whipworm (trichuriasis) that are either transmitted through contaminated soil or by ingesting parasite eggs.

Symptoms caused by parasitic infections include (but are not limited to, especially when intolerances/allergies are ruled out.):

gastric complaints, stomach pain, swelling, diarrhoea, nausea or vomiting, hunger pains, appetite loss, weight loss, loss of appetite, chills, cough, haemoptysis (coughing up blood), fatigue, fever, rectal haemorrhage (bleeding rectum), rectal itching, hematochezia (bloody faeces), dysuria (urinating problems or pain), immunodeficiency, rashes, itching, jaundice (yellowish eye whites and skin), joint pain, memory loss, muscle pain and spasms, dizziness, headaches sweating and grinding teeth while sleeping.

Treatment: Occasional de-worming should for us be as normal as it is for animals. So if you think you may be affected by parasites, please don't be afraid; speak to a pharmacist for available over the counter treatment or consult your doctor, or nutritionist. Diagnosis can be made by examining the stools. 'Travellers' however, may want to consult with a tropical institute. (Alternative natural treatment options may include black walnut, wormwood, papaya extract, etc.). **NB:** This test does not include testing for Helicobacter Pylori /Candida or Parasites (only the Complex 250 and 500). However we make this information available because some people may be affected. If you suspect you are affected, consult with your doctor about the probability and available treatment.

(Testing for Parasites is included in the Complex 250, Digestion 300 and Comprehensive 500 items test)

Non-Food Items & Substances

Cat & Dog hair and dander

Pet allergies are most commonly associated with cats and dogs. Pet allergy is an allergic reaction to proteins found in an animal's skin cells, saliva or urine. For instance, a child's skin might break out where a dog licks them. Animal dander gets everywhere, including places where they have never set a paw. Though often it's not the dog's hair or fur that's the real problem. Instead, people are usually allergic to dander - flakes of dead skin cells, as well as saliva and urine. People with allergies have oversensitive immune systems. Their bodies overreact to harmless substances - like dog dander - and attack it as they would bacteria or viruses. The sneezing and watery eyes are just the side effects of the body's attempt to destroy or flush out the allergen. Some people with pet allergy may also experience skin symptoms, a pattern known as allergic dermatitis - an immune system reaction that causes skin inflammation. Direct contact with an allergy-causing pet may trigger allergic dermatitis.

Signs and symptoms - caused by inflammation of nasal passages include: Respiratory: coughing, sneezing and wheezing, difficulty breathing, asthma (worsening/cause) audible whistling or wheezing sound when exhaling, chest tightness or pain. Nose: Nasal congestion, Runny /stuffy nose, Itchy nose, roof of mouth or throat, Postnasal drip. Eyes: itchy, red or watery. **Skin** reactions, itchy skin, eczema, raised, red patches of skin (hives) hives on their face or chest, allergic dermatitis. Facial pressure and pain. Frequent awakening - trouble sleeping caused by shortness of breath, coughing or wheezing. Children frequently rubbing their nose upwards.

Management: If you've got a pet allergy, take action now to cut down your symptoms. Some simple steps can make all the difference:

1. **Keep pets out of bedrooms.** It's hard, but never let them sleep on your bed.
2. **Clear away clutter.** Less stuff makes it easier to clean and get rid of dander, the dead skin cells shed by pets that trigger allergies.
3. **Keep your floors bare.** Carpets trap dander.
4. **Bathe pets regularly.** For best results, have someone else do it. A frequent bath can wash away those sneeze-inducing allergens.
5. **Ask a family member to change the litter box or clean an animal's bed.** They are dander hotspots.
6. **Vacuum weekly.** Use a vacuum with a HEPA filter.
7. **Visit with pet-owning friends outside your home.** Their clothes will bring in dander. Meet them somewhere else instead.
8. **Cover vents with cheesecloth.** It can catch the allergens before they're blown into the air.
9. **Use synthetic pillows.** Ones that are made out of feathers can make your symptoms worse, depending on your allergy.
10. **Prepare with medication.** Take allergy medicine before you visit a place with pets, if prescribed by your doctor.
11. **Find a fish friend.** There's no such thing as an allergy-free dog or cat, so consider another kind of pet.
12. **Wash your hands after touching your pet.**

HOUSE DUST MITE

The house dust mite is a cosmopolitan guest in human habitation. Dust mites feed primarily on skin cells that secrete the person. The tiny animals feel most comfortable on mattresses, where they will find not only enough food, but also benefit from heat and moisture. House-dust mites thrive in old sofas and armchairs, mattresses and carpets, and old vacuum cleaners. Many years of exposure can cause chronic cough, tightness in the chest and labored breathing. Allergy inducing are the faecal droppings, which includes many proteins and enzymes (notably proteases). If these proteins are inhaled, the body's immune system builds antibodies, which cause the release of histamine among others. People allergic to House dust mites are exposed all night to the allergenic substance, and have the strongest complaints often in the morning. Although complaints persist throughout the year, house dust mite allergy sufferers are especially affected in autumn and winter. The reason: the house dust mite multiply during the summer, since the conditions are ideal. Then in the autumn, when the heating season starts and low humidity prevails, most die off. Their droppings - accumulated in large amounts - dries out and is spread all over together with house dust, by the dry air caused from heating. Commonly households with pets (cats & dogs) have an increased amount of house dust mites - especially if carpets are present - due to the amount of skin shedding.

Allergenic cross-reactivity: app.20% of people highly reactive to house dust mites are also sensitized to crustaceans, e.g. shrimp and snails. The allergen (tropomyosins) are the major cause of cross-reactivity between house-dust mites (HDMs) and other invertebrates.

Possible reactions/Symptoms: Irritated airways, cough, breathing difficulties, wheezing, allergic asthma, exercise-induced asthma, hypersensitivity of the airways (non-specific bronchial hyper-reactivity), mucosal swelling in the nose and throat, inflammation of the bronchial mucosa. Irritated eye's, red, itchy or watery, or swollen, conjunctivitis, especially in the morning after getting up. Allergic rhinitis, chronic nasal congestion, sneezing, runny nose. Itching and skin rashes, hives, exacerbation of eczema especially in children.

Removing the mites completely from the living environment is almost impossible. However, their number can be significantly reduced.

What you can do: Most important is to keep the bed as much as possible free of mites, and that the affected regular clean their bed and bedroom, using protective covers on mattress and air/ventilate every day. Simply washing will remove most of the waste matter. Some people may benefit from changing their bedding weekly, discarding all feather filled pillows, duvets and cushions and swapping for washable ones, removing carpets and buying special filter vacuum cleaners.

- Using an **air purifier** might be a good option if you are suffering from respiratory allergies.
- Placing Linen in the dryer for 10 minutes (at temperatures above 60 °) or refrigerate for about an hour will kill mites rigorously.
- Avoid - upholstered furniture, especially in the bedroom; "dust catchers" such as 'furry' toys, cushions, dried flowers, etc.
- Remove carpets and - if possible - even curtains. Only use rugs that can be washed every week.
- Clean the walls, the woodwork and the floors with damp cloth. The floor can be waxed.
- Dust mites do not like cold, dry air. Therefore airing daily is most beneficial (possibly several times a day).
- Use a hygrometer - **room temperatures** with a **relative humidity less than 50 percent** may also be fatal to the dust mites.

POLLEN AND GRASSES

When an allergen such as pollen or dust is inhaled by an individual with a sensitized immune system, it triggers antibody production. These antibodies mostly bind to mast cells, which contain histamine. When the mast cells are stimulated by pollen and dust, histamine (and other chemicals) are released. This causes itching, swelling, and mucus production.

Grain Pollens Mix: Oats, barley, wheat, meadow foxtail, sweet vernal grass, couch grass, smooth-stalked meadow grass.

Tree Pollens Mix: Alder, Ash, Beech, Birch, Elder, Elm, Hazel, Lilac, Lime, Jasmine, Oak, Plane, Poplar, Privet, Robinia, Willow.

In northern latitudes **birch** is considered to be the most important allergenic tree pollen, with an estimated 15–20% of hay fever sufferers sensitive to birch pollen grains. **Birch pollen** allergies are associated with apple, carrot, cherry, pear, peach, plum, fennel, walnut, potato, spinach, buckwheat, peanut, honey, celery, and kiwifruit.

Grass Pollens Mix (Family Poaceae): Corn, redtop grass (*agrostis*) English rye grass *Lolium* sp.), brome, dogstail, meadow fescue, meadow soft grass timothy (*Phleum pratense*). An estimated 90% of hay fever sufferers are allergic to grass pollen. **Grass pollen** allergies are associated with melon, tomato, watermelon, orange, rice and cherry.

Weed Pollens Mix: Hops, dandelion, plantain, common mugwort, white goosefoot, glasswort, goldenrod. Ragweed (*Ambrosia*), plantain (*Plantago*), nettle/parietaria (Urticaceae), mugwort (*Artemisia*), Fat hen (*Chenopodium*) and sorrel/dock (*Rumex*). **Mugwort** (*artemisia*) allergies are associated with celery, carrot, spices, melon, watermelon, apple, hazelnut, and chestnut.

Ragweed allergies are associated with melon, chamomile, honey, banana, sunflower seeds, Echinacea. People allergic to ragweed can also cross-react to Echinacea.

Physical Symptoms: vary in severity between individuals. Very sensitive individuals can experience hives or other rashes. Particulate matter in polluted air and chemicals such as chlorine and detergents, which can normally be tolerated, can greatly aggravate the condition. Sufferers might also find that cross-reactivity occurs. For example, someone allergic to birch pollen may also find that they have an allergic reaction to the skin of apples or potatoes. A clear sign of this is the occurrence of an itchy throat after eating an apple or sneezing when peeling potatoes or apples. This occurs because of similarities in the proteins of the pollen and the food. There are many cross-reacting substances. Some disorders may be associated with allergies: Comorbidities include eczema, asthma, depression and migraine. Some fruits and vegetables cause allergic reactions in people with a pollen allergy but only if eaten in raw form. Symptoms in these cases are usually limited to the mouth and throat.

Management: Many people with pollen allergies reduce their exposure by remaining indoors during hay fever season, particularly in the morning and evening, when outdoor pollen levels are at their highest. Closing all the windows and doors prevents wind-borne pollen from entering the home or office. When traveling in a vehicle, closing all the windows reduces exposure. Air conditioners are reasonably effective filters, and special pollen filters can be fitted to both home and vehicle air conditioning systems. Because many allergens cling to clothing, skin, and hair, regular cleaning reduces exposure and therefore symptoms. Many people shower/bathe before sleeping, to minimize their exposure to potential allergens that could have stuck to their bodies during the day. Some people use nasal irrigation to physically remove contaminants from their noses.

ENVIRONMENTAL TOXINS

Exposure to synthetic chemicals occurs either through inhaling, skin contact or ingestion. The common ingredients in most chemical products are hydrocarbon based volatile organic chemicals (VOC's). Phenols (containing benzene). With everyday cosmetic and household chemical products, it is generally the addition of perfume that makes them bad news for MCS sufferers. Some people develop a multiple chemical sensitivity (MCS) identifying many products as chemical triggers.

Possible reactions/Symptoms: headache, fatigue, disorientation, dizziness, nausea, irritability, confusion, memory problems, difficulty concentrating, intolerance to heat or cold, Flu-like symptoms, earache, stuffy head or congestion, itching, sneezing, sore throat, breathing problems, changes in heart rhythm - Irregular or rapid heartbeat, chest pain, muscle and joint pain or stiffness, bloating or gas, diarrhea, skin rash or hives, mood changes.

including: tobacco smoke, perfume, traffic exhaust or gasoline fumes, nail polish remover, newspaper ink, hair spray, paint or paint thinner, insecticides, PVC, soft plastic, carpets -especially new carpet and new cars, new clothes, flame retardants on clothing and furniture (such as mattresses) felt tip/marker pens, adhesives and glue, chlorine in swimming pools.

PESTICIDES AND HERBICIDES

Pesticides include two classes of chemicals, insecticides and herbicides. Petroleum-based they are not only dangerous to the environment, they are hazardous to a person's health. Herbicides may cause harm by acute poisoning or long-term, cumulative exposure, with side effects ranging from mild to severe reactions, even at "safe" levels. High levels of exposure can be fatal. Some people are unaffected or only mildly affected, while others become severely ill from similar levels of exposure. Toxins from pesticides can remain in the body and build up in the liver as well as stored in the colon where they slowly but surely poison the body. Non-organic apples may have been sprayed with over 30 different pesticides. Even if you wash a piece of fruit, there are still many pesticides lingering on and in the fruit or vegetable. **Strawberries, apples, carrots, celery, spinach, grapes, apples, cucumbers are just a few foods found to have the highest pesticide levels.**

The health effects of pesticides depend on the type of pesticide. Some, such as the organophosphates and carbamates, affect the nervous system. Others may irritate the skin or eyes. Some pesticides may be carcinogens. Others may affect the hormone or endocrine system in the body. After countless studies, pesticides have been linked to cancer, Alzheimer's Disease, ADHD, and even birth defects.

