BIOMETRIX LABS
#THE INSIDE INFO

GUIDE

Body Intolerance Results Guide

Start your journey towards a healthier life

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Understanding your results

Every item tested is classified to one of the following three reactivity levels:

High Reactivity / Outside Range

These are the items that our testing shows you are most likely to be sensitive to or fall outside of optimal range.

These may be causing or contributing to physical symptoms. We would recommend the removal of these items from your daily diet for 6-8 weeks using a structured elimination diet, followed by a gradual reintroduction.

Moderate Reactivity

These are the items that our testing shows you may be sensitive to.

These may have the potential to cause or contribute to physical symptoms. We would always recommend prioritising the removal of the high reactivity items first and then considering the removal of moderate items for 4-6 weeks, and subsequent reintroduction.

It is also worth considering that having these items in isolation may not cause symptoms, however having a number of moderate reactivity items in the same meal or day may lead to symptoms due to an accumulative effect.

No Reactivity / Within Range

These are the items that our testing shows you do not have sensitivity to or fall within optimal range.

Interpreting your results – explainer

Sensitivity NOT Allergy

It is important to reiterate that this test is NOT for allergy. It is easy to confuse allergy and sensitivity or intolerance as the different terms are often used interchangeably, which leads to misinterpretation. Allergy and sensitivity are not the same. Of course if someone is allergic to a food item it could be described as being 'sensitive' however as a health condition allergy is different from sensitivity or intolerance.

There are a couple of fundamental differences between allergy and sensitivity; having food sensitivity may be uncomfortable and cause symptoms that, whilst annoying, embarrassing or even debilitating, do not have the potential to be life-threatening like those caused by food allergy; food sensitivity can also change over time, it can often be overcome through implementation of a food elimination diet and/or improving gut health, however food allergy tends to be lifelong.

The physiological process, which takes place in the body during an allergic reaction, is also entirely different to that of sensitivity. An allergic reaction involves the immune system and cells called antibodies, whereas this is not involved in sensitivity. Hair testing does not test antibody levels therefore this is why it cannot be used to test for allergy.

Known Allergy

You may have a known allergy; so let's help you to interpret sensitivity results to this item.

Scenario 1

The item you are allergic to shows as a moderate or high reactivity item.

This means that as well as a food allergy you have food sensitivity. If you have already removed this item from your diet you do not need to take any action. If you have not removed it previously, it is worth considering doing so, however we would not recommend reintroduction following the elimination diet.

Scenario 2

The item you are allergic to shows as a no reactivity item.

This means that you do not have food sensitivity to this item however the result does not question or contradict the presence of your food allergy to the item. It does NOT mean you should reintroduce the item to your diet, you should respect the symptoms or test results you have had previously with regards to allergy. Remember this test does not test for allergy.

This is where your journey to a healthier life begins

You have read through all of your results, so what now?
As we said at the beginning of the report we believe that these test results can be the start of your journey towards a healthier life.

The next step we would recommend is the completion of an elimination diet. This entails the removal of all reactive foods for a period of time followed by reintroduction. The elimination diet is a powerful tool, which provides much clarity for individuals on which foods work for them and which do not.

Aims and objectives

Before you embark upon any new project, venture or undertaking, in this case making positive dietary changes, it is always good to write down your aims and objectives. You can refer back to these notes in times of doubt or to reflect on whether you achieved your objectives.

You can use the notes section below to jot down any key pieces of information from the test results and also your objectives for the elimination diet and beyond.

Elimination diet

What is an elimination diet?

An elimination diet is conducted over a short period of time, normally around four weeks. In certain cases a person may be recommended to conduct a longer elimination diet, however generally around four weeks is sufficient time to get good results. At the end of this period you can reintroduce items one by one at the same time as monitoring your symptoms and general wellbeing.

How does it work?

In the removal and then reintroduction of items you get a clear understanding of those foods which make you feel good, allow you to think with clarity and leave you feeling energised and those which make you feel lethargic, sluggish, sap your energy levels and provoke symptoms like bloating or headaches.

1

Elimination phase

All high and medium reactive foods are removed from the diet, along with any known allergy or intolerant foods. You can eat freely from those foods in the no reactivity category. You should aim for this phase to last four weeks.

2

Reintroduction phase

During the reintroduction phase you should bring one item in at a time and then monitor symptoms for the next two days.

You will find a reintroduction diary on page 11, where you can note the food and drinks that you consume along with any symptoms you experience.

What can't you eat on an elimination diet?

Each person will be different in the foods they should eliminate during the elimination phase. The priority items to remove are those which are shown in the high reactivity category. If eliminating these items alone seems like a big undertaking stick with the removal of only these items. However if you feel you can also achieve the removal of those foods in the medium reactivity category during the elimination phase also do so.

You must also respect any known allergies or intolerances. For example if you know you are allergic to wheat or lactose intolerant and it comes up in the no reactivity section, do not bring it back into your diet.

What can you eat on an elimination diet?

You can eat any items, which are shown as having no reactivity, except any to which you have known allergies or intolerances.

What's important during an elimination diet?

In removing items from your diet you are also removing nutrients. Whilst it is only for a short period of time it remains important that you maintain a good daily intake of vitamins and minerals through your diet. Please consult 'the role of food types' page to ensure that in the removal of items you are still getting the given nutrient through other sources.

What happens after an elimination diet?

Following an elimination diet you should have good clarity on which foods work well for you and which provoke symptoms or make you feel less than your best. If you do find there are items or food groups, which provoke symptoms, it is worth considering the reduction or removal of these items from your diet.

Should you choose to greatly reduce or eliminate an item or food group from your diet ensure you replace the nutrients you would have got from the item or food group with alternative sources.

To get the best from your diet and to support your health and wellbeing ensure that, in the most part, your food comes from non-processed, natural sources and contains a breadth of vitamins and minerals.

Reintroduction diary

Start date: ___ / ___ / ___

Typical symptoms to record:

Vomiting | Diarrhoea | Abdominal pain | Bloating | Flatulence | Loose stools | Itchy or inflamed skin | Cough

	Morning Food	Morning Symptom	Afternoon Food	Afternoon Symptom	Evening Food	Evening Symptom
Day 1						
Day 2						
Day 3						
Day 4						
Day 5						
Day 6						
Day 7						

For each food that you reintroduce, think about the symptoms on your list and use none, mild, moderate, or severe to describe your reaction to it in the boxes provided. This will help you remember later when you look back.

Complementary and alternative medicine

What is Complementary and Alternative Medicine?

Bioresonance therapy and testing is categorised as a complementary and alternative medicine (CAM). This is a diverse group of therapies, practices and products, which fall outside of conventional medicine or healthcare.

