

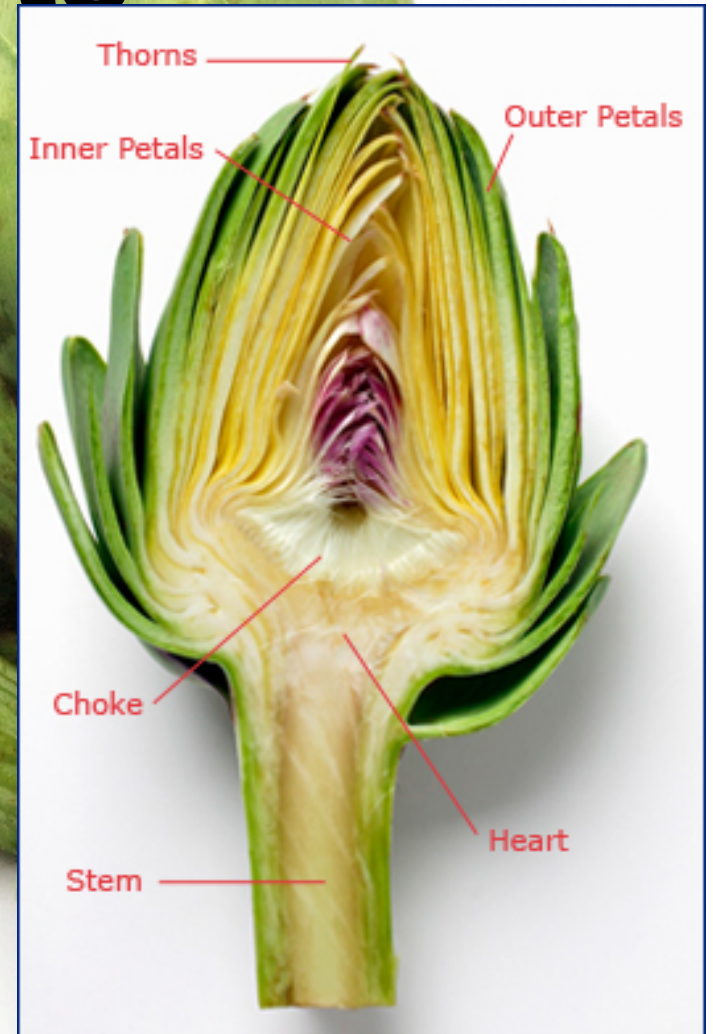
Globe Artichoke



Cynara scolymus

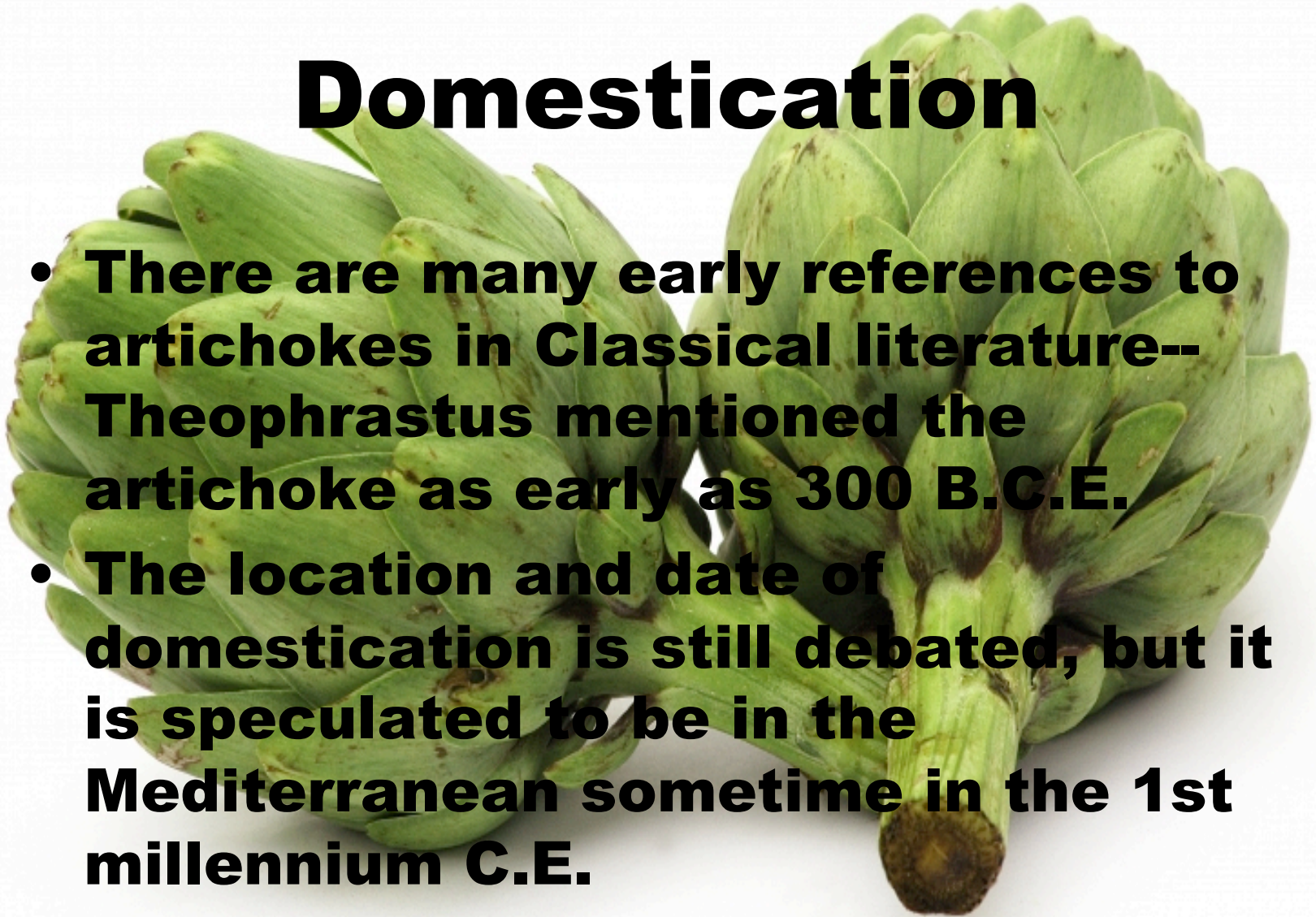
Basic Facts

- **Family: Asteraceae (Sunflower Family)**
- **Name derived from Arabic *ardischauki***
- **Italy=main producer**
- **Heterozygous**



