NUTRA Sprint

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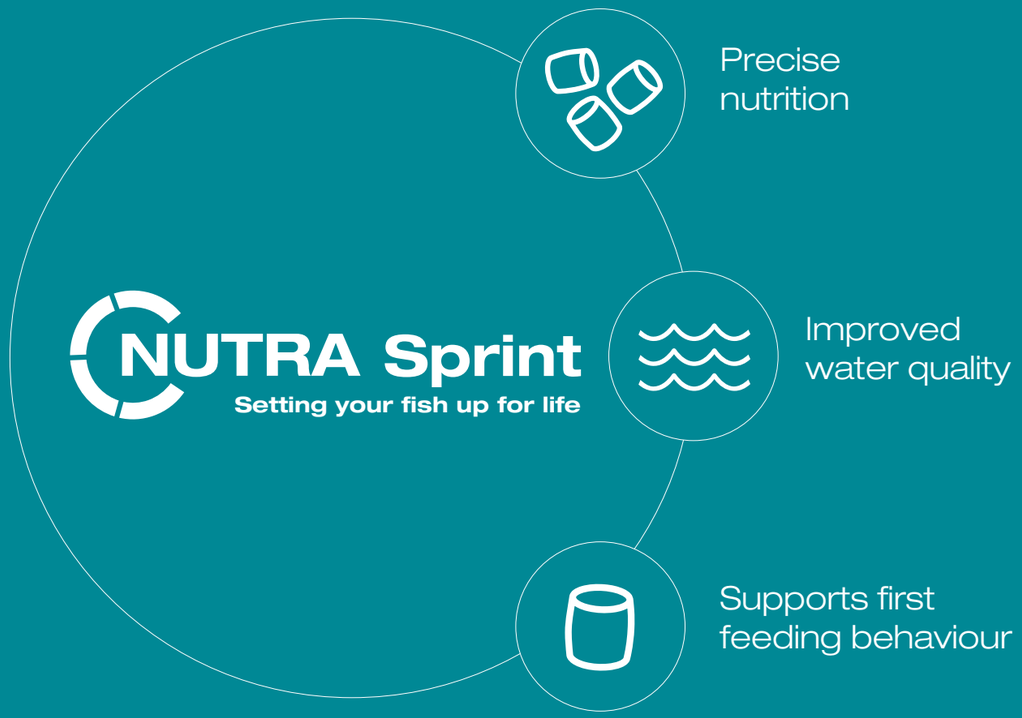
a Nutreco company



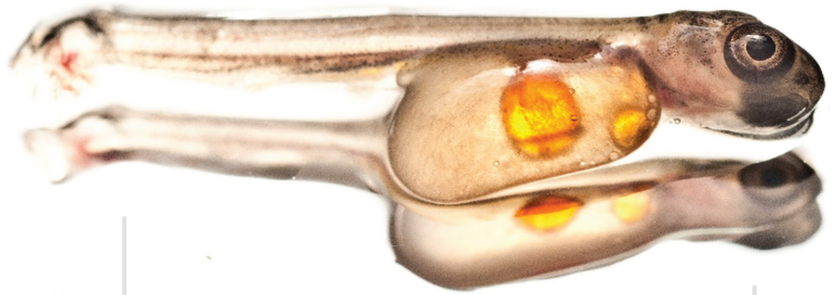
Nutritionally complete

Tailored nutrition for first feeders' needs

The digestive system of first feeding larvae is delicate and not fully developed on hatch.

Nutra Sprint is tailored to the specific nutritional profile required after the fish has absorbed all nutrients available from the yolk sac post-hatching.

Nutra Sprint supports complete organ development - not only building muscle, but building the foundation for all organs.