Possible reactions/Symptoms: dizziness, confusion, fatigue, skin irritations, stomach and intestinal problems, nausea, vomiting, convulsions, numbness in the limbs, breathing problems. Infertility, cardiovascular/ heart problems, liver damage, lung and kidney damage. Cancer of the breast, prostate and lymphatic system. Blood disorders, nerve damage, muscle damage, damage to adrenal glands, brain disorders/ damage, birth defects, miscarriages and stillbirths, Parkinson's disease. Decreased cognitive abilities, and aggression in children, aggressive behaviour, learning disorders. Researchers are increasingly pointing to pesticide and herbicide contamination as one cause for the many reported cases of autism, as well as attention deficit disorder (ADD) and attention deficit hyperactivity disorder (ADHD).

Pesticides have been classified as **endocrine disruptors** - mimicking the effects of human oestrogen or testosterone - being disruptive to the synthesis and breakdown of both oestrogen and testosterone. (The major endocrine glands include the pituitary gland, thyroid, adrenals, ovaries and testes). Pesticides can adversely affect children's thyroid hormones, as irritability and aggressive behaviour are linked to thyroid hormone levels. Furthermore, attention deficit and/or hyperactivity (ADD, ADHD) disorders in children are linked to changes in their levels of thyroid hormone.

FLUORIDE (now classified as a neurotoxin)

Fluoride is found in many common household products, including toothpaste (*sodium monofluorophosphate*), vitamins, dietary supplements (*sodium fluoride*), glass-etching or chrome-cleaning agents (*ammonium bifluoride*), and insecticides and rodenticides (*sodium fluoride*).

Fluoride also occurs at moderate to high levels in drinking water. Scientists from Environmental Effects Research Laboratory have classified fluoride as a "chemical having substantial evidence of developmental neurotoxicity". Most of the 30 studies linking fluoride to reduced IQ, impaired neurobehavioral development, and foetal brain damage. Children exposed to excessive fluoride have been consistently observed to suffer from some form of neurological impairment, including Autism Spectrum Disorders, Attention Deficit Hyperactivity Disorder.

Possible reactions/Symptoms: Gastrointestinal signs predominate: hypersalivation, nausea, vomiting, diarrhoea, abdominal pain, dysphagia, mucosal injury. neurologic effects: headache, tremors, muscular spasm, tetanic contractions, hyperactive reflexes, seizures, muscle

weakness, mood changes, depression. cardiovascular: widening of qrs, various arrhythmias, shock, cardiac arrest, alzheimer's disease.

Children may experience gastrointestinal distress upon ingesting too much fluoride from their toothpaste. Three ingredients in toothpaste are considered dangerous: Fluoride - poisonous if taken internally. Sorbitol and Sodium Lauryl Sulfate can cause diarrhoea, especially in children.

FORMALDEHYDE

Found in many household products from fabric softeners, paints, plywood, furniture, cleaning products, adhesives, carpets, bedding and even toothpaste and diet drinks, deodorant, mouthwash, air-freshener and many other cleaning solutions. Did you know that Aspartame is a by-product of formaldehyde?

Possible reactions/Symptoms: Formaldehyde has been found to cause cancer in rats. It can cause dizziness, headaches, heart palpitations, depression, insomnia, asthma, irritation to the eyes, nose, throat, lungs and skin, allergic contact dermatitis, symptoms of eye and throat irritation, increased headache and fatigue. Chest tightness, and shortness of breath, anaphylactic reaction. Occupational dermatoses and asthma. Lung cancer. Occupational exposure: Carpet manufacturing, wood workers, chemical and lab workers, cosmetics, metal workers, hairdresser, medical staff, mortician, paper maker, plastics industry, latex workers, animal pelt workers, maintenance & cleaners.

Found In: Disinfectant, germicide, fungicide, household cleaners and disinfectants, cigarette smoke, automobile exhaust, and smoke from wood, coal, or charcoal fires. Fabric finishings in clothing and linens, releasing preservatives in skin-care products e.g. medicated creams, shampoos (especially of the lower price group). Preservative in defoaming agents and in animal feed. May be found in products and materials in the home and work environment, high-quality paper, particle board, plywood, fibreboard, panelling, some carpets and furniture, some household chemicals. Higher levels can be found in caravans, mobile homes and houses insulated with urea formaldehyde insulation.

➤ **Tip:** wash new clothing and bedding several times in hot water before use. Also avoid permanent-press and wrinkle-resistant clothing. An effective way of removing formaldehyde from your home/office is to open windows and airing rooms regularly. Using an air purifier with an activated carbon filter might be a good option if you are suffering from respiratory allergies. Top 5 Best air purifiers for Chemical sensitivity and formaldehyde (information on <https://theozonhole.com/best-air-purifier-for-formaldehyde.htm>)

CHLORINE (dichlorophenol)

Chlorine in tap water has been linked to the rising number of people developing food allergies, a study has revealed. Chlorine used to reduce the risk of infectious disease may account for a substantial portion of the cancer risk associated with drinking water. As chlorine is an irritant and corrosive and chlorinated water contributes to dozens of everyday ailments. **Chlorine reactions** may not be an allergy but actually an "**irritant dermatitis**" (like a chemical burn), caused by hypersensitivity to this natural irritant. Studies have suggested that exposure to chlorine – drinking chlorinated tap water, frequent swimming in chlorinated pools and chlorine cleaning products may increase the risk of developing asthma and other respiratory allergies, both in adolescents and in adults.

Up to 2/3s of our harmful exposure to chlorine is due to inhalation of steam and skin absorption while showering. A warm shower opens up the pores of the skin and allows for accelerated absorption of chlorine and other chemicals in water. The steam we inhale while showering can contain up to 50 times the level of chemicals than tap water. Thus Inhalation is much more harmful since the chlorine gas (chloroform) we inhale goes directly into our blood stream. As mentioned earlier, inhalation of chlorine is a suspected cause of asthma and bronchitis, especially in children... which has increased 300% in the last two decades.

Why is chlorine in drinking water dangerous? When we drink chlorinated water the toxins are partially filtered out by our kidneys and digestive system where chlorine destroys acidophilus and plays havoc on our microbiome. What's surprising is that we commonly find higher levels of chlorine in our tap water than is recommended safe for swimming pools. However, far more toxic is something you may have never even heard of: Disinfection byproducts (DBPs / chloroform and chloramines) are contaminants found in nearly every municipal water supply that adds chlorine, and they are over 100 times more toxic than chlorine; and they have also been linked to damaging effects to heart, lung, kidney, central nervous system and our immune system. Because when chlorine mixes with even minute amounts of organic compounds that are very often found in water, harmful by-products, called Trihalomethanes (THMs) are produced. These by-products produce free radicals in the body through oxidation, which trigger cell damage and are highly carcinogenic, even in small amounts.

How Chlorine impacts thyroid function: The skin absorbs the chlorine, allowing it to be taken up and stored in your thyroid. Chlorine, fluorine and bromine, are chemically related to iodine (halogen family - periodic table) and compete with it, subsequently blocking iodine receptors and uptake in the thyroid gland. Iodine is a vital mineral when it comes to proper thyroid function and hormone production. Chlorine is similar enough to iodine that your thyroid will absorb and store it in place of iodine, effectively "displacing" iodine. The highest concentration of iodine is found and used in our thyroid gland - so low levels can result in a low-functioning or impaired thyroid (hypothyroidism). So if chlorine is displacing iodine, your ability to produce thyroid hormones is reduced. Every time you come into contact with chlorinated water (Shower, bath or pool), your skin absorbs the chlorine. The higher the concentration of chlorine you have in your body, and the lower your iodine levels are, the more likely it is that your thyroid functions will be negatively impacted.

Recommendation: keeping dietary and supplemental iodine intake between 150 and 450 mcg daily.

Following chlorine exposure, the most common symptoms are:

- **Respiratory diseases**, airway irritation, sinus, runny /stuffy nose, sneezing, difficulty breathing or shallow breathing, wheezing, cough, childhood asthma, chest tightness, dull chest pain. Throat irritation, sore throat.
- **Eye irritation** serious injury to the eyes, including blurry vision, burning, irritation, and in extreme cases vision loss, Pink eye.
- **Skin irritation**, Skin sensitivity, rashes, itchy red skin or hives / itchy bumps (urticaria), tenderness, inflammation, skin damage, Skin lesions, Scales or crust on the skin, drying out of hair and scalp. **Damaging hair cuticles** and the cause or **worsening of dandruff**.
- **Gastrointestinal** difficulties, **Tiredness, dizziness or headaches, Changes in the pH balance** of your blood, Low blood pressure.
- **Liver & Kidney problems, Central nervous system, A weakened immune system**, significantly impacting your body's ability to fight disease.

Reactions: Chlorine sensitivities are more common than you would think, as chlorine itself is a natural irritant. According to a survey published in *Annals of Allergy, Asthma and Immunology*: chlorophenols, byproducts of **water chlorination could be to blame for the rise in food allergies** in the western world.

Chlorine in washing detergents can leave a residue in the clothes and bedding that can cause skin problems or aggravate conditions such as eczema. It is best to avoid the triggering agents completely by removing the chemicals or discontinuing their use (where possible). Using natural cleansing agents for cleaning. The use of natural materials for clothes, bed linen, carpets and other interiors will also prove beneficial.

Chlorinated water affects more people adversely than is commonly thought of. Yet chlorine is another hazardous substance not considered an allergen by conventional medicine. If you are affected by any of the conditions above you may want to think about getting water filters to purify the water you use.

Water Filters: Table top filters like Brita are widely used to purify drinking water (available in most supermarkets). However their effectiveness might be questionable. **Kitchen-tap filters** – either installed under the sink or attached to the tap can be found online (research is necessary as this constantly changes as it evolves). **Shower/bath filters** are a relatively inexpensive and an easy to install solution for people with sensitive skin; helping with skin conditions such as itchy skin, dermatitis eczema,... (Amazon offers a wide range). **Whole house filters** are also obtainable but still quite costly.

Preservatives MI / MCI Methylisothiazolinone (MI) and Methylchloroisothiazolinone (MCI) (Isothiazolinone mix)

Are preservatives commonly used in many cosmetic and household cleaning products, as an anti-bacterial agent and so preserves the shelf life of these products. Often MCI / MI may be used in combination and labelled under different names such as Kathon®, Kathon CG®, Kathon 886®, Euxyl K 100® and Bio-Perge® (2-methyl-4-isothiazolin-3-one and 5-chloro-2-methyl-4-isothiazolin-3-one). Some people allergic to Methylisothiazolinone also react to Isothiazolinone and Chloroisothiazolinone.

Possible reactions/Symptoms: Allergy to methylisothiazolinone is extremely common. MI/MCI can cause/aggravate eczema, allergic contact dermatitis(ACD) commonly presents as an itchy red rash on the skin. Symptoms include redness, dryness, a burning or stinging sensation, facial swelling (in particular around the eyes), blisters, peeling of skin and crusting. Not everyone who uses a product containing MI will have problems.

Found in: cleansers, shower gels, bubble baths, soaps, shampoos & conditioners, moisturisers and sun creams, bronzers/self-tanners, makeup, foundations/concealers, mascara & eye shadows, make-up removers OTC and prescription medicines, detergents/cleaners, fabric softeners, polishes, pesticides, paints, adhesives/glues, curing agents, jet fuels, printing inks, **some moist toilet or baby wipes**.

PERFUME / FRAGRANCE

Perfume allergies can be extremely hard to diagnose because there are so many common products that contain so many different chemicals and chemical combinations. To find out what is causing a specific allergic reaction, a physician would first and foremost have to figure out what product is causing the reaction. Then the physician would need to pinpoint the chemical or chemical combination in that product that is triggering the allergy. Pinpointing one chemical can be nearly close to impossible because one product or perfume can contain hundreds of chemicals. One can suffer from a perfume allergy even if the individual does not spray on the perfume. Perfume and fragrances come in many other common products. Some common household products that contain these common reaction chemicals are: *Laundry detergents, Soap, Shampoo/ Conditioner, Deodorant, Lotion, Cosmetics, Toothpaste/ Mouthwash, Insecticides, Tissues, Incense/ Candles.*

The most common chemicals that cause fragrance reactions are: **Cinnamal** (in cinnamon), **Cinnamylalcohol** (in cinnamon, balsam of Peru), **Citral** (in lemongrass, citrus, cardamom, petitgrain, ginger), **Coumarin** (in tonka, sweet clover, stone fruit, strawberries), **Eugenol** (in clove, nutmeg, cinnamon, rose, basil and bay), **Farnesol** (in neroli, rose, palmarosa and ylang ylang), **Geraniol** (in rose, citronella, palmarosa, and geranium), **HICC** (synthetic) / Hydroxyisohexyl 3-cyclohexene carboxaldehyde, **Hydroxycitronellal** (in citrus fruits, petitgrain, ylang ylang and sandalwood), **Isoeugenol** (in clove, nutmeg, ylang ylang), **Limonene** (oxidised) (in citrus), **Linalool** (oxidised) (in citrus, rose, neroli, coriander, spearmint, cypress, chamomile, ylang ylang ...)