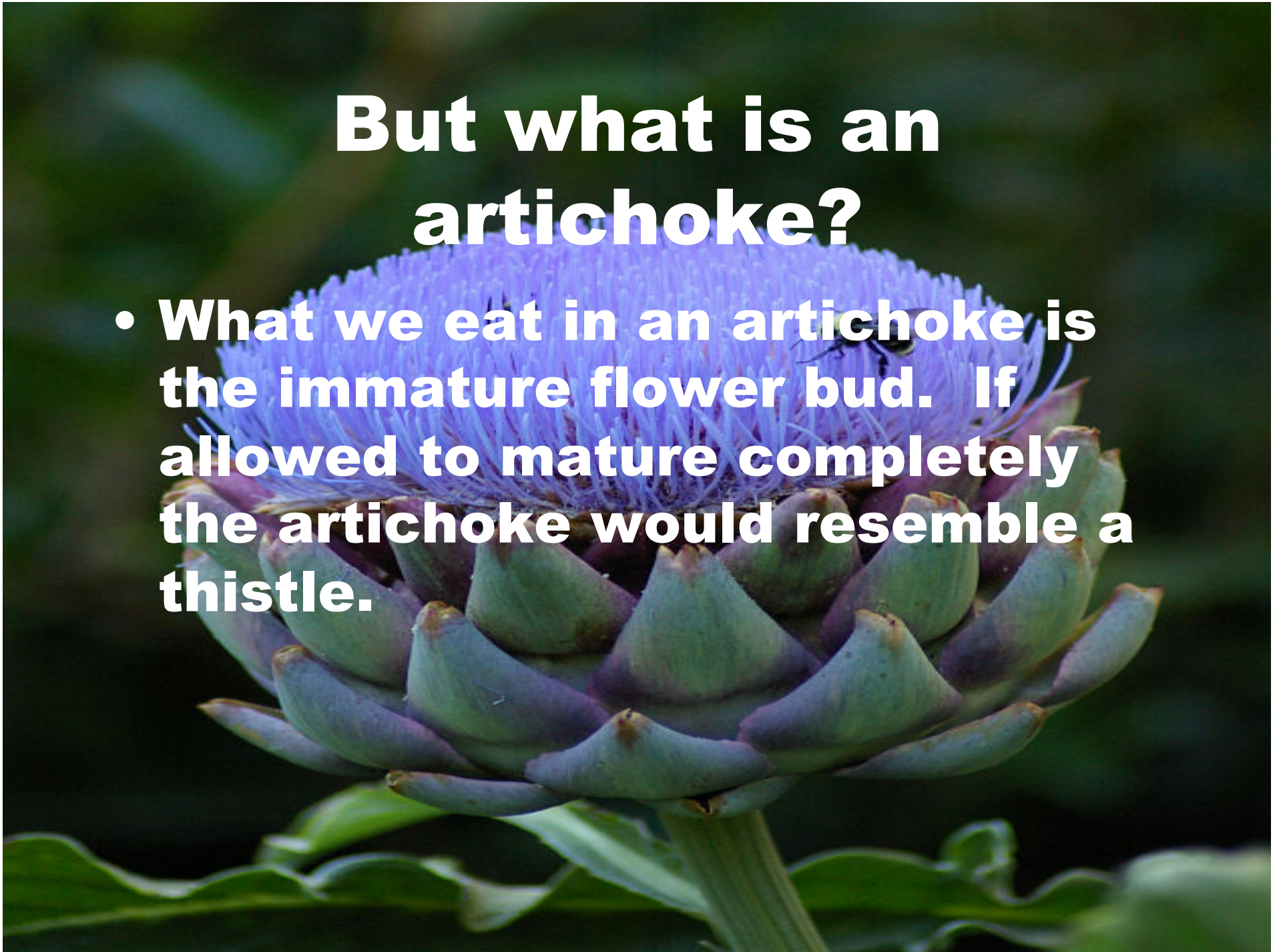
Domestication

- **There are many early references to artichokes in Classical literature-- Theophrastus mentioned the artichoke as early as 300 B.C.E.**
- **The location and date of domestication is still debated, but it is speculated to be in the Mediterranean sometime in the 1st millennium C.E.**