A complementary therapy is used alongside conventional medicine or treatment, whilst alternative therapy is used in place of conventional medicine or treatment. Some therapies or practices could be used as either complementary or alternative; it depends on whether it is combined with conventional medicine alongside or not.

Other therapies and practices, which are considered complementary and alternative medicine:

- Aromatherapy
- Acupuncture
- Homeopathy
- Massage therapy
- Naturopathy
- Osteopathy
- Pilates
- Yoga

Finding Complementary and Alternative Medicine Practitioners

When using complementary and alternative medicine it is important that you look for a practitioner who is registered with a regulatory body for their field of expertise.

If you think you have a health condition always seek advice from your GP first.

The NHS and CAMs:
https://www.nhs.uk/conditions/complementary-and-alternative-medicine/

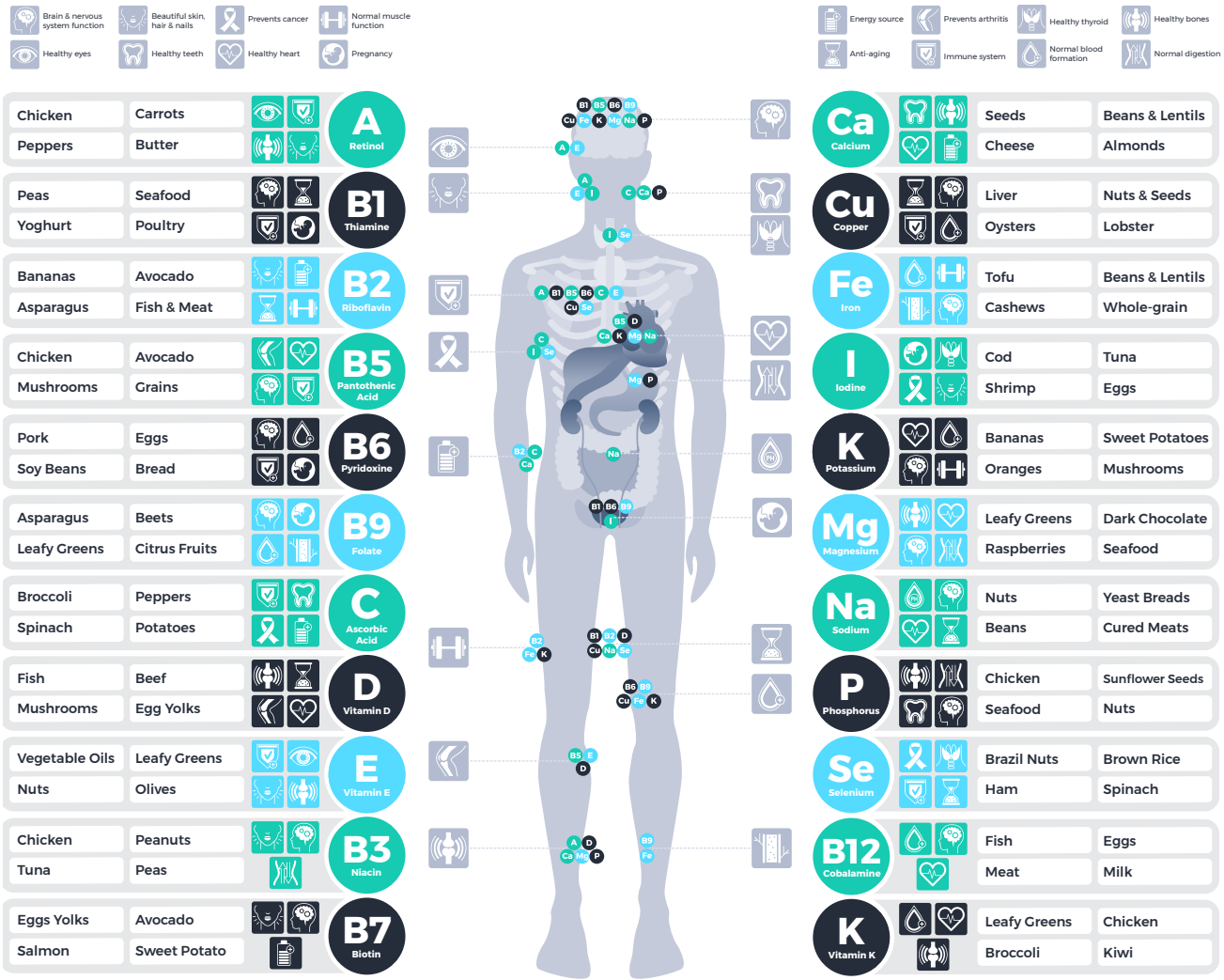
Food & drink sensitivities

The role of food types

As well as providing energy for the body food also contains nutrients in the form of vitamins and minerals. Vitamins and minerals are considered essential as they enable the body to complete literally hundreds of tasks, which are vital for day-to-day function, health and wellbeing. To name a few vitamins and minerals facilitate energy production, hormone production, wound healing, immune system function, blood clotting and foetal development.

The diagram below gives an overview of a few of the richest sources of each nutrient and some of the functions it performs within the body. You can refer to this diagram to ensure that in removing items from the diet you replace the relevant nutrients through other dietary sources.

Vitamins & Minerals



Everyday Foods

It is common for a food item consumed in the daily diet or very frequently, to test as a moderate or high sensitivity item. This can happen with food sensitivity and may be due to the body suddenly struggling to process or breakdown particular constituents of the food. This could be caused by overconsumption of a food group or could be down to an imbalance in gut bacteria or the presence of low-level inflammation in the gut.

Whatever the cause do not despair. We are talking about food sensitivity and NOT allergy; therefore completing a food elimination diet with subsequent reintroduction can help. This may mean you need to eliminate a favourite food or staple in your diet for a period of weeks but you will be able to reintroduce the item. Eliminating food items for a period of time can allow the gut time to 'rest' from trigger foods and the reintroduction of items can allow you to assess how a food or food group makes you feel.

Gut Nourishment

In most cases carrying out an elimination diet is enough to improve symptoms and allow for a greater understanding of any foods, which aren't agreeing with the body. It is also worth considering the nourishment of the digestive tract and addressing any gut bacteria imbalances to further improve gut function and reduce digestive symptoms.

Complementary Alternative Medicine (CAMS)

Our food sensitivity tests are carried out using bioresonance therapy and is categorised under Complementary and Alternative Medicines (CAMs) which covers a wide range of therapies that fall outside mainstream medicine. Tests and related information provided do not make a medical diagnosis nor is it intended to be a substitute for professional medical advice, diagnosis or treatment.

Always seek the advice of your doctor or other qualified health provider if you have a medical condition or with any questions you may have regarding a medical condition and/or medical symptoms.

