NATURE’S EVERYDAY IMMUNE SUPPORT

Unlocking the Full Healing Potential of Echinacea

Echinacea Premium

MEDI*HERB
Every day your patients are challenged by chemicals in our environment and by poor diets. By stressful and sedentary habits. By life and lifestyle, every day.

So what can you offer, every day, to help them maintain and support a healthy immune system?

Austrian philosopher Rudolf Steiner suggests, “For every human illness, somewhere in the world there exists a plant which is the cure.”*
Observe Echinacea.

She thrives in times of drought, in nutrient-stripped soil.

Her name, derived from the Greek ekhinos, the hedgehog, reveals her generous gifts of vitality, resourcefulness and defense.

Her medicine inspires.

Her roots are insecticidal, a signature for innate defense systems.

She rises to meet challenges, reverse setbacks and face each day, every day with fresh perspective.

No wonder the Eclectic physicians of the 19th and early 20th century turned to Echinacea.

No wonder MediHerb’s co-founder and herbalist Professor Kerry Bone has been observing, blending and using Echinacea since the 1980s. It’s his favorite herb, the one he takes every day.*
Discovery

In the 1980’s MediHerb found it was difficult to find real Echinacea. Quality issues and unethical substitution with other plants were destroying its reputation. Plant parts, quality markers and extraction methods were varied, and research was inconsistent.

Even today with the plethora of Echinacea products now available, many of the same quality control issues exist. It’s not surprising that few of the products on the market are at all effective.

Kerry Bone initially observed the two main species of Echinacea known and valued for their medicinal effects: *Echinacea purpurea*, and *Echinacea angustifolia*. For insight he turned to the traditional wisdom from the Eclectic physicians. He studied what happened when he combined the roots of *E. purpurea* and *E. angustifolia*. Like Dr. Royal Lee at Standard Process, who coupled observation and intuition with clinical practice, Kerry tested his blend on his patients and witnessed remarkable results. Over the years he discovered that the ethanolic extract of these combined roots perfectly complement and encourage each other’s efforts, creating a synergistic effect not found when each Echinacea species acts alone.*

The next step was scientific validation.

The Science

Research on Echinacea Premium by MediHerb scientists has made a substantial contribution to a new understanding of lipophilic (ethanolic) extracts of Echinacea. It can be concluded from this research that:

- Alkylamides must be used as the markers of quality and activity.
- The root of Echinacea is the preferred plant part, since it is highest in alkylamides.
- The preferred species of Echinacea are *E. angustifolia* and *E. purpurea*, since they contain high levels of alkylamides.
- Echinacea must be extracted using an alcohol percentage sufficiently high to efficiently extract the alkylamides.
- Echinacea root (rich in alkylamides) additionally boosts the white cell count, especially natural killer cells.
- The traditional way Echinacea was used every day has been validated by scientific research at the cutting edge of modern immunology.*

Active Absorption

What is active must first be absorbed, and what is absorbed must be active.

For Echinacea to act on the immune system, the active phytochemicals must be absorbed in significant quantities in the bloodstream.

Results from MediHerb’s “Physiological Effects of Echinacea Premium in Humans” study, published in the *Journal of Clinical Pharmacy and Therapeutics*, showed that:

- Only alkylamides were found in human plasma after ingestion of Echinacea Premium tablets.
- A mixture of *E. angustifolia* with *E. purpurea* is necessary for an efficacious product.*

Benefits Backed by Universal Pharmaceutical-Grade Testing

Echinacea Premium’s efficacy is due to our patented alkylamide ratio. This can only be achieved because we select only Echinacea roots that meet minimum levels of alkylamides, which then go through our proprietary manufacturing process and universal pharmaceutical-grade testing. All our products are subject to the highest standards to ensure consistent benefits. Quality analysis confirms active concentration at the four major stages in manufacturing: raw ingredient, liquid extract, vacuum dried material and final tablets.*
By combining the whole root extracts of two species of Echinacea (E. Purpurea & E. Angustifolia) in a patented alkylamide ratio, MediHerb created a blend that reveals the potentiation of E. Purpurea alkylamides by the E. Angustifolia alkylamides.

The paradigm-shifting Echinacea Premium:

- Provides significant immune system support in the face of immune challenge—as shown in a landmark study of air travelers.
- Supports a balanced immune system response.
- Promotes healthy macrophage and T cell activity.
- Is safe for supporting the complete range of respiratory health goals.

By combining the alkylamides from both plants in a patented, optimized ratio, the MediHerb research team has developed an Echinacea extract that when used every day delivers long-lasting, gentle immune-modulating support. Repeated human clinical trials and lab studies confirm this.*

Echinacea Premium Tablets
The efficacy of a liquid extract, the convenience of a tablet

Compliance is just as important as efficacy. For Echinacea Premium to be effective, your patients have to take it, and the truth is, most Americans prefer tablets and capsules over liquid extracts.

