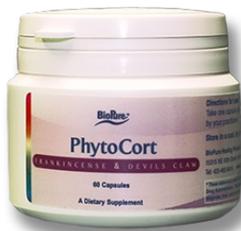


Welcome to BioPure Bulletin-keeping us in touch with you; our friends, colleagues, and customers. Our monthly newsletter allows us to share topical feature articles, valuable resources, product updates and announcements.

This month we report on the important subject of **inflammation**, and introduce an herbal product formulated to strengthen the body's anti-inflammatory defense systems.



Cooling the Heat of Inflammation with

PhytoCort™

There are basically two types of inflammation; acute and chronic. Injury or infection triggers an acute localized inflammatory response characterized by redness, swelling, heat, and pain. This is the body's natural way of protecting and repairing itself, involving a complex cascade of chemical reactions, that result in a variety of physiological changes. Vessels dilate to allow extra blood flow, and become more permeable to release fluid and plasma proteins to the injured site. Leukocytes are attracted to the area to engulf dead cells and bacteria. As the problem is fixed, anti-inflammatory reactions kick-in and the body restores itself towards a healthy equilibrium.

Inflammatory activity becomes destructive when it persists and fails to turn off. Many factors can contribute to chronic, inappropriate levels of hidden inflammation including emotional stress, high blood sugar, cellular dysfunction, oxidative stress, environmental toxins and

In This Issue

Cooling Inflammation
Ozonated Oils
Chlorella vulgaris extract

**Chlorella vulgaris
extract (C.V.E.)
on sale**



For the month of September,
BioPure will be offering a
25% discount
on *Chlorella vulgaris* extract

allergens, repeated or prolonged infection, being overweight, poor oral hygiene, deficient intestinal flora, to name a few [Life Ext].

Conventional drug interventions for inflammation, including corticosteroids, statins, and non-steroidal anti-inflammatory drugs (NSAIDs), each have associated side effects, including increased blood and eye pressure, mood swings, bone thinning, elevated risk of stroke or heart attack, gastrointestinal bleeding, ulcers, etc. [Mayo Clinic]. Many people are turning to natural herbal supplements that offer proven effectiveness with better safety profiles [Abdel-Tawab et al 2011, Alt. Med. Rev., Prasad and Aggarwal 2011].

BioPure's **PhytoCort™**, for example, is a mixture of three herbs, specifically formulated to support the body's anti-inflammatory responses, decrease pain and inflammation related to rheumatoid and osteoarthritis, and reduce persistent low-level inflammation, in general. Frankincense, Curcumin, and Devil's Claw are the three active ingredients. Each herb has a long history of use in traditional medicine, as well as scientific research that validates its anti-inflammatory properties [Di Lorenzo et al 2013, Conrozier et al 2014, Grant et al 2007].

Frankincense is derived from the aromatic resin of the *Boswellia serrata* tree. It has been used for thousands of years for spiritual, and a wide range of medicinal purposes, including arthritis, fevers, asthma, bronchitis, hair-loss, hemorrhoids, sore throat, ulcers, cardiovascular and blood issues, and to stimulate and protect the liver [Siddiqui 2011]. It continues to be one of the most valued herbs in Ayurvedic medicine. Modern research shows Frankincense to be effective support for many conditions involving inflammation, including ulcerative colitis [Gupta et al 1997], collagenous colitis [Madisch et al 2007], rheumatoid arthritis [Umar et al 2014], osteoarthritis [Kimmatkar et al 2003], asthma [Gupta et al 1998], and more.

The resins of Frankincense contain highly bioactive compounds known as triterpenic acids [Verhoff et al 2014]. One of these, Boswellic acid, was discovered to be a strong inhibitor of 5-lipoxygenase, an enzyme prominently involved in mammalian inflammatory



for both wholesale and retail customers

Chlorella vulgaris extract (C.V.E.) is one of BioPure's top selling products. This microscopic freshwater algae packs in more chlorophyll to its tiny cells than any other plant known [Burlew 1953]. Not only is *Chlorella* a nutritious food source, rich in vitamins, minerals, and all eight essential amino acids, it is also a powerful antioxidant, immunity stimulant, and assistant in eliminating heavy metals and other environmental toxins such as cadmium, lead, mercury, dioxin, and arsenic. C.V.E. is obtained using a unique hot water extraction method that concentrates the primary bioactive constituents from the algae in a form that is highly potent and easy to digest.

