

Kathy's MCS/ES Info

NUTRITIONAL SUPPLEMENTS WHICH MAY HELP DETOXIFICATION

Please note that in this article I am NOT referring to a crash-detox, but to nutrients to help your detoxification system to work as best it can. I am also not recommending nor qualified to recommend anything. However, there is a vast number of supplements which claim they help detoxification & as this can be overwhelming & confusing, I hope that this article gives a clear introduction to the subject.

Nutritional Supplements may be helpful for MCS to ensure that your detoxification system has all the nutrients it needs to work properly. Optimising your body's ability to detoxify may help those with MCS in several ways. Some people find that with a detoxification system that's better able to eliminate toxins - resulting in less build up in their body (toxic load), they generally feel better than they previously did. With a lower toxic load, some find that their tolerance to chemicals improves. Some find that an improved detoxification system helps to reduce the severity of their symptoms, or that it helps them to recover better & more quickly from an exposure by eliminating the toxins more efficiently & thoroughly. In addition, some people find taking specific supplements prior to an exposure helps reduce symptoms, their severity or persistence than they would otherwise experience; or some taken asap during or after an exposure can help in these ways.

Supplements may be particularly helpful if you have a limited diet because of food sensitivity/intolerance which is common with severe/very severe MCS.

Taking supplements is a complex topic as they need to be correctly balanced & professional advice should really be sought. GPs (if you have one who you can approach regarding MCS) usually have relatively little knowledge on nutrition & few tests they can request. Consulting an Environmental Doctor or a Nutritionist tends to be more beneficial, though this usually needs to be done privately. They will consider your individual case, including your dietary intake, tests you have had (eg relating to your absorption/utilisation of nutrients, your detoxification pathways, any deficiencies),

other illnesses, etc. They will know which, if any, supplements may help, the amount you need (possibly higher than the RDA) & the best form of a nutrient for you ie. which form you will best tolerate & which is best for what you need it for (eg whether to use magnesium citrate or magnesium glycinate etc).

If you are restricted by either finances or ability to travel, you may find just a telephone consultation can provide some advice/guidance that helps you.

Some people for whom a professional consultation isn't an option try supplements on their own, but if doing this do it carefully & make sure your GP knows as some can affect medication.

GENERAL TIPS & INFO

- Introduce them to your body carefully & possibly very slowly. For those very sensitive/intolerant, this may mean e.g. a fraction of the normal dose once a week, then twice a week & very gradually building up the frequency & dose. A professional may suggest starting with as little as 1/10th of a normal dose, in liquid form in a glass of water to drink slowly through the day & to gradually increase the dose over many months. Or they may suggest (if able) low dose immunotherapy for each supplement.
- If you tend to become sensitive/intolerant to food/chemicals you initially tolerate, it may help to take a supplement less frequently e.g. every other day or to have a break from them from time to time. Switching to a different brand or form of the nutrient for a while may also help some people.
- Find what works & helps you. We are all different- you may not need the supplement(s) every day. Some supplements you may only need occasionally or after a large or certain exposure.
- Capsules are often tolerated better than tablets as they contain fewer (if any) filler ingredients. If you can't tolerate their capsule shell, you can open them & drink the powder in water. As they can be opened, it also makes it easy to take smaller amounts. It's usually easiest to open the capsules by gently turning the 2 parts as if you are unscrewing them. Once you have emptied out the amount you don't want you can push

them together again so the powder is enclosed to swallow.

- Introduce 1 new supplement at a time Only add another when you are ok with the previous one.
- Be prepared to try different brands & types of a supplement to find 1 you tolerate & which works for you. Check ingredients- they contain different forms & amounts of the nutrient as well as their other ingredients.
- The better quality & purer supplements do cost more but may be the only ones those very sensitive can tolerate.
- You may find that you have better results with supplements which are ready to be used by your body without your body needing to prepare them- look for things like 'active form' , or 'easily absorbed' etc.
- Supplements containing multiple nutrients can be more convenient, cheaper & easier to take than lots of individual supplements. However there is more chance you may not tolerate it as you may react to any one of its ingredients- so those very sensitive may be better with individual nutrients you can select to suit you.
- Slow release supplements are made with layers of coatings around a solid core & these dissolve at different times. With MCS it may be best to avoid the extra ingredients in these.
- There are alternatives to capsules or tablets eg. liquid form, injections, powder, which some people can tolerate better (also useful if you have other digestive or stomach issues). A professional could advise you. Most nutrient skin-patches have poor scientific reports & their materials may cause skin irritation but some people find them helpful.
- Check with a professional that each supplement is safe for you to use (in relation to health conditions, medications etc you may have) & also if taking supplements for long periods of time as some should only be used short-term.
- Follow instructions on the bottle & do not exceed the dose stated unless advised by a professional - they can be harmful. If taking several different supplements check if a

nutrient is in more than 1 & that the combined amount is safe.

BASIC UNDERSTANDING:

There is an array of supplements available which claim they help with detoxification & they do each have a role at certain stages or particular places within the detoxification process, or on particular tissues, particular chemicals etc.

The whole of a detoxification pathway needs to be working & a lack of what's needed for any stage stops the detoxification process being effective. In addition, during the detoxification process some chemicals are broken down into ones more toxic than the original one as a step towards it being prepared for excretion, so you need to make sure that your pathway does not break down at that stage.

Our bodies have many different detoxification pathways. We use different pathways for different toxins & the nutrients needed for each pathway varies - hence the number of nutrients involved.