Sources of vitamins

Water-soluble vitamins

B Vitamins
Oats, whole wheat, rye, buckwheat, brown rice, Brewer's yeast, peanuts, mushrooms, soybean flour and soybeans, split peas, pecans, sunflower seeds, lentils, cashews, chickpeas, broccoli, hazelnuts, peppers.

B12
Oysters, mussels, scallops, liver, mackerel, tuna, salmon, sardines, crab, beef, eggs, yogurt, Swiss cheese, fortified products.

Vitamin C
Red peppers, guavas, kale, kiwi, broccoli, Brussel sprouts, strawberries, raspberries, blackberries, blueberries, oranges, tomatoes, peas, mange tout, papaya, mango, pineapple, melon.

Fat-soluble vitamins

Vitamin A
(Retinol) Liver, beef, lamb, cod liver oil, mackerel, salmon, tuna, paté, goat's cheese, eggs, cheddar, cream cheese, butter, goat's cheese.

Beta Carotene
(Precursor to vitamin A)
Sweet potato, carrots, kale, spinach, collards, Swiss chard, pak choi, butternut squash, pumpkin, cos lettuce, romaine lettuce, mango, dried apricots, prunes, peaches, melon, red peppers, tuna fish, mackerel, butter.

Vitamin D
Salmon, trout, swordfish, mackerel, tuna, buttermilk, some yogurt, mushrooms, eggs, fortified products.

Vitamin E
Spinach, kale, broccoli, Swiss chard, turnip greens, collards, avocado, almonds, hazelnuts, pistachios, sunflowers seeds, prawn/shrimp, crayfish, salmon, smoked salmon, swordfish, herring, trout, olive oil, sunflower oil, sweet potato, squashes, kiwi, mango, peach, nectarines, apricots, guava, raspberries, blackberries.

Vitamin K
Kale, spinach, mustard greens, spring onions, cress, basil, thyme, coriander, sage, parsley, Brussel sprouts, cabbage, chilli powder, paprika, fennel, leeks.

Minerals

Calcium
Watercress, kale, broccoli, low fat mozzarella, low fat cheddar, yogurt, pak choi, tofu, sugar snap peas, almonds, tinned sardines in oil with bones, tinned pink salmon.

Magnesium
Buckwheat, rye, millet, brown rice, whole wheat, kelp, almonds, cashews, brazil nuts, peanuts, walnuts, tofu, coconut, soya beans, figs, apricots, dates, prawns, corn, avocado, spinach, kale, broccoli swiss chard, turnip greens, collards.

Zinc
Rye, spinach, beef, lamb, pumpkin seeds, sesame seeds, sunflower seeds, cashew nuts, cocoa powder, dark chocolate, pork, chicken, chickpeas, baked beans, mushrooms.

Iron
Rye, whole wheat, pumpkin seeds, sunflower seeds, sesame seeds, chicken liver, oysters, mussels, clams, cashews, pine nuts, hazelnuts, peanuts, almonds, beef, lamb, lentils, white beans, soybeans, kidney beans, chickpeas, lima beans, oatmeal, spinach, Swiss chard, kale, dark chocolate.

Manganese
Rye, oats, brown rice, barley, mussels, hazelnuts, pine nuts, pecans, lima beans, chickpeas, aduki beans, lentils, pumpkin seeds, sesame seeds, sunflower seeds, pineapple, spinach, kale, tofu, soybeans, sweet potato, blueberries, raspberries, strawberries.

Copper
Rye, oats, sesame seeds, cashews, soybeans, mushrooms, sunflower seeds, tempeh, garbanzo beans, lentils, walnuts, lima beans, liver, spirulina, dark chocolate, collard greens, Swiss chard, spinach, kale.

Phosphorus
Brown rice, oats, rye, whole wheat, chicken, turkey, pork, liver, sardines, scallops, salmon, mackerel, crab, milk, yogurt, cottage cheese, sunflower seeds, pumpkin seeds, Brazil nuts, pine nuts, almonds, pistachios, cashews.

Potassium
Dried apricots, salmon, mackerel, tuna, monkfish, white beans, lentils, kidney beans, avocado, butternut squash, spinach, mushrooms, bananas, potatoes, low fat yogurt.

Selenium
Brazil nuts, brown rice, rye, whole wheat, mushrooms, shrimp, sardines, oysters, tuna, sunflower seeds, liver, eggs, beef, turkey, cottage cheese.

Food & drink analysis

What is a food sensitivity?

Food sensitivity happens when the body has difficulty digesting a particular food. Having food sensitivity can cause symptoms such as bloating, bowel movement changes, headaches and fatigue. It can also contribute towards symptoms experienced by those with chronic conditions such as irritable bowel syndrome, chronic fatigue, arthritis, autism and ADD/ADHD.

What is a food allergy?

Food sensitivity should not be confused with food allergy. This test is for food sensitivity ONLY. Food allergy symptoms include coughing, sneezing, runny nose/eyes, itchy mouth/eyes, swelling of the lips/face, rashes, worsening of eczema and/or asthma, wheezing, breathing difficulties, vomiting, diarrhoea and, in rare cases, anaphylaxis. Testing for food allergy can only be done through a blood, skin prick or patch test. If you suspect you have food allergy please see your physician.

Interpreting your results

To help you with this your food sensitivity ratings will be broken down into either high, moderate or no reactivity ratings. These ratings will help you focus on specific reactivities, along with the relevant actions to take.

High Reactivity	These are the food items that our testing shows you are most likely to have a sensitivity to or that fall outside of range. We would recommend the removal of these items from your daily diet for 6-8 weeks using a structured elimination diet.
Moderate Reactivity	These are the food items that our testing shows you may have a sensitivity to. We would recommend the removal of these items from your daily diet for 4-6 weeks using a structured elimination diet.
No Reactivity	These are the items that our testing shows you do not have sensitivity to or are within optimal range

Botanical analysis

What is a botanical sensitivity?

Botanicals such as plants, flowers, shrubs and trees can cause the body to react, which can lead to the production of symptoms such as headaches and fatigue. If you suspect you have an allergy please see your physician. It is important to note that this is not an allergy test. Any known pollen allergies you know you have may or may not come up in this test.

Interpreting your results

Your botanical sensitivity ratings will be broken down into either high, moderate or no reactivity ratings. These ratings will help you focus on specific reactivities, along with the relevant actions to take.

High Reactivity	These are the botanical items that our testing shows you are most likely to have a sensitivity to or that fall outside of range. We would recommend the removal of these items from your daily diet for 6-8 weeks using a structured elimination diet.
Moderate Reactivity	These are the botanical items that our testing shows you may have a sensitivity to. We would recommend the removal of these items from your daily diet for 4-6 weeks using a structured elimination diet.
No Reactivity	These are the botanical items that our testing shows you do not have sensitivity to or are within optimal range

Metals analysis

What is metal toxicity?