Scented products that cause the most fragrance reactions are: *Acetone, alpha-pinene, Alpha-terpineol, Benzyl acetate, Benzyl alcohol, Benzaldehyde, Camphor, Vinyl Alcohol, Ethyl acetate, G-Terpinene, Limonene, Linalool.* Physical Symptoms vary depending on how bad one's allergy actually is, as well as how one's particular body reacts.

Possible reactions/Symptoms: Itchy eyes, runny nose, Headaches, and/or muscle joint pain, Tingling of the lips and/or skin, Wheezing or coughing, loss of breathe or voice, Nausea, Respiratory irritation for people that have asthma, Contact dermatitis, Eczema, Hives (This group includes skin conditions associated with the allergy), Anaphylactic Shock.

DETERGENTS & FABRIC CONDITIONERS

Most conventional laundry detergents and conditioners are made from petroleum, and contain many chemicals & some also contain chloride, formaldehyde. A rating in your report primarily indicates the detergent/fabric conditioner you are currently using, but it usually also applies to most if not all other detergents or fabric conditioner.

Possible reactions/Symptoms: The enzymes used in detergent can cause inflamed spots or rashes on the skin. Serious inflammation can result from breathing enzyme particles into the nasal passages and lungs. A wide variety of enzymes and chemicals are capable of inducing asthma or aggravating pre-existing asthma. Fragrances - synthetic or natural – can also prove to be highly irritating to lungs, causing serious health effects to people with asthma or even chronic heart problems. **Physical symptoms:** breathing, sneezing, coughing & sinus problems, nausea / vomiting, sore throats, stomach & muscle cramps, swollen glands, watery eyes, stuffy noses, heart palpitations, exhaustion, rashes / eczema, trigger for asthma attacks. **Neurological symptoms:** Migraine, dizziness, inability to concentrate, loss of coordination, seizures, tremors, convulsions, weakness, short-term memory loss, depression, irritability, mood swings, aggression, fatigue, sleepiness and hallucinations.

Alternatives: Use naturally derived detergents or plant-based formulas, & "non-chlorine bleach" cleaning solutions. Ecover products are available in most supermarkets (but very sensitive people may even react to these products). Or magnetic / ceramic washing balls (e.g. Hypo-allergenic T-Wave Laundry Discs, from www.naturalcollection.com). Try Health food shops & the internet for other alternatives.

ALUMINIUM

An aluminium allergy, or almost any type of metal allergy, was considered completely rare up to just a few years ago. Aluminium is present in a large range of common household products; and compounds are used extensively in cosmetics and medicinal preparations. The main source of aluminium is from antacids, antiperspirants and cooking foil, pots and pans. Another more typical route of sensitization, however, is via vaccines and hypo-sensitization injections. Unfortunately, this often leads to building up a sensitivity to one of the ingredients in the shot. children's medicines are routinely coated with aluminium lake, an artificial colouring. Water is treated with aluminium compounds in most towns and cities before coming out of your tap.

Possible reactions/Symptoms: reported to be associated with increased incidences of eczema, skin dermatitis, axillary rash, hand dermatitis. Aluminium accumulation in the brain has been medically linked to Alzheimer's disease. It is also suspected to play a role in various other similar neurological disorders such as Dementia, Parkinson's Disease, and Attention Deficit Disorder (ADD). As the theory goes, when aluminium concentrates in your brain, you can't concentrate... because it short-circuits your neural networks.

NICKEL

Nickel allergy is one of the most common causes of allergic contact dermatitis - commonly associated with jewellery, etc, usually resulting in an itchy rash that appears when your skin touches a usually harmless substance. But nickel can be found in many everyday items - from coins to zippers, from mobile phones to eyeglass frames. There are also numerous foods containing Nickel. Nickel allergy can affect people of all ages, and usually develops after repeated or prolonged exposure to items containing nickel. Once you develop nickel allergy, you are likely to always be sensitive to the metal and need to avoid contact. Nickel sulfate may be a hidden culprit in many commonly used products, creams and even medications. Instances of cross-reactions to molecularly related products not truly containing nickel may also occur. Contact dermatitis usually begins within 12 to 48 hours after exposure, and the reaction may persist for as long as two to four weeks.

Possible reactions/Symptoms: Rash or skin bumps, Itching - which may be severe, Redness or changes in skin colour, Dry patches of skin that may resemble a burn, Blisters and draining fluid in severe cases, scaling.

Foods that contain high levels of naturally occurring nickel: Chocolate/Cocoa Powder, Cashews, Kidney Beans, Green leafy vegetables: Spinach, Broccoli, kale, lettuce. Legumes especially dried beans and lentils. Bean sprouts. Whole wheat and multigrain flours, buckwheat, oat bran, oatmeal, brown rice, and flower seeds (such as sunflower and sesame). Nuts: almonds, hazelnuts and peanuts, Soya (including tofu).

Other high content nickel foods: Shellfish (shrimp, oysters, mussels), Salmon, tinned meats and fish, such as tuna. Fruit: bananas, pears, and all canned fruits and canned fruit cocktails, dates, Liquorice, fresh and dried figs, pineapple, prunes, raspberries, leeks, peas (including split peas). **Because Nickel occurs naturally in a variety of foods - these foods may not show in your tests results.** Only your observation can help you to identify the foods.

TEFLON

Teflon® is a brand name for a man-made chemical known as polytetrafluoroethylene (PTFE). Mainly found in stain repellent products, electrical insulation tape, combustion engines and in chemical apparatus and cookware. About 70 percent of our cookware contains a non-stick coating. Like so many products developed for the sake of convenience without concern for human health, Teflon coated cookware has proved to be a primary source of dangerous fluorocarbon or perfluorinated chemicals (PFOAs / perfluorooctanoic acid). PFOA has the potential to be a health concern because it can stay in the environment and in the human body for long periods of time. Perfluorooctanoic acid (PFOA), linked to an increase in tumours of the liver, pancreas and testicles and reduced fertility, is one of the chemicals used in the chain of reactions that makes the common non-stick surface Teflon.

Teflon pans quickly reach temperatures which cause the non-stick coating to begin breaking down, releasing toxins - at least six toxic gases. So the moment you heat the pan it begins to vaporize and this toxic chemical goes into your bloodstream. Further, if Teflon cookware is scratched, it releases aluminium which may contribute to Alzheimer's ...so much for that healthy home cooked meal.

Associated Symptoms: The major health effect linked with the potential dangerous fumes from Teflon are **flu-like symptoms** in humans – chills, head aches and muscle aches (a condition known as polymer fume fever), bladder problems, interruption of hormone function, thyroid disease, reduced fertility, birth-damage in infants, cancer. Teflon fumes can be fatal to birds. **Alternatives:** It is highly recommended to replace Teflon pans with **ceramic** or **glass**. Ceramic cookware is very durable, non-stick and easy to clean with absolutely no risk of exposure to harmful chemicals.

LATEX

Many products are made from latex including dummies for babies, rubber bands, balloons, shoe soles, condoms, gloves, catheters and stethoscopes. Latex is derived from the sap of the rubber tree, *Hevea brasiliensis*. The substance is then processed to increase elasticity, durability and strength. Estimates vary, but around one to six per cent of people are allergic to latex; either to the proteins found naturally in the substance or to the industrial chemicals (such as mercaptobenzothiazole) added during manufacturing. Synthetic rubber products made from petrochemicals usually don't provoke allergic reactions in people who are allergic to latex. **Irritant dermatitis** - characterised by crusty skin lesions. **Allergic contact dermatitis** - caused by a reaction to the chemicals added to latex during processing, not to the latex proteins themselves. Symptoms tend to develop a few days after exposure. Not a true latex allergy, but the absorption of latex through broken skin can increase the risk of latex allergy in susceptible people. **Immediate-type latex allergy** - initial exposure to latex prompts the immune system to react and create antibodies. On subsequent exposure to latex, the body mounts an immune system response, which includes the release of histamine. This can cause a wide range of sudden reactions including hives, swollen lips and, in severe cases, anaphylaxis.

Possible reactions/Symptoms: range in severity depending on the individual, but can include: Dermatitis, itchy skin, crusty skin lesions, weeping rash, sneezing, coughing, wheezing and breathing difficulties, hay fever symptoms such as running nose and itchy eyes, hives, swollen lips, tingling in the mouth, Anaphylaxis (symptoms include airways swelling to the point of suffocation).

Latex allergy and food - Around half of all people with latex allergy have allergic reactions when eating particular foods, including: Avocado, Kiwi fruit, Banana, Potato, Tomato, Chestnut, Papaya. Some latex-allergic people may be cross-sensitized to: Passion fruit, Fig, Melon, Mango, Pineapple, Peach, Pear, Celery, Pineapple, Cantaloupe, Apple, Cherry, Wheat, Turnip, Spinach, Bell pepper. This is because some of the proteins in latex that cause latex allergy are also present in these fruits. (A person who is allergic to the manufacturing chemicals in latex will not have allergic reactions to these foods.)

Part 4:

NUTRIENT ANALYSIS

Beneficial Supplementing Of Vitamins & Minerals

This part of your test is concerned with nutritional deficiencies or need for certain vitamins, minerals or nutritional supplements.

Understanding the role vitamins and minerals play in the body is the key to understanding what we need and why. A deficiency of certain vitamins and minerals can cause physical as well as emotional imbalances. It is generally thought that we could get all of the vitamins and minerals our bodies need if we “eat right.” But studies show that many foods contain fewer vitamins and minerals than they did decades ago. And, honestly most of us just don’t always “eat right.” Vitamins, minerals or Multivitamin supplements help to fill the void in achieving proper nutritional levels, and help balance the body’s function naturally.

The supplements marked as beneficial in your Allergy Report are suggestions only. They do not necessarily reflect a veritable deficiency. Deficiencies as such can indicate a lack of certain minerals or vitamins, but occur also due to an inability of the body to absorb the nutrients; which in turn can be caused by various reasons such as allergies, a disturbed metabolism, toxins in the body, hyperacidity, Leaky Gut Syndrome, parasites, stress, illness, etc. explaining why we may have an increased need for certain Minerals or vitamins.

The quality of vitamins, minerals and dietary supplements varies greatly, as they aren't all created equally in potency and purity of ingredients. Significantly so the ratio and distribution of particular vitamins/minerals, as cheaper supplements often do not have adequate amounts/ratio and poor quality ingredients and unnecessary sometimes unhealthy fillers. Also the way they are produced can affect their health performance and how beneficial they can be for your body. Unfortunately, many of today's vitamin and mineral supplements are made synthetically through chemical processes, rather than derived directly from plants, fruits and vegetables or materials. Quality vitamins are produced with the best natural raw ingredients available. This is important because the more adulterated a product (synthetic, impurities, fillers, etc) is the more detrimental they can be for your health, apart from being totally useless. The ingredients of quality and balanced product should ensure and improve absorption by the body. However, the proliferation of different formulas and brands of dietary supplements makes it confusing to decide which to buy -- whether you are looking for vitamins, minerals, other nutritional supplements or herbal products. Consider consulting a nutritionist or nutritionally trained specialist for guidance or dietary advice.

Quality Supplements we trust: Lamberts Healthcare is UK's leading supplier of Vitamins, Minerals and Supplements - supplying practitioners for over 25 years www.lambertshealthcare.co.uk.

About Dosage: Because we all have individual and different requirements, general advice is near impossible to provide. Please always follow advice given on individual products also for safety and contraindications. However, most Vitamin & Minerals may only be needed short term or as a top up for app 3-4 weeks (perhaps one general sized tub). Some people take/continue V&M only every other day or different intervals. In chronic conditions however usage may be required for longer 3-6+ months. Some recommend starting with a booster dose (normal to slightly larger amount), and then after 1-2 weeks continuing with a smaller maintenance dose (normal to half). However, higher dosages than recommended should only be taken under supervision of a healthcare provider.

Safety: Before you embark on a supplement regiment, be sure that what you're going to take is safe and effective.

Consider consulting a nutritionist or nutritionally trained specialist for guidance about supplements, the right dosage, usage and duration.

Please consult your doctor or a nutritional therapist before taking any nutritional supplements

Note: Information and statements regarding dietary supplements are not intended to diagnose, treat, cure, or prevent any disease or health condition. We make no medical claims as to the benefits of any of the suggestions to improve medical conditions, or recommend any supplement as a drug, or drug replacement. Please continue taking your prescribed medication. We always recommend that you work in conjunction with your primary medical advisor, or nutritionist/dietician, particularly if you have an existing medical condition, and that you do not take any products during pregnancy or breast-feeding.

