

# PRIME & EXPRESS



Faster to harvest

Can a feed shorten the time to harvest  
without compromising the quality?

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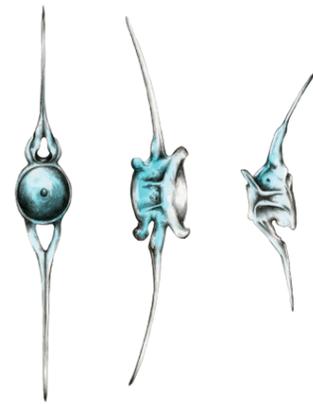


*4 weeks less  
or 700 g more*

**Yes!**

Prime & Express are the next generation of feeds for post-transfer salmon. Skretting's new grower diets enable a shorter production time in the sea, without compromising fish health or final quality.

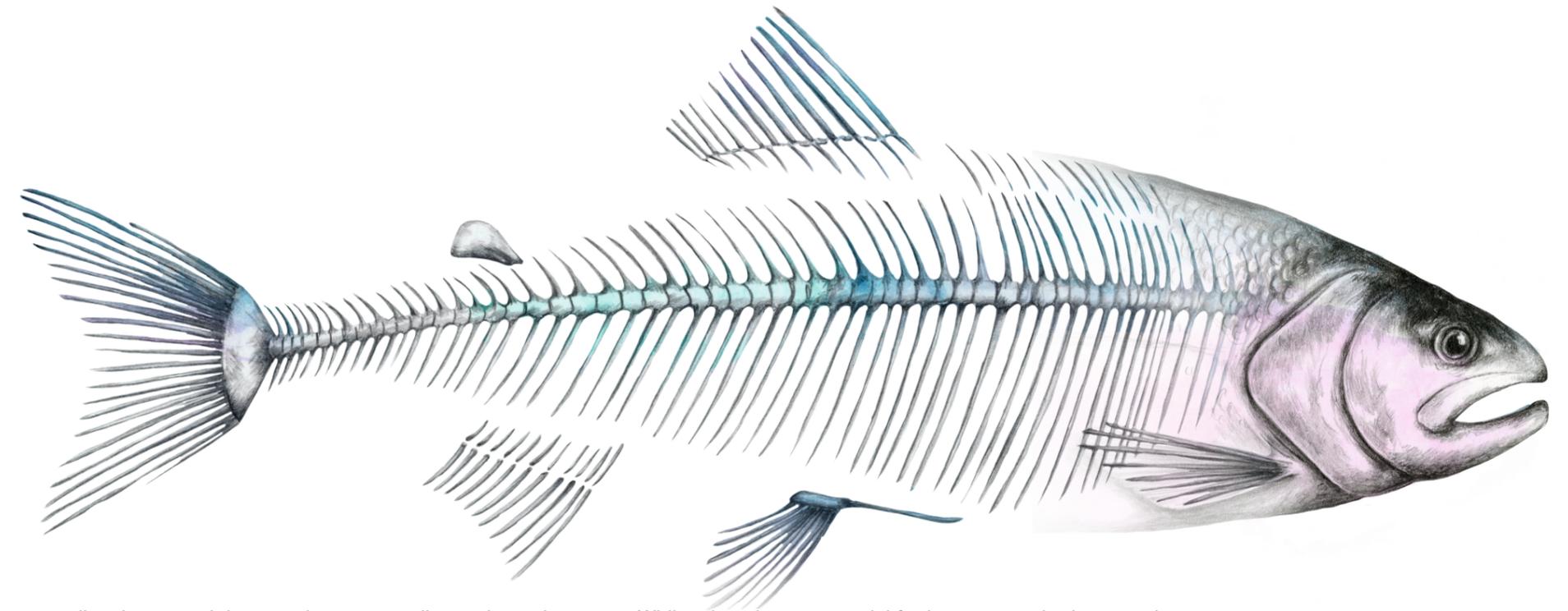
Prime prepares, or primes, the fish, building a solid foundation to support fast, high quality growth. Express builds on the framework created by Prime, maximising the speed of growth by enabling the fish to fully utilise the potential in the feed.