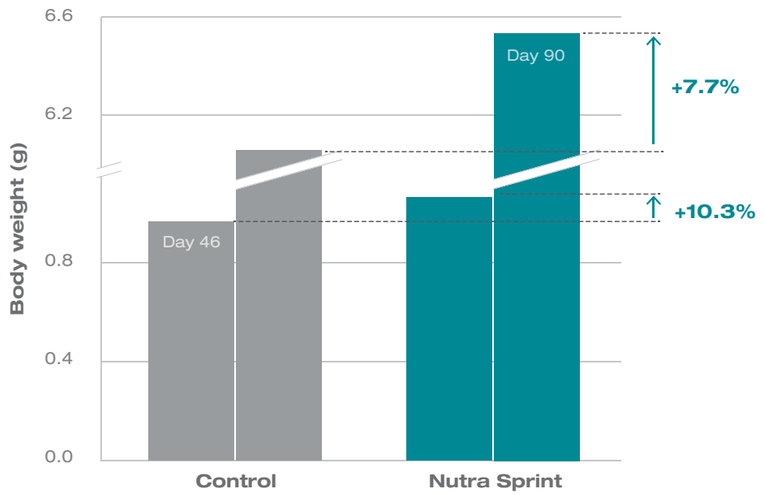
A maturing digestive system

Nutrient availability after yolk sac consumption

Supports organ development and building muscle

Improved growth

Improving the growth of your first feeders



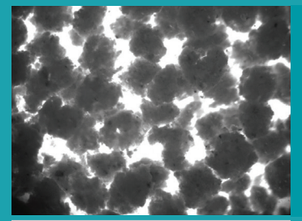
Nutra Sprint provides excellent growth for the early stages of trout production. It is nutritionally complete and has good water stability, ensuring the fish are robust and ready to thrive in the next stage of their development.

Optimal water quality

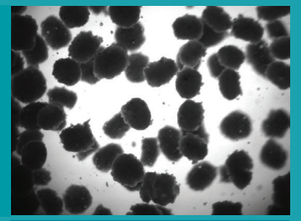
Applying advanced techniques for feed production

The specific size of the particles when produced is crucial for water stability. Stable, uniformed, and cohesive feed ensures better water quality, and at the same time, reduces moisture attraction ensuring cleaner automatic feeding systems and better usability.

Pellets immersed in water after 60 minutes

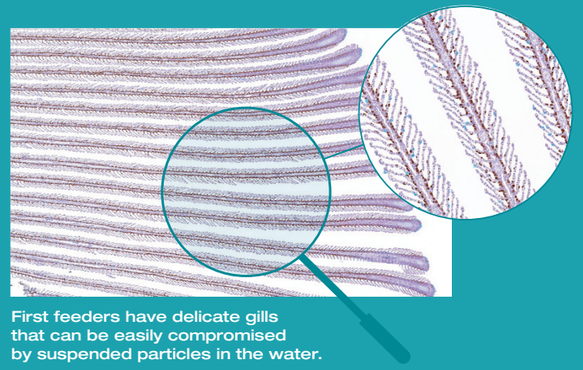


Production process A



Production process B

Taking care of your fish and system



First feeders have delicate gills that can be easily compromised by suspended particles in the water.

Good water quality is essential for early growth, and this is directly related to the physical quality of the feed. This is just as important as nutritional quality in the early stages. If one is not adequate, the other cannot compensate.

The consistent quality of **Nutra Sprint** ensures good water quality, reducing the load of particles suspended in the water column, creating less impact in your system and fish health.