Vitamins And Minerals – A Brief Description

MINERALS

Calcium Helps build strong bones and teeth. Promotes muscle and nerve function. Helps blood to clot. Helps activate enzymes needed to convert food to energy. **Magnesium, NOT calcium, is the key to healthy bones:** Dietary intake of magnesium, not necessarily calcium, may be the key to developing healthy bones during childhood, according to new research. A meta-analysis (2010) showed calcium supplements - without co-administered vitamin D - are associated with increased risk for heart attack and may increase the risk of kidney stones and other health problems. According to the National Osteoporosis Foundation (NOF), food will always be the best source of calcium: “People who get the recommended amount of calcium from foods do not need to take a calcium supplement. These individuals still may need to take a vitamin D supplement. Too much calcium from supplements.” Research suggests that physical exercise is the most critical factor for maintaining healthy bones.

Deficiency: Rickets in children; osteomalacia (soft bones) and osteoporosis in adults. **Overdose:** Constipation, Kidney Stones, calcium deposits in body tissues. Hinders absorption of iron and other minerals.

Dairy-Free sources for calcium include:

Nuts such as **Almonds**, Brazils, Hazelnuts, Pistachio. Almonds contain more calcium than any other nut, and they are also good sources of fibre, folic acid, magnesium, potassium and protein. Use Almond butter instead of peanut butter

Enriched Ricemilk, Soymilk and Oatmilk, many replacement dairy products are enriched with calcium and other minerals. Use calcium-fortified non-dairy milk (like soy, oat or rice milk) instead of water in recipes such as pancakes, mashed potatoes, pudding and oatmeal.

Blackstrap Molasses (the darkest grade syrup) contains many minerals, such as calcium, iron and potassium. Stir a drizzle of blackstrap molasses into your oatmeal. **Fruits** dried figs, currants, lemons (esp lemon peel!), oranges). **Figs** supply almost 100 milligrams in just 4 figs, also high in iron, magnesium, potassium, and phosphorous.

Vegetables: Dark leafy greens are excellent sources of calcium: kale, mustard greens, spinach, pack choy, watercress, lambs lettuce etc. also found in parsnips, swede, turnips and olives. Kale contains more calcium per ounce than milk! (Spinach though has high amounts of oxalic acid which can inhibit the body's ability to assimilate the calcium, so it should not be eaten as a main calcium source all of the time. To increase the body's ability to absorb the many nutrients found in spinach, adding foods high in vitamin C helps to cancel out the effect of oxalic acid.) Broccoli is high in calcium as well as iron, magnesium, potassium and vitamins C and E, this cruciferous vegetable is one

nutritional powerhouse! Add steamed and minced greens like collards and kale to casseroles, soups and stews. Cook a vegetable stir-fry and toss in diced tofu made with calcium sulfate.

Pulses: **soya** (used to make tofu, soya burgers, soya milk etc) red kidney beans, **chick** peas, broad beans, baked beans, Add calcium-rich beans like black-eyed peas to soups, pasta sauces, salads and burritos, **Use in cooking and baking** mixed/mashed into favourite recipes or canned beans as a side dish. **Sesame seeds** exceptionally high in calcium, a quarter cup contains about 35 percent of the recommended daily value, as well as magnesium, iron, b-vitamins, and zinc. (Hummus a dip, contains Tahini-sesame paste and chickpeas. Tahini can be used in sweet & savoury foods, sauces etc.).

Chromium (picolinate) keeps the body's metabolism healthy- improves carbohydrate and fat metabolism, Most common use is as a weight loss aid; reduce appetite, and increase metabolism. also said to decrease high blood pressure and cholesterol and aids in promoting healthy growth hormone functions. Vitamin C may increase its absorption.

Iodine (Kelp/ Lugol's Iodine Solution)

Iodine is essential for hormonal and thyroid function (Thyroxin is thyroid hormone). app. 95% of the world population is deficient.

Deficiency: Fatigue and Weakness, Cold intolerance, Brittle nails, Depression, Dry skin & hair, Excessive sweating, Fatigue. Frequent bowel movements, throat swelling (Goiter), Hair loss, Hand tremors, Heat intolerance, Heavy periods or less than 28 day cycles, Hypothyroidism, Increased appetite < LI>, Irritability, Inability to concentrate learn and remember, Insomnia, Low sex drive, Muscle aches, pains, cramps, and weakness, Nervousness, Over-active Thyroid Under-active Thyroid, Poor memory Puffy face, Unexpected weight gain, Weight gains, Weight loss, changes in heart rate. **Dosage:** 150 mcg. **Lugol's Iodine Solution** further kills bacteria, fungus, parasites and viruses. It removes fluoride, chlorine, bromine and heavy metals like lead and mercury that other detoxes cannot remove. Suggested read: 'The Iodine Crisis' by Lynne Farrow.

Iron Essential for making hemoglobin, the red substance in blood that carries oxygen to body cells. **Deficiency:** Tiredness, irritability, difficulties concentrating. Skin pallor; weakness; fatigue; headaches; shortness of breath (all signs of iron-deficiency anemia). **Dosage:** 14mg. (Liver, lean Meats, Kidney beans, enriched Bread, Raisins) Note: Oxalic acid in spinach and Rhubarb hinders iron absorption. **Overdose:** Toxic build up in liver and in rare instances the heart.

Magnesium (Mg) is an important multi purpose mineral - a miracle mineral. Magnesium deficiency has been implicated in allergies, allergy like symptoms and allergic skin reaction including skin redness and increased scratching. Variations of allergies, raised white blood cells and increased histamine levels have all been noted as features of many chronic disorders. Magnesium (Mg) is an important mineral needed for normal, day to day functioning of the human body. Responsible for the regulation of over 300 Enzymes, magnesium helps in the regulation of blood calcium levels, energy production, and muscle relaxation and it also helps relax the mind. Low magnesium levels induce a heightened state of anxiety. Mg is a part of the mineral structure of bones and teeth; were the bones act as a reservoir to maintain the correct extracellular magnesium concentration. Necessary for proper function of muscles including those of the heart, Magnesium plays an important role in regulating blood pressure.

Magnesium activates enzymes needed to release energy in body, helps keep the blood's pH levels in balance by controlling the amount of acid in the blood, also helps utilize B-complex and vitamin C and E in the body. Muscle tension, anxiety and even headaches and migraines can all be kept under better control when the body has sufficient levels of magnesium, and it aids in production of serotonin, the 'feel good' neurotransmitter. A natural way to control conditions such as asthma, anxiety, hyperactivity, stress, depression, adrenal fatigue, post traumatic stress disorder, it's also great for constipation - instead of reaching for a laxative or stool softener.

Deficiency: anaemia, anxiety, asthma, anorexia, birth defects, calcification of small arteries, confusion, depression, lethargy, mood swings, and irritability, hyperactivity/synophobia, hypotension, High blood pressure, insomnia, diabetes, malignant calcification of soft tissue, menstrual tension, migraines, muscle cramps/pains/tremors/ weakness, muscle twitch, nausea, nervousness/nueromuscular irritability, neuromuscular problems, restlessness, seizures, stress, ticks and twitching, tremors, vertigo, irregular heart rhythm, palpitations.

Dosage: 200 - 400mg , should not be taken directly after food as it neutralises stomach acidity. Not all forms of magnesium are equally well absorbed. *Magnesium Citrate* is one of the best forms for being absorbed by the body. Magnesium is also best taken in several small doses. Similarly, it should not be taken with caffeine as this inhibits the absorption of magnesium. Spinach, Beef Greens, Broccoli, Tofu, Popcorn, Cashews, Wheat Bran. **Overdose:** Nausea, vomiting, low blood pressure, nervous system disorders. **Warning:** Overdose can be fatal to people with kidney disease. **Caution:** you should consult your doctor first if you are already being treated for arrhythmia (irregular heart rhythm.) Magnesium can interact with certain diuretics, some cancer drugs, and magnesium-containing antacids.

Magnesium and Osteoporosis: Magnesium deficiency may be a risk factor for postmenopausal osteoporosis. This may be due to the fact that magnesium deficiency alters the metabolism of calcium within the body and the hormone that regulates calcium. Several studies have suggested that magnesium supplementation may improve bone mineral density. Magnesium is extremely critical for women. Some of the symptoms of magnesium deficiency are irritability, memory loss, and chocolate cravings.

Selenium Important in protecting lipids of cell membranes (cell walls are made up of a lipid (fat) layer), proteins, and nucleic acids against oxidant damage. Antioxidant. Interacts with Vitamin E to prevent breakdown of fats and body chemicals. **Deficiency:** Age spots or liver spots, ALS (Lou Gehrig's Disease), Alzheimer's Disease (associated high vegetable oil consumption), Anaemia, Cardiomyopathy, Cataracts, Cancer Risk, Cystic fibrosis, Cancer (associated with high vegetable oil intake) (Number 2 killer), Fatigue, Heart palpitations (irregular heart beat), Impaired immunity, Infertility, Keshan Disease (myocardial fibrosis), Liver cirrhosis, Multiple Sclerosis, Muscular dystrophy, Myalgia, Pancreatitis, Parkinson's Disease (associated lead poisoning), Scoliosis, Sterility in males. **Dosage:** 0.05-0.2 mg. Sources include broccoli, chicken, cucumbers, egg yolk, garlic, liver, milk, mushrooms, onions, seafood, and tuna, Kidney, Liver and other meats Grains and other Seed contain varying amounts depending on the soil content. **Overdose:** Finger nail changes, hair loss.

Silica (Horsetail) Increases collagen in growing bone by 100%

Most disorders of the stomach and digestive tract involve a degradation of the lining in the G.I. tract. Silica is an essential element involved in rebuilding and maintaining these tissues. Our skin is our first line of defence against naturally occurring bacteria, virus's, and other pathogens. Silica promotes and maintains healthy skin tissue. **Silica stimulates the rapid re-growth of damaged skin tissue.** The

presence of adequate Silica in the intestines will diminish inflammation of the intestinal tract. It can cause disinfection in the case of stomach and intestinal catarrh and ulcers. Silica can avert or clear up diarrhoea and its opposite, constipation.

Deficiency: Poor skin quality, brittle fingernails, Dry brittle hair, Poor calcium utilization arterial wall strength problems, In the human body, silica is found in the connective tissues, tendons, ligaments, cartilage, and blood vessels and it is thought that the mineral is essential for their integrity. Research suggests that silica can help to prevent osteoporosis and can be used to treat bone fractures. Anti-bacterial, Anti-fungal, Anti-viral, Systemic disinfectant & immune support, Subdues inflammation & promotes healing. Bone health/ mending, broken bones, fractures, capillary strength, foetal development, immune system health, osteoporosis, skin disorders, scars, sprains, tendinitis, torn ligaments, vascular disorders, wound healing, wrinkles. **Dosage:** depending on product and format (tablet, capsule, powder, gel) between 20-30mg. Gel can also be applied externally on rashes, sunburn etc.

Zinc Necessary element in more than 2000 enzymes that are essential to Immune system, digestion, metabolism and the breakdown of protein, fat and carbohydrate. Essential for synthesis of protein, DNA and RNA. It is required for growth in all stages of life. Zinc is required in the healing of injuries, wounds, burns and gastric ulcers. Necessary for growth, development, maintenance of muscles. Hair growth, insulin production, immunity, smell, taste, and fertility. It is essential for skin's oil gland function and therefore is known for the treatment of acne. Zinc is known for its ability to fight disease, cold and flu symptoms and protects the immune system. Zinc is required in the healing of injuries **Deficiency:** Slow healing of wounds; loss of taste; retarded growth and delayed sexual development in children. / Acne, Acrodermatitis enteropathica, Anaemia, Anorexia and/or Butimia, Apathy, Birth defects, Bad body odours ("smelly tennis shoe" syndrome), Brittle nails, Depression, Diarrhoea, Enlarged prostate, Eczema, Fatigue, hair loss / "frizzy" hair, loss of sense of taste, Infertility, Impaired wound healing, Impotence, Irritability, Lethargy, Loss of sense of smell, Malabsorption, Memory loss, Paranoia, Pica (eating hair, wool, etc.), Sterility, Weaken immune function, White spots on nails *Zinc deficiency associated congenital birth defects:* Cleft lip & Cleft palate, Clubbed limbs, Down's syndrome, Heart & lung defects, Hiatal hernia & umbilical hernia, Spina bifida.

Dosage: 15-20mg per day is quite safe. Best taken before bed as it should be taken away from food and should be taken at least 8 hours after iron. Zinc Chelate is one of the most effective and absorbable zinc supplements. **Found in:** Oysters, Shrimp, Crab, Beef, Turkey, whole Grains, Peanuts, Beans.) **Overdose:** Nausea, vomiting; diarrhoea; abdominal pain; gastric bleeding.

Spirulina stands out as one of the most nutritious foods in the world. Having more than 70 percent protein, it is the highest among all other foods, containing ALL the essential amino acids and as such can be described as a 'complete protein'. Spirulina- a microscopic blue-green algae - grows in shallow ponds which contain very high concentrations of minerals - turning sunlight into life energy. These ponds are alkaline and in fact almost no other plant life can survive in this type of environment. As Spirulina has the ability to lock many minerals into amino acids, 'pre-digesting' the minerals in a form which our body can readily make use of. Spirulina is rich, containing a balance of nutrients that make it virtually a 'whole food' capable of sustaining life without the need for any other foods. It is very easily digested providing vitamins, many minerals, chlorophyll, essential amino acids, proteins, carbohydrates and enzymes, with 'probiotic' properties. Spirulina has more protein than red meat, making it also a healthy option for Vegetarians & Vegans.