## Building the frame

Bones are live tissue, and the most important cells are those that are responsible for mineralisation - the process of deposition of minerals into the bones. This is what gives the bones their strength.

Minerals are essential, but cannot be synthesised by the fish. A high proportion is supplied from the feed intake.



While minerals are essential for bone strength, they are also important for other metabolic processes. During the smoltification process, the digestibility of minerals can be reduced.

Prime has been specifically formulated to meet the requirements of rapidly growing post transfer fish, providing all the essential components to ensure maximum bone strength.



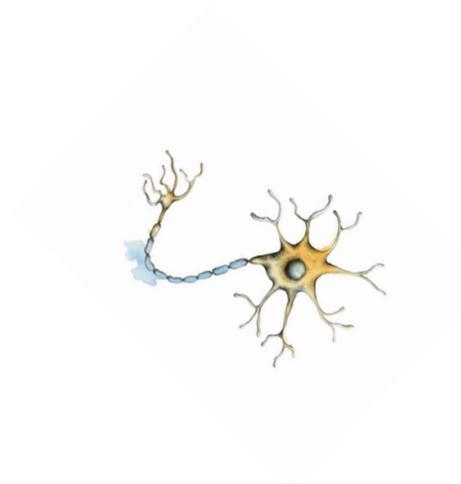
No shortcuts

*Maximising growth and yield*



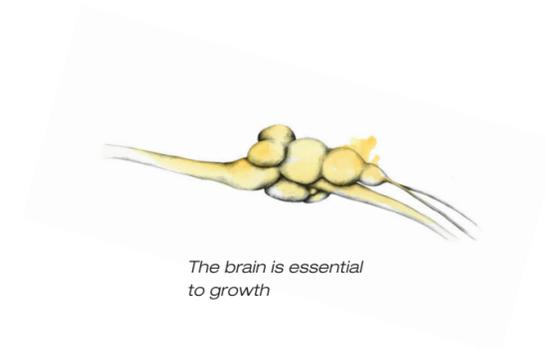
An important aspect in gaining growth is the recruitment of muscle fibres that needs to be completed in the earlier phase in seawater. The more muscle fibres that can be recruited at this stage, the higher the potential to build valuable flesh at later stages. Prime builds a solid foundation for Express growth to harvest.

Commercially, growth is the conversion of nutrients from feed into valuable flesh tissue. The salmon fillet that goes to market is mainly made up of muscle and fat tissue. To achieve the full potential for growth, it is essential that the physiological needs of the fish are supported throughout the life cycle.



## Make your fish hungry, faster

The brain's primary function is to translate stimuli into signals. There are a number of stimuli that influence feeding, including taste and hunger. Taste buds occur on the tongue, but also throughout the gut. They identify taste and trigger hormonal signals for digestion and growth.



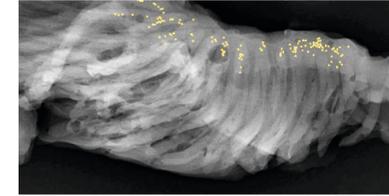
*The brain is essential to growth*



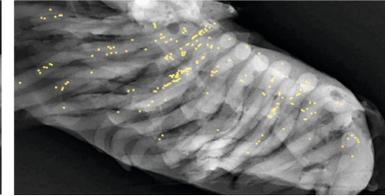
When the stomach is empty, the stomach tissue relaxes and this triggers one of the main signals for hunger to the brain. Faster emptying time of the feed from the stomach equals more frequent signalling to the brain to indicate that the fish is hungry. The efficient utilisation of Prime & Express feeds means that fish get hungry, faster.

