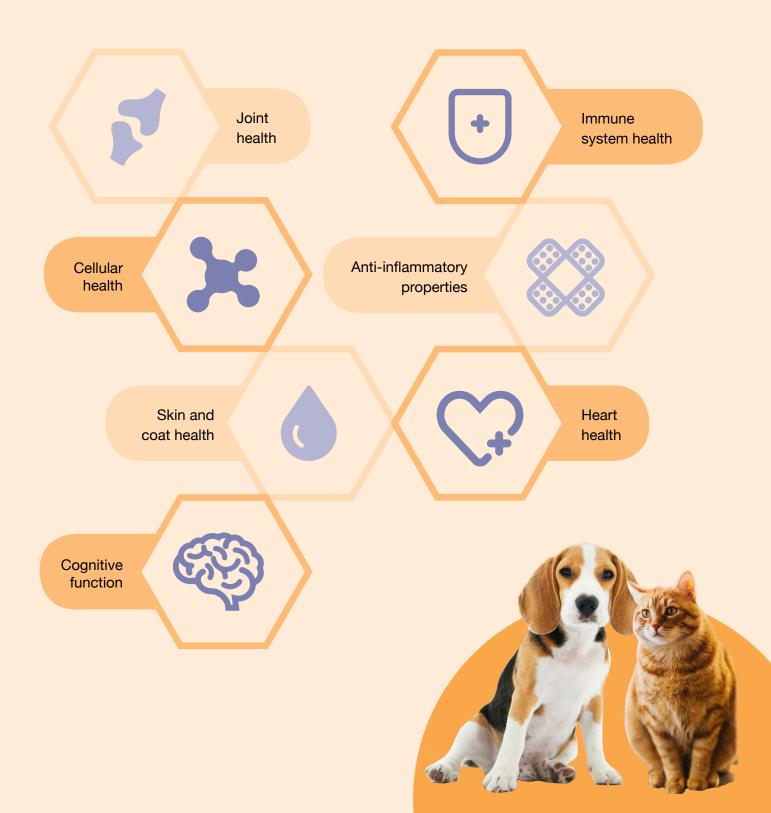
# AGROMEGA

ENHANCED OMEGA-3 ESSENTIAL FATTY ACID SUPPLEMENT

### AGROMEGA for **Pets**

Omega-3 fatty acids are essential for optimum pet health and must be obtained by dogs and cats through diet and supplementation. Where it is included in finished feed, AGROMEGA is an excellent source of omega-3 fatty acids as they provide long chain polyunsaturated fatty acids, EPA and DHA. EPA 20:5n-3 and DHA 22:6n-3 perform mutually supportive roles in promoting overall pet health.



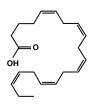
### AGROMEGA

### ENHANCED OMEGA-3 ESSENTIAL FATTY ACID SUPPLEMENT

**AGROMEGA** is an enhanced omega-3 fatty acid supplement. It has been developed to supply supplemental essential fatty acids to animal feeds to redress the imbalance between omega-3 and omega-6 fatty acids. It also provides a supplemental source of long chain fatty acids, EPA 20:5n-3 and DHA 22:6n-3, which are not present in any vegetable oil used in animal feed.

### Role & Importance of EPA & DHA:

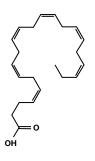
**EPA** is a 20 carbon chain polyunsaturated essential fatty acid that acts as a precursor for series prostaglandin 3. Prostaglandins contain 20 carbon atoms and they have an important role in regulating many functions in the animal.



### EPA

boosts immune system and it supports early development.

**DHA** is a 22 carbon chain fatty acid and is a primary structural component of the brain and retina. It is a major fatty acid in sperm, meaning that a deficiency of this essential fatty acid in the diet will have a detrimental effect on both sperm quantity and quality.



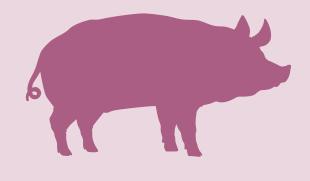
**DHA** benefits the reproductive performance.

### AGROMEGA for **Pigs**

### **Boar Fertility:**

Trials have demonstrated that when boars receive feed with additional essential omega-3 fatty acids, they produce semen with significantly higher sperm counts. Those sperm have a higher viability, which results in a significantly higher number of piglets born alive.

