

Kerry Bone's Essentials

Key Research Points for Featured Products in Rank Order

Echinacea Premium

- Contains 4.1 mg of alkylamides per tablet
- Alkylamides have been proven by MediHerb to be bioavailable, no other constituents were bioavailable
- Contains a patented combination of alkylamides to improve bioavailability
- Alkylamides, alone and in combination were shown to modulate the immune system in *in vitro* model systems
- This product has been shown in a human clinical trial to increase white cell count and heat shock protein expression
- This tablet is one of the most researched Echinacea products in the world and is presently being used in a major trial in the USA involving 700 patients
- The only Echinacea tablet with guaranteed stability and levels of alkylamides

Boswellia Complex

- Standardized to contain 180 mg of boswellic acids (from Boswellia) and 70.4 mg of curcuminoids (from Turmeric)
- It has been reported that only Boswellia extracts standardized to boswellic acids are relevant to the treatment of inflammatory diseases. The boswellic acids have been shown to act as selective 5-lipoxygenase inhibitors, with 3-acetyl-11-keto- β -boswellic acid specifically implicated
- β -boswellic acid, 3-acetyl-11-keto- β -boswellic acid and 11-keto- β -boswellic acid have been shown to be bioavailable in human clinical studies, especially if taken with a meal
- The pungent components of ginger (including gingerols) are inhibitors of the arachidonic acid metabolism, including cyclooxygenase and lipoxygenase pathways
- Celery contains butylphthalides such as sedanolide, sedanenolide and n-butyl phthalide in the essential oil component. The essential oil of Celery has been shown to have joint supporting effects in animal models
- Turmeric contains the diarylheptanoids collectively known as the curcuminoids, the major component being curcumin
- Curcumin has been shown to be metabolized upon absorption into a less polar compound
- Curcumin has been clinically trialed for joint support

Thyroid Complex

- Standardized to contain 600 mcg of iodine (from Bladderwrack) and 25 mg of bacosides (from Bacopa) together with good levels of withanolides from Ashwaganda
- Bladderwrack has been recognized as a good source of iodine for centuries
- Iodine has been shown to support healthy thyroid function
- Withania and Bacopa are traditionally Ayurvedic tonic herbs to help maintain normal basal metabolism

Tribulus

- Successful clinical studies of Tribulus have used the Bulgarian Tribulus herb (aerial parts)
- This tablet is manufactured from herb sourced from Bulgarian Tribulus which has been shown to contain protodioscin. Research shows protodioscin is absent in Tribulus from other geographic areas
- This tablet contains an extract of *Tribulus terrestris* herb (aerial parts). The fruit does not contain protodioscin
- Standardized to contain 100 mg of furostanol saponins (as protodioscin) per tablet

Gymnema 4g

- Standardized to contain 100 mg of gymnemic acids
- Gymnema contains a group of approximately 20 related compounds which are collectively referred to as gymnemic acids
- Gymnemic acids are believed to maintain healthy blood sugar levels already within a normal range when combined with a balanced diet
- Gymnema is known in Ayurveda as "sugar destroyer", with a unique ability to remove the ability to taste sweet substances

Saligesic

- Standardized to contain 60 mg of salicin (from Willow stem bark)
- Salicin is typically present in Willow Bark in the form of salicin, salicortin, fragilin and populin
- The salicin precursors are converted into salicin and then to salicylic acid by the action of intestinal flora and liver metabolism
- European clinical trials have used Willow Bark extracts for supporting the musculoskeletal system
- The extract used in this tablet is phytochemically equivalent to the product used in successful European trials

Andrographis Complex

- Standardized to contain 10 mg of andrographolides (from Andrographis)
- Andrographis has been clinically trialed for the support of seasonal stresses. In more recent trials the extracts have all been standardized to andrographolides
- Andrographolide has been shown to be bioavailable



LivCo

- Standardized to contain 24 mg of flavanolignans (from Milk Thistle seed), good levels of schisandrins (from Schisandra) and rosmarinic acid, carnosic acid and carnosol (from Rosemary)
- Two different species of Schisandra are used in TCM, but only *Schisandra chinensis* contains high levels of the schisandrins and as such is preferred by TCM and Western practitioners
- Numerous studies have shown the hepatoprotective benefit of Schisandra and its constituents
- Human clinical trials in Russia have shown that Schisandra increased endurance and physical efficiency
- Rosemary is a potent antioxidant, even being used in the food industry as a preservative
- The antioxidant activity is related to carnosol, carnosic acid and rosmarinic acid, therefore a good quality Rosemary extract should contain all three constituents
- Flavanolignans, collectively known as silymarin, are recommended in Germany to support a healthy liver