## Improving intestinal functionality

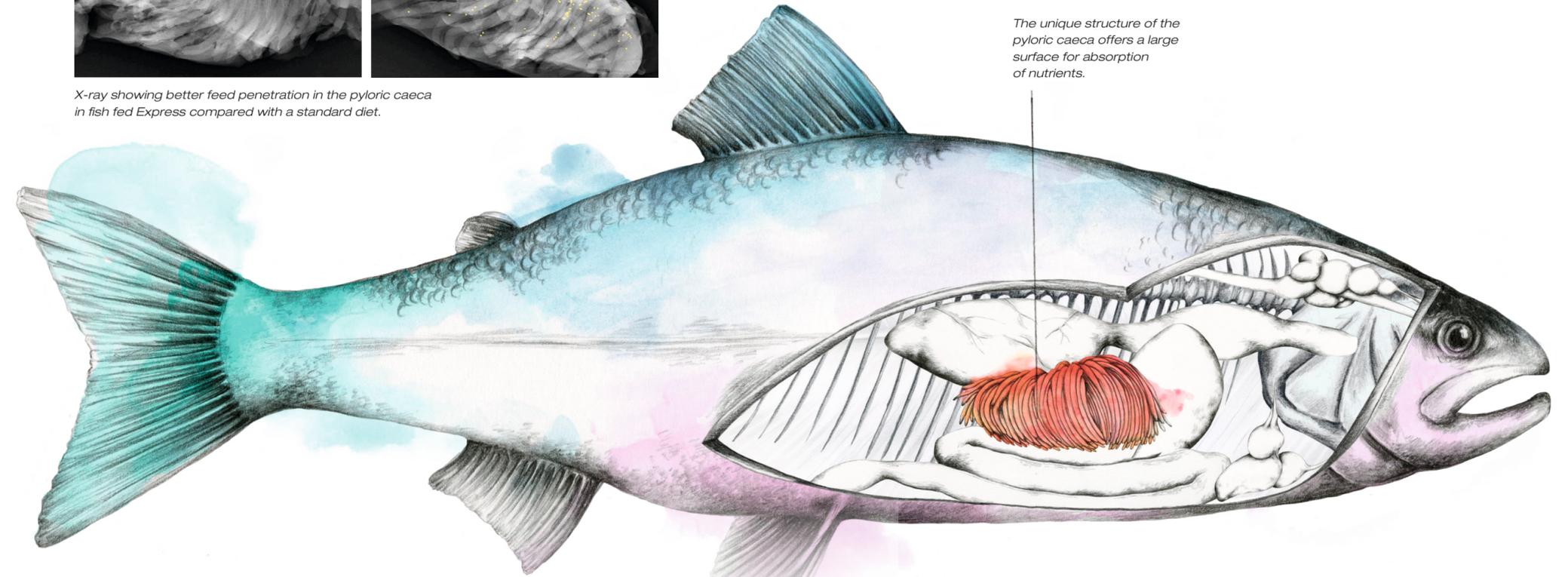
Standard diet



Express



X-ray showing better feed penetration in the pyloric caeca in fish fed Express compared with a standard diet.