We are all exposed to metals to differing levels on a daily basis through industrial exposure, pollution, foods, or medications. Some of us may be more sensitive than others to exposure.

What to do if you have high levels of exposure?

For optimal health it is recommended to look at lowering your day-to-day level of exposure. Consider your environment, the foods you eat, water, cosmetics and cleaning products.

The body is constantly detoxifying things from your everyday environment such as chemicals in foods, cosmetics and cleaning products, caffeine, alcohol, medications and even your own hormones. You can help your body with detoxification processes by ensuring you; drink plenty of filtered water, eat a diet that is as wholefood as possible, avoid processed foods, reduce caffeine and/or alcohol consumption, lower nicotine usage and exercise regularly.

Interpreting your results

Your metal sensitivity ratings will be broken down into either high, moderate or no reactivity ratings. These ratings will help you focus on specific reactivities, along with the relevant actions to take.

Ideally the metals will show no reactivity in testing. If however there are metals identified as moderate or high reactivity do not panic. Through lowering daily exposure and helping your body with detoxification processes your body can reduce its own toxicity levels.

High Reactivity	These are the botanical items that our testing shows you are most likely to have a sensitivity to or that fall outside of range. We would recommend the removal of these items from your daily diet for 6-8 weeks using a structured elimination diet.
Moderate Reactivity	These are the botanical items that our testing shows you may have a sensitivity to. We would recommend the removal of these items from your daily diet for 4-6 weeks using a structured elimination diet.
No Reactivity	These are the botanical items that our testing shows you do not have sensitivity to or are within optimal range

Potential sources in your environment

Heavy metals are a part of our everyday life and at low levels are detoxified by the body causing no issue. However it is beneficial to have a greater awareness of where you may come into contact with metals and therefore help you reduce your potential exposure.

Food – Pesticides, insecticides and herbicides used on crops can lead to contaminated food produce. Contaminated water can result in fish and seafood containing heavy metals.

Water – Pipework that water runs through is the most likely cause of any heavy metals in drinking water. For this reason it is always best to filter your water.

Air – Pollution from vehicles such as cars, trains and aeroplanes contributes to heavy metals, which can be inhaled. Industrial factories and agricultural areas, which use pesticides on crops are also ways metals get into the air we breathe.

Cosmetics – Lead, arsenic, mercury, aluminium, zinc and chromium can be found in many cosmetics such as lipstick, whitening toothpaste, eyeliner, nail polish, moisturiser, sunscreen, foundation, blusher, concealer and eye drops. Some metals are added as ingredients whilst others are contaminants.

Cleaning products – Everyday household cleaning products like polish, all purpose sprays and garden products like insecticides and pesticides contain heavy metals.

Metal potential sources

Aluminium
Can be found in: Cans, foils, kitchen utensils, window frames and beer kegs

Antimony
Can be found in: Batteries, low friction metals and cable sheathing

Argon
Can be found in: Welding and light bulbs

Arsenic
Can be found in: Rat poisons and insecticides

Barium
Can be found in: Paints, fireworks, some medicines and the process of making glass

Beryllium
Can be found in: Springs, electrical contacts and spot-welding electrodes

Bismuth
Can be found in: Usually mixed with other metals

Boron
Can be found in: Clay pots, detergent, glass, flares and fibreglass

Bromine
Can be found in: Flame-retardants, water purification systems and dyes

Cadmium
Can be found in: Re-chargeable batteries

Caesium
Can be found in: Atomic clocks and photoelectric cells

Cerium
Can be found in: Air conditioners, computer and ovens

Chlorine
Can be found in: Bleach, papermaking, swimming pools

Chromium
Can be found in: Stainless steel cutlery, wood preservatives, dyes and pigments

Cobalt
Can be found in: Cutting tools and dyes

Copper
Can be found in: Electrical generators and motors

Dysprosium
Can be found in: Lasers and many alloys

Fluorine
Can be found in: Toothpaste and etched glass

Gadolinium
Can be found in: Many alloys

Gallium
Can be found in: Electronics, alloys and thermometers

Germanium
Can be found in: Glass lenses, fluorescent lights, electronics and many alloys

Gold
Can be found in: Jewellery

Hafnium
Can be found in: Many alloys

Holmium
Can be found in: Lasers

Indium
Can be found in: Electronics and mirrors

Iridium
Can be found in: Alloys and materials that need to withstand high temperatures

Lead
Can be found in: Lead-acid storage batteries

Lithium
Can be found in: Rechargeable non-rechargeable batteries, some medications and alloys

Mercury
Can be found in: Batteries, fluorescent lights, felt production, thermometers and barometers

Molybdenum
Can be found in: Many alloys

Nickel
Can be found in: Stainless steel

Palladium
Can be found in: Car exhaust manufacture, dental fillings and jewellery

Platinum
Can be found in: Jewellery, decoration and dental work

Radium
Can be found in: Some medicines and glowing paints

Rhenium
Can be found in: Many alloys and flash photography

Rhodium
Can be found in: Spark plugs and highly reflective materials

Rubidium
Can be found in: Many alloys and amalgams

Ruthenium
Can be found in: Many alloys and corrosion resistant metals

Samarium
Can be found in: Many alloys and audio equipment

Silicon
Can be found in: Glass, pottery, computer chips and bricks

Silver
Can be found in: Jewellery

Strontium
Can be found in: Firework production, tin cans (food)

Sulphur
Can be found in: Medicines, fertilisers, fireworks and matches

Tantalum
Can be found in: Surgical equipment and camera lenses

Tin
Can be found in: Alloying metal

Titanium
Can be found in: Alloying metal

Vanadium
Can be found in: Alloying metal

Zinc
Can be found in: Many alloys, paint, fluorescent lights and the process of making plastic

Zirconium
Can be found in: Corrosion resistant alloys, magnets and some gem stones

Additives analysis

What are additives?

Additives are substances, which are added to food for a specific reason such as; to improve the look or taste of a food, to preserve a food and make it last longer on the shelf, to aid food processing and manufacturing, to stabilise a food and keep it safe to eat.

The main types of additives are colourings, flavour enhancers, sweeteners, antioxidants, emulsifiers, stabilisers and preservatives. They can be natural, man-made but nature identical or artificial.

Interpreting your results

Your additive ratings will be broken down into either high, moderate or no reactivity ratings. These ratings will help you focus on specific reactivities, along with the relevant actions to take.

High Reactivity	These are the additives that our testing shows you are most likely to have a sensitivity to or that fall outside of range. We would recommend the removal of these items from your daily diet for 6-8 weeks using a structured elimination diet.
Moderate Reactivity	These are the additivesthat our testing shows you may have a sensitivity to. We would recommend the removal of these items from your daily diet for 4-6 weeks using a structured elimination diet.
No Reactivity	These are the additives that our testing shows you do not have sensitivity to or are within optimal range

If you would like further information on a particular additive we have set out a variety of different sources you can use. You will find details of the full name of each additive on the next page.

