



## Pharmacopeia Module 17

### Carrot Seed (*Daucus carota*)

#### Overview:

Carrot is a root vegetable that belongs to the Apiaceae family; it is native to Europe and now cultivated all over the world. Carrot root is one of the most popular vegetables all over the world and has various species and cultivars. It is rich in carotene (metabolized into vitamin A), vitamin K and vitamin B as well as in sugars and dietary fibers. Carrot seeds are obtained in the second year of life off the plant, when the plant produces a flower that delivers numerous seeds. Due to its nutrients profile carrot is considered highly beneficial for the eyes and skin.

Carrot seed essential oil is obtained through distillation of dried seeds. It has a yellow to brown orange color, and a light mobile texture. Unlike the root, carrot seed oil does not contain carotene but is rich in flavones such as luteolin and a potent alcohol named carotol and also monoterpenes, sesquiterpenes and esters that create its therapeutic properties. Carrot seed oil is highly beneficial for the skin, due to its high antioxidant content and scientifically proven regenerative properties. Carrot seed essential oil is not to be confused with carrot oil, which are carrier oils infused with carrot root. Carrot seed oil is highly superior to carrot infused oil, which has little therapeutic properties and an unremarkable aromatic profile.

#### Therapeutic Actions and Benefits:

Due to its content in carotol and luteolin carrot seed oil has an affinity for the skin and the musculoskeletal system. When topically applied to the skin it has antioxidant and regenerative properties which are particularly useful in balancing the skin, fighting aging, rashes, eczema, psoriasis, dermatitis and other skin conditions related to biochemical imbalance or premature oxidation. Carrot seed oil also promotes wound healing, helps treat bruises and reduces scarring. In the musculoskeletal system carrot seed oil has soothing, slightly warming properties that help relieve tension, aches and spasms. Carrot seed oil also supports peripheral circulation and capillary health, which prevents water retention and helps in complex musculoskeletal and circulatory system illnesses such as Raynaud's. The oil also supports the respiratory system by encouraging airflow and decongesting airways. In aromatherapy carrot seed oil is considered calming, soothing and grounding, with effects on relieving stress and anxiety.

and promoting a deep, restful sleep.

### **List Of Specific Therapeutic Actions**

Circulatory: helps in cellulite reduction, stimulates peripheral circulation, protects capillaries, fights edema

Musculoskeletal: relieves joints and muscular pain, soothes sore muscles, helps in osteoarthritis and rheumatic arthritis, reduces muscle and joint inflammation, treats stiffness, enables mobility, helps in Raynaud's disease

Skin: promotes wound healing, reduces scarring, has antioxidant properties, scavenges free radicals, prevents and fights premature aging of the skin, helps in psoriasis, eczema, rash, dermatitis, promotes healthy skin, hair and nails

Nervous: alleviates anxiety, fights stress, soothes nerves, helps in sleeping disorders and insomnia, and promotes restful sleep.

Energetic: soothing, grounding, balancing, helps with the inability to let go and move on, reduces unproductive and negative thinking, supports creativity, encourages expression of emotions.

### **Ayurveda:**

In Ayurveda carrot seed is considered sweet and slightly warming, thus useful for balancing vata. It has an affinity to the skin that helps in topical conditions associated with pitta imbalance: eczema, rashes, psoriasis, and acne.

### **Traditional Chinese Medicine:**

In TCM, carrot seed is considered warm, moist and associated to the metal element. It is used to address illnesses associated with cold and dryness.

### **Aromatic profile:**

Scent: sweet, herbaceous and fresh with a dry, woody heart note with an earthy, root-like dry-out

Note: top to middle

Blends well with: bergamot, lemon, lime, cedarwood, sandalwood, cardamom, lavender, geranium

Safety: non-toxic, can be irritant to the skin when undiluted

### **Important Scientific Data**

Carrot seed essential oil is high in flavones, potent alcohols, monoterpenes, sesquiterpenes, esters as well as vitamins and minerals that contribute to its therapeutic properties.

Several studies showed that carrot seed oil has antibacterial and antifungal properties, even against drug resistant pathogens.

The flavonoids in carrot seed oil, especially luteolin has potent antioxidant and regenerative properties that have been scientifically validated. This means that when topically applied, the oil prevents premature apoptosis of skin cells, restores the cellular

metabolism by fighting free radicals and thus, preventing premature aging. Carrot seed oil is particularly effective in restoring sun-damaged skin by actively protecting against UV radiation.

Early studies also showed luteolin to have anti-inflammatory and anti-allergic properties. In vitro, luteolin inhibited pre-inflammatory cytokines.

Several active ingredients in carrot seed oil also showed in vitro cytotoxic and anti-mutagen properties.

### **How To Use Carrot Seed Essential Oil:**

Carrot seed essential oil can be applied (always diluted) topically as a massage or compress, in the bath, through direct inhalation, or diffuser.

Add 2-3 drops of carrot seed oil in the skin lotion or ointment to promote a healthy, young-looking skin and to address premature skin aging.

Add 1-5 drops of carrot seed essential oil in a carrier oil to create a massage oil ideal for soothing musculoskeletal aches and to address chronic rheumatic pains. Gently massage in the troubled area to soothe pain, relax muscles and encourage peripheral circulation.

Add 1 - 2 drops in the bathwater for a soothing, calming and grounding experience.

Use 1-2 drops in the diffuser or diluted for direct palm inhalation to soothe, calm, uplift and relieve stress and anxiety.

### **Carrot Seed Essential Oil Recipes:**

#### **Revitalizing skin blend:**

- 8 drops carrot seed
- 4 drops helichrysum
- 2 drops sandalwood
- 2 drops frankincense
- 5 drops vitamin E

Dilute the blend in 1 oz. carrier oil such as jojoba, rosehip seed or tamanu oil. Apply and gently massage on the skin to promote a healthy complexion and to prevent aging.

#### **Skin health blend:**

- 8 drops carrot seed
- 4 drops chamomile
- 2 drops geranium
- 2 drops lavender

Dilute the blend in 1 oz. calendula infused olive oil. Use it on the skin to address dry, scaly skin as well as dermatitis and rashes.