Ghost written for VitasupportMD (www.vitasupportmd.com)

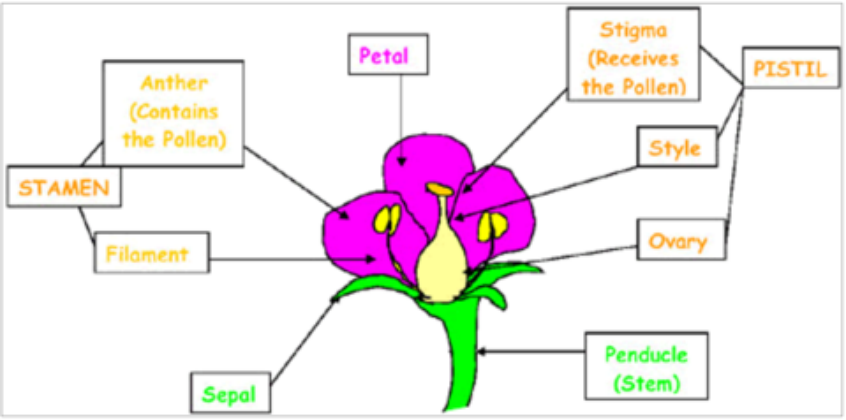
Forget the Birds, It's Really the Bees!

Summer is upon us! The flowers are blooming, the days are getting longer and the cycle of life begins again. By now, you've probably noticed a flurry of activity in your yards or gardens – plants sprouting, squirrels foraging and the buzzing of insects everywhere. And probably one of the busiest insects on earth is the *Apis Mellifera* – the honey bee – as it fastidiously flies from one budding flower or plant to another.

Of course, we think of bees as producing that sweet substance that we all love…honey. And while this is certainly true, bees contribute a far more important function to the survival of mankind: pollination…the fundamental building block of nature that brings color, depth and nourishment to our lives.

What is pollination?

According to the United States Department of Agriculture, pollination is the "act of transferring pollen grains from the male anther of a flower to the female stigma" which allows the plant to reproduce. While butterflies, animals and even wind can transfer these pollen grains, bees are by far the most productive pollinators in the ecosystem.



In fact, bees pollinate close to three quarters of the plants that produce 90% of the food we eat. But to put the role of bees and pollination into financial perspective, a study conducted by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services estimated the annual global production of food that depends exclusively on pollination is worth between $235 and $577 billion dollars!

In fact, over the last half decade, the number of crops that depend on pollination – vegetables, seeds, nuts and fruit – has nearly tripled! Now, one might think that pollinating these immense

crops is a daunting task for a honey bee, but believe it or not the average honey bee can pollinate more than 2,000 flowers in a single day. Incredibly, a colony of honey bees – which on average contains about 60 thousand bees – can pollinate 50 million flowers each day. Now you know where the term "busy bee" comes from!

And a bee's ability to pollinate creates a "domino effect" in our ecosystem. Plants, once pollinated, reproduce exponentially and contribute half the world's oils, fibers and medicines while providing food and shelter for wildlife, preventing soil erosion and absorbing CO2, the prime culprit affecting global climate change.

So, it's clear that bees play a crucial and integral role in mankind's existence.

What Else Do Honey Bees Do Besides Pollinate?

Aside from pollination, the most recognizable product that honey bees produce is, of course, honey.

The physical act of how a bee makes honey might be somewhat unsettling, but in the simplest terms, a honey bee collects sugar-rich nectar from flowers, digests it in its stomach where the complex sugars are broken down into simple sugars and then regurgitates it to "house bees" back in the hive. The house bees then store the nectar in the hexagon-shaped beeswax honey cells and convert it into honey by drying it using their wings. Finally, once the honey is dry, they cap the honeycomb using beeswax and save it for when nectar is not so readily available in the winter months.

The Benefits of Honey

In terms of nutrition, a tablespoon of honey contains 54 calories and 17 grams of sugar including fructose, maltose, sucrose and glucose. While honey is not particularly rich in vitamins or minerals, honey does contain a high level of antioxidants such as phenols and bioactive plant compounds.

It is also believed that honey is a better form of sugar for people suffering with diabetes, and as such may lower bad LDL cholesterol, triglycerides and inflammation while helping to increase good LDL cholesterol. Of course, anyone suffering from diabetes should consume honey with the customary limitations or cautions as they would with traditional sugar.

Does your child have a chronic cough? Honey is a natural cough suppressant. A study published by the National Library of Medicine discovered that honey was more effective than two common cough medications designed for children. Not only that, other studies have found that honey reduced cough symptoms and improved sleep more than cough medication.

And one thing you might not know is that honey has been used to heal wounds and burns since ancient Egypt and still is to this day! Numerous studies have shown honey to be an effective healing agent in partial-thickness burns and wounds. Researchers believe that honey's ability to heal comes from its anti-inflammatory and antibacterial qualities, as well as its natural ability to nourish tissue.

Bee Kind

So, the next time you see or hear honey bees buzzing around your yard, try to remember the important role that they play in the ecosystem, our health and mankind's well-being. Without them, our lives would be quite different, and not much for the better. Bee kind to your friendly-neighborhood bee…they are one of nature's most important insects.