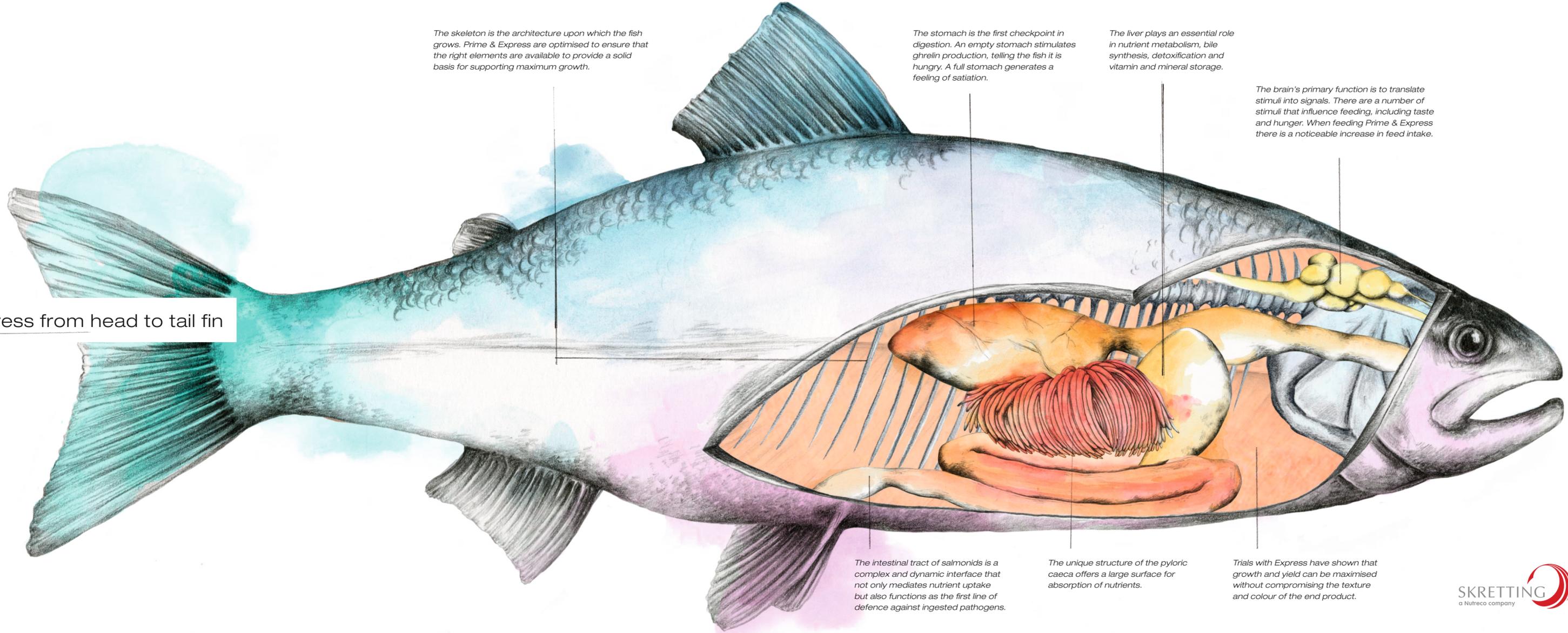
The unique structure of the pyloric caeca offers a large surface for absorption of nutrients.

Prime & Express support better transport of feed nutrients throughout the pyloric caeca. The structure offers a large surface area, so the fish can be more efficient at absorbing nutrients from the feed. Nutrients need to be mobilised through intestinal cells into the blood to allow further nutrients to be absorbed.

Hypervacuolisation is associated with fat accumulation in the intestinal cells. When feeding Prime & Express, vacuolised area has been shown to be significantly reduced, indicating that fat is much more readily absorbed without being held within the intestinal cells.



Prime & Express from head to tail fin



The skeleton is the architecture upon which the fish grows. Prime & Express are optimised to ensure that the right elements are available to provide a solid basis for supporting maximum growth.

The stomach is the first checkpoint in digestion. An empty stomach stimulates ghrelin production, telling the fish it is hungry. A full stomach generates a feeling of satiation.

The liver plays an essential role in nutrient metabolism, bile synthesis, detoxification and vitamin and mineral storage.

The brain's primary function is to translate stimuli into signals. There are a number of stimuli that influence feeding, including taste and hunger. When feeding Prime & Express there is a noticeable increase in feed intake.

The intestinal tract of salmonids is a complex and dynamic interface that not only mediates nutrient uptake but also functions as the first line of defence against ingested pathogens.

The unique structure of the pyloric caeca offers a large surface for absorption of nutrients.

Trials with Express have shown that growth and yield can be maximised without compromising the texture and colour of the end product.



Our mission: Feeding the Future

feeding  
the future



The 12th sustainable development goal of the United Nations is 'Ensure sustainable consumption and production patterns', and aims at doing more and better with less.



Linking to this goal, Prime & Express play a significant role in Skretting's sustainability programme, Nuterra. Sustainable consumption and production involve using resources more efficiently.

**PRIME** & EXPRESS

Prime & Express enable farmers to reduce costs by allowing them to produce more from less. By reducing the time in the sea, Prime & Express help farmers boost productivity and support animal health.

# PRIME & EXPRESS

[skretting.com](http://skretting.com)

