

Complete Bee Diet with Natural Ingredients!

Helps to restore and maintain a healthy Honey Bee immune system caused by poor pollen, insufficient nectar, habitat loss, bee pests, pesticide poisoning, pathogens, migratory, environmental and nutritional stresses.

Suggested feeding dose with all three products:

1-tsp. (5ml) Honey-B-Healthy® (HBH), 1-tsp. (5ml) Amino-B Booster® (ABB) & ½ -tsp. (5ml) Vitamin B Healthy™ (VBH)

Add all three, one at a time, at these rates to each quart of your feeding mix at ambient temperature.

(Heat will damage most of the vitamins as well as drive off essential oil constituents)

Honey bees, like all animals, require a balanced diet of sugar, protein, vitamins, minerals & water.

During the past 25 years, there has been a tremendous pressure on bees due to pests (mites, beetles and etc.), pathogens (viruses, bacteria & fungi) and pesticides which are causing huge health issues for honeybees. Also, there has been loss of suitable pollen sources or bee pasture due to increased production of crops (such as corn and soybean) that lack sufficient nectar and pollen-containing amino acids, minerals and vitamins required for the bees' nutritional needs. This changing agricultural ecosystem is causing an effect on bees and their immune systems. Increased drought in many areas also degrades the quality and quantity of available pollens; stressed plants produce less nutritious crops, pollen and nectar, and the pollen has less protein, fewer vitamins, minerals and fewer important nutritional items.

In 1953, Dr. A. De Groot studied the amino-acid and protein requirements of honey bees and found that they need ten (10) essential amino-acids at levels ranging from 1% to 4.5% of the protein digested. During times of poor pollen or late winter, bees can utilize nutrients like protein from their bodies to make royal jelly for brood rearing; however, by doing this, the bees are weakened and their immune systems degrade because they are not maintaining proper nutrient levels. This often reduces their longevity and provides an opening for diseases like viruses. Bees stay healthy when their protein content is 60% and begin to fail when levels drop.

What is important is this: small amino acids and small peptides [the components of our Amino-B Booster] are able to enter almost any cell or membrane in the body. They are easy to absorb and to assimilate by growing cells. Their presence is very important for all protein activities such as the function of the immune system. Providing all needed amino acids as small molecules is a great benefit to any organism, especially if it is growing, healing, or producing milk, royal jelly, etc.

Essential oils (EO's) are very complex and poorly understood with some oils containing one hundred or more constituents with many of these constituents not yet identified. They are thought to be cytophylactic (cell protecting), possibly helping some cells to be protected from pathogens and pathogen reproduction. The way this is accomplished is not known; claims cannot be made until the action of essential oils is identified. EO's are directly toxic to some microorganisms. This was stated in the published papers about feeding the EO mix to cattle; the normal bugs in the rumen are not able to digest the proteins, due to EO being toxic to them, thus the cattle are able to gain more protein from the food. Again, this is a technically difficult topic and takes a lot of careful biochemical research to prove. EO's are found to be toxic to some pests and other organisms [but not to us and bees when used in the proper amounts].

The ABB does not interact with essential oils; it greatly improves the rate of protein uptake by honeybees because of the formulation as individual amino acids or as small peptides. HBH and ABB make up a one-two punch: HBH helps build the bees' immune system, ABB allows bees to grow more rapidly to a healthier and stronger state (it especially supplements old pollen that has lost its quality). Our VBH is a third valuable component in the diets of honey bees, providing vitamins that might be in short supply in poor pollen or in a drought stricken environment. Many proteins need vitamins in order to work and to function properly. Many vitamins are coenzymes: they fit into the structure of selected proteins called enzymes and allow these enzymes to function. VBH helps ensure that bees are not stressed or diseased by a lack of vitamins.

For more information on Honey Bee Nutrition:

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC169102/>

<http://www.progressivecattle.com/focus-topics/nutrition/4636-essential-oils-are-they-essential-feed-additives>

<http://www.beecdcap.uga.edu/documents/CAPArticle10.html>

<http://www.honeybee.com.au/Library/pollen/nutrition.html>

<http://www.extension.umn.edu/agriculture/dairy/feed-and-nutrition/essential-oils-as-dietary-supplements/>