

# Bio St. John's®

## Positive Mood

**PROMOTES HEALTHY EMOTIONAL BALANCE\***



### Positioning Statement

Bio St. John's® contains a proprietary combination of St. John's wort and CordyMax® Cs-4®, which promotes vitality and stamina, Bio St. John's® is uniquely formulated to help reduce fatigue, stabilize mood, and increase a positive mental outlook—promoting a healthy emotional balance.\*

### Concept

Bio St. John's® helps people cope with the common daily stress in our modern lifestyles. It features a proprietary combination of a standardized St. John's wort (*Hypericum perforatum*) extract, together with CordyMax® Cs-4®. St. John's wort is highly regarded and widely used in Europe as a safe, effective mood-promoting supplement. Numerous clinical studies suggest that St. John's wort influences mood and helps people to maintain a positive mental outlook. Pharmanex's proprietary strain of the Chinese *Cordyceps sinensis* (CordyMax® Cs-4®) helps to reduce fatigue and promote stamina and vitality while providing important protective and stabilizing benefits for numerous bodily systems. Both CordyMax® Cs-4® and St. John's wort have a proven safety record.\*

Each ingredient in Bio St. John's® is concentrated and scientifically standardized to assure consistency and reliability. The St. John's wort extract is standardized to European health authority standards (0.3% Hypericin in a complex of other key natural compounds), and CordyMax® Cs-4® is standardized by proprietary methods for levels of adenosine and mannitol.

### Primary Benefits

- Stabilizes mood and promotes a positive outlook\*
- May improve sleep patterns in older individuals\*
- Moderates occasional seasonal mood changes\*
- Promotes vitality and stamina\*
- Reduces fatigue\*
- Promotes healthy lung function\*

### What Makes This Product Unique?

- Contains a clinically-proven dose of St. John's wort, supported by dozens of clinical studies in the U.S. and Asia
- Contains Pharmanex's unique CordyMax® Cs-4®
- Cs-4® is recognized by the Chinese government as having benefits most similar to that of wild *Cordyceps sinensis*
- Safe and effective

### Who Should Use This Product?

Bio St. John's® is a dietary supplement that has been developed by Pharmanex® to help adults cope with the common daily stress of our modern lifestyles.\*

### Did You Know?

- An estimated 16% of people in the U.S. will have at least one short-term episode of negative outlook during their lifetime
- The average age at which individuals begin having a short-term negative mood episode is gradually dropping
- In ancient China, *Cordyceps sinensis* use was reserved exclusively for the Emperor's Palace
- Traditionally, *Cordyceps sinensis* was so rare that it was worth more than four times its weight in silver
- The first recorded medicinal use of St. John's wort was by Hippocrates in ancient Greek texts

### Frequently Asked Questions

#### How does this product work?

The mechanisms responsible for the emotional balance effects of St. John's wort are still under study. The mechanisms of action hypothesized are: 1) it influences catecholamine (epinephrine) neurotransmitters; and 2) it influences serotonin, a neurotransmitter shown to be involved in emotional balance.\*

#### How is Bio St. John's® standardized?

The complementary ingredients in Bio St. John's® are concentrated and standardized to assure consistency and reliability. The St. John's wort extract is formulated to European health authority criterion and

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standardized to 0.3% hypericin, the level used in clinical studies. CordyMax® Cs-4® is extracted from fresh *Cordyceps sinensis* (Berk.) Sacc. collected from Qinghai Province, China. CordyMax® Cs-4® is standardized by HPLC to guarantee potency and consistent results by supplying minimum levels of 0.14% adenosine. An additional test method is used to standardize to 5% mannitol, which is an indicator of polysaccharide content.

## Is Bio St. John's® safe?

Bio St. John's® is safe at the recommended dosage. There are no known toxicities. The most common side effects reported in an independent open-label study of 3250 patients taking St. John's wort were gastrointestinal symptoms (0.6%), allergic reactions (0.5%), and fatigue (0.4%). Photosensitivity does not appear to be a significant risk factor for humans taking recommended amounts of standardized St. John's wort extracts. However, St. John's wort can be photosensitizing under certain conditions; therefore, patients receiving therapeutic ultraviolet treatments should avoid taking St. John's wort. A skin rash upon sunlight exposure (photosensitivity) may develop in some fair-skinned individuals. Discontinue use if rash appears.

