

Spirulina for horses is a dense, green powder derived from fresh water, blue green algae. In laboratory experiments it has been documented, both in vitro and in vivo, as having potent anti-histaminic, anti-inflammatory and immune system moderating effects. Feed spirulina to horses to support skin and lung health as well as providing an excellent source of protein.



Spirulina is used, throughout the world, as a protein and dietary source by the World Health Organisation and has a very high safety profile. It's high protein content means it is particularly valuable for feeding to malnourished populations.

Nutritionally, dried spirulina contains about 60% (51-71%) protein and less than 20% carbohydrates. It is a [complete protein](#) containing all essential amino acids, though with reduced amounts of [methionine](#), cysteine and [lysine](#) when compared to the proteins of meat, eggs and milk. This means that it should be accompanied by both lysine and methionine supplementation when fed to your horse for maximum growth and muscle function. It is, however, superior to typical plant protein, such as that from legumes.

Spirulina has an immunomodulating effect on some of the immunoglobulins produced as a response to an allergy. Immunoglobulins are used by the immune system to defend the body, to identify and neutralize pathogens such as bacteria and viruses. The antibody recognizes a unique molecule of the harmful agent, called an antigen.



Antibodies are typically made of basic structural units—each with two large heavy chains and two small light chains. Antibodies are able to bind to receptor sites and this helps to direct the appropriate immune response for each different type of foreign object they encounter. For example, IgE is responsible for an allergic response consisting of mast cell degranulation and histamine release. These interactions mediate allergic signal transduction to induce conditions such as asthma or COPD in the horse.

The immuno-modulating effect means that spirulina has been shown to involve a shift in antibody class toward IgG and IgA, and away from IgE. IgE is the antibody responsible for allergic reactions. So where horses are showing signs of an allergic immune response through lung and skin issues it can be highly beneficial as IgG and IgA are the normal protective antibodies that form against proteins in bacteria or viruses.

When to Feed Spirulina to Horses

[Spirulina is an excellent choice when a protein supplement is needed for horse growth or horse muscle development](#)[Click To Tweet](#) Spirulina is an excellent choice when a protein supplement is needed for horse growth or horse muscle development as it is highly digestible. It is a more concentrated source of protein than soybean meal and also more digestible. Although it contains all the essential amino acids it is low on methionine and lysine so it is wise to make sure extra supplementation of these are included in the daily diet.

If your horse is demonstrating allergies of the lungs and skin then including spirulina in your horses bucket feed each day can be beneficial.

Spirulina is excellent for the control of respiratory inflammatory and allergic responses. The benefits seen when spirulina is fed can be enhanced by MSM (anti-inflammatory), flaxseed meal (anti-inflammatory), Jiaogulan (bronchodilator) and vitamin C (the key antioxidant in the lungs). Note that care should be taken not to feed laminitic horses extra vitamin C.

Horses with mild rubbing of the tail, mane, and irritation around the sheath and belly button area from biting insects, will also benefit from the addition of spirulina in their diet. Horses which have sweet itch will also benefit although the inclusion of addition Chondroitin Sulphate as well as spirulina will see the greatest support.



Horses prone to seasonal itching will benefit from daily feeding of spirulina.

How much Spirulina to Feed Horses

The amount of spirulina to feed for an average 500 kg horse is 20 grams twice day for average size adult horse. One 25 ml scoop holds approximately 20 grams of spirulina. Scale up or down depending upon the size of your horse. Feeding too much however is not a

problem.

Will my horse like eating Spirulina?

Horses are not always accepting of eating spirulina and up to 50% will reject it in a bucket feed. This however seems to be based more on suspiciousness of the smell rather than the taste. Mixing it with coconut oil prior to adding to feed can substantially decrease the odor (it smells far worse than it tastes).



How to feed Spirulina to Horses

Most horses will get used to the smell if you persist and find inventive ways of reducing or disguising the smell. Mint, carrot juice and liquorice powder can all be useful. If all this fails then resorting to mixing with oil and then syringing into the mouth immediately before feeding will be necessary. You might get away with syringing small amounts each day just before giving a bucket feed so the horse becomes used to both the taste and smell of the

spirulina.

If the above doesn't work, mix into oil and feed by syringe immediately before feeding the bucket feed, putting gradually increasing amounts of the feed amount into the food. The taste will already be in the horse's mouth when they eat so gradually they will come to accept the addition of spirulina in their food.

Spirulina is a member of the group cyanobacteria, aka blue-green algae. This is a large family and not all forms are beneficial to consume so be sure it is human grade spirulina you are purchasing.

Chlorella, like Spirulina, is nutritious and safe but it does not have the same high protein, immune modulating and antihistamine effects.

'Forage Focused'™ Minerals to Benefit Horses with Allergies

All horses with allergic reactions will benefit from balanced minerals being added to their diet. This 'forage focused' approach will support and maintain health in an intelligent way. To find out more about the benefits of feeding 'forage focused' minerals to your horse [read this article](#).

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