Spirulina helps boosting the production of white blood cells that fight and prevent infection, and help in increasing various disease-combating antibodies within your body. In a 2005 study it was found that high doses of Spirulina also help in inhibiting many allergic reactions in the body, particularly among those who suffer from allergic rhinitis. It also is a powerful blood purifier, and potent detoxifier - detoxing body and cells of various heavy metals and toxins. Spirulina has a long history of safe human consumption.

Its outstanding nutritional profile: includes B complex, vitamin C and E and phytochemicals, such as carotenoids, chlorophyll (blood purifier), the essential fatty acids, GLA fatty acid, lipids, nucleic acids (RNA and DNA), Calcium (highest source), Potassium, Zinc, Magnesium, Manganese, Selenium, Iron and Phosphorus. Phycocyanin (a blue pigment) a protein known to inhibit cancer.

Intake: Available as a powder, tablet and capsule, and can be added to foods, drinks, smoothies and health tonics. Spirulina can be taken in small quantities as a healthful addition to your diet, or in larger quantities, or as a meal replacement. In addition to being your powerhouse of well balanced nutrients, **Spirulina is a potent detoxifier.** Thus you may experience reactions due to the detoxification process, as Spirulina increases metabolism, converts protein into heat energy - which may elevate body temperature, removes accumulated waste product in your colon. Your body may go through an adjustment period. For that reason, it is best to start with a small dose (1-2 tsp) and work your way up (2-3 tablespoons). Once you see how your body responds, you can gradually increase your intake.

VITAMINS

Vitamin A (Retinol) Essential for eyes /eyesight, skin, appetite, taste and growth, and the proper function of the immune system.

Essential for normal growth, integrity of the skin, and bone development. **Deficiency:** Lack of Vitamin A can lead to infection of the cornea, conjunctiva (the red part of the eye), trachea (windpipe), hair follicles, and renal system. Night blindness; reduced hair growth in children; loss of appetite; dry, rough skin; lowered resistance to infection; dry eyes. **Dosage:** 3000 IU , Found in liver, fortified Milk .**Overdose:** Headaches; blurred vision; fatigue; diarrhoea; irregular periods; joint and bone pain; dry, cracked skin; rashes; loss of hair; vomiting, liver damage.

Vitamin B-Complex Energy Production - Good Digestion - Healthy Skin, Hair and Nails.

Vitamin B-Complex, a **very important stress buster**, comprises of the essential B Vitamins - Vitamin B1, Vitamin B2, Vitamin B3, Vitamin B5, Vitamin B6, Vitamin B9, Vitamin B12 plus the vitamins Biotin, Choline and Inositol. The eight B-Vitamins are needed for the proper functioning of almost every process in the body and are essential for correct RNA and DNA synthesis and cell reproduction, healthy functioning of the nervous system, correct digestion, production of HCL (Hydrochloric acid) and to assist in the breakdown of fats, proteins and carbohydrates. A Vitamin B deficiency can lead to decreased energy production, lethargy and fatigue, impaired digestion and deficiency of essential nutrients; dry, grey skin, dermatitis, wrinkles, acne, rashes, falling hair and weak, splitting nails.

Synergy - B Vitamins work so closely with one other that a deficiency in any one B Vitamin can lead to poor functioning of any or all of the others even if they are in good supply. Always take the B Vitamins in a Complex and then top up with any individual Vitamin B, if needed.

Symptoms include: ADHD, alcoholism, alzheimer's disease, anxiety or panic disorder, chronic fatigue, tiredness, irritability, nervousness, tension, leg cramps, pain and chronic pain, depression, low morale and mental confusion, hypersensitivity to light, poor appetite, insomnia, constipation, crohn's disease, canker sores, diabetes, high cholesterol level, weakness, other indications for lack of vitamin b is hair problems, gray hair, falling hair, baldness, neuritis, psoriasis, rosacea, acne, nail problems, or other skin troubles, stress, heart disease prevention, infertility. Nervous individuals and people working under tension can greatly benefit from taking (larger than normal) doses of B vitamins.

Recommended Dosage: B complex once a day -dose should contain 50-100 micrograms of vitamin B12 and biotin, 400 micrograms of folic acid, and 50-100 milligrams each of all the other B vitamins. B Vitamins are water-soluble which means any excess will be excreted through the urine. This also means that B Vitamins need to be taken on a daily basis, as the only one we can store is Vitamin B12. Taking a high dose Vitamin B Complex (50mg - 100mg) daily can turn urine a bright fluorescent, this is perfectly safe and normal so don't be alarmed!

Folic Acid (Folacin) Essential for the manufacture of genetic material as well as protein metabolism and red blood cell formation.

Deficiency: Impaired cell division; anaemia; diarrhoea; gastrointestinal upsets. **Overdose:** Convulsions in epileptics. May mask pernicious anaemia (see Vitamin B12 deficiency).

Vitamin C - Ascorbic Acid is a general anti-allergy vitamin and natural antihistamine also known as "ascorbate" (ASC). It both prevents histamine release and increases the detoxification of histamine (*especially in Hayfever*). Antioxidant. Helps bind cells together and strengthens blood vessel walls. Helps maintain healthy gums. Aids in the absorption of iron. **Deficiency:** Muscle weakness, bleeding gums; easy bruising. In extreme cases, scurvy. **Overdose:** Unknown.

Vitamin D / D3 One of the most useful nutritional tools we have at our disposal for improving overall health. Necessary for the development of bones and teeth. It is essential in the metabolism of calcium and phosphorus, two of the most important constituents of bone and teeth. Enhances calcium absorption. Vitamin D is manufactured in the skin with exposure to sunlight*, enabling the body to make its own Vitamin D. Vitamin D3 is the only vitamin the body can manufacture from sunlight (UVB). Yet, with today's indoor living and the extensive use of sunscreens due to concern about skin cancer, we are now a society with millions of individuals deficient in life-sustaining bone building and immune modulating Vitamin D3.

Deficiency: Rickets in children; bone softening in adults; osteoporosis. The latest research, shows that Vitamin D3 deficiency is linked to other health conditions such as depression*, back pain, cancer, both insulin resistance and pre-eclampsia during pregnancy, impaired immunity and macular degeneration. **Dosage:** D 200 400 IU / D3 2.000-8.000iu (5.000iu ideal). A growing number of researchers who have widely studied Vitamin D3 are almost begging the general public to consume more of this important nutrient. Due to Vitamin D3's high safety profile in doses up to 10,000 IU per day and because of the wide role it plays in our health, consuming 5,000 IU per day of this nutrient at times of the year when sunlight is scarce is a prudent way to improve overall health. **Sources:** milk, cod liver oil, salmon, egg yolk, and butter fat. **Overdose:** Calcium deposits in organs; fragile bones; renal and cardiovascular damage.

***Depression** may also result from lack of sunlight causing a condition known as '**Seasonal Affective Disorder**' SAD. Some people do benefit from using a full-spectrum SAD light throughout the darker winter months (see www.sad.co.uk).

Vitamin E Antioxidant. Helps form red blood cells, muscles and other tissues, aids healing of scars. Preserves fatty acids. The antioxidant properties may be a factor in reducing the risk of certain forms of cancer. **Dosage:** 200iu-400iu. Corn or Cottonseed Oil, Butter, Brown Rice, Soybean Oil, Vegetable oils such as Corn, Cottonseed or Soybean, Nuts, Wheat Germ. **Deficiency:** Rare, seen primarily in premature or low birth weight babies or children who do not absorb fat properly. Causes nerve abnormalities. **Overdose:** Unknown.

Activated Charcoal (AC)

Activated charcoal is a fine, black powder that is odourless, tasteless, and nontoxic. Commonly made from peat, coal, wood, coconut shell, or petroleum. "Activated charcoal" is similar to common charcoal, but is made especially for use as a medicine. As a well known antidote, Activated Charcoal (AC) is used to treat poisoning (any toxic drug or chemical), trapping chemicals, prevents their absorption and removing them from the body (estimated to reduce absorption of poisonous substances up to 60%), reduce intestinal gas (flatulence), etc. Some Emergency Rooms administer large doses of activated charcoal for certain types of poisoning.

Activated charcoal (AC) has been used for thousands of years by cultures around the world and is safe for most adults when used short-term. Activated charcoal is one of the safest and most cost-effective remedies to keep around the house. If you or a family member suffers from food allergies or sensitivities, it could very easily be the difference between hours of pain and discomfort, or a regular day.

Helpful for: poisoning, upset stomach, stomach bugs (binds bacteria), bloating, gas, diarrhoea, colic, indigestion and heartburn, tooth pain, stinging bug bites, rashes and hives (Urticaria) etc. **Reactions from food allergies** - AC binds offending proteins in food that the body can't break down, such as gluten, dairy, egg, peanut, soy, and other allergens. When the protein is bound to the activated charcoal, it is whisked out of the digestive tract rather than remaining in the body and causing discomfort, therefore reducing or alleviating food allergy symptoms. Activated charcoal works best in people who have primarily digestive symptoms when reacting to a food allergen and it **should not be relied on** as a remedy in individuals who have anaphylactic allergies (although some research shows that using activated charcoal in addition to epinephrine immediately upon ingestion of an allergen could help lessen the severity of anaphylactic reactions). AC can further be used for colon cleanse, liver and kidney cleanse, full body cleansing or poison detox.

About usage: There is a wide variety in the recommended dosage of activated charcoal for non-poison related use, most likely because the amount of charcoal needed to be effective varies from person to person. It is further important to select activated charcoal made from coconut shells or other natural sources. It is best to take AC as soon as a known allergen has been (accidentally) ingested. However although activated charcoal is effective in reducing or eliminating food allergy symptoms it should **not be used as a way to 'cheat' on a restricted diet in order to eat offending allergens**. The AC cannot stop all of the proteins in a food from entering into the body, causing the immune system to over-react, triggering inflammation, and exacerbating leaky gut issues. **Anyone with food allergies should make all efforts to avoid the foods they are allergic to.**

Dosage: A general guideline is to take 500 to 1040 mg of activated charcoal with water up to 4 times daily, as needed. Adults can start by taking two to three capsules and repeat as needed until symptoms subside. For small children it would be wise to start with a smaller amount, such as ½ or 1 capsule of activated charcoal, adding more gradually as needed. (Buying AC: Watch out for products using fillers and Anti-Caking agents: Magnesium Stearate, Silicon Dioxide)

Richard C. Kaufman, BS, MS, PhD, (Bio-nutritional Chemistry University of Brussels): "Detoxification is an on-going biological process that prevents toxins (from infectious agents, food, air, water, and substances that contact the skin) from destroying health. Chronic exposure to toxins produces cellular damage, diverse diseases, allergic like reactions and compromised immunity." As a general detox plan to counteract these daily exposures to toxins, he has found two programs using Activated Charcoal: 1.) Use activated charcoal on two consecutive days each week. Take a total of 20 to 35 grams each day divided into two or three doses. Take in the morning, at midday and before bed on an empty stomach. Avoid excessive calories or processed foods on those days. 2.) Take about 20 grams a day of activated charcoal in divided doses for several months. Follow with a one-month break and resume the cycle.

Precautions, Contraindications and Side Effects: Activated charcoal can cause constipation and dehydration and should always be taken with plenty of water. It shouldn't be taken regularly, as it can cause nutrient deficiencies. Activated charcoal will interfere with absorption of prescription and over-the-counter medications into the body, so it should always be taken separately (wait two to four hours in between using AC and taking medication), and a doctor should be consulted before using activated charcoal in the case of being on long-term prescription medication. Activated charcoal will often turn stools black, but is no cause for concern. **Gastrointestinal (GI) blockage** or slow movement of food through the intestine: Don't use activated charcoal if you have any kind of intestinal obstruction. Also, if you have a condition that slows the passage of food through your intestine (reduced peristalsis), don't use activated charcoal, unless you are being monitored by your healthcare provider. **Pregnancy and breast-feeding:** Activated charcoal might be safe when used short-term, but consult with your healthcare professional.

(Source: A Surprising Natural Food Allergy Remedy <http://wholenewmom.com/health-concerns/activated-charcoal-food-allergies-natural-remedy/>)

Digestive Enzymes Digestive enzymes are proteins specially tailored to break down the foods we eat into nutrients that your body can then readily digest. Enzymes are substances that make life possible, and are needed for every chemical reaction that takes place in the human body. No mineral, vitamin or hormone can do any work without enzymes. Lack of digestive enzymes can be a factor in food allergies and may influence the health of the entire body. **Possible symptoms:** Symptoms are bloating, belching, gas, bowel disorders, abdominal cramping, heartburn and food allergies. As we grow older all of us lose our ability to produce concentrated digestive enzymes. Rosacea – many people have been found to have low stomach acid and low digestive enzymes.

