Kidney & Blood Pressure Drops™ - MONOGRAPH

NPN: 80056588

1 mL (32 Drops) of Oral Tincture contains:
Juniper (189.0 mg DHE* – Juniperus communis fruit)
Goldenrod (59.1 mg DHE* – Solidago virgaurea aerial parts)
Uva-ursi (59.1 mg DHE* – Arctostaphylos uva-ursi leaf)
Marshmallow (44.6 mg DHE* – Althea officinalis root)
Ginger (34.1 mg DHE* – Zingiber officinale root)
Parsley (26.3 mg DHE* – Petroselinum crispum leaf)
Gravelroot (22.8 mg DHE* – Eupatorium purpureum root)
Horsetail (22.3 mg DHE* – Equisetum arvense aerial parts)
Nettle (19.2 mg DHE* – Urtica dioica leaf)
Goldenseal (17.1 mg DHE* – Hydrastis canadensis root)
Lobelia (3.9 mg DHE* – Lobelia inflata aerial parts)
Cayenne (2.6 mg DHE* – Capsicum annuum fruit).

Non-medicinal ingredients:
purified water, ethanol USP, glycerin, Juniperus communis fruit oil, spearmint flavour.*DHE = Dry Herb Equivalent.

Directions of Use:
Adults, take 1 ml, 2-3 times daily. Shake well before use. Drink plenty of water daily. For occasional use only. Allow at least 1-hour between taking this product and other herbal or medicinal preparations.

Indication:
Juniper, goldenrod, uva-ursi, parsley, gravelroot, horsetail, and nettle are Traditionally used in Herbal Medicine as diuretics to help relieve symptoms of temporary water retention, such as edema.

Detailed Information:
Kidney and/or urinary problems often result in water retention and/or edema as a primary symptom. Furthermore, kidneys act as a regulator of blood pressure through a renal-body fluid feedback[1]. Edema generally appears as peripheral/arterial blood pressure increases above a certain level. The use of diuretics to help eliminate excessive body fluid or relieve the edema serves to increase the ratio of sodium excretion (via urination) to sodium intake, and extracellular fluid volume, manifest by edema, consequently decreases until arterial blood pressure returns to normal, the intake of diuretics is stopped, and/or sodium balance is achieved by increased intake. Diuretics are the first-choice medications recommended in the management of hypertension (high blood pressure)[2,3].

Kidney & Blood Pressure Drops™ are an effective and safe, natural alternative to use in place of thiazide and thiazide-like diuretics that are the most widely used diuretics for treatment of hypertension[3].

Kidney & Blood Pressure Drops™ is an hydroethanolic extract of twelve (12) herb ingredients, with juniper, goldenrod, uva-ursi, parsley, gravelroot, horsetail, and nettle contributing additively to the product's Traditional use in Herbal Medicine as a diuretic to help relieve symptoms of temporary water retention, such as edema. The remaining ingredients – marshmallow, ginger, goldenseal, lobelia and cayenne – are complementary and/or supportive to this use of the product when taken as recommended.

Juniper fruit preparations have long been used as a general diuretic and soothing kidney remedy[4], being specific for cystitis in the absence of renal inflammation[5]. The herb is widely recognized as a urinary tract antiseptic, helpful in the relief of benign urinary tract infections[6]. Its ability to lower blood pressure is at least partially attributable to its diuretic effects. In fact, its terpinene-4-ol constituent has demonstrated aquaretic effects, where water excretion is increased without affecting renal handling of electrolytes[7]. Other constituent monoterpenes have a direct diuretic effect through their irritant action on kidney glomeruli[8].