Optimal health with robust fry

First feeding is a crucial step to create robust fry

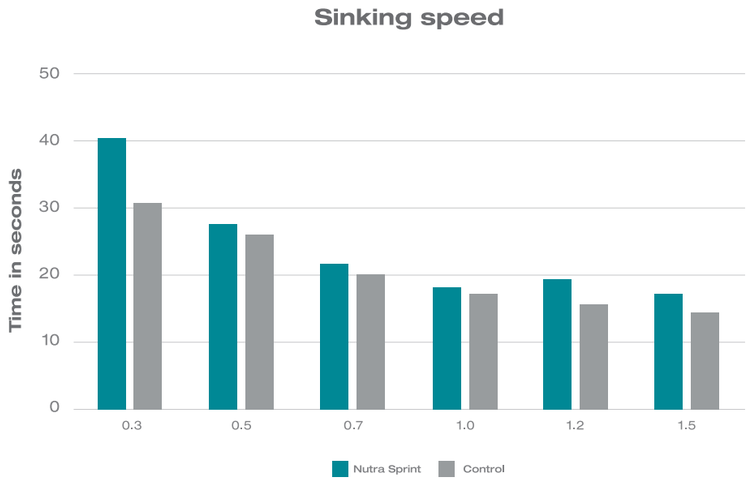
Nutra Sprint contains a broad range of functional ingredients that supports the immune system in first stages by adding building blocks for new cells and increases level of antioxidants to ensure a robust fry.

Nutra Sprint is readily available and attractive for the fish with palatability enhancers. As first feeders react and move slowly through the water column, sinking speed of the pellets is crucial at this early stages.

Feeding **Nutra Sprint** results in early progressive feeding behaviour, related to the physical and nutritional qualities of the feed.

Comparison of sinking speed after 30 seconds

Nutra Sprint | **Control**



+4 sec slower

First feeders have shown a better first feeding behaviour when fed with Nutra Sprint.

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Accelerating growth through precise nutrition

Trout-specific formulation

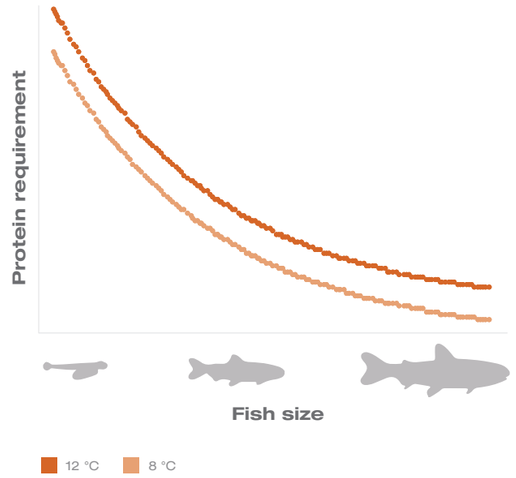
Optimal protein and energy balance

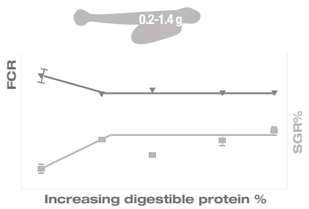
Supplements for a better yield

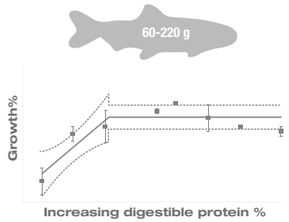
Precise nutrition for each life stage

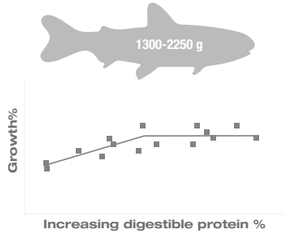
Each life stage has specific nutritional requirements. At Skretting, our R&D knowledge enables us to provide precise nutrition for the various production stages.

Trout have a larger protein requirement when the fish are small, and a lower requirement when the fish are larger. Through extensive trials and research, we define the optimal protein level in the different feeds. We have shown that a lack of protein decreases performance, but excessive protein does not improve growth, is costly and increases the FCR.