- Greater ejaculation
- Higher concentration
- Higher amounts of semen doses

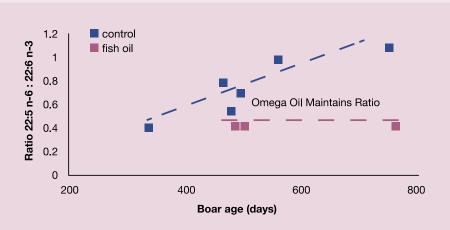


### Sow Reproduction:

Omega-3 fatty acids have the ability to reduce prostaglandin PGF2a, which thereby improves maternal recognition of pregnancy. This results in a much higher rate of foetal survival during pregnancy, resulting in larger litter sizes.

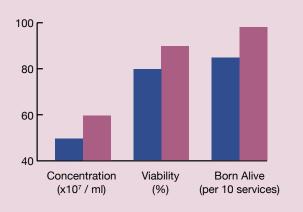
Not only are there more piglets born alive but the viability of the piglets is improved, leading to a greater number of piglets weaned.

#### Boar Age Effect on Sperm Omega 6 : 3 Ratio:





#### **Essential Fatty Acids Effect on Boar Fertility:**



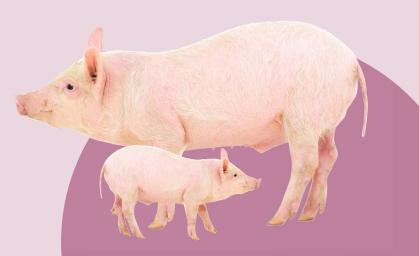
As boars become older they tend to become less fertile. Analysis of the sperm indicate that with aging, the ratio of omega-6: omega-3 fatty acids in the sperm increases in favour of the omega-6 fatty acids and coincides with the deterioration of the sperm quality, viability and the reproductive capability of the boars. However, supplementing the feed with long chain omega-3 fatty acids can redress this ratio and significantly extend the reproductive life of the boar.

Control

**Piglet Development:** 

Omega-3 fatty acids are transferred to the piglet during pregnancy and via the milk. A greater supply of these essential fatty acids will help to increase the brain size and activity of the piglets, leading to reduced losses in the farrowing house which can be caused by crushing by the sow. Immune systems are enhanced and there is a reduction in growth suppression during a disease challenge. The combined effect of omega-3 fatty acids on boars, sows and piglets can result in an average increase of 0.5 extra piglet weaned per sow/litter. This will have a huge impact on the profitability of a pig breeding operation.

Treated



### AGROMEGA for **Poultry**

In nature, a chicken's diet ranges from seeds and roots to insects and animals, which provide all the nutrients necessary for survival, growth and reproduction. This ideal diet is not reflected in modern poultry production units where economic and physical factors determine a very narrow range of ingredients used in the diet. Typically, energy is provided by starch from cereals, with vegetable oil being added to achieve necessary energy target. Little emphasis is given to the fatty acid profile required to meet the animal's needs.

The essential omega-3 fatty acids have very important functions in poultry in reducing the growth depressing effects of various diseases, improving broiler performance, aiding fertility in male breeders and optimising leg bone and keel bone strength.



### Fatty Acids: Ratio Omega-6 to Omega-3:

	LA	AA	LNA*	EPA	DHA	Omega-6 to Omega-3
Corn Oil	60	0.3	1	-	-	60:1
Palm Oil	9.1	-	0.2	-	-	45:1
Soya Oil	54	0.3	7	-	-	8:1
Beef Fat	3	0.2	0.6	-	-	5:1
Linseed Oil*	32	-	30	-	-	1:1
Salmon Oil	4	2	2	6	6	3:10

\*Linolenic acid poorly converted to EPA/DHA

### **Reduces Inflammation**

High omega-6's can cause an excessive inflammatory response to infectious challenges. AGROMEGA will help to redress the imbalance between omega-3 and omega-6 fatty acids.

### **Improved Fertility**

The addition of AGROMEGA increases hatchability, sperm number and reduces age related sperm decline.

### **Improves Antibody Stimulation**

Replacing omega-6 vegetable oil with omega-3 AGROMEGA improves antibody production.

### **Improved Leg Strength**

AGROMEGA reduces Prostaglandin E2 synthesis and increases leg bone strength and thickness.

### **Omega 3 Enrichment**

AGROMEGA in the diet will enrich the omega-3 content of the egg or meat. In a recent University trial conducted, a 4% inclusion rate of AGROMEGA in the layers diet gave eggs a 255% increase in omega-3 content and more importantly the DHA content increased from 15mg to 100mg per egg.



## Recommended Inclusion Rates:

As Agromega is on a high absorbent carrier, it comes in an easy to use powder form.

### Min Feed Rate:

1% Inclusion Rate

### Packaging:

20kgs



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