A comparison of the various *Chlorella products* carried by BioPure can be seen on our website.

For more information on BioPure Healing Products, and to view all of our products, please visit one of our websites:

www.retailbiopure.com

accessible to anyone, including patients and the general public

-or-

www.practitionerbiopure.com

pathways [Radmark et al 2007, Siddiqui 2011]. Other terpenes identified in *Boswellia* resin selectively inhibit microsomal prostaglandin (mPGES-1) formation [Bahia et al 2014, McCarty]. This specificity bypasses some of the adverse side effects of conventional NSAIDs, while still providing anti-inflammatory and analgesic benefits. Numerous studies suggest that Frankincense may be a possible alternative to NSAIDs [Abdel-Tawab 2011, Umar et al 2014, Verhoff et al 2014].



Curcuma longa is a tropical perennial with orange-colored tuberous roots. The dried and ground roots provide the popular Indian curry

spice-turmeric, which has recently experienced a surge in popularity for its anti-inflammatory properties. Potent bioactive polyphenolic compounds known as curcuminoids [Funk et al 2006], have been isolated and given the name 'Curcumin'. Curcumin has been used in Ayurvedic medicine for centuries as a remedy for a variety of ailments including asthma, allergies, sore throats, colds, digestive and liver problems. It has also been used as an antiseptic for wounds, and to lessen swelling and pain due to injuries, arthritis, and rheumatism [Prasad and Aggarwal 2011]. Curcumin can have positive effects on symptoms of pancreatitis, ocular swelling, gastrointestinal disorders, Alzheimer's [Mishra and Palanivelu 2008], as well as post-surgical recovery [Jorgenson]. Extensive research on Curcumin reveals that it influences anti-inflammatory reactions by way of a number of different mechanisms, making it a very promising supplement for bolstering a healthy anti-inflammatory response [Zhou et al 2011, LPI].

Harpagophytum procumbens, more commonly known as Devil's Claw, is an herb native to the dry savannas of southern Africa. The plant's tuberous roots have long been used in African traditional medicine for a variety of ailments including fevers, infections, digestive disorders, arthritis, post-partum



accessible to Practitioners and Wholesale only. Drop-shipments can be delivered directly to your patients.

Should you wish to register as a practitioner or wholesaler, please contact BioPure by:

**toll free: 800-801-6187
or 425-462-8414**

or [click here to email our office](#)

References

* If you would like to see references supporting information presented in The BioPure Bulletin, please refer to the '**Research & More Information**' sections on the description page for each individual product on our website:

www.biopureus.com

Food & Drug Administration Disclaimer

Our products are not intended to diagnose, treat, cure or prevent any disease. They are designed to be used as part of an overall health plan with your authorized healthcare provider. Individuals taking food supplements or who have an underlying health condition should consult with their authorized healthcare provider before using these products. We suggest that you consult your authorized healthcare provider if you have any health problems and require

pain, and more [Mncwangi et al 2012, Grant et al 2007]. Devil's claw is widely used in Germany and Europe as an anti-inflammatory in relation to arthritic joint pain, low back pain, tendonitis, atherosclerosis, and migraines [Mncwangi et al 2012, Grant et al 2007].

The primary bioactives in Devil's claw are iridoid glycosides, such as 'harpagoside' and 'harpagide' [Mncwangi et al 2012, Viljoen et al 2012]. Evidence suggests that Devil's Claw inhibits the inflammatory activity of COX-2 enzymes, and reduces prostaglandin E2 synthesis, and nitric oxide production [Viljoen et al 2012]. Devil's Claw also has significant antioxidant effects, aids digestion, lowers blood sugar [Mahomed and Ojewole 2004], and protects cartilage [Alt Med Rev 2008].

Please note that our **PhytoCort™** product will soon be renamed PhytoFlam™.