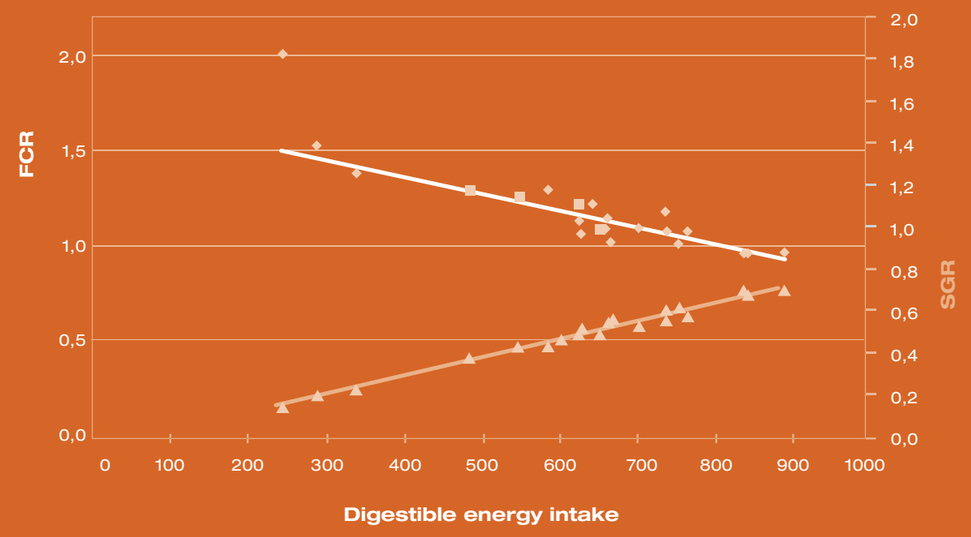






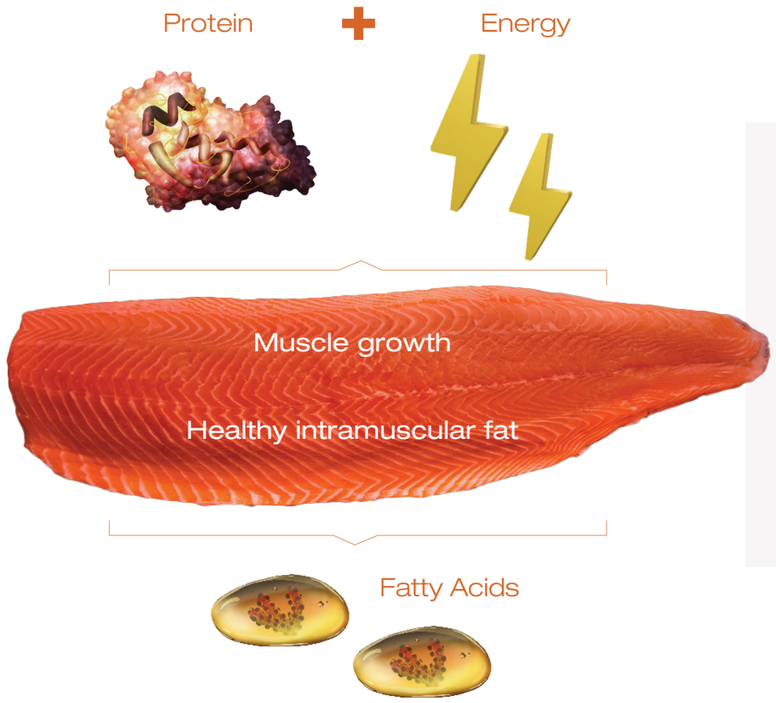


Digestible energy intake is the main driver of growth



When the protein requirement is met, an increase in the intake of digestible energy has clear positive impact on both the growth and FCR.

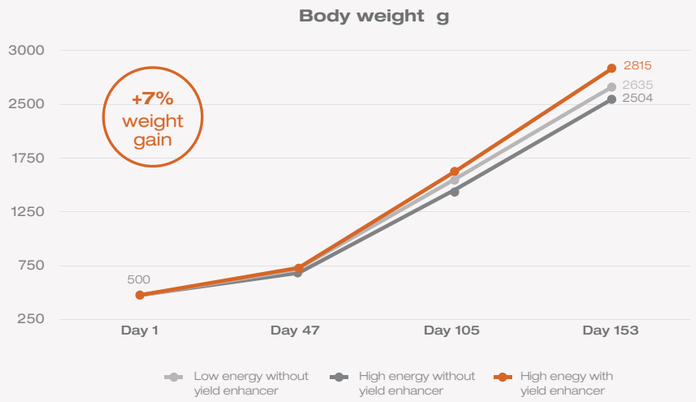
Balance of protein and fat



For maximum muscle growth, the trout needs both protein and fat.

