



GlyphoFix

With Glycine & Probiotics

glyphosate

noun \ˈglɪfə(ʊ)seɪt\

: a synthetic compound which is a non-selective herbicide, particularly effective against perennial weeds

(Definitions from Oxford Languages)

fix

noun \ˈfɪks\

: to restore proper working order; repair

(The Free Dictionary)

Glyphosate was first created in 1950 by a Swiss chemist who worked for the pharmaceutical company Cilag. It is made by reacting the amino acid glycine with several other synthetic ingredients and derives its name from a contraction of the final synthesis step: **glycine** and **phosphonate**.

A first patent was issued in 1964 for use as a metal chelating and descaling agent to clean out mineral deposits in pipes and boilers. In 1971 glyphosate was patented as a herbicide by Monsanto and introduced into the market in 1974 under the trade name "Roundup". Glyphosate is a systemic, broad spectrum herbicide that kills plants by inactivating the shikimate pathway, a biochemical pathway found in plants and bacteria, that makes the amino acids tryptophan, phenylalanine and tyrosine, that are essential for survival.

In 1996 Monsanto introduced a range of new crop varieties such as soy, maize, canola and sugar beet that were genetically modified to be resistant to glyphosate (GM crops). This simplified weed control as farmers could spray their fields after crops were planted, killing the weeds but allowing GM crops to survive. Monsanto later extended the use of glyphosate to non-GM crops (oats, wheat, peas lentils, beans), by using Roundup as a desiccant and spraying just before harvesting, which killed the foliage and made it easy to harvest the seeds. All crop plants are therefore sprayed with Roundup to some extent, so that most food products, including bread, sugar, beer, wine, confectionary and even baby foods contain traces of glyphosate.

Scientists regard the ubiquitous presence of glyphosate in our foods and bodies as harmless because humans lack a shikimate pathway, but there are still a number of ways glyphosate can be harmful to our health. Glyphosate kills beneficial bacteria (which have a shikimate pathway) in our gut, thereby preventing the formation of vitamins, short chain fatty acids and amino acids essential to humans. Glyphosate can also be mistaken for glycine and incorporated into body proteins which affect the integrity of body components that use glycine in their structure. But the most insidious effect of glyphosate is that it chelates (binds) minerals (calcium, magnesium, zinc, manganese and more) in the blood so that they are no longer available to cells.

Removal of minerals from the blood stream by glyphosate is a culmination of a number of deleterious practices that have contributed to the steady decline of minerals in our food, such as use of fertilizers (soil depletion), glyphosate spraying (binding of minerals in soil) and food processing techniques (refinement of food), so that the foods of today provide up to 40% less minerals than the foods of our ancestors. Moreover, these deficiencies no longer involve single minerals as they did in the past (shortage of iodine in soils), but rather, multiple mineral deficiencies that all occur at the same time.

Deficiencies in minerals affect the manufacturing processes in the body, the mechanism cells use to make the molecules needed to build and repair body structures, as well as to make enzymes and specialized molecules such as hormones and neurotransmitters. Multiple deficiencies that occur simultaneously create havoc with manufacturing processes and together with the incorporation of glyphosate into proteins, result in the formation of incomplete or abnormal body structures/components, enzymes and hormones, and can lead to the wide range of symptoms we have come to regard as chronic disease.

Chronic disease symptoms are therefore directly related to the levels of minerals in our blood. These levels vary on a daily basis, depending on the type and frequency of food eaten (junk or organic) and consequently take a long time to develop. Individual diets and eating habits are not the same for everyone so that symptoms are never consistent and are often unique; 1 in 10 patients have unexplained medical conditions, depending on which part of the body the manufacturing processes are disrupted.

Initially, mineral deficiencies disrupt manufacturing processes which affect non-vital body parts and structures such as the skin, muscles, bone, tendons and cartilage, and can lead to innocuous symptoms such as itching, fatigue, cramping, stiffness and inexplicable pain/aches, but as the deficiencies persist and blood levels continue to fall, manufacturing processes in vital organs are affected as well - usually in middle age - and full blown chronic disease can develop including heart disease, diabetes, arthritis, stroke, and liver disease.

Low levels of minerals in the blood also have a knock-on or domino effect on later generations when mineral deficient mothers give birth to mineral deficient babies so that the onset of chronic disease occurs at an ever younger age. This is the pattern we see today, but one that has escalated since the introduction of GM crops, so that even small children can have heart problems.

GlyphoFix has been specifically developed to counteract the effects of glyphosate poisoning. GlyphoFix provides probiotics together with inulin (a prebiotic) to restore gut bacteria; it also provides glycine to prevent incorporation of glyphosate into body proteins and n-acetyl cysteine to stimulate the formation of glutathione, the endogenous antioxidant to help remove chelated glyphosate/mineral complexes. Finally it provides a potent blend of important minerals to replace those removed by glyphosate. Other ingredients play an auxiliary role

In summary, the Metabole GlyphoFix formula can do the following for you:

- Replaces the probiotic bacteria that are killed by glyphosate
- Provides glycine to prevent incorporation of glyphosate into body proteins
- Stimulates the formation of glutathione to remove chelated glyphosate/mineral complexes
- Provides a rich source of minerals, to replace those removed by glyphosate.
- Facilitates communication between cells involved in glyphosate detoxification and removal

No added preservatives, colourants, flavourants, sugar, salt or dairy products