This website gives the names of branded products, which contain a given additive. Search the database using the full name of the additive rather than the number. For example under 'search for a product' put aspartame rather than E951.

E-numbers explainer

Colourings

E 100 Curcumin
E 101 Riboflavin (vit. B2), riboflavin – 5' – phosphate
E 102 Tartrazine
E 104 Quinoline yellow
E 110 Sunset yellow FCF, orange yellow S
E 120 Cochineal, carminic acid, carmines
E 122 Carmoisine
E 123 Amaranth
E 124 Ponceau 4R
E 127 Erythrosine
E 128 Red 2 G
E 129 Allura red AC
E 131 Patent blue V
E 132 Indigo carmine
E 133 Brilliant blue FCF
E 140 Chlorophylls and chlorophyllins
E 141 Chlorophyllins (Cu complexes)
E 142 Green S
E 150 a Caramel
E 150 b Caustic sulphite caramel
E 150 c Ammonia caramel
E 150 d Ammonia sulphite caramel
E 151 Brilliant black BN, black PN
E 153 Vegetable carbon
E 154 Brown FK
E 155 Brown HT
E 160 a Carotene (mixed carotenes, beta-carotenes)
E 160 b Annatto, bixin, norbixin
E 160 c Capsanthin, capsorubin
E 160 d Lycopene
E 160 e Beta - apo - 8' – carotenal, (carotinoid)
E 160 f Ethyl ester of beta - apo - 8' – carotenoic acid
E 161 b Lutein
E 161 g Canthaxanthin
E 162 Beetroot red (betanin)
E 163 Anthocyanins
E 170 Calcium carbonate
E 171 Titanium dioxide
E 172 Iron oxides, iron hydroxides
E 173 Aluminium
E 174 Silver
E 175 Gold
E 180 Lithol rubine BK

Preservatives

E 200 Sorbic acid
E 202 Potassium sorbate, sorbic acid
E 203 Calcium sorbate, sorbic acid
E 210 Benzoic acid
E 211 Sodium benzoate, benzoic acid
E 212 Potassium benzoate, benzoic acid
E 213 Calcium benzoate, benzoic acid
E 214 Ethyl-para-hydroxybenzoate (PHB-ester)
E 215 Sodium ethyl-para-hydroxy benzoate (PHB-ester)
E 216 Propyl-para-hydroxybenzoate (PHB ester)
E 217 Sodiumpropyl-para-hydroxy benzoate (PHB-ester)
E 218 Methyl-para-hydroxbenzoate (PHB-ester)
E 219 Sodium methyl-para-hydroxy benzoate (PHB-ester)
E 220 Sulphur dioxide
E 221 Sodium sulphite (sulphur dioxide)
E 222 Sodium hydrogen sulphite (sulphur dioxide)
E 223 Sodium metabisulphite (sulphur dioxide)
E 224 Potassium metabisulphite (sulphur dioxide)
E 226 c Calcium sulphite (sulphur dioxide)
E 227 Calcium hydrogen sulphite (sulphur dioxide)
E 228 Potassium hydrogen sulphite (sulphur dioxide)
E 230 Biphenyl, diphenyl
E 231 Orthophenylphenol
E 232 Sodium orthophenylphenate, orthophenylphenol
E 233 Thiabendazole
E 234 Nisin
E 235 Natamycine
E 239 Hexamethylene-tetramine
E 242 Dimethyl dicarbonate
E 249 Potassium nitrite
E 250 Sodium nitrite
E 251 Sodium nitrate
E 252 Potassium nitrate
E 260 Acetic acid
E 261 Potassium acetate, salt of acetic acid
E 262 Sodium acetate, salt of acetic acid
E 263 Calcium acetate, salt of acetic acid
E 270 Lactic acid
E 280 Propionic acid
E 281 Sodium propionate, propionic acid
E 282 Calcium propionate, propionic acid
E 283 Potassium propionate, propionic acid
E 284 Boric acid
E 285 Sodium tetraborate, boric acid
E 290 Carbon dioxide, carbonic acid
E 296 Malic acid
E 297 Fumaric acid

Antioxidants

E 300 Ascorbic acid (L-) (vitamin C)
E 301 Sodium L-ascorbate (ascorbic acid)
E 302 Calcium L-ascorbate (ascorbic acid)
E 304 Ascorbyl palmitate/ ascorbyl stearate
E 306 Natural tocopherols (vitamin E)
E 307 Synthetic alpha-tocopherol (tocopherol)
E 308 Synthetic gamma-tocopherol (tocopherol)
E 309 Synthetic delta-tocopherol (tocopherol)
E 310 Propyl gallate (gallate)
E 311 Octyl gallate (gallate)
E 312 Dodecyl gallate (gallate)
E 315 Isoascorbic acid
E 316 Sodium isoascorbate
E 320 Butylated hydroxyanisole (BHA)
E 321 Butylated hydroxytoluene
E 322 Lecithins
E 325 Sodium lactate (salts from lactic acid)
E 326 Potassium lactate (salts from lactic acid)
E 327 Calcium lactate (salts from lactic acid)
E 330 Citric acid
E 331 Monosodium citrate, disodium c., trisodium c.
E 332 Monopotassium citrate, tripotassium c.
E 333 Monocalcium citrate, dicalcium c., tricalcium c.
E 334 Tartaric acid (L+), tartaric acid
E 335 Monosodium tartrate, disodium tartrate
E 336 Monopotassium tartrate, dipotassium tartrate
E 337 Sodium potassium tartrate (salts from tartaric acid)
E 338 Orthophosphoric acid, phosphoric acid
E 339 Monosodium phosphate, disodium p., trisodium p.
E 340 Monopotassium phosphate, dipotassium p. tripotassium p.
E 341 Monocalcium phosphate, dicalcium p., tricalcium p
E 350 Sodium malate, sodium hydrogen malate
E 351 Potassium malate (salts from malic acid)
E 352 Calcium malate, calcium hydrogen m.
E 353 Metatartaric acid
E 354 Calcium tartrate (salts from malic acid)
E 355 Adipic acid
E 356 Sodium adipate
E 357 Potassium adipate
E 363 Succinic acid
E 380 Triammonium citrate (salts from citric acid)
E 385 Calcium sodium ethylene diamine tetra-acetate (EDTA)

