

The Level of Evidence Supporting Botanical & Herb Use

Botanicals and herbs are consistently used with the goal of supporting a wide variety of health processes. The use of botanical supplements is broadly reported throughout history in the application of numerous folk and natural remedies, with the oldest evidence pointing to use approximately 5,000 years ago. This evidence, many times, reports the use of similar plants with the same intended effects in cultures which would have no ability to share their knowledge.¹ It is a challenge to base the decision-making process entirely on historical use, expert opinion, and anecdotal evidence, especially with the continued publication of newer, more powerful evidence, while still ensuring the highest levels of safety and effectiveness.

Botanical products come in a variety of preparations including teas, tinctures, or extracts with separate portions of the plant (root, leaves, stem, flowers, or fruit) commonly found. This variability of application is important when looking for evidence to support use. Verifying that the form and portion of the plant being used matches what is referenced in the evidence is one of the first steps to ensure best outcomes.

A large body of the evidence supporting the use of botanicals is based on tradition passed through generations, expert opinion, and anecdotal evidence. While this level of evidence provides a sound foundation, it is important to seek out the highest power evidence to support an intended use. As evidence is collected it is important to vet the quality of your evidence to ensure recommendations will yield the intended results with a high level of safety.

Assessing evidence ranked by power is an appropriate method to remove any bias. Commonly accepted levels from least to most powerful include:

- expert opinion/anecdotal reports
- case studies or series
- case control studies
- cohort studies
- randomized controlled trials
- systematic reviews²

While there seems to never be enough evidence for some practitioners or researchers, a growing, powerful collection has been well documented. While scouring what is available, one must always focus on the most powerful and recent evidence, even if it replaces a previous paradigm. Abundant evidence of varying power exists for a wide variety of botanical preparations in the promotion of health. While the breadth of information available far exceeds a solitary article, a sampling of some well documented benefits of botanicals includes:

- Ashwagandha – Shown to support stress response in adults³ along with positive support of the endocrine, cardiopulmonary, and central nervous system.^{*4}
- Berberine – Used in tradition Chinese medicine for centuries with powerful evidence in support of gastrointestinal health⁵ and blood sugar metabolism within normal limits.^{*6,7,8}
- Echinacea – Generally well-tolerated with a good safety profile and effective support of a healthy immune response.^{*10}

- Lavender – A specific oral essential oil form, has been shown to support a relaxed state, promote healthy sleep, and calm nervousness.*^{11,12}
- Turmeric – Curcumin, the most studied of the curcuminoids found within turmeric, supports positive mood and healthy blood sugar metabolism within normal limits.*¹⁴

When examining additional evidence it is important to seek out certain factors which are clearly defined to promote the best outcomes. Some important factors include:

- form provided (root, stem, flower, tea, tincture, etc.)
- extract standardization
- total dosage
- dose frequency
- duration of study
- safety profile

While not every study will provide all of the above points the power of the total collection of evidence continues to grow with time. It is important to verify that the botanical or herbal preparation you choose has some level of support in the documented evidence.

Future research would benefit all if it focused on specific standardized doses, specific time lengths, frequency of dosage, specific portion of the botanical used, and in combination with other commonly used herbs or botanicals. As the catalog of research and evidence grows, it is important to remember that higher levels of evidence (more recent, more powerful) must replace previous lower levels. As the scientific understanding of botanical use increases, the application in the maintenance of health must follow suit.

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