ScentArestTM

ScentArest™ was designed to support a healthy, functioning liver detoxification pathway, urea cycle, mitochondrial function, and methylation. Downregulation of these metabolic pathways, through genetic polymorphism or dietary pattern may result in numerous unwanted challenges.

Compounds that trigger chemical intolerance include sulfite, phenolic compounds (tannins), mold or yeast (aldehydes), prostaglandins, histamines, tyramines, and congener (chemical residues from fermentation). Metabolism of these compounds takes place in the liver, and is supported by the ingredients supplied by **ScentArest™**. Nutrigenomics related to genetic polymorphisms of methylation and detoxification dramatically influence liver metabolism of these compounds, and providing key nutrients can up-regulate clearance.

"Sulfites" is considered to be an inclusive term for sulfur dioxide (SO2) and related compounds. The salts formed from sulfurous acid, including sodium sulfite or potassium metabisulfite (also known as potassium pyrosulfite) are used for a variety of preservative properties such as controlling microbial growth, preventing browning, and for bleaching some foods. They are also concentrated in wine. It is estimated that in the US, a half million people are sulfite sensitive. This includes about 8% of asthmatics.

There are two categories of sulfites: natural and added. Natural sulfite compounds are produced during fermentation and cannot be avoided. For this reason, sulfite-free wines do not exist. However, sulfites are often added to wines to protect them from oxidation, yeast and mold.

Sulfite and Sulfite Oxidase: Sulfite oxidase (SO) converts sulfite to sulfate. Inadequate SO levels can be due to genetic predisposition and/or cofactor deficiency.

Molybdenum oxotransferases includes SO, aldehyde oxidase, DMSO reductase, xanthine oxidase, and nitrite reductase. Production of SO requires molybdenum and riboflavin, both of which are supplied by **ScentArest™**.

Histamines: Those with histamine tolerance challenges often feel over-stimulated or



anxious, suffer from occasional sleeplessness, sometimes have trouble regulating body temperature, or may feel nauseous. Vitamin B6 (pyridoxal-5-phosphate) has been shown to promote diamine oxidase (histaminase). Folate antagonists promote histamine, and quercetin inhibits release of histamine from mast cells. **ScentArest™** supplies both folate (5-methyltetrahydrofolic acid) and quercetin to support histamine metabolism.

Tyramine (biogenic amine): Many foods, especially fermented foods, are a source of tyramine, a biogenic amine. Tyramine intolerance may result in similar challenges as histamine intolerance. Tyramine and the other biogenic amines are metabolized by monoamine oxidase (MAO). Riboflavin is an essential cofactor for MAO production, and is supplied by **ScentArest™**.

Tannins (polyphenols): Tannin is a naturally occurring phenolic compound found in plant seeds, leaves, bark, pulp, and fruit skins. Interestingly, even though grape skins contain tannins which are in contact with wood (also containing tannins) during the wine making process, red wine has been shown to contain a potent inhibitor of phenolsulfotransferase (PST), an enzyme that breaks down, or sulfates phenolic compounds, including tannins. You should be aware that certain food additives such as





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artificial colors and flavors can inhibit PST. Dietary sulfur is required for PST production. Cruciferous vegetables in general, and broccoli specifically, are effective sources of sulfur. Sulfation of PST is supported by vitamins B12, folate (5-methyltetrahydrofolic acid), and B6 (P-5-P). All of these nutrients are provided by **ScentArest™**.

Aldehydes: Fermentation of wine produces aldehydes. It is normally metabolized into harmless acetic acid (vinegar) in the liver by the enzyme acetaldehyde dehydrogenase. Individuals with general aldehyde sensitivity will also be sensitive to perfumes, smoke, molds, many industrial chemicals, and volatile organic chemicals (VOCs). Exposure is widespread. The breakdown of aldehydes via aldehyde dehydrogenases is supported by upregulating their production with the cofactors molybdenum selenium, riboflavin, niacinamide, and vitamin E, all of which are supplied by **ScentArest[™]**.

Congeners: These are substances other than ethanol that are produced from fermentation. They include fusel oils, methanol, acetaldehyde, and biogenic amines like histamine and tyramine. Some congeners are normal to the body, such as acetone (a class 3 residual solvent), which is broken down in the liver by the P450 detoxification pathway. Metabolism of this pathway is supported by riboflavin, niacin, B6, folate, vitamin E, quercetin, selenium, magnesium and indoles from cruciferous vegetables, all of which are contained in **ScentArest™**. On the other hand, methanol can be guite toxic. It is metabolized in the liver into formaldehyde by acetaldehyde dehydrogenase. The formaldehyde is then further broken down by glutathione peroxidase dependent formaldehyde dehydrogenase to formic acid, which is them metabolized by catalase. Denaturation of formic acid depends on folate sufficiency. Production of glutathione depends on the nutrients selenium, folate, magnesium, and B6. All of the above mentioned compounds are supplied by **ScentArest™**.

ScentArest™ provides nutritional support for healthy, functioning:

- Detoxification pathways
- Mitochondrial function
- Methylation processes

ScentArest™ provides nutrients the body needs to meet the onslaught of compounds including sulfites, tannins, aldehydes, histamines, tyramines and congeners that may trigger chemical intolerance.

ScentArest™— another example of Biotics Research Corporation bringing you the "Best of Science and Nature."

ScentArest™ is available in 60-count bottles (#7858).

	Amount Per Serving	% Daily Value
Vitamin E (as d-alpha tocopheryl acetate and mixed tocopherols)	50 IU	167%
Thiamine (as cocarboxylase chloride)	1 mg	67%
Riboflavin (as riboflavin-5-phosphate)	2 mg	118%
Niacin (as niacinamide)	10 mcg	50%
Vitamin B6 (as pyridoxal-5-phosphate)	6 mg	300%
Folate (as 5-MTHF glucosamine salt)	100 mcg	25%
Selenium (from vegetable culture† and selenomethionine)	50 mcg	71%
Molybdenum (from vegetable culture† and molybdenum glycinate)	150 mcg	200%
Quercetin	50 mg	*
Proprietary blend Raw organic grass juices (barley, wheat, oat, alfalfa, kamut)*, raw o concentrates (broccoli, cauliflower, kale)*, raw organic vegetable ju acerola berry extract*, organic peppermint leaf*, Stevia rebaudiana	ices (beet, carro	

Other ingredients: Capsule shell (gelatin and water) and silica

This product is gluten and dairy free.

 $\textbf{RECOMMENDATION:} \ \, \textbf{One (1) capsule once or twice each day as a dietary supplement or as otherwise directed by a healthcare professional.}$

KEEP OUT OF REACH OF CHILDREN

Store in a cool, dry area.

Sealed with an imprinted safety seal for your protection.

Product # 7858 Rev. 04/16

To place your order for **ScentArest™** or for additional information please contact us below.





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