## Are there any drug interactions?

As a category, natural products, properly tested and used, are generally safe. However, there are instances where sound science has shown that certain natural herbs (e.g. comfrey) are dangerous and should not be marketed. One of the most important components of the Pharmanex® 6S process is focused on ensuring that our products are safe, and Pharmanex scientists continue to be vigilant regarding the potential negative interactions between prescription drugs and herbal products. In light of this concern, Pharmanex continues to recommend that people on prescription medications consult with their physician before taking a dietary supplement.

In February 2000, the FDA released a "Public Health Advisory" on the potential risk of drug interactions with St. John's wort. The FDA's advisory referenced a study conducted by the National Institutes of Health (NIH) that found that St. John's wort significantly interacted with Indinavir, a protease inhibitor used to treat HIV infection. The FDA has specified certain drugs whose action may be adversely affected by St. John's wort. Although studies have not yet directly tested these potential interactions, nor have these effects been clinically documented, recent research has suggested that drugs metabolized in the cytochrome P450 pathway and nonnucleoside reverse transcriptase inhibitors (NNRTIs) may be affected by St. John's wort. Pharmanex® will continue to monitor the safety of its products. Relevant warnings will be included in our package labeling and Healthcare Professionals Guides when there is sufficient scientific data to justify taking such steps. In the meantime, Pharmanex will persevere in its efforts to educate the public and medical community on herbs and natural products through the continued posting of substantiated scientific and product information on [www.pharmanex.com](http://www.pharmanex.com) and targeted company literature.

## Key Scientific Studies

1. Harrer G, Schülz V. Clinical investigation of the antidepressant effectiveness of Hypericum. *J of Geriatric Psychiatry Neurology* 1994;7:S6–S8.
2. Hänsgen KD, Vesper J, Ploch M. Multicenter double-blind study examining the antidepressant effectiveness of the Hypericum extract LI 160. *J of Geriatric Psychiatry Neurology* 1994; 7:S15–S18.
3. Linde K, Gilbert Ramirez, Mulrow CD, Pauls A, Weidenhammer W, Melchart D. St John's wort for depression—an overview and meta-analysis of randomized clinical trials. *British Medical J* 1996;313:253–256.
4. Guo Y. Medicinal chemistry, pharmacology, and clinical applications of fermented mycelia of *Cordyceps sinensis* and Jin Shui Bao capsule. *J of Modern Diagnostics and Therapeutics* 1986;1:60-65.
5. Zhu, JS, Rippe, JM. CordyMax Enhances Aerobic Capability, Endurance Performance, and Exercise Metabolism in Healthy, Mid-age to Elderly Sedentary Humans. *FASEB J* 2004; 18(5): A931.

## Supplement Facts

Serving Size Two Capsules

| Amount Per Serving  |        | %Daily Value* |
|---|--------|---------------|
| Cordyceps Cs-4 mushroom mycelia<br>( <i>Cordyceps sinensis</i> [Berk.] Sacc.)               | 750 mg | *             |
| St. John's Wort Extract (5:1) ( <i>Hypericum perforatum</i> ,<br>flowering tops and leaves) | 450 mg | *             |

\*Daily Value not established.

**Other Ingredients:** Gelatin, Rice Bran, Magnesium Stearate.

## Directions for Use

Take two (2) capsules twice daily with food and drink. Some people feel the positive emotional benefits of Bio St. John's® after two weeks, but it typically takes four to six weeks to achieve optimal results.

## Warnings

Keep out of reach of children. If you are pregnant or lactating, consult a physician before using this product. Do not use this product while taking any prescription drug(s) without the advice of your prescribing physician. Excessive doses might make the skin sensitive to sun exposure.

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