

## Nanofibre magic turns fish skins into wrinkle busting skin care

Sanford partners with kiwi nanotech experts to help develop a wrinklebusting skincare product made from Hoki skins.



Above: nanofiber fabric made from New Zealand hoki skins. When used in facemasks, this collagen based material can reduce wrinkles by up to 31.5%.

New Zealand's biggest and oldest seafood company is moving into the future of skincare and medicine by becoming supporting partner to West Auckland nanofibre producer Revolution Fibres, which is launching a potentially game-changing nanotech face mask.

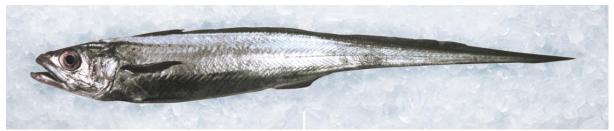
The actiVLayr face masks use collagen extracted from fish skins as a base ingredient which is then combined with elements such as fruit extracts and hyaluronic acid to make a 100 percent natural and sustainably sourced product.

They have achieved stunning results in third party tests which show that the nanofiber masks can reduce wrinkles by up to 31.5%.\*

Revolution Fibres CEO lain Hosie says it is no exaggeration to say the masks could be revolutionary.

"The way actiVLayr is produced, and the unique application method of placing it onto wet skin like a mask, means ingredients are absorbed quickly and efficiently into the skin to maximise the repair and protection of the skin."

Sanford is delighted to support the work that Revolution Fibres is doing by supplying hoki fish skins. Hoki is a sustainably caught fish and its skin has some unique properties.



Above: New Zealand hoki is a certified sustainable fishery. The fish has a unique type of collagen in its skin which is excellent for medical and cosmetic applications.

Sanford's General Manager of Innovation, Andrew Stanley, says these properties make it ideal for the actiVLayr technology.

"Hoki skins are rich in collagen, which is an essential part of our bodies. But their marine collagen is unique - it has a very low melt point, so when placed on the skin, it can dissolve completely and be absorbed in a way that collagen from other animals cannot."

Sanford's Chief Customer Officer, Andre Gargiulo, says working with the team at Revolution Fibres is a natural fit, because both company's think about innovation and sustainability in the same way.

"We hope actiVLayr gets the global attention it deserves, and we're delighted that our sustainably caught Hoki is part of this fantastic New Zealand product. It's exactly what we're all about at Sanford – making the most of the precious resources from the sea, working in a sustainable way and getting the most value out of the goodness we harvest from nature."

Sanford's Business Development Manager Adrian Grey says the focus on sustainability and value creation are so important for the seafood company.

"Previously we have been making use of these hoki skins, which is great, but they were being used only for fish meal or pet food products. Being able to supply and support a high tech company that is going to earn increased export revenue for New Zealand is just fantastic. And the product created is completely natural, harvested from a globally certified sustainable fishery."

Sanford provides the hoki skins and then turns these skins into pure collagen using the science and skills of the team at Plant and Food in Nelson. Revolution Fibres transforms the Sanford product into nanofibre using a technique called electrospinning of which Revolution Fibres are the New Zealand pioneers.

During the electrospinning process natural ingredients known as "bioactives" (such as kiwifruit and grapes) and hyaluronic acid (an ingredient to help the skin retain moisture) are bonded to the nanofibres to create sheets of **actiVLayr**. When it is exposed to wet skin the nanofibres dissolve rapidly and release the bioactives deep into the skin.

The product is being launched at the China Beauty Fair in Shanghai on May 22 and will go on sale in China this month followed by Hong Kong and New Zealand later in the year.

Revolution Fibres CEO lain Hosie says there is big demand for unique delivery systems of natural skin and beauty products such as **actiVLayr** in Asia, which was the key reason to launch the product in China. But his view of the future is even bigger.

"There are endless uses for actiVLayr and the one we're most proud of is in the medical area with the ability for drug compounds or medicines to be added to the actiVLayr formula. It will enable a controlled dose to be delivered to a patient with skin lesions, burns or acne."

Revolution Fibres is presenting at Techweek NZ as part of *The Fourth Revolution* event on May 25 in Christchurch which introduces high tech engineers who are building a better place.

\*Testing conducted by Easy Care using VISIA Complexion Analysis

Video assets are available for free download from Sanford's and Revolution Fibre's websites.

Here is the fully produced story.

Here is the b-roll (selected shots) of the process.

## For more information and to arrange an interview please contact:

Fiona MacMillan Sanford Corporate Comms 021 513 522 fmacmillan@sanford.co.nz

## Fascinating Facts (for your background):

- 1kg of hoki skin produces 400 square meters of nanofibre material
- Nanofibres are 1/500th the width of a human hair
- Revolution Fibres is the only nanofibre producer in the world to meet aerospace industry standards with its AS9100d quality assurance certification
- The marine collagen found in hoki skins is unique because of its relatively low melt point, meaning it can dissolve at a lower temperature which makes it perfect for human use
- Revolution Fibres is based in West Auckland and employs 12 people, of which 4
  have PhDs in science related to nanotechnology. There are also a number of
  employees with strong engineering backgrounds to complement the company's
  Research & Development expertise
- Sanford is New Zealand's oldest and biggest seafood company. It was founded by Albert Sanford in Auckland in 1904
- New Zealand's hoki fishery is certified as sustainable by the London-based Marine Stewardship Council, which audits fisheries all over the world