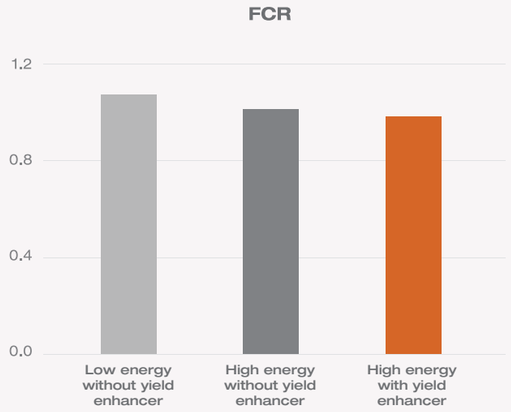
Protein and energy builds the muscle, while part of the growth also comes from the build up of intramuscular fat, which provide us with the healthy fatty acids that salmonids are known for.

Maximising performance with high energy and yield enhancer

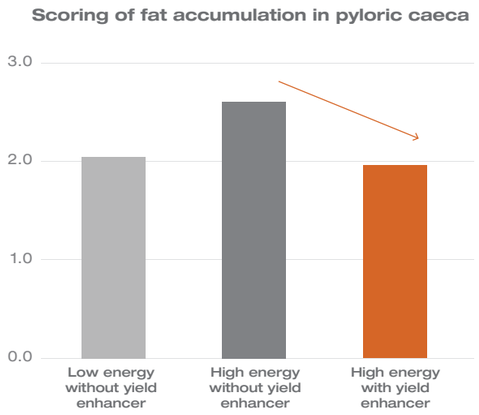


To help trout better utilise the fat in the feed, micro nutrients are added to improve the mobilisation of fat in the body. The result is less fat accumulation in the gut, and increased feed intake, growth and harvest yield.

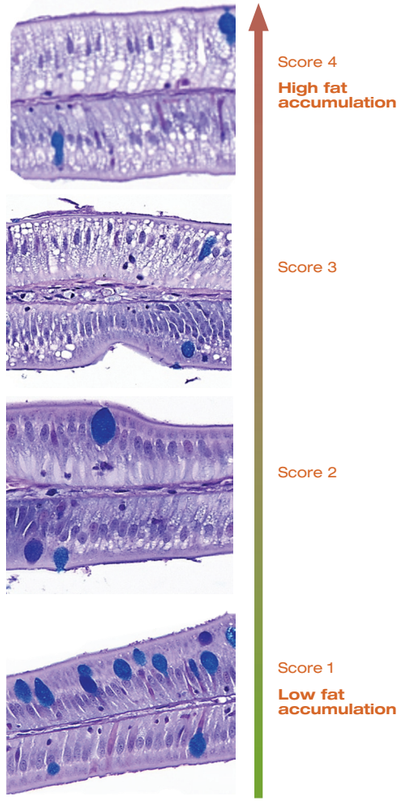
Comparison of high energy diets with and without yield enhancer and low energy diet



Yield enhancer improves mobilisation of fat



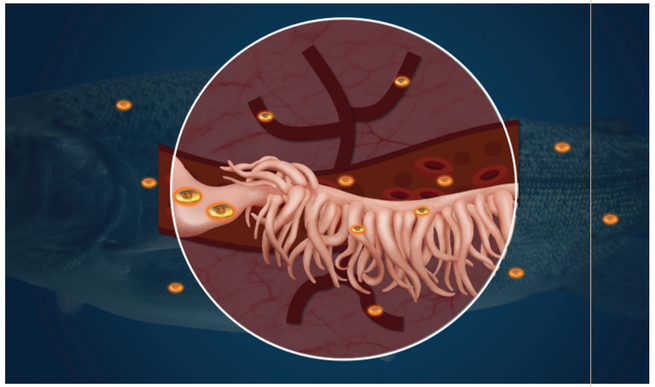
With yield enhancer in combination with high energy, growth is improved and the fat accumulation in the gut is reduced.

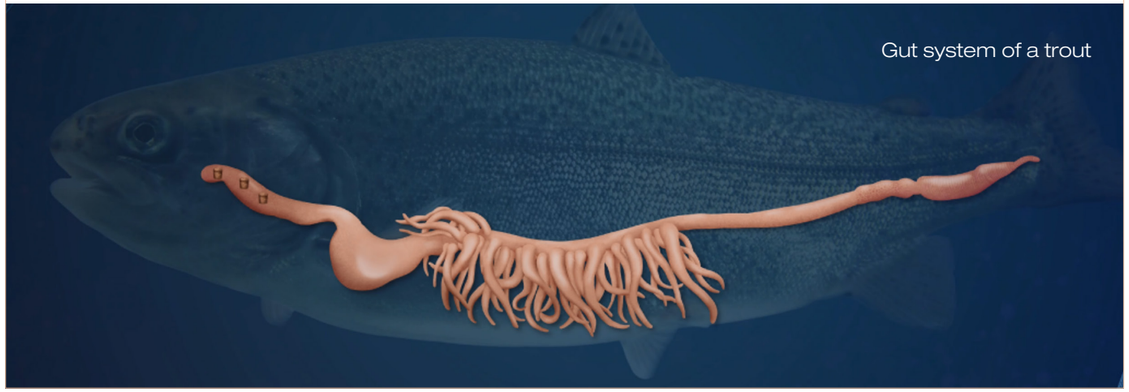


Histology of pyloric caeca

Efficient use of energy

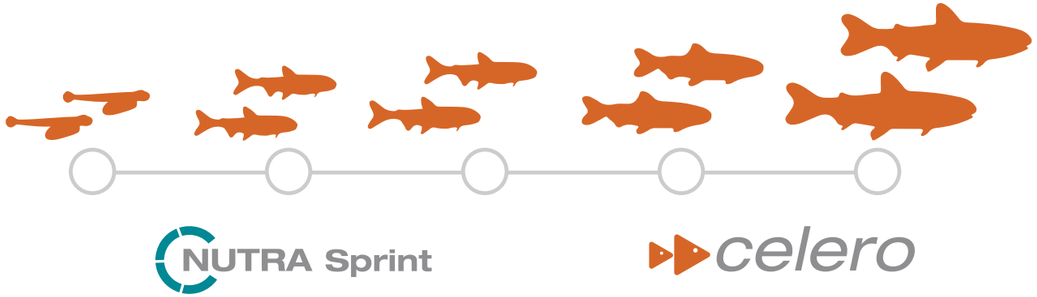
The pellets are broken down to nutrients in the stomach. Most of the fat will be absorbed in the pyloric caeca. To ensure the fat is utilised efficiently by the fish, it needs to be transported into the body through the blood stream. It is critical that fat does not accumulated in the gut and liver to ensure optimal growth and a high harvest yield.





Gut system of a trout

Trout feed portfolio



Skretting is the global leader in providing innovative and sustainable nutritional solutions and services for the aquaculture industry. Skretting has production facilities in 19 countries on five continents, and manufactures and delivers high quality feeds from hatching to harvest for more than 60 species. The total annual production volume of feed is more than 2 million tonnes. The head office is located in Stavanger, Norway. Skretting is the aquaculture division of Nutreco, a world leader in animal nutrition. Our purpose is #Feeding the Future.

www.skretting.com

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