Benefits: Enzymes deliver nutrients, carry away toxic wastes, digest food, purify the blood, deliver hormones, balance cholesterol, feed the brain, strengthens of the immune system and cause no harm to the body. Digestive enzyme products with several digestive enzymes are available at health food stores and many supermarkets.

EFA - Essential Fatty Acids are critical for health and have a beneficial effect on many bodily processes & hormones, and seem to exert a calming influence on an over-active immune response. Our bodies cannot manufacture them, and we must consume them in our diets. Found in oily fish. Supplements: Evening Primrose oil (EPO), Flax & Linseed oil (contains almost twice as much omega 3 than fish oil), Fish oil, Cod-liver oil, Starflower oil, GLA. **Possible symptoms:** skin disorders (dry / itchy skin, tissue inflammation), slowness or lack of wound healing, Oedema / water retention, high blood pressure, drying up of glands and mucus membranes, dry brittle hair / hair loss, behavioural changes/disturbances. **Benefits:** EFA's are necessary for growth and for healthy immune system function and are powerful anti-inflammatory agents. They may be helpful in a number of other conditions: skin complaints, rheumatoid arthritis, depression, autism, and many other conditions.

Probiotic - Acidophilus Modern-day lifestyle, stress, poor diets and modern food production techniques, drugs use - especially antibiotics can deplete our friendly bacteria which play a vital role in our immune health, blood cholesterol as well as our ability to absorb nutrients. For healthy digestion and general well-being we need to maintain a healthy balance of bacteria in the gut. Certain foods rich in fibre molecules are called prebiotics, factors which nourish friendly GI flora and set the stage for probiotic survival. Prebiotics help probiotics survive passage through the acidity of the stomach and small intestine, and foster their growth in the intestines and colon (fructooligosaccharides (FOS), guar gum, lactulose, inulin). Those are found primarily in all kinds of plant foods (bananas, artichoke, chicory root, burdock, onions, leeks, fruit, soybeans, sweet potatoes, asparagus, green tea); but also honey and cultured foods (kefir, cottage cheese, sauerkraut, yogurt). **Symptoms:** An imbalance (deficiency of healthy bacteria) can cause intestinal flora imbalances or dysbiosis – and associated symptoms. Diarrhoea, irritable bowel syndrome, inflammatory bowel disease and other gastrointestinal problems. **Benefits:** These friendly bacteria encourage good digestion, help regulate bowel movements (reduces constipation), boost the immune system and increase resistance to infection. **Choosing a probiotic:** Probiotics come in a wide range of formulations. Look for supplements that contain Bifidobacteria and *Lactobacillus* species such as *L. Acidophilus* in the billions. The number of colony-forming units (CFU's) should be listed on the label.

Multi strain Probiotic: e.g. Probioguard® (from Lamberts Healthcare) - 4 strain probiotic for those travelling, or following a course of antibiotics - provides 4 billion live bacteria. Suitable for people considering travelling abroad, or have used a course of antibiotics, or people with regular bloating problems or on-going digestive disturbances

Probiotic - S.Boulardii (*Saccharomyces Cerevisiae Boulardii*)

A probiotic yeast (is a strain of non-pathogenic yeast /microbe) has been shown to maintain and restore the flora in the large and small intestine, and it is now **widely recommended especially for the management of gut health**. *S. boulardii* **cannot be killed by antibiotics** and is an ideal supplement to pair with antibiotics. *S. boulardii* has been shown to be effective at combating *Candida Albicans*, *H. Pylori*, *Clostridium Difficile* infection (CDF), and other pathogenic yeast and bacteria strains.

Benefits beyond skin and intestinal health: The benefits don't end with improved skin and intestinal health. Since *S. boulardii* is such a strong anti-inflammatory agent, it can act pretty powerfully throughout your body, improving your immune function, reducing food allergies, lowering your risk of infection and increasing the nutrients your body is able to absorb from food. May further benefit: Acne, allergies, autism, cancer, *Candida* infection, colitis (inflamed colon), constipation, cystic fibrosis, depression, diabetes, digestive disorders (Hirschsprung's disease), fatigue, fever, flatulence (gas), food allergies, infection (children), herpes, lactose intolerance, mood changes (irritability), skin disorders, seborrheic dermatitis (inflamed skin), ulcerative colitis, ulcers, urinary tract infections (UTIs).

Dosage: The highest-quality *S. boulardii* preparations are lyophilized (freeze-dried) and generally contain 5 billion CFU (colony forming units).

Adults: *S. boulardii* is often taken in doses of 500-2,000 milligrams in divided daily doses (three or four times daily) for up to 15 months.

Children (younger than 18 years): The most commonly used dose for children for the treatment of diarrhoea is 250-600 milligrams daily for up to five days. This has been given alone and in combination with antibiotics. **OptiBac for Babies & Children** - 3 Billion Friendly Bacteria Flavourless Natural Supplement | *Lactobacillus Acidophilus* & *Bifidobacterium Infantis*.

Caution: Yeast Allergy. Avoid in individuals with a known allergy or sensitivity to yeast, *Saccharomyces boulardii*, *Saccharomyces cerevisiae*, or other species in the *Saccharomycetaceae* family. *Saccharomyces boulardii* use may be associated with itching, urticaria ("hives"), and generalized skin eruptions.

70% of our immune system is located around the digestive system.

Healthy Bowels + An Efficient Digestive System = More Energy

MSM (Methylsulfonylmethane)

MSM is a stable source of sulphur that is naturally found in the human body, plants and animals. Sulphur is a key building block in the body and is directly involved in the production and strengthening of collagen molecules. The elastic nature of collagen adds "bounce" to all cell membranes, helping to keep them flexible and 'plump'. As we age, collagen production declines (which means that our joints don't bounce back from injuries as quickly as they once did). MSM performs a series of important functions in your body every day, from increasing your energy levels to helping with conditions like allergies and asthma. There is a whole range of reasons why people take MSM, apart from trying to relieve pain or swelling. Sulphur is an emerging stealth player in nutrition and for a variety of mechanisms, including the detox and anti-inflammatory pathways. If you don't have enough sulphur in your diet, you're not going to be able to naturally produce glutathione, which is absolutely essential for removing heavy metals and many of the toxins you're exposed to.

Relief Of Allergies - Respiratory Allergies: There is some evidence to suggest that MSM's anti-inflammatory benefits may offer some relief from the symptoms of hay fever, including respiratory congestion and itching, lung problems, asthma, inflammation of mucous membranes. Gastrointestinal problems, chronic constipation, Diverticulitis, "sour stomach", diarrhoea, nausea, constipation, hyperacidity (helpful in maintaining a proper pH balance), helps balance blood sugar levels, Obesity, helpful in healing **Leaky Gut**.

Bone, Joint and Muscle: MSM is a beneficial nutrient for helping conditions like arthritis, rheumatoid arthritis and osteoarthritis. Being a dissolved calcium phosphate, MSM helps in breaking up the unhealthy calcium deposits in the body that are the root cause of degenerative diseases. In addition MSM helps in: improving joint flexibility, reducing pain and swelling, reducing stiffness, improving circulation, improving cell vitality. Musculoskeletal pain, muscle cramps.

The Detoxification Effect: MSM considerably increases the permeability of your cells, which means that it increases the cells' capability of flushing out excess fluids and toxins. This mechanism has a very important detoxifying effect, making way for essential nutrients into your system and thereby improving the overall functioning of your cell membranes.

Skin And Hair Care: The sulphur provided by MSM produces generous quantities of collagen and keratin, both of which are vital for healthy hair and nails. In fact, MSM is often referred to as the 'beauty mineral' owing to its ability to add to enhance the thickness and strength of nails as well as hair in a very short span of time. Moreover, research also shows that MSM is quite helpful in the treatment of **Skin conditions:** psoriasis, eczema, rosacea, dermatitis, acne, dandruff. **Many other conditions:** Dental/gum disease. Ulcers, wounds, cuts, or abrasions, sun burn, inflammation in eyes or mucous membranes, headaches, migraines or hangover, PMS, muscle cramps. Osteoarthritis or rheumatoid arthritis, Osteoporosis, relieve from pain or swelling, repetitive strain injuries, carpal tunnel syndrome, Bursitis, tendinitis. Scleroderma, Scar tissue or stretch marks. Mood elevation, fatigue, chronic fatigue syndrome, poor circulation, high blood pressure, autoimmune disorders, boost the immune system, parasite infections, Radiation poisoning, certain bladder disorders like intestinal cystitis.

Natural Energy Booster: As MSM increases the permeability of our cells. Owing to this increased permeability, these cells then need a lesser amount of energy to deal with the accumulated toxins. Moreover, due to the detoxification, it becomes easier for the body to absorb nutrients, which in turn reduces the amount of energy spent on digestion of your food. **MSM further improves** our body's ability to make its own antioxidants. For example, sulphur plays a critical role in detoxification, and also in inflammatory conditions. For detoxification, sulfur is part of one of the most important antioxidants that your body produces: glutathione. Without sulphur, glutathione cannot work.

Usage: Sulphur is a critical nutrient, without which many other things don't work properly. **MSM Sulphur 99.9% pure** can be taken as powder, capsule or tablet 1-3 times daily with large glass of water. **Dosage:** MSM is safe to take in higher doses ranging from 500 to 4000 milligrams (4g) daily. Beneficial for cleaning and healing the digestive tract if taken 6-12 months. MSM powder can also be added to hair conditioner. **For osteoarthritis:** 1.5 to 6 grams of MSM daily taken in up to 3 divided doses for up to 12 weeks. In addition MSM cream can be applied to the skin.

Side effects: In some people, MSM might cause nausea, diarrhoea, bloating, fatigue, headache, insomnia, itching, or worsening of allergy symptoms, often due to detoxification. (These symptoms may pass after a few days).

Turmeric - For Digestive Health & Skin Ailments

Turmeric has antiseptic, anti-inflammatory properties, anti-microbial, anti-allergic properties. Turmeric (Curcuma) is **highly valuable for the digestive system and the liver**. It is considered a **digestive bitter** and a **carminative** in both Ayurvedic and Traditional Chinese Medicine. Turmeric stimulates bile production in the liver encouraging excretion of bile via the gallbladder - improving the body's ability to digest fats. It **helps to improve digestion** and is beneficial for people who experience gas and bloating or who feel tired after consuming meals.

Turmeric is **anti-inflammatory** to the mucous membranes which line the throat, lungs, stomach and intestines - decreasing congestion and inflammation. People with the following conditions could benefit from regular use of turmeric: IBS (Irritable Bowel Syndrome), diarrhoea, loose stools, colitis, Crohn's disease and post-giardia or post salmonella conditions. It can also reduce the itching and inflammation that accompanies haemorrhoids and anal fissures. **This herb is also useful in following up antibiotic treatments**, in addition to acidophilus and garlic. It helps to improve the intestinal flora and acts as an anti-bacterial.

Turmeric has beneficial/strengthening influence on the liver, especially in Spring - the season which rules the liver and gallbladder in Traditional Chinese Medicine. Turmeric shares similar liver protectant compounds like milk thistle and artichokes.

Turmeric can also benefit **skin conditions** including: eczema, psoriasis and acne, for it is a potent detoxifier. Another use of turmeric is for the treatment of skin cancer or pre-cancerous skin conditions. Both topical and internal use are encouraged.

A member of the ginger family, Turmeric will benefit both the digestive system and the liver, whichever way consumed.

Available in capsules or as a loose herb powder, it can be incorporated into foods, or taken as a supplement (best taken twenty minutes before meals, especially meals that are high in protein and/or fat). I prefer organic Turmeric powder stirred in a herbal tea (at app. 60-70 degree temperature). It is thought that bitter herbs constituents (as tea or tincture) start their work by locally stimulating the bitter sensory response of taste buds in the mouth and throat. Bitters also increase digestive secretions from the stomach, pancreas, liver and gallbladder. This leads to better digestive health. Apart from increasing effectiveness over capsules, loose powder is often more cost effective.

WATER

Many people actually suffer from dehydration. Water is rarely regarded as an essential nutrient, yet it ranks after oxygen as the most important element necessary for life. While a healthy person can live for weeks without food, we can not survive longer than a few days without water. Our bodies are made up of 75% water. To drink a lot of water is one of the key recommendations for good health, particularly in the dry summer months. Research has shown that increasing hydration dilutes histamine and its effects, thus, water is the safest antihistamine known to man. A scientist has recently claimed that it was normal in old age that the kidneys are only around 40% as efficient as they originally were. However, the main cause is ignored, namely the insufficient fluid intake. Consider that a whole litre of blood flows through the kidneys every minute (about 1400 litres per day). Drinking sufficient amounts of water is crucial to be and stay healthy.

