

The Use of Beetroot as Natural Solutions for Reducing Inflammation - Case Studies from Thailand (P12-046-19)

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Objectives: Introduction: Inflammation is a complex biological response of the body tissues to foreign particles or pathogens. Research shows that an alkaline state maintained by the cells is healthier while an acidic pH increases the risk for numerous problems including chronic inflammation. The usual adverse effects of the anti-inflammatory drugs, necessitate the search for novel compounds of herbal origin. Red beetroot (*Beta vulgaris rubra*), is a vegetable plant known to possess various beneficial properties and is considered as a promising therapeutic tool in a range of clinical pathologies associated with oxidative stress and inflammation due to the betalain pigments contained. The present study refers to three cases suggesting options in which beetroot might be used to handle in different situations of inflammation.

Methods: Case description: Raw beetroot was administered as a common, affordable, safe to use natural remedies and a possible alternative to the common pharmaceutical over-the-counter anti-inflammatory drugs. Its efficiency was evaluated in few particular situations involving inflammation, as : episodes of gingivitis and

toothache, migraine headaches, or as part of a more elaborate plan to recover from Bell's palsy. All three cases are individuals in the age range 50–65.

Results: Eating raw beetroot and chewing thoroughly proved to be an efficient way to alleviate symptoms of gingivitis (probably linked to tooth infection). Gum inflammation was fully resolved within a week. In another case, it helped reduce deep pulsating headache and recurrent pain which prevented sleep as well as ease of the tension, thus headache was ameliorated within 30 min and good night rest could be resumed. Another challenge was given to help accelerate recovering from Bell's palsy condition (this time, under a more elaborate plan which included also vitamin B12 supplements and massage therapy) and the complete recovery and returning to normal function could be obtained within 8 weeks instead of 3–6 months.

Conclusions: Beetroot proved to be a potential highly effective anti-inflammatory remedy, easy accessible and safe to use. Further investigations would be essential in order to validate the bioactive components involved, its efficiency in other forms of inflammation and implications for clinical practice, as well as defining the best way to use it.

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