SUPPLEMENTS WHICH MAY BE HELPFUL:

Some MCS people find that just taking a quality multi-vitamin & mineral supplement (if tolerated) helps them & that eating a little extra protein (for amino acids) can also improve their detoxification ability. If eating meat, choose lean meat if possible as toxins are stored in animal fat.

However, there are many specific supplements some of us also find make a difference so I'll mention some of the popular ones below. These nutrients may also have other uses in the body, but I am only describing their role in relation to detoxification here.

Vitamin C (ascorbic acid) is an antioxidant. It is water-soluble & the body does not store it, so divided doses may be more beneficial as what is not needed at the time of a high dose will be excreted. Buffered forms (usually calcium added) or mineral ascorbates may suit you better if ascorbic acid causes stomach problems as they are less acidic.

Vitamin C is also great for heavy metal detox.

Vitamins A & E which are fat-soluble & can be stored in fat are also important antioxidants.

Antioxidants help protect cells throughout the body as well as being used in the liver.

B vitamins (including B2, B3, B6, B12 & folic acid) are important in the detoxification system, particularly as cofactors for enzymes in the liver. B-complex supplements contain a balance of the B vitamins which can be useful as some work synergistically.

Amino Acids - these may be particularly helpful if you can't eat much protein food (protein is broken down into amino acids during digestion). They are essential in both phases of detoxification in the liver. Both Essential Amino Acids (ie those which cannot be made in the body so must be obtained from food or supplements) & Non-Essential Amino Acids (which the body can either synthesise or obtain from food) are used.

Different amino acids are used in different pathways.

Sulphur containing Amino Acids e.g. Taurine, Methionine, also help in the removal of heavy metals by metal binding, transmembrane transport (ie moving them across membranes) & removing heavy metals from tissues.

Glutathione - MCS people often find this really useful. Environmental Doctors usually find that most MCS people don't have enough of it, so if you can't manage tests to check, it can be worth trying it. It is an important antioxidant & also used for conjugation so is used in both phases of the detoxification process that occur in the liver. It is important to have enough of it, as if your level is low & all used in stage 1, its conjugation pathway in stage 2 stops. It also recycles other antioxidants e.g. vitamin C & E.

Your body can synthesise glutathione from glutamine, cysteine & glycine (3 amino acids found in protein). Magnesium is needed for this. However, you may find a supplement helpful if your intake of these is low or your body does not easily make it. Reduced glutathione (L- glutathione, or GSH) is in the active state ready to neutralise free radicals in the body. This form is easily absorbed. However there is some thought that because it can easily change to the inactive (oxidised) form, that it may not remain in the reduced form during absorption from the digestive tract. Liposomal glutathione is glutathione that has undergone a process to encapsulate it inside a lipid. This protects the

glutathione & improves absorption. The glutathione in this may or may not be the reduced form so do check.

Trace Elements (minerals) used in detoxification:

Magnesium, Selenium & Zinc are very important.

Copper, Iron, Molybdenum & Manganese are significant.

Others are also used.

Alpha Lipoic Acid(ALA) is a highly regarded antioxidant since it is a tiny molecule which easily crosses cell membranes, & can quench both fat-soluble and water-soluble free radicals inside & outside cells. It also extends the life of other antioxidants eg vitamins C & E, protects the liver from free radical damage, promotes detoxification reactions, is a cofactor for some enzymes involved in detoxification, increases production of glutathione, & helps eliminate heavy metals from the blood. It can be made in the body. There are 2 forms of ALA.(R&S). The R form is the natural form & used by our bodies. If a supplement does not specify the form it is usually a mix of the 2.

Flavonoids are compounds found in many fruit & veg. Their use in detoxification is as antioxidants & helping to regulate liver enzyme activity. NB: High doses can be harmful.

Co-enzyme Q10 (the active form is called ubiquinol)- a potent antioxidant located in our cell membranes. It is also one of the antioxidants used to stabilise the intermediaries between stages 1 & 2 of detoxification in the liver. It is made naturally by our bodies but this reduces with age.

OTHER SUPPLEMENTS WHICH MAY BE HELPFUL include:

Essential fatty acids - omega 3 & omega 6. These maintain the structure & functioning of cell membranes, increase the absorption of vitamins & minerals, & are used for liver functions. Omega 3 may be fish oil, cod-liver oil or flax oil. If using a fish/cod liver oil try to take a purified one as otherwise it will contain toxins from the liver. Omega 6 oils include borage oil & evening primrose oil. A certain ratio of omega 3:omega 6 may be recommended.

Probiotics to help improve gut health & digestion to obtain the nutrients from food.

Digestive enzymes to help your body to access nutrients.

NAC (n-acetyl-cysteine) a potent antioxidant, & used in glutathione synthesis. It was banned in the UK in 2021 by FDA over legalities whether it was 1st used as a drug or as a supplement - not over safety issues. It is now obtainable.

ASSISTING THE ELIMINATION OF TOXINS:

It is important that once your detoxification system has prepared toxins for elimination that they can be well excreted in urine, sweat or faeces, so do ensure that your water & fibre intake is adequate.

Fibre - Bile helps to clear toxins in the intestines & is then absorbed by fibre to be excreted, expelling the toxins. Without enough fibre, there is inadequate binding & the toxins are reabsorbed.

Hydration - keep well hydrated to flush out toxins in urine & sweat.

Fragrance Petition to the UK government

By coincidence , just after my fragrance article was put in our summer quarterly, this petition

was started. If you are affected by fragrance in any way or wish to support those who are,

there is currently a petition to the UK Government to ban air fresheners & scented products

in public spaces. The deadline for signatures is 4th January 2026.

You can sign online at

<https://petition.parliament.uk/signatures/157671014/signed>