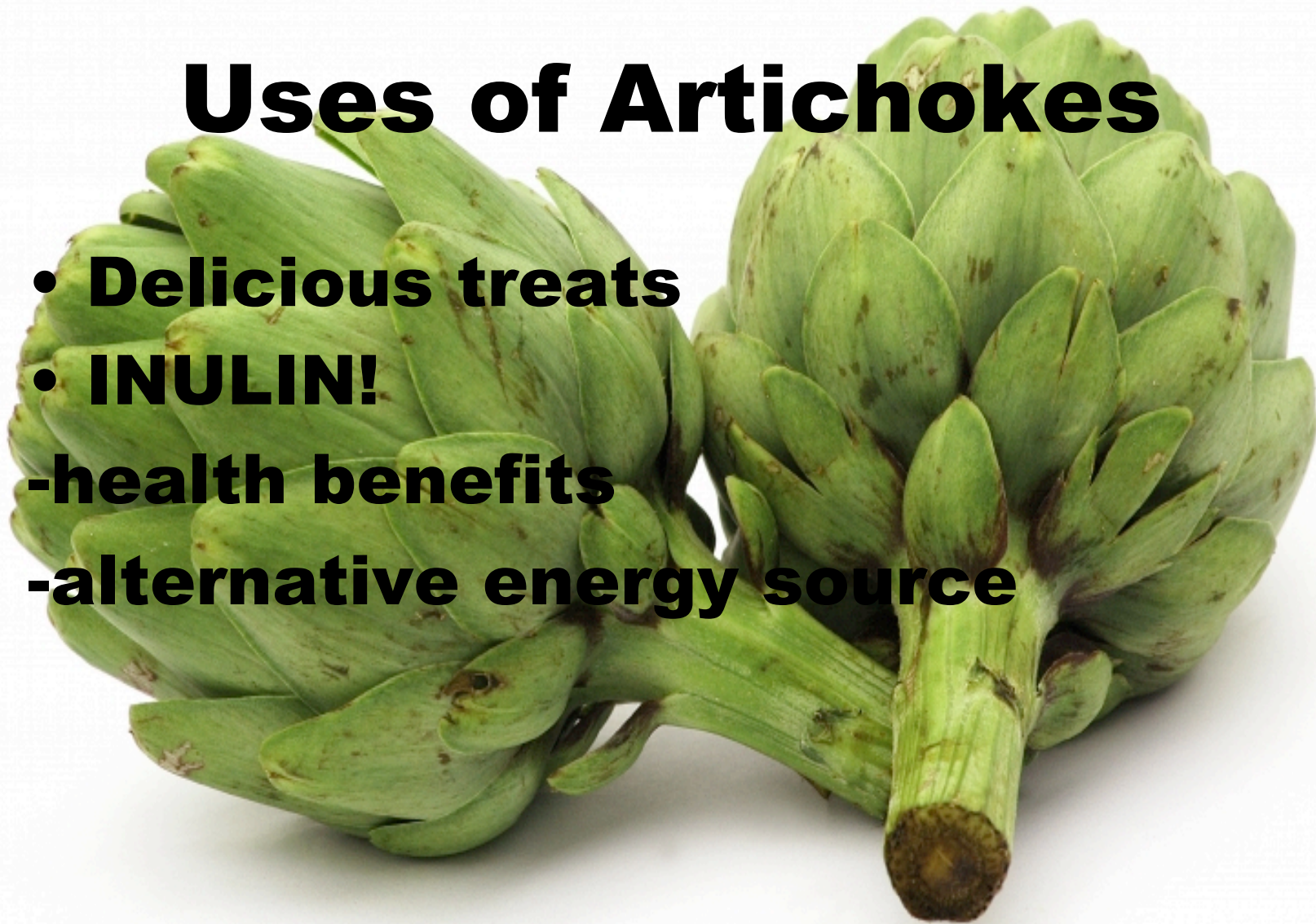
But what is an artichoke?

- **What we eat in an artichoke is the immature flower bud. If allowed to mature completely the artichoke would resemble a thistle.**



Uses of Artichokes

- **Delicious treats**
- **INULIN!**
- health benefits**
- alternative energy source**



Inulin

- **“Inulin is a plant-derived carbohydrate with the benefits of soluble dietary fiber. It is not digested or absorbed in the small intestine, but fermented by the colon” -Molina et al 2005**
- **It is a polysaccharide that falls into the fiber categorization of fructan**
- **It is thought to have many benefits for human health and could be a good source for cellulosic ethanol.**

Health Benefits

Two fresh artichokes are shown against a white background. The artichokes are green with some brown spots on the leaves. They are positioned on the right side of the slide, partially overlapping the text.

- **Prebiotic**

- the fermentation of inulin feeds good bacteria in the gut flora

- This prohibits the growth of bad bacteria

- It has also been shown to stimulate the immune system

- **Weight loss**

- The texture of inulin is unique--when mixed with milk or water it creates a fat-like sensation

- It is also tasteless so has the potential to be a calorie-free additive that could help with weight loss

