

Name _____

Nature's Pharmacy: Exploring Edible and Medicinal Perennial Plants

Open-Ended Response Answer Key

1. Echinacea has been traditionally used by Indigenous peoples to treat various ailments, including infections, wounds, and respiratory illnesses. In modern medicine, it's commonly used to boost the immune system and reduce the duration and severity of colds and flu. The immune-boosting effects of Echinacea are attributed to its active compounds, such as flavonoids and polysaccharides, which stimulate the production of white blood cells and enhance immune response.
2. The stalks of Rhubarb are edible because they contain minimal amounts of oxalic acid, which is primarily concentrated in the leaves. Oxalic acid can bind to calcium in the body and form insoluble crystals, leading to kidney stones and other health issues. Therefore, it's important to avoid consuming Rhubarb leaves and to only use the stalks in cooking and baking.
3. Lavender essential oil is used in aromatherapy to promote relaxation, reduce stress, and improve sleep quality. It can be diffused in the air, inhaled directly from the bottle, or diluted and applied to the skin through massage or bath products. The aroma of Lavender oil stimulates the limbic system in the brain, which regulates emotions and mood, leading to feelings of calmness and tranquility.
4. Asparagus is rich in vitamins A, C, E, and K, as well as folate, iron, and fiber. These nutrients support various aspects of health, including vision, immune function, cardiovascular health, and digestion. Asparagus is also low in calories and contains antioxidants like glutathione, which may protect against oxidative stress and inflammation.
5. The rhizome of the Ginger plant is used in both cooking and traditional medicine for its spicy flavor and medicinal properties. It's commonly used as a culinary spice to add flavor to dishes and beverages like curries, stir-fries, teas, and ginger ale. In traditional medicine, Ginger rhizome is valued for its ability to alleviate nausea, aid digestion, and reduce inflammation, making it a popular remedy for gastrointestinal issues, motion sickness, and arthritis.