What happens if you don't drink enough Water? Drinking too little can have health consequences:

- **Headaches and dizziness:** If there is not enough fluid in the body, not enough oxygen can be transported to the brain. The result is headache and dizziness.
- **Poor concentration:** Insufficient supply of oxygen to the brain also leads to difficulty concentrating. You should therefore drink a lot, especially before important appointments or when driving.
- **Feeling hungry:** The lack of fluids leads to cravings. The cause lies in the liver. If there is a lack of fluid, it signals a deficiency to the brain.
- **Dry skin:** If there is a lack of fluids, the body primarily supplies the vital organs. As a result, the skin becomes dry. This phenomenon can usually be seen first on chapped lips.
- **Illnesses:** Persistent lack of water means that toxins are not "flushed" out of the body. The result can be a wide variety of diseases.
- **Pain:** Pain, for example back pain, can also be caused by a lack of water. If there is a lack of fluid in the body, blockages can occur, which trigger cramps and tension.

Dehydration is in 5th place to cause of migraine headaches. WaterCures.org, has a very different view of what is an allergy, believing the answer is dehydration.

The daily requirement is app: 2 litre = 8 glasses @250ml (= 7 half pint glasses = 3.5 pints). However, your need for additional drinking water depends entirely on your diet. Coffee, sweet drinks and alcohol do not count - on the contrary alcohol and coffee dehydrate the body. Sugar laden soda and diet drinks are not a valuable source either. Though, it seems nonsense to drink 2 litres of water as recommended by many sources, when you already get some water through your diet (Herbal tea, fruit & veg, etc).

Increase your intake: From our experience (complex 500 test), most people require an average increase of about 10-25%. Particularly those prone to constipation as water is especially important for proper digestion. Top up your required daily liquid intake. Kick starting the day with a large glass of water (cold, warm or hot), replenishes what you have lost during the night. Water is the most essential 'food' and we need a sufficient amount to function properly! As does a car battery! It has also been found that pain and especially back pain can be an indicator of dehydration. Drinking more water can avoid painful episodes. It is the cheapest 'medicine' and first line of defence. At any age, support the work of your organs by drinking plenty of water, particularly between 3 - 7pm, even if you do not experience thirst. It is a matter of habit.

Filtering: Most tap water has added chemicals e.g. chlorine, which affects the skin and respiratory system. Water also contains natural elements found in the ground such as lime scale. Today water filters are widely used to purify drinking water - available in most supermarkets. Kitchen-tap filters are today available from many suppliers. Whole house filters are also obtainable but still quite costly.

Interesting Read: Your Body's Many Cries for Water, Dr. F. Batmanghelidj has written a series of books, expanding on the healing powers of water. Asthma, allergies, arthritis, hypertension, depression, head-aches, diabetes, obesity, and MS are just some of the conditions and diseases that are caused by persistent dehydration. **Your Body's Many Cries for Water: You're Not Sick; You're Thirsty: Don't Treat Thirst with Medication.** **Water Cures:** www.watercures.org/natural-allergy-relief.html

Natural Supplements for Controlling Allergies

Vitamin C (with bioflavonoids) is a general anti-allergy vitamin. Allergic symptoms - caused through the release of histamine by mast cells and other allergy-mediating chemicals - are stabilized by Vitamin C. It acts as a natural Antihistamine (up to 5000mg daily). **Acerola** cherry - richest sources of vitamin C. Well known for its ability to strengthen immunity, Vitamin C contains antioxidants that help strengthen skin, nourish metabolism, strengthen your body's defence system and stimulate white blood cell production.

Vitamin B5 - Pantothenic Acid for general allergy relief. It supports the function of the adrenal glands which make hormones that help us cope with allergic reactions.

Vitamin A: Potent antioxidants and other essential compounds, promotes healthy mucus membranes and inhibits bacteria from entering the body. Also enhances the immune system by stimulating new white blood cells to fight against illness and allergies.

Zinc: plays an important role in immune function, wound healing, normal growth development and allergic reactions. Zinc has been found to help reduce inflammation in the nasal area, effectively alleviating some of the allergy discomfort.

Quercetin - Helps neutralize histamine (up to 2000mg daily) Found in wine and many fruits and vegetables, Quercetin may work as a mast cell stabilizer. It helps block the release of histamine that causes inflammation.

Bromelain (derived from pineapple), helpful in reducing nasal swelling and thinning mucus, making it easier for people to breathe, Breaks down proteins into amino acids and peptides aiding digestion (up to 750mg daily).

Quercetin and Bromelain are synergistic in suppressing the inflammation of allergic reactions, stimulates the production and release of anti-inflammatory agents (prostaglandins - PGs), *Allergic reactions typically involve an excess of inflammatory PGs being released, which contributes to the swelling, redness and itching.*

Omega-3 Fatty Acids - Reduces allergic reactions (1000mg daily)

Digestive Enzymes generally help break down food into smaller, less allergenic molecules, thus decreasing reactions to foods.

Stinging Nettle - can help relieve sinus inflammation and tension that is caused by allergies - significant relief from hay fever. Effectively help reduce allergy symptoms by strengthening immunity. Botanically contains minerals, vitamin A, C + K carotene and Quercetin.

Salt: one of the Best Natural Antihistamine. Self Test the Natural Antihistamine Theory: When you get a runny nose, have congestion or need to constantly clear your throat, put a little salt on the end of your tongue. It is not necessary to swallow it. Just let it be absorbed and after a little while, rinse or otherwise, get rid of the excess. Notice what happens within seconds. Likewise if you are having a hay-fever attack, try the salt and a glass of water. Make sure and look at the second hand of a clock. Because you will want to take note in how many seconds it takes to work. Everyone is different and we will all have various salt and water needs. Test the theory and if necessary, increase or decrease the amount of unprocessed salt and water you take in. Source: www.watercures.org/natural-antihistamine.html

Baking Soda for Allergic Reactions to Foods. Baking soda can stop an allergic reaction within five to eight minutes. Try 1/2 teaspoon of baking soda for children or one - two teaspoons for teenagers or adults, dissolved in a half cup of water, to lessen the symptoms caused.

Activated Charcoal (AC) for reactions from food allergies. Binds offending proteins in food, toxins, chemicals and is known to reduce or alleviate food allergy symptoms (see info below).

Part 5:

How Is Stress Related to Adverse Reactions or Allergy Symptoms?

Stress and adverse reactions (allergies) go hand in hand. Stress wreaks havoc on energy. Stress is your body's response to situations, inside and out, which interfere with the normal balance in your life. Virtually all of the body's systems - digestive, cardiovascular, immune, and nervous system - make adjustments in response to stress.

Our Gut - the flora in our digestive system is easily prone to upset and disruption by external sources, like our hormones. This is where stress, self-criticism, and anxiety come into play as they change the pH level (the acid/alkaline balance) in your intestines. The intestinal tract is one of the first areas of the body to react to fear or personal stress (think of the nausea and/or loose-bowel feeling that can accompany stage fright, etc.). In a balanced system, once the stress is reduced, the pH straightens out and symptoms may disappear. In a weakened system, such as occurs under unrelenting stress, the intestines stay irritated and contribute to chronic discomfort.

When we are all stressed out, our body releases hormones and other chemicals, including histamine, the powerful chemical that leads to allergy symptoms. While stress doesn't actually cause allergies, it can make an allergic reaction worse by increasing the histamine in your bloodstream.

Chronic stress that persists for weeks, or even months produces cortisol, the body's main stress-induced hormone, which may lead to varying levels of fatigue, including adrenal fatigue. When cortisol becomes elevated and remains so for a while, it affects the cells that comprise your immune system. The immune system can't keep infections or diseases at bay as it would do normally. Viruses or bacteria proliferate to the point where they can infect many cells, leading to symptoms and increased chance of illness.

If you suffer with allergy symptoms, you know all about the stress of having a chronic condition. Not only is it difficult to live with all the various -often debilitating symptoms - but poor sleep patterns, that can lead to fatigue, exhaustion and problems concentrating - often leaving your body's natural resistance completely exhausted, too. Allergy medicines can cause appetite changes, low energy, and even irritability. All you want is relief: from the symptoms, the stress, all of it.

'Many people with IBS discover that their bowels seem to function as a kind of emotional barometer, indicating how they feel about what is going on their lives. Emotional tension always makes IBS worse. Anxiety, frustration, despair can all tie your guts in knots. Rushing around trying to do too much can do the same. If you are exhausted and stressed out, barely coping, 'it's your body that keeps the score'. Nobody can keep going for ever without a break.' Source: IBS Network (For more info visit www.theibsnetwork.org/stress)

Adrenal Fatigue (Burnout)

Adrenaline is a 'stress hormone' - produced by the Adrenal glands and is responsible for our 'fight and flight' response. **Prolonged stress** (and trauma) can lead to Adrenal fatigue; a deficiency in adrenal gland functioning that can result in debilitating symptoms. (Decision Fatigue is another stressor that can lead to adrenal fatigue) It is a condition - often unrecognised - that likely affects millions of people. Adrenaline produced by stress usually stays in the body for app. 4 weeks, until it is fully expelled. The only way to release it faster is through exercise! (Children usually release excess adrenalin through crying!). For example, when we drink coffee / caffeine the adrenal glands are signalled to release adrenaline.

So our emergency reserve is released just because we told it to by drinking a cup of coffee. But what happens when we repeatedly call for adrenaline on top of being stressed? The body will go into a very mild form of cachexia (wasting syndrome - fatigue, weakness, muscle atrophy,...). You may feel exhausted and need lots of stimulating foods to keep going. You may have symptoms such as tiredness, fearfulness, anxiety, depression, reduced memory, difficulties in concentrating, insomnia or simply feel worn-out. You may well be suffering from Adrenal Fatigue Syndrome.

Further Signs and Symptoms include: Allergies, asthma, bronchitis or chronic cough, behaviour problems -fearfulness, anxiety, depression, memory problems, dizziness /lightheaded (postural hypotension), decreased ability to handle stress and increased effort to perform daily tasks, dry and thin skin, excessive thirst and urination, cravings for salty, fatty, and high protein food such as meat and cheese, food intolerances, headaches, hemorrhoids, hyperpigmentation, hypoglycemia, indigestion - alternating constipation and diarrhoea, inflammation, lack of energy, Low body temperature, muscle weakness and back pain, nervousness, palpitations - heart pounding, recurring infections, sleep disturbances/Insomnia, swelling, varicose veins, weight problems-tendency to gain weight and unable to lose it.

Several recommended supplements include: **Magnesium**, one of the most important nutrient needed to reduce the flow of adrenaline in the body and to lower blood pressure and relax contracted muscles. Without sufficient magnesium reserves, muscles stay tense, blood pressure remains elevated, and adrenaline keeps flowing. Our bodies stay in a constant state of fight or flight / red alert status.

For people feeling run down or suffering from anxiety, talk therapy may be a helpful secondary treatment consideration, but talk therapy isn't a substitute for correcting a biological mineral deficiency. **Maca** - also called "Peruvian Ginseng" an endocrine adaptogen, that helps balance hormones, nourishes and reduces stress hormones. PMS/Menopause, balance and enhance Male hormones, helps with mood, relieves depression, reverse increase energy/stamina - may cure chronic fatigue, hypothyroidism, natural "steroid" like properties, aids in detoxification, improves skin and hair, increases metabolism - may help with weight loss / obesity. (best taken as capsule!)

James L. Wilson has written a very empowering work "**Adrenal Fatigue: The 21st Century Stress Syndrome**". Packed with vital information about the condition, he helps readers determine if they have adrenal fatigue and learn how to treat it. A very informative and reader-friendly book - about a common debilitating medical condition - that goes largely undiagnosed and untreated. **More information** and help: www.adrenalfatigue.org, including a health-checker: Dr. Wilson's Adrenal Fatigue Questionnaire: www.adrenalfatigue.org/take-the-adrenal-fatigue-quiz

Part 6:

Management and Treatment Options for Adverse Reactions and Intolerances:

Today nobody has to live with the often debilitating and distressing symptoms caused by substances and foods. The key to combating reactions is to identify what your body is affected by or reacting to, and then finding out ways to either avoid or reduce these substances, or even eliminate the symptoms for the future. Many studies suggest alternative medicine is very helpful for reducing adverse reactions (allergies) and symptoms. Those who like to take an active approach may want to investigate alternative treatment options.

There are a variety of alternative treatments aimed at helping to reduce and eliminate adverse responses, often by balancing or re-educating the body. How effective a complementary treatment will be for you, may depend on how severe your symptoms are, your biochemistry and the types of therapy/s you consider. In some cases it is helpful to use a combination of techniques including acupuncture, homeopathy and supplementation to help desensitize you to a known 'offender' (allergen). The practitioner may also work with you to help boost your immune system so you are better able to fight off infection and eradicate some sensitivities to known irritants.

General dietary advice - is difficult to provide, because we are all individually different.

Thus you may want to consult with a nutritionist or nutritionally trained specialist for guidance or dietary advice. Or alternatively work out yourself what is best for you by keeping a food/substance diary. Your keen observation can help you to determine the level/amount you can tolerate on a daily/weekly basis, to maintain a balanced diet. **If you are affected by allergies:** People affected by severe allergy or anaphylaxis should consult a medical practitioner to discuss avoidance, testing for type 1 allergy (IgE mediated), risk assessment for anaphylaxis and emergency medication. Allergic reactions are likely for life. Depending on severity, avoidance is the appropriate approach.