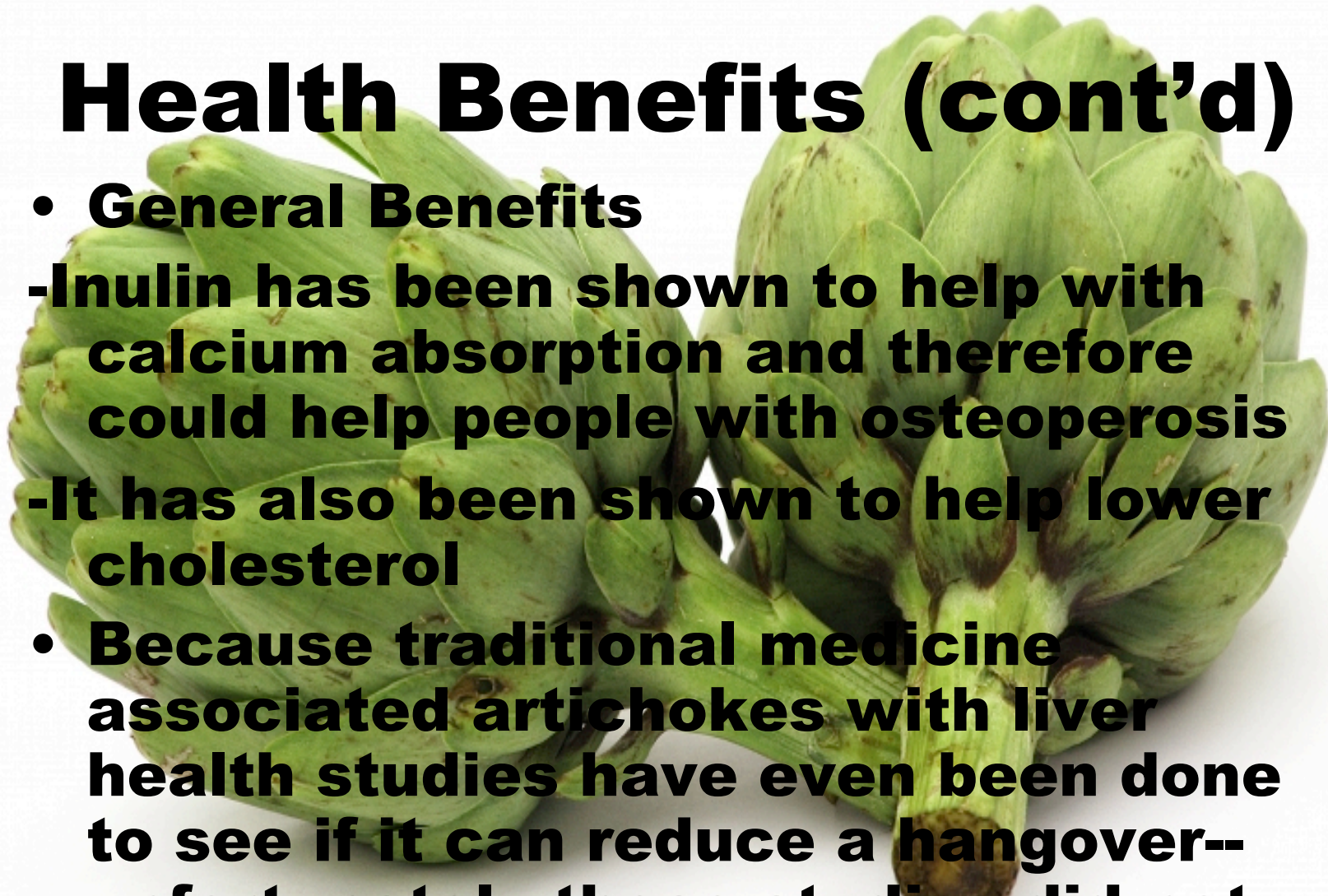
Health Benefits (cont'd)

- **General Benefits**

- **Inulin has been shown to help with calcium absorption and therefore could help people with osteoporosis**