St John's Wort 1.8g

- Standardized to contain 990 mcg of hypericin and 18 mg of flavonoid glycosides together with good levels of hyperforin, biapigenins and OPCs
- This tablet contains all of the components believed to contribute to the efficacy of St John's Wort in elevating mood
- The extract used to make this tablet is phytoequivalent to that used in the majority of positive clinical trials on St John's Wort
- This product is presently being used in a major trial in Australia of 100 patients

Ginkgo 5000mg

- Standardized to contain 9.6 mg of ginkgo flavonglycosides, 2.4 mg of ginkgolides and bilobalide
- Ginkgo is one of the most researched herbs in the world in many conditions related to facilitation of blood flow, particularly in microcirculation
- Ginkgo extracts used in these trials contain the marker compounds ginkgo flavonglycosides, the phytochemically significant ginkgolides and bilobalide
- MediHerb uses a material which is phytoequivalent to that used in the clinical trials, with known levels and profiles of ginkgo flavonglycosides, ginkgolides and bilobalide. The known irritant, ginkgolic acid is also set at a very low level to minimize any potential problems

Garlic 5000mg

- Standardized to contain 5.7 mg of alliin (from Garlic) as well as sufficient alliinase the enzyme that converts alliin to allicin
- Enterically coated to protect the sensitive alliin and alliinase from degradation by the acid in the gut
- Allicin is responsible for the characteristic smell of freshly crushed garlic
- The use of garlic for atherosclerosis is well documented in clinical and pharmacological studies
- Garlic has been shown to help maintain blood lipid levels already in a healthy range
- "The strongest published evidence to date is for Garlic preparations standardized to alliin content with allicin-releasing capability" – Kerry Bone

Rhodiola & Ginseng Complex

- Standardized to contain 4.5 mg of rosavins and 1.5 mg of salidroside (from *Rhodiola rosea*) and 8.4 mg of ginsenosides (from *Panax ginseng*)
- Many different species of Rhodiola are found in northern Eurasia and many species contain salidroside, however only *Rhodiola rosea* contains rosavins

- *Panax ginseng* is considered the king of Ginsengs and should not be confused with other *Panax* species or herbs such as Eleutherococcus, which has been incorrectly referred to as Siberian Ginseng
- The profile of ginsenosides from *Panax ginseng* root is very different to that of other species and even other parts of the *Panax ginseng* plant such as the leaves
- In Russia, *Rhodiola rosea*, also known as Golden Root, has been used for centuries to cope with the cold Siberian climate and stressful life
- Russian research has shown that Rhodiola improves both physical and mental performance
- Korean Ginseng has been used as a tonic and stimulant in traditional medicine systems to rebalance the yin-yang disharmony. In modern terminology this is referred to as an adaptogen

Vitanox

- Standardized to contain 42.5 mg procyanidins (from Grape Seed), 70.4 mg curcuminoids (from Turmeric) and 83.35 mg of catechins (from Green Tea)
- Grape Seed extract contains the antioxidant compounds collectively known as procyanidins
- Turmeric contains the diarylheptanoids collectively known as the curcuminoids, the major component being curcumin
- Curcumin has been shown to be metabolized upon absorption into a less polar compound
- The curcuminoids have been shown to have high antioxidant capacity in model systems
- Green Tea contains the antioxidant catechin compounds; these compounds have been shown to have protective effects in a range of conditions
- One tablet is equivalent to around two cups of Green Tea
- Rosemary contains a number of antioxidant compounds such as carnosol, carnosic acid and rosmarinic acid. The latter is water-soluble and the former are lipid soluble, therefore only a galenical extract will have effective levels of these very important antioxidant fractions

Rehmannia Complex

- Contains good levels of saikosaponins (from *Bupleurum falcatum*), iridoid glycosides (from Rehmannia), triterpenoid saponins (from Hemidesmus) and parthenolide (from Feverfew)
- Rehmannia has been used to support healthy adrenal function, with no contraindication in persons with hypertension
- Rehmannia, Bupleurum and Hemidesmus have been used in patients to support immune function
- Feverfew has been shown in clinical trials to support healthy joints

Coleus Forte

- Standardized to contain 18.7 mg of forskolin (from Coleus)
- *Coleus forskohlii* is the only known plant source of the diterpene forskolin – also known as forskolin
- Forskolin is valued as an adenylate cyclase activator
- Adenylate cyclase is the enzyme involved in the production of cyclic adenosine monophosphate (cAMP), (a significant biochemical agent involved in metabolic processes), from the high energy molecule, ATP (adenosine triphosphate)
- Sometimes referred in literature as a "second messenger," cyclic AMP facilitates the action of "primary messengers" or various hormonal and bioactive substances in the body
 - The role of cAMP is indispensable to many body functions
 - cAMP induces a chain of biochemical events that trigger metabolic processes and diet induced thermogenesis, thereby providing the means to maintain a healthy body composition and lean body mass levels