BioPure O₃ Oils™

BioPure is in the process of expanding and improving its family of **ozonated (O₃) oil products**. These new O₃ oils replace our popular Rizol Oils that many of our customers are familiar with, and are core ingredients in our proprietary formulated **suppositories**. All of our O₃ oil products start with a base of high quality, cold-pressed, 100% organic olive and castor oils, that have been infused using a cold-process ozone generator, with pure, clean, medical-grade oxygen, in pharmaceutical-grade ceramic cells. Every effort is made to ensure the purity and health benefits of the oils are preserved throughout the process.

Ozonation changes the oils in a number of ways. It alters their chemical structure by trapping the additional oxygen in ozonide and peroxide molecules. Oxygen incorporated into ozonated oils can last for up to ten years (if kept refrigerated), unlike naturally occurring ozone in air or water, which is highly unstable and breaks down quickly. The supplementary oxygen provides health benefits by stimulating the body's own anti-oxidation mechanisms, increasing circulation, speeding healing, aiding in detoxification, and contributing antibacterial, antiviral, and antifungal support. [Vijayan and Patil 2010, Sagai and Bocci 2011, Jani et al 2012, Travagli et al 2010].

After the base oils are ozonated, various combinations of natural essential oils or other ingredients are added to provide specific health benefits. Each essential oil has its

a medical diagnosis, medical advice or treatment. The FDA has not evaluated statements in this newsletter. We do not recommend any of our natural products to be used for small children without the guidance of a licensed healthcare provider. We do not recommend that any of our products be used while breastfeeding, while pregnant, or while trying to become pregnant.

BioPure Healing Product's Promise*

BioPure Healing Products is committed to providing our customers with the highest quality natural food supplements available. We pride ourselves in sourcing high potency products that are pure, rich in biological vitality, and effective.

www.biopureus.com

own unique properties. Artemesia oil, for instance, is known to have strong antiseptic properties [Abad et al 2012], and Clove oil contains a potent bioactive known as 'eugenol' that is a strong antifungal [Pinto et al 2009]. Frankincense has anti-inflammatory properties, is thought to relieve stress, and may help clear bronchial passageways [Gupta et al 1998]. Walnut oil is high in omega-3 fatty acids that are known to support cardiovascular health, and may reduce joint pain and stiffness from arthritis [Whfoods].

BioPure O₃ Oil™ Products

*BioPure's O₃ oils replace our previous 'Rizol Oils'.
All of our O₃ oils are made with a base of high quality,
cold-pressed, 100% organic olive and castor oils,
infused with pure medical grade oxygen.
The essential oils are not ozonated.*

Product name	Essential oils added
Alta™	none
Beta™	Peppermint, Geranium
Gamma™	Artemesia, Clove, Walnut
Delta™	Artemesia, Clove, Garlic, Walnut
Lambda™	Artemesia, Black Cumin, Clove, Marjoram, Thyme, Walnut
Zeta™	Clove, Artemesia, Walnut, Moxa, Black Cumin
Ten in One™	Artemesia, Bitter Almond, Black Cumin, Clove, Frankincense, Garlic, Geranium, Marjoram, Moxa, Peppermint, Thyme, Walnut

BioPure also carries two suppository products containing ozonated olive and castor oil, added to a base of pure food-grade cocoa butter.

Alta™ Suppository	no essential oils added
Idalia™ Suppository	Artemesia, Clove, Walnut

BioPure O₃ oils may be prescribed by a licensed healthcare provider as a bath oil or applied topically to support healing of a wide variety of skin conditions. When used in **suppository** form, the benefits of ozone and the accompanying healthful oils are readily absorbed and may be helpful for yeast, viral, or other microbial infections, and in healing cuts or tears.

In order to ensure the highest levels of safety and effectiveness, BioPure strongly recommends that any of our products should be used ONLY under the supervision of a licensed healthcare provider, and that people DO NOT SELF ADMINISTER. Please refer to the individual product descriptions on our website for more

detailed information.

Join Our Mailing List

to receive our BioPure newsletter

Access past issues

of the BioPure Bulletin newsletter
(previously called "Thrive").