Thickening, setting and moisturising agents

E 400 Alginic acid, alginate
E 401 Sodium alginate, alginate
E 402 Potassium alginate, alginate
E 403 Ammonium alginate, alginate
E 404 Calcium alginate, alginate
E 405 Propylene glycol alginate,
E 406 Agar
E 407 Carrageenan
E 407 a Eucheuma algae, treated
E 410 Locust bean gum, carob gum
E 412 Gua gum
E 413 Tragacanth
E 414 Gum arabic
E 415 Xanthan gum
E 417 Tara meal
E 418 Gellane
E 420 Sorbit, sorbit syrup
E 421 Mannite
E 422 Glycerine

Emulsifiers

E 432 Polyoxyethylene-sorbitan-monolaurate (polysorbate 20)
E 433 Polyoxyethylene-sorbitan-monooleate (polysorbate 80)
E 434 Polyoxyethylene-sorbitan-monopalmitate (polysorbate 40)
E 435 Polyoxyethylene-sorbitan-monostearate (polysorbate 60)
E 436 Polyoxyethylene-sorbitan-tristearate (polysorbate 65)
E 440 Pectin, amidated pectin
E 442 Ammonium phosphatides
E 444 Sucrose-acetate-isobutyrate
E 445 Glycerol esters of wood resin
E 450 Potassium and sodium diphosphates
E 451 Potassium and sodium triphosphates
E 452 Polyphosphates
E 460 Cellulose, microcrystalline cellulose, cellulose powder
E 461 Methylcellulose
E 463 Hydroxypropylcellulose
E 464 Hydroxypropylmethylcellulose
E 465 Methylethylcellulose
E 466 Carboxymethylcellulose
E 470 a Sodium-, potassium- and calcium salts
E 470 b Magnesium salts of fatty acids
E 471 Mono- and diglycerides
E 472 a Acetic acid esters of mono and diglycerides
E 472 b Lactic acid esters of mono and diglycerides
E 472 c Citric acid esters of mono and diglycerides
E 472 d Tartaric acid esters of mono and diglycerides
E 472 e Diacetyltartaric acid esters of mono and diglycerides
E 472 f Mixed esters of mono and diglycerides
E 473 Sucrose esters of mono and diglycerides
E 474 Sucroglycerides
E 475 Polyglycerol esters of fatty acids
E 476 Polyglycerol polyricinoleate
E 477 Propylene glycol esters of fatty acids
E 479 Thermo-oxidised soya oil
E 481 Sodium stearoyl-2-lactylate
E 482 Calcium stearyol-2-lactylate
E 483 Stearyl tartrate
E 491 Sorbitan monostearate
E 492 Sorbitan tristearate
E 493 Sorbitan monolaurate
E 494 Sorbitan monooleate
E 495 Sorbitan monopalmitate

Miscellaneous additives

E 500 Sodium carbonate, sodium hydrogen carbonate, sodium sesquicarbonate
E 501 Potassium carbonate, potassium hydrogen carbonate
E 503 Ammonium carbonate, A.-hydrogen carbonate
E 504 Magnesium carbonate, M.-hydrogen carbonate
E 507 Hydrochloric acid
E 508 Potassium chloride
E 509 Calcium chloride
E 511 Magnesium chloride
E 512 Tin II Chloride
E 513 Sulphuric acid
E 514 Sodium sulphate, sodium hydrogen sulphate
E 515 Potassium sulphate, potassium hydrogen sulphate
E 516 Calcium sulphate
E 517 Ammonium sulphate
E 520 Aluminium sulphate
E 521 Aluminium sodium sulphate
E 522 Aluminium potassium sulphate
E 523 Aluminium ammonium sulphate
E 524 Sodium hydroxide
E 525 Potassium hydroxide
E 526 Calcium hydroxide
E 527 Ammonium hydroxide
E 528 Magnesium hydroxide
E 529 Calcium oxide
E 530 Magnesium oxide
E 535 Sodium ferrocyanide
E 536 Potassium ferrocyanide
E 538 Calcium ferrocyanide
E 541 Sodium aluminium phosphate, acidic
E 551 Silicon dioxide (silica)
E 552 Calcium silicate
E 553 a Magnesium silicate, magnesium trisilicate
E 553 b Talc
E 554 Aluminium sodium silicate
E 555 Aluminium potassium silicate
E 556 Aluminium calcium silicate
E 558 Bentonite
E 559 Aluminium silicate (kaolin)
E 570 Stearic acid (fatty acids)
E 574 Gluconic acid
E 575 Glucono-delta-lactone
E 576 Sodium gluconate
E 577 Potassium gluconate
E 578 Calcium gluconate
E 579 Iron-II-gluconate
E 585 Iron-II-lactate

Flavour enhancers

E 620 Glutamic acid
E 621 Monosodium glutamate, sodium glutamate
E 622 Monopotassium glutamate, potassium glutamate
E 623 Calcium diglutamate, calciumglutamate
E 624 Monoammonium glutamate, ammonium glutamate
E 625 Magnesium diglutamate, magnesium glutamate
E 626 Guanylic acid, guanylate
E 627 Disodium guanylate, guanylate
E 628 Dipotassium guanylate, guanylate
E 629 Calcium guanylate, guanylate
E 630 Inosinic acid, ionisate
E 631 Disodium ionisate, ionisate
E 632 Dipotassium ionisate, ionisate
E 633 Dicalcium ionisate
E 634 Calcium 5'-ribonucleotide
E 635 Disodium 5'-ribonucleotide
E 640 Glycine and its sodium salts
E 900 Dimethylpolysiloxane
E 901 Bees wax, white and yellow
E 902 Candelilla wax
E 903 Carnauba wax
E 904 Shellac
E 912 Montanic acid ester
E 914 Polyethylene wax oxidates
E 927 vCarbanide
E 938 Argon

Sweeteners

E 939 Helium
E 941 Nitrogen
E 942 Nitrous oxide
E 948 Oxygen
E 950 Acesulfame K, acesulfame
E 951 Aspartame
E 952 Cyclamate, cyclohexane sulphamide acid
E 953 Isomalt
E 954 Saccharin
E 957 Thaumatin
E 959 Neohesperidin DC
E 965 Maltitol, maltitol syrup
E 966 Lactitol
E 967 Xylitol
E 999 Quillaia extract
E 1105 Lysozyme
E 1200 Polydextrose
E 1201 Polyvinylpyrrolidone
E 1202 Polyvinyl polypyrrolidone
E 1404 Oxidised starch
E 1410 Monostarch phosphate (modified starch)
E 1412 Di-starch phosphate (modified starch)
E 1413 Phosphatised di-starch phosphate (modified starch)
E 1414 Acetylised di-starch phosphate (modified starch)
E 1420 Acetylised starch (modified starch)
E 1422 Acetylised di-starch adipate (modified starch)
E 1440 Hydroxypropyl starch (modified starch)
E 1442 Hydroxypropyl di-starch phosphate (modified starch)
E 1450 Starch sodium octenylsuccinate (modified starch)
E 1505 Triethyl citrate
E 1518 Glycerine triacetate (triacetin)

Gut health analysis

Why is gut health important?