Goldenrod has been used in Traditional Chinese and Western Herbal Medicine for a large number of indications[5,9]. A double- blind, randomized clinical trial demonstrated that a hydroethanolic extract of the herb promoted urination, drained water, and helped relieve edema through aquaretic action[10]. Traditionally, it is considered to nourish and strengthen the kidneys, especially in cases of renal gravel and inflammation due to bacterial infection[8,11]. It is commonly used as an adjunct therapy in patients with lower urinary tract infections[4]. Hypotensive effects have been used as a pharmacotaxanomic character of the Solidago genus[12]. Constituent flavonoids and phenol glycosides, especially leiocarposide, are suggested to be mainly responsible for the herb's aquaretic and hypotensive effects, although triterpene saponins and caffeic acid are also known active constituents[8,11].

Uva-ursi, also known as Bearberry, contains hydroquinones, especially arbutin, and saponins and astringent tannins that together have diuretic and urinary antiseptic effects when taken orally[7,13]. Traditionally, the herb has been specifically indicated for diseases of the bladder and kidneys, helping to soothe, strengthen and tonify the urinary passages and reduce inflammation and infections of the urinary tract[5,7,13,14]. It has been clinically demonstrated to be a safe therapeutic option for treating lower urinary tract infections[15], to the extent that its use can delay and/or reduce antibiotic use for primary treatment of urinary tract infections[16].

Marshmallow root is a rich source of mucilage (5-11%) that is demulcent and emollient, helpful in soothing/alleviating irritation of mucous membranes[5,11]. It is therefore particularly useful in water/urine retention, as well as for inflammation of the bladder, and in nearly every affection of the kidney and bladder[14]. Its mucilaginous/soothing effects are reinforced when used in combination with uva-ursi and horsetail[9], which are also key ingredients of the **Kidney & Blood Pressure Drops™** formulation. While no clinical studies have been carried out, results of in vitro and in vivo studies support marshmallow root's demulcent/soothing actions, and complementary anti-inflammatory and immunostimulant effects[11].

Ginger root is Traditionally and widely regarded as a stimulating tonic and diffusive stimulant, used commonly to enhance metabolism and circulation, and to enhance the actions of other herbs that it is combined with[13]. The vasodilatory action of the herb has been shown to help reduce blood pressure, and the improved blood flow and supply contributes to relief of cramps and tension, as well as edema[14]. Its use clinically as an adjunct in the treatment of arthritic and rheumatic conditions is upported by reduction of symptomatic inflammation, swelling and pain [13,17].

Parsley is extensively used in Germany for ailments of the lower urinary tract, as irrigation therapy for the prevention and treatment of renal gravel or kidney stones, for dropsy, gout, rheumatism and arthritis due to its diuretic/aquaretic action[4,7,8,14]. This action has been mainly attributed to its volatile oil constituents myristicin and apiole which stimulate increased K+ retention in the lumen, inhibit the Na+-K+ pump and/or irritate the kidney epithelium to cause an increase renal blood flow and glomerular filtration rate[18]. Its diuretic/ aquaretic action, and associated reduction in blood pressure, supports the use of parsley for hypertension in several Traditional systems of Medicine[19,20].

Gravelroot has Traditionally been used as a diuretic, urinary stimulant, and astringent tonic for treatment of dropsy (i.e. edema), as well as for other conditions affecting the genitourinary system, especially kidney and bladder stones[4,14]. It combines well with and complements the actions of other tonics and stimulants, and diffusives such as ginger[6,21]. ts actions are mainly attributed to constituent flavonoids (especially the benzofurans eupatorin and euparin), volatile oil, and resin[5], and to cistifolin which acts as a cell adhesion blocker[22].

