

Gut instinct

Feed company takes control of fish health support

ALLTECH Coppens is the Dutch company at the heart of Europe's fish feed industry, now seeing unparalleled growth while minimising the impact on the environment.

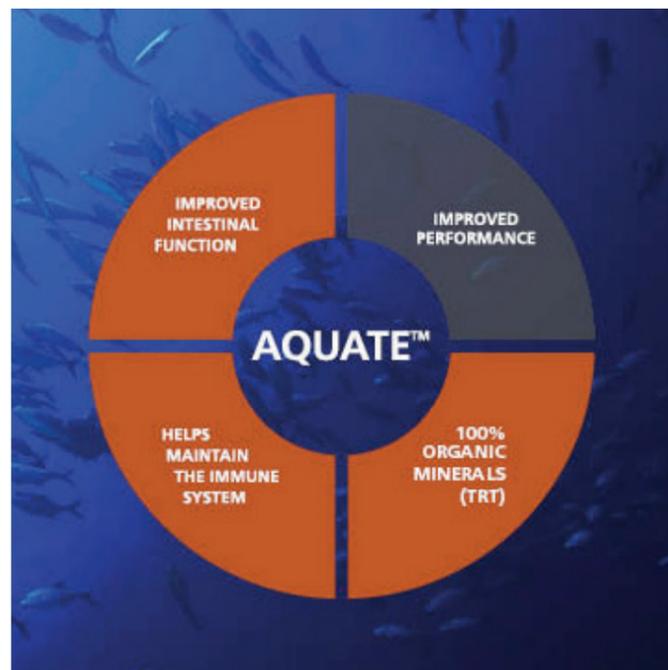
With a factory just over the German border, the company has its headquarters in Helmond and a research facility (ACAC) in Leende, both on the outskirts of Eindhoven.

It is helping fish farms optimise the performance of fish growth even when up against challenging conditions such as low water supply or water temperatures rising to unfavourable levels.

Alltech Coppens uses an Aquate premix which, among other beneficial components, contains Bioplex.

Aquate is an innovative premix which optimises growth and the digestive function, supports immune response, and contributes to external barrier and mucous barrier protection.

Bioplex are organically bound trace elements of zinc, copper, manganese and iron, and can improve the health, growth and performance of the fish.



Right: Illustrations of effect on the gut, **left** is control, without Bio-Mos (Aquate) – **right** is with Bio-Mos (Aquate) **Left:** The Aquate technology helps to achieve the true potential of the fish and enhance farmer profitability.

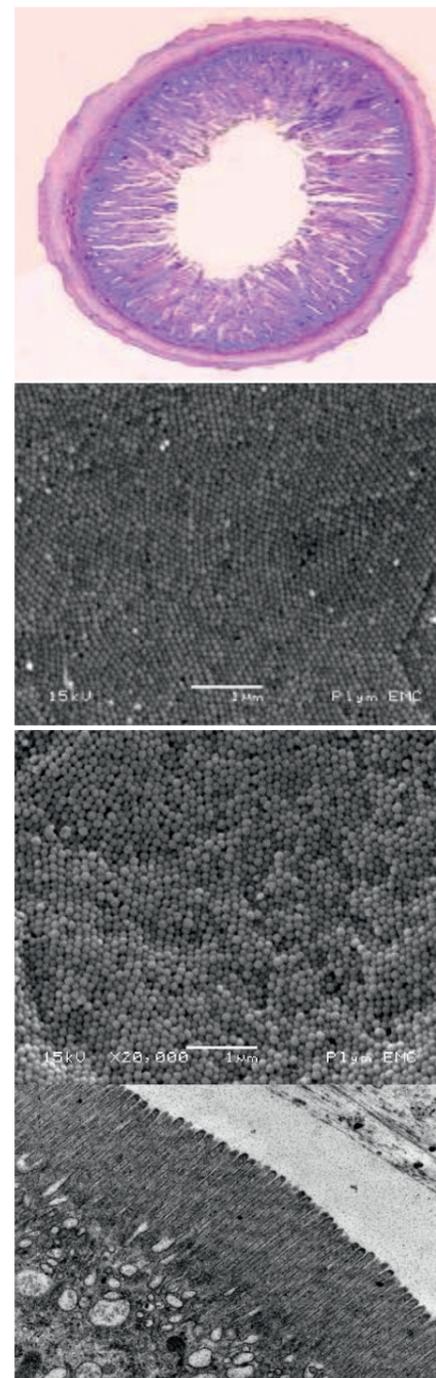


with a much higher bioavailability in comparison to conventional inorganic trace elements and without the pro-oxidative effect of copper and iron.

Recently, Alltech Coppens moved to a more efficient dosage of Bioplex. This lower dose is possible due to the higher availability of the organic minerals. By fine tuning this dose, the requirements of the fish are sufficiently met while reducing the environmental impact.

This leads to a reduction of the pollution from iron, copper and iodine in the fish pens. Iodine is the only inorganic mineral used by Alltech Coppens.

The benefit of organically bound trace elements such as iron and copper is that they do not have a pro-oxidative effect. This helps to protect the vitamins and astaxanthin in the



feed and achieve a higher and more stable flesh pigmentation in practice.

The fish also gains reserves of Bioplex which they can use when needed.

Bram Meersman, aquatic veterinarian at Alltech Coppens, explains: 'As all our feeds contain this unique premix Aquate with organic minerals, the fish is more robust right from the start and this results in an increased immunity.'

'Due to the higher availability, more organic minerals can be stored in the tissue than with inorganic minerals. The fish can draw from this storage when required, leading to and supporting a high degree of robustness.'

Improved intestinal function comes with the use of Bio-Mos, which derives from the outer cell wall of yeast.

Bio-Mos increases microvilli density and

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microvilli length in the gut, which means that the digestive function is optimised.

Bio-Mos also results in a thicker mucus layer, which effectively acts as an exterior barrier protection. The gut contains a large proportion of an animal's immune system and it is where nutrients are absorbed as well as where the gut microflora live. Gut health is essential in keeping fish healthy.

Meersman concluded: 'The intestinal microbes are known to play a central role in how fish metabolise and use energy from feed.'

'Maintaining a good gut health is part of the functionalities of the entire Aquate premix and focuses on maximising growth and feed efficiency, while supporting animal performance by promoting good gut structure and a healthy gut microflora as well as building natural defences.'

But the best testimonials come from customers. Stormfish, a Bulgarian fish farm, said: 'We had been having skin problems on our sturgeons for a long time. After we started using Alltech Coppens’ fish feed containing the premix Aquate, these skin problems faded drastically.' **IF**

