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DEN 2315 Pharmacology

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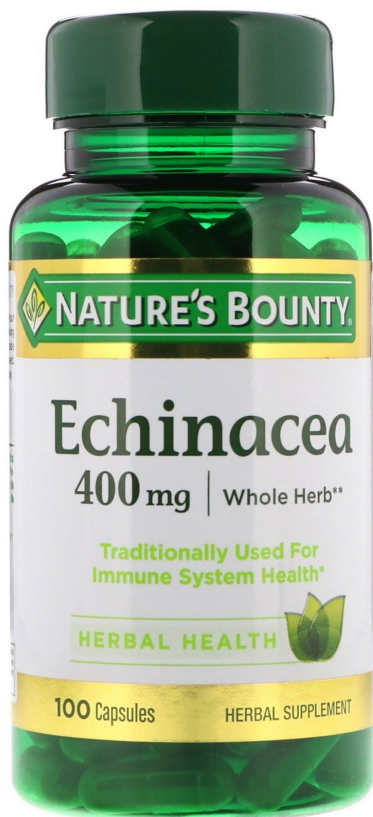
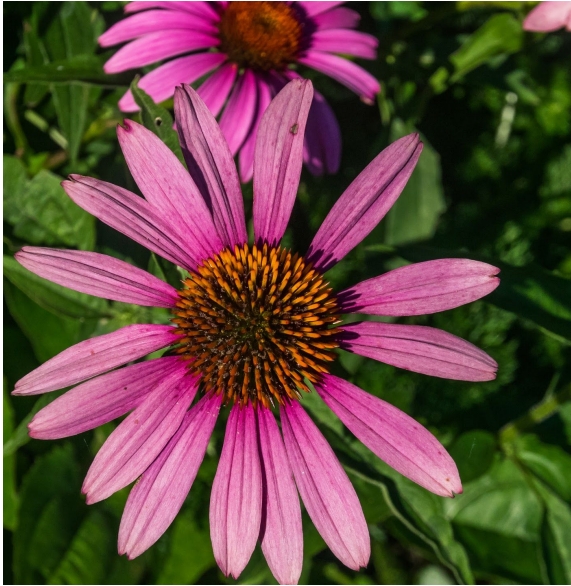
## **Echinacea**

Echinacea is a genus of herbaceous flowering plants in the daisy family, as stated in *Wikipedia*. They are commonly found in eastern and central North America, where they grow in moist to dry land. Echinacea is a well-liked herb often used for upper respiratory tract infections. There have been claims that the popular flower can be used for a variety of conditions such as attention deficit-hyperactivity disorder (ADHD), septicemia, streptococcus infection and many more. However there have not been enough studies to confirm these affirmations. According to an article written in *Journal Iranian of Nursing and Midwifery Research*, there was a study that confirmed it can be used as a suitable mouthwash opposed to chlorhexidine for minor gum disease. According to an article in *Medicalnewsoday.com*, there are three species of echinacea that can be used as herbal therapy: echinacea purpurea- purple coneflower, eastern purple coneflower. Echinacea is available over the counter at health food stores, pharmacies and online. It is available as teas, liquids and dried herb. Also, as capsules, pills or powdered. According to a popular wellness company Nature's Bounty, Adults should take 1 pill (400mg) seven times a day, preferably with meals. Like any other medications when taking this herbal supplement there can be contraindications and adverse reactions. People with hypersensitivity to plants of the Asteraceae/Composite family should avoid taking echinacea. Patients with rheumatoid arthritis, systemic lupus erythematosus, leukosis, multiple sclerosis, tuberculosis, and HIV infection

should also avoid echinacea. Adverse reactions when taking the popular flower are rare, however patients have reported having an upset stomach, dizziness, nausea, rash and allergies.

There are limited reports of interactions with echinacea, although there is one report on a reaction with etoposide. Data regarding echinacea effects on the cytochrome P450 (CYP-450) enzyme system are conflicting. (*Drug Information Handbook for Dentistry*). As a dental hygienist it was intriguing to learn there was a study confirming the benefits of echinacea on early periodontal disease. Although the drug of choice for most dentist would be Chlorhexidine, which is a disinfectant and antiseptic used for gum disease, the side effects can be fatal due to the high risk of acute respiratory distress syndrome. (*Wikipedia.com*). Long term use of Chlorhexidine can also cause staining of the enamel. As a hygienist I would feel confident in recommending echinacea for treatment of minor periodontal disease because there are fewer side effects. In today's world many people would rather take natural supplements as opposed to medicine to avoid many side effects. I strongly believe patients would rather use the popular flower because it is available over the counter so it's easily available and less costly. As a health educator I would research any natural product extensively before recommending the product to my patients and take into consideration any systemic diseases they might have to avoid any interactions. In doing my research I would make sure the studies are from reputable journals which are blinded or double blinded peer-reviewed. In doing so I would feel confident enough to ensure that I am knowledgeable and comfortable enough in recommending the product to my family, friends or even personal use. I would incorporate the use of this product when treating a patient with mild periodontal disease by instructing them to use a surgical syringe around the

gums with 15ml of echinacea twice a day for a week after performing hygiene services. To ensure that my patient gets the optimal effect when treating periodontal disease.



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