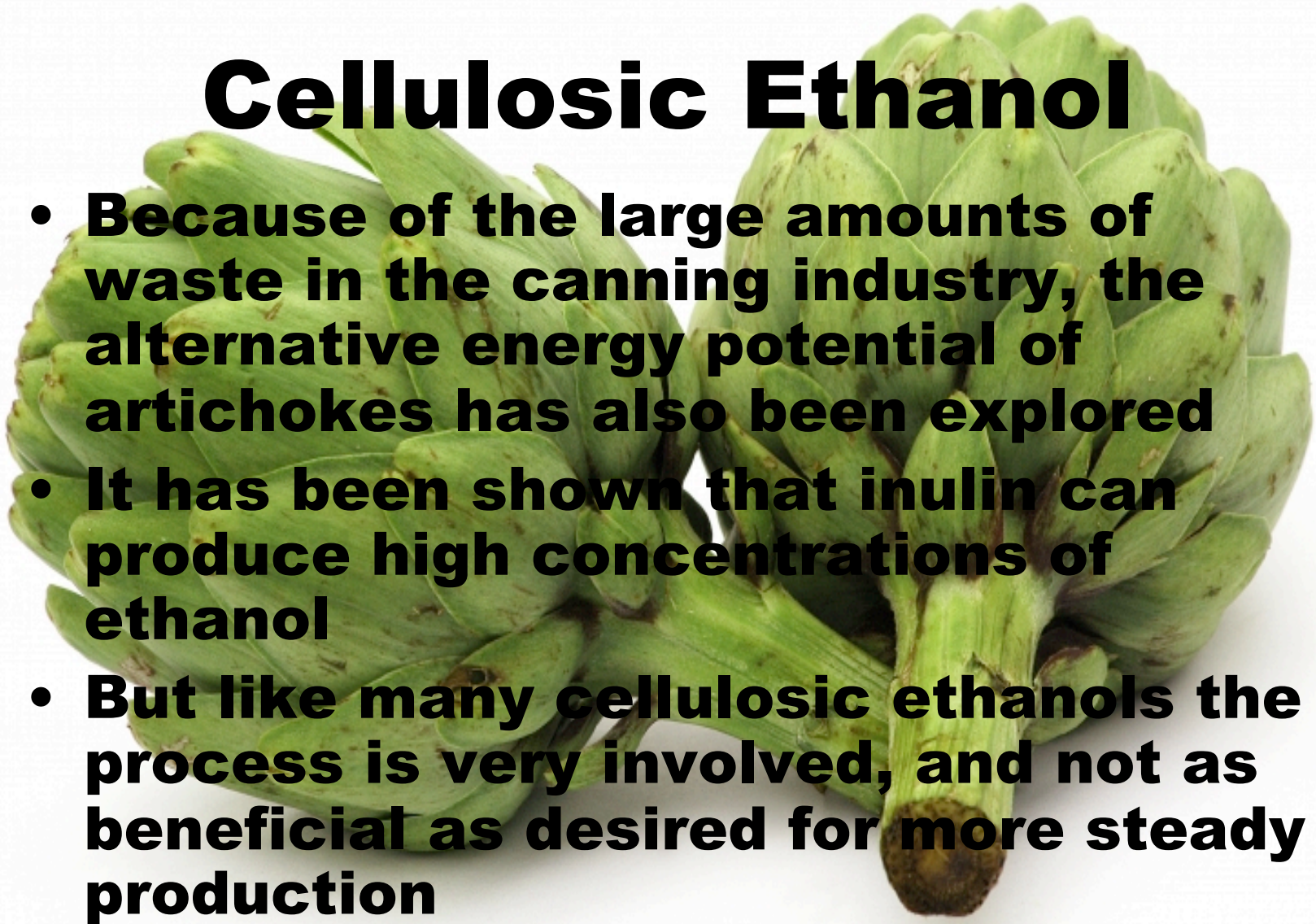
- **It has also been shown to help lower cholesterol**

- **Because traditional medicine associated artichokes with liver health studies have even been done to see if it can reduce a hangover-- unfortunately these studies did not turn out to be successful**



Cellulosic Ethanol

- **Because of the large amounts of waste in the canning industry, the alternative energy potential of artichokes has also been explored**
- **It has been shown that inulin can produce high concentrations of ethanol**
- **But like many cellulosic ethanols the process is very involved, and not as beneficial as desired for more steady production**



The End