Nettle is principally used in Herbal Medicine as a mild diuretic[8,11,24,] and as a nutritive tonic and supportive therapy to help relieve rheumatic complaints[26]. Supporting its Traditional use in oriental Morocco as an antihypertensive remedy[20,] nettle has been clinically shown to produce hypotensive responses through a vasorelaxing effect mediated by the release of endothelial nitric oxide and the opening of potassium channels, and through a negative inotropic action.[21]

The aerial parts of **Horsetail** have been used Traditionally in Herbal Medicine as a diuretic and astringent in the treatment of dropsy, gravel, hematuria, dysuria, urinary incontinence, bladder irritations, and kidney affections generally[4,7,14,23]. Its diuretic/aquaretic effects are mainly attributable to its phenolic (i.e. flavonoid and hydroxycinnamic acid) constituents[8,24]. Specific hydroxycinnamic acid esters from horsetail have also demonstrated vasorelaxant activity in vitro, by a mechanism involving decreased norepinephrine-induced calcium influx[25].

Goldenseal root, among its various properties, is known to be antiseptic, antimicrobial, diuretic, astringent, and mildly vasodilatory[4,5,13,14]. It is commonly used today in Herbal Medicine for, among other things[28], the management of infectious and inflammatory conditions of genitourinary system, including for catarrh of the bladder[29]. It has been described as "a stimulant, and hence sustaining to the circulation, [but] it never excites or forces the pulse"; "weak kidneys are also much improved by its inward use"; and "as a tonic in cellular dropsy"[21] Its main active constituents are isoquinoline alkaloids, especially hydrastine and berberine, which have been reported to work best when taken orally in small dosages[30]. These constituents exhibit a wide range of beneficial health effects[29]. Berberine, itself, has been reported to exert a stimulant action on the heart, a decrease in systemic and pulmonary vascular resistance and in ventricular diastolic pressure, but an increase in stroke index, cardiac index, and left ventricular ejection fraction[31].

Lobelia is a powerful nervine and antispasmodic that helps to reduce pain due to spasm of any character, and alleviate tension[4]. As a general systemic relaxant with diffusive stimulation, it helps to equalize circulation and relieve vascular tension[32], and enhance "the diffusion and intensity of any agent with which it may be associated"[21]. Lobelia's main active constituents, piperidine alkaloids and bitter glycosides, effect useful antispasmodic, diaphoretic, relaxant and diuretic properties, including in cases of cardiac congestion[14], when administered in only small quantities[24,33].

Cayenne is well known for its stimulant and counterirritant effects, and has long been recognised as one of the most powerful and persistent of cardio-stimulants known, with a primary influence on circulation[34], even when only very small amounts are consumed[35]. It is used Traditionally in Herbal Medicine to help support peripheral circulation when taken at a dry weight equivalent dosage of 15-650 mg/day[36]. It's main active constituent, capsaicin, has also been shown to increase the permeability of epithelial cells of the gastrointestinal tract to ions and macromolecules[37], thereby facilitating the absorption of medicinal agents with which it is co-administered.

In summary, the specific combination of herbal extract ingredients making up the **Kidney & Blood Pressure Drops™** formulation is unique, and provides a safe, gentle and effective product to help relieve symptoms of temporary water retention, such as edema, through the Traditional use in Herbal Medicine of its juniper, goldenrod, uva-ursi, parsley, gravelroot, horsetail, and nettle ingredients as diuretics. Their actions assist the kidneys to maintain healthy water balance and blood pressure levels in the body. The demonstrated immune-stimulant and supportive properties, especially of ginger, goldenseal and nettle, further contribute to the therapeutic value of the formulation. The ginger and cayenne ingredients also enhance the absorption of active constituents, acting as "carrier" ingredients and as metabolic and circulatory enhancing agents, helping to enhance the actions of the other herbs that they are combined within the formulation. This action is further enhanced by the general systemic relaxant and diffusive stimulation of lobelia.

Cautions and Warnings:
Consult a health care practitioner if symptoms persist or worsen; prior to use if you are taking other medications and /or supplements.

Contra-Indications:
Do not take if you are pregnant or breastfeeding; have a kidney disorder or edema caused by cardiac or renal insufficiency; or are hypersensitive/allergic to members of the Asteraceae (Compositae) family.

Known Adverse Reactions:
Hypersensitivity/allergic reactions are known to occur, in which case discontinue use.

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