MediHerb tablets work just as well as liquids because they are made using extracts (not the powdered herb) and are formulated to pharmaceutical standards to ensure rapid disintegration. This has been verified in a clinical study that compared equivalent doses of Echinacea Premium in liquid or tablet form.*

Debunking the “Overstimulation” Myth

MediHerb’s long term investigation reveals that Echinacea works as a modulator or facilitator of the immune response rather than as a stimulant. These findings challenge the mythology that traditional Echinacea extracts will “overstimulate and wear out” the immune system if taken every day.*
Full Spectrum Extracts
Health care professionals often compare herb equivalence on tablet labels in an effort to gauge the most effective formula for their patients. This can be quite misleading. Our extracts do not focus on the one active constituent or marker compound while ignoring the full phytochemical profile of the herb. That is why we extract whole roots of *E. angustifolia* with *E. purpurea*.

Preserving the Alkylamides in our Dried Tablets
We screen our incoming Echinacea root for alkylamide presence and use a proprietary ethanol to water ratio extraction. We turn the liquid extract into a concentrate with our low temperature vacuum concentrator, removing the ethanol and ensuring no damage to the delicate active constituents. This concentrate is then placed into a low temperature vacuum oven, milled into tiny granules and mixed with hypoallergenic tablet excipients before it is pressed and punched into tablets.

Sourcing
Along with preserving alkylamide content, MediHerb ensures Echinacea Premium’s efficacy through superior ingredient sourcing and raw material testing. We work with growers to confirm optimal field conditions and handling parameters, and all our ingredients must test free of pesticide residues, ensuring a clean and effective final product.

Echinacea Comparison Chart
In November 2014, independent tests of nine U.S. Echinacea tablet and capsule products showed that MediHerb Echinacea Premium tablets are higher in alkylamides (both 2-ene and 2,4-diene alkylamides), which are clinically proven active constituents. The testing was conducted by an independent analytical laboratory accredited by the Australian Therapeutic Goods Administration.

2-ene are only found in *Echinacea angustifolia* and are an important measure of quality. MediHerb's research has found that 2-ene alkylamides improve the bioavailability of 2,4-diene alkylamides in *Echinacea purpurea*.

This means that the alkylamides in MediHerb's unique blend, Echinacea Premium, are available to the body, resulting in a better effect on the immune system. MediHerb's Echinacea Premium formula is patented in Australia, New Zealand and the U.K. with a patent applied for in the U.S. to protect this important finding.

MediHerb Echinacea products are labeled with their alkylamide content (both 2-ene and 2,4-diene alkylamides). The testing below reports the alkylamide content of MediHerb Echinacea Premium and nine other U.S. Echinacea products. Note that most of the other Echinacea products do not make claims of alkylamide content. Through research, MediHerb has determined alkylamides are important constituents of Echinacea.

<table>
<thead>
<tr>
<th>Product</th>
<th>Echinacea Species Used</th>
<th>Total 2-ene mg/capsule or tablet</th>
<th>Total 2,4-diene mg/capsule or tablet</th>
<th>Total Alkylamides mg/capsule or tablet</th>
<th>Number of Tablets/Capsules Needed to Provide the Equivalent Alkylamides</th>
</tr>
</thead>
</table>
| MediHerb Echinacea Premium Tablets | *E. angustifolia*  
*E. purpurea* | 1.22                             | 4.40                                | 5.62 (label claim 4.1 mg)               | 1                                                                                                                                 |
| Brand A                   | *E. angustifolia*  
*E. purpurea* | 0.36                             | 1.38                                | 1.74                                   | 2.4                                                                                                                             |
| Brand B                   | *E. angustifolia*  
*E. purpurea* | 0.00                             | 0.82                                | 0.82                                   | 5                                                                                                                                 |
| Brand C                   | *E. angustifolia*  
*E. purpurea* | 0.28                             | 0.19                                | 0.47                                   | 9                                                                                                                                 |
| Brand D                   | *E. purpurea*       | 0.01                             | 0.21                                | 0.22                                   | 18                                                                                                                             |
| Brand E                   | *E. purpurea*       | 0.01                             | 0.18                                | 0.19                                   | 22                                                                                                                             |
| Brand F                   | *E. purpurea*       | 0.00                             | 0.18                                | 0.18                                   | 22                                                                                                                             |
| Brand G                   | *E. purpurea*       | 0.01                             | 0.06                                | 0.06                                   | 63                                                                                                                             |
| Brand H                   | *E. angustifolia*  
*E. purpurea* | 0.00                             | 0.03                                | 0.03                                   | 159                                                                                                                           |
| Brand I                   | *E. angustifolia*   | 0.00                             | 0.01                                | 0.01                                   | 341                                                                                                                            |

* One Echinacea Premium Tablet (Compared to MediHerb Label Claim of 4.1 mg)*

Dig even deeper: The science behind the blend.
Visit www.mediherb.com to take a fresh look at Echinacea! Learn more about Echinacea’s activity as a true adaptogen: Echinacea’s alkylamides are non-stimulant and encourage a balanced immune system response.*

MediHerb®
www.mediherb.com
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*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.*