Each person has their own unique combination of bacteria, which is established and develops through their environment but also, and importantly, the food choices made. The presence and balance of bacteria within the gut is now known to be of great importance for our health and wellbeing. Factors such as elevated stress levels, a diet low fibre and/or high in sugar and the usage of antibiotics can greatly affect our levels and balance of bacteria.

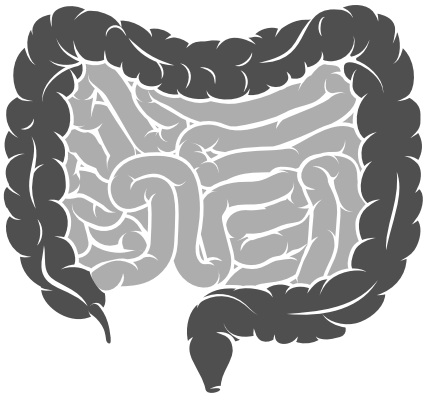
Intestinal flora affects your health

The microbes that live inside your intestines influence your health in beneficial and harmful ways

Immunity
Providing a physical barrier to invasive microbes, our gut flora enhances the functionality of the immune system.

Vitamins
Bacteria in the gut plays a direct role in the synthesis of vitamins B and K as well as the absorption of calcium and iron.

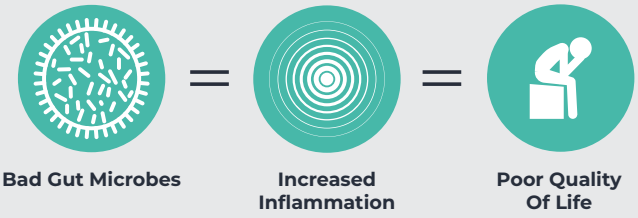
Metabolism
Metabolic activity of the gut flora allows our body to utilize food that would otherwise not be digested.



Obesity
In 2009, Dr. Krajmalnic-Brown discovered gut bacteria of obese patients differs significantly from normal individuals.

Inflammation
Gut flora likely plays a major role in the development of various inflammatory diseases including IBD and colitis.

Autism
New research by Dr. Krajmalnic-Brown suggests a link between autism and decreased gut bacterial diversity.



What can be done to improve gut health?

The food choices we make have great impact on the levels of beneficial bacteria in our guts. Probiotic foods are those that contain live micro-organisms and can positively affect the levels of bacteria in the gut. Probiotic foods are those such as good quality live yogurt, kefir, sauerkraut, miso, tempeh, kimchi, goat's cheese, olives, good quality dark chocolate and spirulina.

Bacteria need to feed on insoluble fibre foods, known as prebiotic foods, from our diet in order to flourish. Prebiotic foods include onion, garlic, leeks, cabbage, asparagus, chicory, artichoke, banana, apple, wheat bran, flaxseed and root vegetables.

Digestion analysis

Digestive health

In order to benefit from the nutrients and energy in our food we need to break it down and absorb it. The digestive process enables this to happen by releasing enzymes in the mouth, stomach and small intestine. The enzymes we release are able to break down different parts of our food; amylase breaks down carbohydrate, lipase breaks down fat and there are a number of different proteases, which break down proteins.

If levels of a certain digestive enzyme decreases digestion of that particular part of your food becomes less effective. For example a decrease in lipase may mean that fats are not being broken down as effectively and this could lead to malabsorption as well as possible symptoms, such as bloating or flatulence.

Digestive health and the daily diet

Certain foods naturally contain enzymes, which can aid digestion such as pineapple, papaya, kiwi, bananas, mango, kefir, good quality natural yogurt, sauerkraut, kimchi, miso, soy sauce, tempeh and avocado. Adding such items into the diet can help the digestive process. Natural digestive enzyme supplements, based on pineapple and payaya are also available. Please note it is always recommended that any supplementation is taken under the advice and monitoring of a health professional.

Interpreting your results

Your reactivity ratings for digestion will be broken down into within or outside of optimal range. These ratings will help you focus on specific reactivities, along with the relevant actions to take.

Outside range	These digestive enzyme levels fall outside the optimal range. We suggest taking steps to raise them to the optimal level.
Within range	These digestive enzymes fall within the optimal range

Anti-aging analysis

Understanding the aging process

The aging process affects the skin in various ways and leads to visible changes in its appearance, texture, and function. These changes are influenced by genetics and natural aging as well as lifestyle and environmental exposures.

As we age we produce less collagen and elastin, these are proteins that provide support and elasticity to the skin. We also have decreased levels of hyaluronic acid, which keeps the skin hydrated. The combination of reduced collagen, elastin, and hyaluronic acid, can lead to a loss of skin firmness and elasticity, the development of fine lines and wrinkles, and dry, less youthful looking skin.

Adopting a comprehensive skincare routine can minimise the impact of the aging on the skin. This may include using sunscreen to protect the skin from UV damage, moisturising to maintain hydration and incorporating products with antioxidants and anti-aging ingredients. Healthy lifestyle choices, such as a balanced diet, regular exercise and avoiding smoking, can greatly contribute to maintaining skin health. Working with a dermatologist can provide personalised advice and treatment options.

Interpreting your results

Your reactivity ratings for anti-aging will be broken down into either outside range or within optimal range). These ratings will help you focus on specific reactivities, along with the relevant actions to take.

Outside range	These anti-aging item levels fall outside the optimal range. We suggest taking steps to raise them to the optimal level.
Normal range	These anti-aging item levels fall within the optimal range

Stress and inflammation analysis

Elevated stress levels

Stress is a physiological response that happens in the body when faced with challenges, demands, or changes that require adaptation or adjustment. It is a natural and automatic reaction that prepares the body to cope with various situations. Stress can be triggered by both external factors, such as work demands, relationships, or environmental changes, and internal factors, such as thoughts and emotions.

Whilst acute stress is short term, manageable and can be motivating for some, chronic stress can lead to chronically elevated cortisol levels, internal inflammation, and have negative effects on health. Stress and inflammation are closely related through complex biological pathways. Chronic stress can dysregulate the normal inflammatory response leading to prolonged and harmful inflammation.

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What is cortisol?

Cortisol is a steroid hormone produced by the adrenal glands, which are located on top of each kidney. Cortisol is often referred to as the stress hormone as it is released in response to acute stress as part of a normal and adaptive response. It also plays a crucial role in various other physiological processes within the body such as blood sugar regulation, metabolism, blood pressure regulation, and immune system function.

Chronic or prolonged elevated cortisol levels due to chronic stress or medical conditions can have negative effects on health such as a weakened immune system, weight gain, cardiovascular issues, digestive issues and it can impact mental health. Managing stress through healthy lifestyle habits, relaxation techniques, and seeking support when needed is crucial for maintaining balanced cortisol levels and overall well-being.