Rotation diet:

Many people with food intolerances benefit from a rotation diet, introducing foods in small amounts on alternating days of the week. For more information about 'rotation diet for allergies', visit www.food-allergy.org/rotation.html, do research on the internet, or seek advice from a nutritionist.

Elimination of offending substances:

With many intolerance responses avoidance or elimination of the offending foods has proven successful. It is suggested at least for a period of time. Experience has shown that avoidance for 2-3 years is most successful, whereas some report that short-term elimination of 1-3 months has shown significant signs of improvement. It is difficult to give any time frame. Again, your keen observation of any reaction - physical and/or emotional - will give you a better perception of how you tolerate certain foods/substances.

Lowering the toxic load & Detoxing

In any case, after an adverse reaction it is advised to lower the toxic load as much as possible and abstain from additives, chemicals, processed foods as much as possible for a few months (4-6). Sometimes adverse (allergic) reactions arise after an infection 'bacterial, viral or after a food poisoning infection. Some experts argue that some penicillin allergies are in fact caused by reactions/symptoms to the microbial infection itself rather than penicillin. People can also experience adverse reactions after an illness or operation and subsequent medication, which may result in a lowered immunity and sensitive stomach or imbalanced gut biome (the bacteria living in your intestines). Supporting the body by mopping up and drawing out toxic chemicals may be quite helpful. Natural remedies with toxin absorbing properties include Chlorella, Activated Charcoal, Zeolite, Bentonite clay and Spirulina. Thereafter strengthening the digestive system by balancing gut flora nutritionally with healthy foods and probiotics will help to restore what was out of balance. Again, you may want to consult with a nutritionally trained specialist for guidance.

Treatment options:

Most of the cutting edge treatments essentially reprogram the nervous system and brain to no longer react to the substance (allergen). Once the body accepts reprogramming, it heals itself. Listed below are several options:

- **Acupuncture** is one of the most effective treatment for allergies, intolerances and associated symptoms. Both Acupuncture and Chinese Herbal Medicine have been shown to help people with respiratory ailments - asthma, seasonal allergies, allergic rhinitis; skin conditions - eczema, dermatitis, digestive problems - food allergies and various other allergies and associated symptoms. Overall acupuncture treatments have been found to be very beneficial in balancing the body's organs and energy systems and
- strengthening the immune system, helping to eliminate symptoms and reduce allergic responses. Most cutting edge allergy treatments today work with the body's energy pathways, recognized by Traditional Chinese Medicine for thousands of years.
- **Bio-resonance Therapy** Treatment have been particularly effective in dealing with multiple sensitivities, allergies, food intolerances and chemical sensitivities. It is a treatment of the body's own vibrations with vibrations of different substances. In allergy treatment BRT can help resolve disturbing, sickening vibration patterns without side effects. The misinformation in the body of a patient (for example in relation to birch pollen) can thus be "erased" in a short time. This is a painless and quick treatment with a high success rate, especially in treatment of children.
- **Homeopathy** is another common natural treatment for Allergies - one of the more gentle forms of treatment - that is most likely to relieve allergy related health problems or symptoms, food intolerances and sensitivities.
- **Kinesiology** is a practice that uses the technique of muscle testing for assessing allergies. Blended with principles of Traditional Chinese Medicine the practitioner assess body function and energy, as well establishing what is needed for the body to heal by identifying structural, chemical, energetic and emotional imbalances in the body.
- **EFT** - Emotional Freedom Techniques - has been very successful in eliminating and resolving allergies. "Carefully applied it can not only eliminate the allergy but also the trauma and fear of the body's reaction to the allergen."
- **Allergy Antidotes™** and **NAET®** Nambudripad's Allergy Elimination Techniques - are both comprehensive systems for assessing, identifying, and treating allergies / substance sensitivities, eliminating undesirable physical and emotional symptoms. Both systems are highly successful in reducing symptoms from allergies and environmental sensitivities.

To find out more about alternative treatment options visit www.allergylink.co.uk

Educational Children's book: A delightful picture book for helping children, family and friends understand their allergy in a cute and accepting manner. **Nutti the Squirrel Who Couldn't Eat Nuts** - by Caroline Brown (Children age 3-6+).

Additional Food for Thought & The development of Allergies

Gluten can promote the development of allergies

Article by: Zentrum der Gesundheit (Center of Health), Last update: 12.08.2016 | Translation: Ute Eden

An allergy is an overreaction of the immune system to substances, which do not cause any reactions in non-allergic persons, since these are completely harmless. But there are also as many allergies, which are based on a completely different cause. Since the reasons for an allergic reaction are as diverse as their symptoms, the triggering factors are not always identifiable.

Allergies and the immune system - Many people are affected by allergies in this day and age. The number of people with allergies is increasing steadily and even small children are increasingly affected by the symptoms. The effect of an allergic reaction can be as diverse as its cause. Among the most common symptoms of an allergy are runny nose, severe flow of tears, itching, asthma, headache, gastrointestinal problems, skin rashes and many other phenomena. An allergic reaction indicates that the immune system completely overreacts on actually harmless substances. The best known representatives - allergens or substances - are flower pollen, house dust mites, insect poisons (wasps or hornet) and metals like nickel. But there are far more allergens. Nowadays virtually every substance can become an allergen and thus trigger allergic reactions. Particularly people with a weakened immune system will make this experience. An allergy sufferer frequently reacts not only to a single allergen. Over time the extremely strong reactions of his immune system can lead to overreactions in more and more situations. As a result, s/he may display overreaching reactions to an increasing number of substances - with an allergic reaction.

Allergy due to weakened adrenal glands - The adrenal cortex produces a variety of hormones - including glucocorticoids such as cortisone and cortisol. These so-called stress hormones are capable of intercepting allergic reactions due to their anti-inflammatory effect. However, this only works if the adrenal glands are not already weakened. Weakened adrenal glands are often the result of a diet rich in sugars and carbohydrates. A high coffee or alcohol concentration also makes excessive use of the adrenal glands. However, the primary cause of adrenal weakness is chronic stress situations. Significant chronic stress can lead to exhaustion. The production of cortisone and cortisol decreases and to the same extent the likelihood of allergic responses in the body increases.

Stressful situations can cause an allergy - Allergy sufferers usually have similar experiences with regard to their symptoms. For example, many allergy symptoms are already present at a child's age, but disappear in teenager's years. As soon as a very stressful situation occurs in adult years, such as a high workload, problems with the children, an annoying divorce or the death of a loved one, the symptoms reappear.

The thymus gland - school of defence cells - Vaccines, medicines and chemicals can also be responsible for allergic reactions such as skin rashes, itching, asthma, etc., as these substances significantly impair the important tasks of the thymus gland. The thymus gland is known as the school of T-lymphocytes (defence cells). Because these important defence cells are trained in such a way that they can recognize and neutralize allergens. Thus, these cells make a significant contribution to intercepting or at least reduction of allergic reactions. This demonstrates clearly that the thymus gland plays a decisive role in the development of allergies.

Foreign proteins often cause an allergy - Foreign unrecognized proteins in the bloodstream can cause the body to have an immediate allergic reaction. These proteins include animal proteins among many others. Particularly important here are milk and egg proteins. But also wheat proteins are known to cause an allergy. For this reason, an allergy sufferer must pay particular attention to the food he is eating.

Gluten intolerance can cause an allergy - With an existing gluten intolerance, the body can only poorly utilize and digest the grains containing this protein (gluten). The intestinal mucous membranes are constantly irritated, causing inflammatory processes which greatly degrade those mucous membranes, which are responsible for a good absorption of nutrients. The resulting thinning of the intestinal walls of the intestine allows toxic or otherwise harmful substances to enter the bloodstream directly and more quickly, where they ultimately trigger allergic reactions.

Lactose intolerance and allergies - Milk intolerance is also a widespread phenomenon. Many people are missing a special enzyme from birth - lactase - which is needed for the processing of milk sugar. In some cases, the production of this enzyme ceases much later. If there is insufficient lactase in the organism, dairy products can not be digested, which results in their decomposition in the intestine. This results in symptoms such as diarrhoea, constipation, flatulence, stomach pain or other allergic reactions. In addition, the milk protein itself - as an unrecognized protein - can also trigger additional symptoms.

Babies are particularly vulnerable to allergy - Incorrect weaning of infants can be responsible for some gluten and milk intolerances. As the gastrointestinal tract of babies is not yet fully developed, its mucous membranes are even more permeable than those of an adult. Mother's milk protects the child from the penetration of foreign proteins into the bloodstream by practically sealing the gastrointestinal tract, making it less permeable. Nowadays, however, only few children are sufficiently breast-fed by their mothers. Instead, they receive Formulas and pasteurized, homogenized cow's milk contaminated with antibiotics, pesticides and growth hormones. If the babies are fed with foreign proteins too early - such as with animal dairy products, eggs or wheat products, this can already set the course for a lifetime of allergies. Therefore, it is of utmost importance to breast-feed an infant for at least 9 to 12 months.

Wheat products promote allergies - In addition to dairy products, our children receive wheat products far too early. It takes at least four to six months before the digestive enzymes responsible for the processing of starch are built up in the body. It can be observed that children who often suffer from an immune deficiency (colds, allergies, etc.) usually eat starchy foods far too early. On the other hand, those children who have been breast-fed for a longer period of time and who were eating fruit and vegetables instead of starch-containing foods, are usually far more stable in their health and rarely show allergic reactions.

Preventing allergies - Unfortunately it is often the case that parents, who give their children unfamiliar and unknown foods, do not pay attention to how the offspring react to the new stimuli. But do you really believe that your child is doing well to eat the same as you do? Can you imagine that fried eggs, fried potatoes, hamburgers, potato chips, sweets, cola or other sweet sodas are beneficial to your child's health? Probably not. It is extremely important that the first foods your child gets to eat are as natural as possible. They should be eaten either raw or in a slightly steamed form. In addition, only small quantities of a single food should be offered to the child. This allows one to observe very well, for a period of 2 to 3 days, whether the child gets rashes after eating the newly introduced food or shows other allergic reactions. If there is no such reaction, you can slowly increase the amount of food and combine it with other - already tested - foods.

Healthy foods can also trigger allergic reactions - If you find that your child shows unusual reactions to healthy foods such as broccoli, cabbage, etc., you should refrain from giving them to your child for six to eight weeks. Then you can try again. If your child is still reacting to it, it could actually be that it has a corresponding food allergy or intolerance. However, such allergies are only rarely observed when earlier the food had been properly integrated into the child's diet. If this approach would be used in the conversion of the child's diet, the probability would be very high that the number of allergic children would significantly decrease.

Liver problems weaken the immune system - Other factors in the development of allergies are the so-called liver-stasis and blood poisoning. If these problems occur simultaneously with a deficiency of certain digestive enzymes or other chronic digestive problems, an increase in allergic reactions will occur. In this case, a holistic liver cleansing should be carried out to relieve the liver, but this is by no means suitable for children. It should be carried out under supervision or accompanied by a naturopathic therapist.

Genetic engineering and artificial additives - The widespread use of chemicals, pesticides, genetically modified organisms and other destructive additives used in food production (e.g. aspartame, glutamate, dyes and preservatives) is often a trigger for the development of allergies.

Allergy from yeast fungi - In case of particularly persistent allergies yeast infections were frequently observed. Yeast fungus spreads in the intestine and irritates the sensitive mucous membranes. The effects of an inflamed and thus permeable intestinal mucosa were explained earlier.

Measures for a tendency to adverse reactions (allergy)

- Basically, it is important to avoid a known offender - this applies to all substances.
- Since food intolerances are often attributed to the chemicals, pesticides, additives, genetically modified organisms, etc. they contain, only organically grown foods should be consumed.
- The diet should be very low in sugar and carbohydrate, since the glucose strongly acidifies the body and burdens the intestine immensely. Both factors weaken the immune system and thus promote the development of allergies.
- In an acute phase of an adverse reaction, the so-called juice fasting is highly recommended. This form of healing fast supports the rapid elimination of existing toxins and thus relieves the liver and the immune system.
- Any adverse reaction also has serious negative effects on the intestinal environment. It is therefore extremely important for sufferers to thoroughly clean the bowel once or twice a year. The accumulated toxins, metabolic residues and other pollutants must be dissolved, bound and excreted. There are a number of effective digestive cleansing programs available, which can be carried out at home. If these measures are consistently carried out, the allergy sufferer is on the right path to be able to say goodbye to his painful symptoms as quickly as possible.
- Subsequently, the intestinal flora has to be stabilized again by means of corresponding healthy bacterial strains / pro-biotic.

(Source: <https://www.zentrum-der-gesundheit.de/allergie-ursachen-ia.html>)

Thank you for choosing Allergy Link

We hope that the Test Result & Report will have given you satisfactory information and that it has enabled you, in making informed decisions.

More information can be found on our website www.allergylink.co.uk

Your feedback is greatly appreciated @ info@allergylink.co.uk



Follow us on Facebook:
www.facebook.com/AllergyLink