

Nutra-BRT

Applications

- Microbial Support
- Immune Support
- Healthy Inflammatory Response Support



Introduction

NutraMedix Nutra-BRT is a synergistic blend of hydro-ethanol extracts from **Cumanda™ huacapurana bark** (*Campsiandra angustifolia*) and **houltuynia leaf** (*Houttuynia cordata*). It is designed to assist with comprehensive microbial support, with additional antioxidant support and healthy inflammatory response support.¹

Cumanda huacapurana bark is an extract from the bark of *Campsiandra angustifolia*.^{1,2} It belongs to the Fabaceae family and the Caesalpinaceae subfamily, which contains many species of *Campsiandra* and is also known as huacapurana.³⁻⁶ While huacapurana is a more general name that can apply to several *Campsiandra* species, *C. angustifolia* is considered the authentic Peruvian huacapurana.² Huacapurana is a medium-sized tree native to Peru and Northern Brazil that is used by local people for food as well as health.² Constituents found within the bark include proanthocyanidins, flavonoids, gallotannins, and caffeoylquinic acid.⁷ Secondary metabolites include steroids, flavonoids, saponins and tannins.⁸ Historically, it has been used in traditional health practices for microbial support, healthy inflammatory response support, and gastrointestinal support.⁹⁻¹¹ Huacapurana is best known for its robust and diverse microbial support.^{6,12-14}

Houttuynia (*H. cordata*) is in the Saururaceae family. It is known as *yu xing cao* in traditional

Chinese health practices and is found throughout Southeast Asia. Constituents include volatile oils such as alpha-pinene, d-limonene, citronellol, carvacrol, and thymol;¹⁵ flavonoids such as quercetin, quercitrin, isoquercitrin, and rutin;¹⁵ organic acids such as chlorogenic acid, palmitic acid, and linoleic acid;¹⁶ phytosterols such as stigmasterol and beta-sitosterol;¹⁶ and water-soluble polysaccharides.¹⁷ Houttuynia also contains houttuynoside A and houttuynamide A, in addition to amino acids, vitamins, and trace minerals.¹⁷⁻¹⁹ Houttuynia may help with microbial support,²⁰⁻²⁴ immune system support,²⁵⁻³¹ healthy inflammatory response support,³²⁻³⁶ and gastrointestinal support.³⁷⁻³⁹

NutraMedix Nutra-BRT is made at our U.S. manufacturing facility using a specialized proprietary extraction process that optimizes the constituents of the herbs in their original, unprocessed state to obtain broad-spectrum concentration. Because NutraMedix's extracts are made in our own facility, we control all aspects of quality, including stringent ID testing, microbial testing, and heavy-metal testing. NutraMedix rigorously follows current good manufacturing practices (cGMP), as do our suppliers.

Microbial Support

Huacapurana (*C. angustifolia*) may help with single-celled microbial support, maintaining the health and integrity of erythrocytes and

macrophages.^{6,12,13} It may also help with microbial support of varied gram status.^{13,14} Additionally, huacapurana may help with mycelial support.¹⁴

Houttuynia (*H. cordata*) may help with both intracellular and extracellular microbial support. It may help with microbial support for diverse strains with dose-dependent zone diameters of inhibition,²⁰ and may also help with microbial support for a variety of morphological forms.²¹ Additionally, it may provide microbial support for smaller intracellular microbes and help maintain normal host immunity.^{22,23} In addition to intracellular microbial support, houttuynia may help support relevant respiratory and intestinal mucosa through maintaining cytokines/chemokines, secretory IgA (sIgA), zonula occludens-1 (ZO-1)/tight junction protein, TLR4, and NF-kappaB already within the normal range.²⁴ Houttuynia may help maintain a healthy gut-lung axis.²⁴ Additionally, it may help support healthy gingival epithelium as well as balanced oral microbiota, including mycelial support.²¹

Immune Support

Houttuynia (*H. cordata*) may help with immune system support through maintaining healthy levels of CD4⁺ and CD8⁺ T cells that are already within the normal range.²⁵ It may help support the innate immune response by maintaining levels of reactive nitrogen intermediates (RNI), such as nitric oxide (NO), and reactive oxygen intermediates (ROI), such as superoxide, that are already within the normal range. It may also help support the morphological change of macrophages from the round form to the dendritic form, supporting normal phagocytic activity as well as normal NO production.²⁶ Houttuynia may assist with immune system support through the maintenance of a healthy Th1/Th2 ratio, in addition to the maintenance of Th2-dependent cytokines IL-4 and IL-5 already within the normal range.²⁷ Additionally, it may help with IgE-mediated immune support by maintaining IL-4, TNF-alpha, and NF-kappaB already within the normal range.²⁸ Houttuynia may help maintain MIP-1-alpha, MIP-1-beta, and RANTES in human peripheral blood mononuclear cells (PBMCs) already within the normal range.²⁹

It may also help support health through its effect on the complement cascade.^{30,31}

Healthy Inflammatory Response Support

Houttuynia (*H. cordata*) may help with antioxidant support and healthy inflammatory response support.³² It may help support healthy function of the NF-kappaB and MAPK pathways and may help maintain cytokine levels already within the normal range.³² It may also help maintain levels of TNF-alpha, NO, IL-6, IL-8 and PGE2 already within the normal range.^{33,34} The constituent houttuynamide A (becatamide) may additionally help maintain levels of COX-1 and COX-2 already within the normal range.^{35,36} In traditional Chinese health practices, houttuynia is used to clear heat.^{15,16}

Safety and Cautions

Huacapurana (*C. angustifolia*) has been used traditionally by native South American peoples for sometime. Despite this, information on interactions and adverse events is sparse. Currently, there are no known cautions or interactions, though this may change with additional research. Theoretically, huacapurana may have additive effects with PDE-5 inhibitors.^{7,9}

Houttuynia (*H. cordata*) is generally well tolerated, and there are no known contraindications to its use. It has been used for centuries in traditional Chinese health practices, with the first known mention in *Ming Yi Za Zhu* by Tao Hong-Jing in 500 CE. In laboratory animals, oral administration of 16 mg/kg was found to be non-toxic.²⁵ In vitro and mouse studies have shown no evidence of genotoxicity or other toxicity,^{25,32,40} and the herb is considered a safe and edible plant.³⁸

Safety is not documented in breastfeeding or pregnant women, or in children under age 3, due to insufficient safety research.

*This statement has not been evaluated by the Food and Drug Administration. This product is not intended to treat, cure, or prevent any diseases.

References

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SHAKE WELL BEFORE EACH USE.
Put 2 to 60 drops in 4 oz (120 mL) of water and wait one minute before drinking. Start with 2 drops (30 min before meals) increasing by 2 drops with each dose up to 60 drops, 2 times a day or as directed by physician. Do not use if pregnant or nursing. Stop use if adverse reactions develop. Keep out of reach of children.

†This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.



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NUTRA-BRT

MICROBIAL SUPPORT †

Dietary Supplement

2 fl oz. (60 mL)

Supplement Facts

Serving Size 60 drops (3mL)
Servings Per Container 20

Amount Per Serving	
Proprietary Blend	3 mL*
Campsiandra angustifolia bark extract and	
Houttuynia herb extract	

*Daily Value not established

Other ingredients: mineral water, ethanol (20-24%)

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Lot #
Exp.