Interpreting your results

Your reactivity ratings for stress and inflammation will be broken down into either outside range or within optimal range). These ratings will help you focus on specific reactivities, along with the relevant actions to take.

Outside range	These stress & inflammation item levels fall outside the optimal range. We suggest taking steps to raise them to the optimal level.
Normal range	These stress & inflammation item levels fall within the optimal range

Quick stress management tips for a healthier you

Your reactivity ratings for stress and inflammation will be broken down into either outside range or within optimal range). These ratings will help you focus on specific reactivities, along with the relevant actions to take.

1. Exercise regularly
Engage in activities like walking, jogging, yoga, or cycling to release stress-reducing endorphins.

2. Practice mindfulness
Try techniques like meditation, deep breathing, or guided imagery to stay present and reduce stress.

3. Maintain a healthy diet
Eat a balanced diet with fruits, veggies, lean proteins, and whole grains while minimizing caffeine and sugary foods.

4. Prioritize quality sleep
Aim for 7-9 hours of consistent, restful sleep to manage stress effectively.

5. Use healthy coping methods
Talk to a friend, write in a journal, enjoy a hobby, or spend time in nature to cope with stress positively.

Sleep hormone analysis

Low melatonin levels

A low level of melatonin is associated with sleep issues like finding it difficult to fall asleep, frequent waking or the inability to stay asleep, and waking early and not being able to fall back to sleep. Low melatonin levels also play a role in mood and stress disorders.

There are many factors that can affect sleep including:

- Stress, anxiety, and depression
- Certain medications
- Physical discomfort (chronic pain or restless leg syndrome)
- Lack of sleep hygiene - too much light or noise or no regular bedtime
- Blue light from screens before bed
- Lack of daylight exposure
- Too much caffeine or sugar in the diet
- Aging
- Alcohol intake

?

What is melatonin?

Melatonin is a hormone naturally produced by the pineal gland, a small pea-sized gland located in the brain. It plays a vital role in regulating the sleep-wake cycle, also known as the circadian rhythm. Melatonin levels in the body increase in the evening and remain elevated throughout the night, promoting sleep and relaxation, and decrease in the morning, helping the body to awaken and maintain wakefulness during the day.

The natural production of melatonin is influenced by exposure to light with darkness stimulating the release of melatonin, signaling the body to prepare for sleep. Exposure to light, especially blue light emitted by electronic devices and certain light sources, can suppress melatonin production and interfere with the sleep-wake cycle.

In addition to its role in sleep regulation, melatonin also acts as an antioxidant, helping to protect cells from oxidative stress and damage, and is involved in the regulation of immune function, blood pressure, body temperature, and hormone production.

Interpreting your results

Your reactivity ratings for sleep hormone Melatonin will be broken down into either outside range or within optimal range). This rating will help you focus on specific reactivities, along with the relevant actions to take.

Outside range	Your melatonin levels fall outside the optimal range. We suggest taking steps to raise them to the optimal level.
Normal range	Your melatonin levels fall within the optimal range

Did you know?

The optimal room temperature for sleep typically ranges between 60-67°F (15-19°C). This temperature range is considered comfortable for most people as it helps regulate your body's internal temperature and promotes better sleep. However, individual preferences can vary, so it's essential to adjust the temperature to what feels most comfortable for you. Experiment within this range to find the temperature that helps you sleep most soundly.

Skin health analysis

What is skin sensitivity?

Items, such as those containing fragrances, can cause the body to react, which can lead to the production of symptoms such as headaches and fatigue. If you suspect you have an allergy please see your physician. It is important to note that this is not an allergy test. Any known cosmetic allergies you know you have may or may not come up in this test

Interpreting your results

Your skin sensitivity ratings will be broken down into either high, moderate or no reactivity ratings. These ratings will help you focus on specific reactivities, along with the relevant actions to take.

High Reactivity	These are the skin sensitivity items that our testing shows you are most likely to have a sensitivity to or that fall outside of range. We would recommend the removal of these items from your daily diet for 6-8 weeks using a structured elimination diet.
Moderate Reactivity	These are the skin sensitivity items that our testing shows you may have a sensitivity to. We would recommend the removal of these items from your daily diet for 4-6 weeks using a structured elimination diet.
No Reactivity	These are the skin sensitivity items that our testing shows you do not have sensitivity to or are within optimal range

Nutrition analysis

Low nutrition levels

There are recommended daily amounts of each vitamin and mineral that should be consumed on a daily basis and the essential amino acids need to be consumed through the daily diet. Vitamin, mineral and amino acid requirements do vary from person to person depending upon life stage, activity level, stress level, health conditions and medications. Low vitamin, mineral and amino acids levels occur when the dietary intake is lower than required or when the body is struggling to effectively absorb nutrients from the diet.

Why is a good daily diet important?

Good daily nutrition plays a central role in maintaining overall health and wellbeing. It is important for:

- Providing essential nutrients
- Supporting growth and development
- Aiding immune system function
- Cardiovascular health
- Support brain function
- Regulates blood sugar
- Aids digestive health
- Supports bone and joint health
- Reduces the risk of chronic disease
- Helps maintain body weight

Interpreting your results

Your nutrition ratings will be broken down into either high, moderate or no reactivity ratings. These ratings will help you focus on specific reactivities, along with the relevant actions to take.

Outside range	These nutrition item levels fall outside the optimal range. We suggest taking steps to raise them to the optimal level.
Normal range	These nutrition item levels fall within the optimal range

What does a balanced meal look like?

The BANT healthy eating plate is a great example of a guide to help you to create balanced meals providing a breadth of nutrients, non-starchy fruits and vegetables, wholegrains or starches and protein, and healthy fats.

7 a day

(5 veg and 2 fruit)

Leafy greens & salads

Root veg & wholegrains

Eat root vegetables as well as whole grains (like wild and brown rice, whole oats, quinoa). Limit refined grains (like pasta and bread) which affect the body in a similar way to sugar.

Fruit

Eat 1-3 palm-sized portions of fruit a day. Choose different colours and eat locally. (e.g pears, apples, plums, berries) and seasonally.

Protein

Make fish, poultry and eggs your principal sources of protein and eat lean red meat, bacon and other processesed meats only occasionally. Eat pulses (lentils, beans, chickpeas) and nuts, seeds as vegetable protein.

Other veg

Limit dairy to a small match-box of cheese, half a cup of live unsweetened yoghurt or a small glass of a milk a day.

Drinks

Drink water, tea, (black, green, fruit and herbal infusions) avoid drinks that are high in sugar or artificial sweetners, including fruit juice.

Got a question?

Please get in touch with the Biometrix Labs team on:

info@biometrixlabs.co.za

Think before you print.

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