The Anti-Inflammatory & Anti-viral Effects of Aldehydes

Aromatherapy is more than meets the nose. European research on essential oils attributes very specific effects to certain compounds found in aromatic plants. With practice, one can learn to detect these compounds by aroma alone. If these main compounds can be identified, one will also have a greater understanding of the chemistry and healing properties of an oil. A qualifier for these effects are that the compounds are only active in the presence of an array of sometimes hundreds of trace constituents which compose an essential oil. In other words, for maximum benefit a whole, complete and unadulterated essential oil is superior to an isolated compound.

Aldehydes are the aromatic compounds responsible for the tart, lemony fragrance we smell in Melissa (Melissa officinalis), Lemon Verbena (Lippia citriodora), Citronella (Cymbopogon nardus), Lemongrass (Cymbopogon citratus), and Lemon Eucalyptus (Eucalyptus citriodora). Lemon oil does not contain aldehydes and therefore does not share therapeutic properties with these oils.

Studies have shown that “essential oils with a high Aldehyde content” tend to display a sedating action on muscular tissue and have been used in therapeutic blends for their strong “sedative and anti-inflammatory effects” (Schnaubelt, 1995). Those experiencing pain and discomfort from overexertion, injury, arthritis or tendonitis often feel relief of symptoms after only one application of a blend which includes one of these aldehyde-rich essences. Aldehyde containing oils with the highest “citronellal content” (Eucalyptus citriodora and Citronella) are considered to be the most appropriate for this particular use (Schnaubelt 1999).

A second feature of the aldehydes are their distinct antiviral effects, “specifically effective against herpes outbreaks” (Schnaubelt 1995). According to Dr. Schnaubelt, “essential oils counteract viral diseases gently and effectively by inhibiting the pathogen and by improving the overall metabolic activity and immune response” (1999). Aldehyde-containing oils with the highest “citral content” (Lemongrass, Lemon Verbena and Melissa) are considered to be the most appropriate for this particular use (Schnaubelt 1999). Lesions which appear as cold sores on the lips or on the lower torso retreat much sooner or are avoided completely if aldehyde-containing essential oils are applied as soon as the tingling or other warning signs of an outbreak are first noticed. Preparations with aldehyde-rich essential oils are commonly found in European pharmacies and are sold over-the-counter to the hundreds who suffer.
recurring symptoms of this type. Dr. Schnaubelt notes that “Melissa oil appears to be one of the strongest antiviral agents available in aromatherapy” and “with only a few topical applications, an outbreak can be ended and the blisters dried up” (1995).

Be aware that aldehydes are potential skin irritants and have been “implicated in some dermal sensitivity reactions” (Tisserand 1995). Even when diluted in blends, skin irritation may occur with certain essential oils, especially on sensitive skin. Check the formulas below for proper dilution. If reddening does occur, increase the proportion of vegetable oil or discontinue treatment.

**Anti-Inflammatory Blend**
Use daily, as needed, for pain due to inflammation
10 drops Melissa, Lemon Verbena, Citronella, Lemongrass, or Eucalyptus citriodora
5 drops Fir Balsam, Douglas Fir or Silver Fir
1 drop Birch or Wintergreen
2 drops Helichrysum
1 oz Sunflower Oil

**Antiviral Blend**
Use directly on lesions
25 drops Total Melissa, Lemon Verbena, Citronella, Lemongrass, or Eucalyptus citriodora
5 drops Ravensara
5 drops Geranium or Palmarosa
½ oz Sunflower Oil
½ oz Tamanu (Foraha) Oil

Sources:
