

the immune system & FLP products



David Urch
Advisory Board Member
& BSc MA VetMB MRCVS

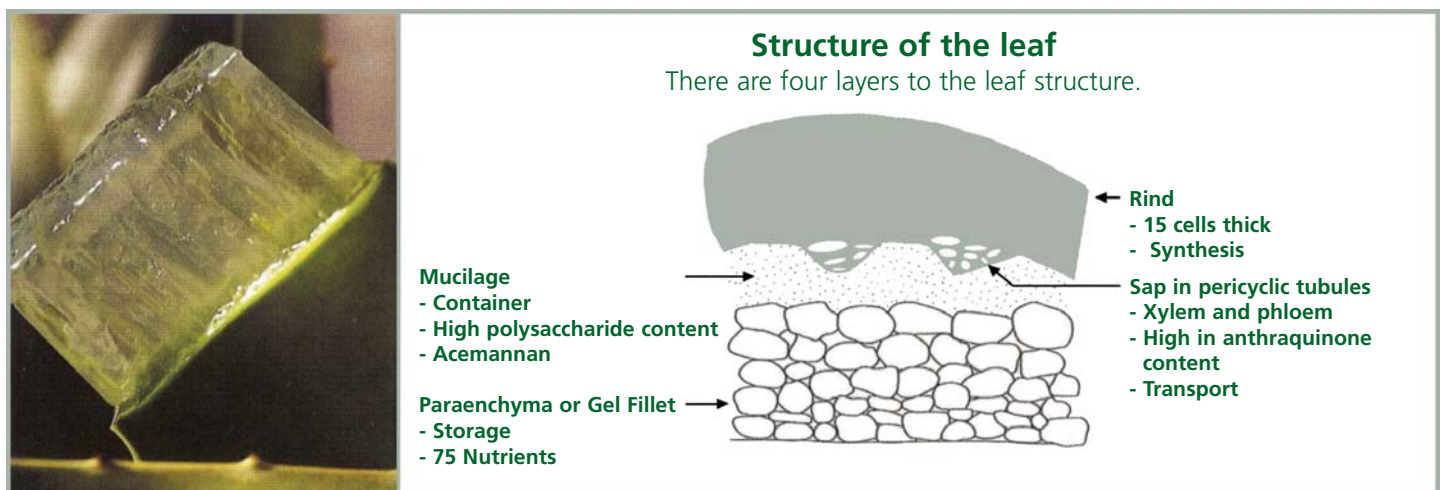
There are a number of conditions which compromise the immune system. Fortunately we have several products, which can return it to optimal function.

When micro-organisms or foreign substances breach the body's defences, specialised cells of the immune system known as white blood cells engulf or neutralise them using antibodies. In acquired or active immunity, the white blood cells called lymphocytes remember how to produce an appropriate antibody following being exposed to a disease.

This is why, if an animal is exposed to a certain disease once, it is unusual to get it again or if it does, it is usually less severe. A very important role of the immune system is to recognise what should be in our bodies and what should not. When the self-recognition goes wrong, the immune system is turned against normal body tissue resulting in autoimmune diseases like rheumatoid arthritis. Sometimes the immunological response is too strong or overactive and is triggered by normally harmless substances such as pollen, resulting in allergies. At the other extreme the immunological response may be underactive as occurs in post-viral fatigue syndrome.

In the mucilage layer of the Aloe Vera plant [see diagram below] are found polysaccharides, the most important group containing glucose and mannose. These are called gluco-mannans, and one in particular, acemannan, has been shown to have specific effects on the immune system:

- Immunomodulating properties - it helps to return the immunity to normal by boosting the level of antibodies as shown in the diagram below.
- Antiviral - particularly against tumour-producing viruses such as feline leukaemia.
- Reduction in secondary infections.
- Increases the activity of T-lymphocytes.
- Increases the activity of large white blood cells known as macrophages leading to the removal of micro-organisms as well as increased wound healing.



The acemannan in Aloe Vera Gel is absorbed whole from the digestive tract by a process known as pinocytosis. Once in the blood stream acemannan is engulfed by T-lymphocytes, which stimulates them to release chemicals called cytokines. These in turn encourage B-lymphocytes to produce antibodies, which destroy microorganisms and foreign proteins. The amounts of Gel required daily for the different species are shown in the table [see top right].

Animal	Treatment Dose/Day	Initial Maintenance Dose	Long Term Maintenance Dose
Hamsters, Mice, Gerbils (50 - 100g)	2mls	1mls	1/2ml
Rats, Pigeons, Guinea Pigs & Rabbits (400g - 2Kg)	Amis	2mls	1ml
Cats (5Kg)	20mls	10mls	5mls
Dogs (30Kg)	60mls	30mls	15mls
Sheep, Pigs & Humans (150Kg)	120mls	60mls	30mLs
Cows (500Kg)	250mls	120mls	60mls
Horses (500Kg)	250mls	120mls	60mls

Bee Propolis

Also known as bee glue, since it is used by the bees to fill up any holes in their hives as well as for encasing foreign material such as dead insects. Bees collect the sap from trees such as chestnut and poplar and then process it through their salivary glands. The resulting propolis is then used to waterproof the hive and line the wax cells in which the queen lays her eggs, producing an environment which is virtually free from infection.



The beehive has been scientifically recognised as being the most naturally sterile environment known to man. This is because propolis is not only a remarkable natural antibiotic but is also anti-viral, anti-parasitic and has stimulating benefits for the immune system. There are records going back over 4000 years for the use of propolis in helping numerous diseases. A number of researchers have more recently shown that propolis has the ability to kill a number of so called 'super bugs' such as M.R.S.A. and T.B.

I initially start dogs on one twice daily and cats a half twice daily after first trying a test dose. Horses require 10 daily and ponies 5. I will increase the number and frequency depending on variations in the animal's weight and its individual response.

Echinacea

This remarkable herb so prized by the North American Plains Indians has been used traditionally to maintain health through its ability to support the immune system. In particular it has been used to increase the body's resistance to infection and recovery from viral, bacterial and fungal diseases.



Clinical studies have demonstrated how it supports the immune system and helps animals deal with infections of the respiratory, urinary and reproductive systems. Echinacea is normally given at the first signs of an illness developing. It is also very useful in persistent or frequently recurring conditions such as post viral fatigue syndrome in horses. At the first sign of infection I give the same number of tablets as indicated above for propolis.

Over the last 30 years I have noticed that both humans and animals are suffering more diseases whose cause can be traced back to changes in the immune system. In animals we see more cases of eczema, skin and respiratory allergies as well as chronic debilitating diseases such as post viral lethargy syndrome/chronic fatigue syndrome/ME. There is probably no single causative factor but a combination of dietary change, exposure to environmental pollutants, over-use of drugs and vaccines and stress.

In the case of both equine and human chronic fatigue syndrome the road to recovery is complex. In the horse it is well documented that if you rest them for at least six weeks and give them 250mls of **Aloe Vera Gel** daily as well as **Bee Pollen** and **Bee Propolis** tablets, over 70% make a full recovery. In the human however these products alone do not appear to produce such good recovery rates. I believe that this is most likely because of the other factors, which are now known to keep this disease going in humans. In all species it is important to look at the whole picture. The commonest cause of this disease continuing is stress, so no matter how many complementary and conventional products you take, you will only make a moderate improvement if this is also not dealt with.

Recently it has been suggested that in stress-induced cases there is inflammation of the hypothalamus. This part of the brain controls the pituitary gland, which in turn controls the adrenal glands, which release cortisone and adrenaline into the bloodstream. These two hormones are responsible for the fear, fright and flight response often referred to in animals. If this hypothalamus-pituitary-adrenal axis is continuously stimulated by stress, the resulting symptoms of chronic fatigue syndrome are not surprising.

In some cases it is a dietary problem, which is maintaining the condition while in others it is colonisation of the digestive tract with yeasts such as *Candida albicans*. In all cases of CFS in all species the most important starting point is to identify and deal with the perpetuating factor. Recovery can then be helped by Aloe Vera Gel, bee products such as Pollen and Propolis and Echinacea. Further details on the immune system and how it can benefit from FLP products can be found in chapter 12 of my book.

