



THE SHEEP MILK REVOLUTION

When you experience the Spring Sheep Milk Co. you can see and feel how their culture and vision are integrated into everything they do, from how they care for the environment, their animals and teams all the way through to the end consumer of their high-value products.

We had an opportunity to sit with Scottie Chapman, CEO, and Nick Hammond, COO, to understand more about Spring Sheep and their commitment to success.

How would you define your milk production philosophy?

Consumer-led production. It's not just about understanding what product category the consumer wants but also focusing on what they expect in regard to the production of the products. Before starting out we did extensive research into the consumer market to really understand where the commercial opportunity would be, both by category and geographically. This is an ongoing process. You can't research once; consumer desires and needs change continuously and you continue to develop with these changes. We will continue to enter new markets, but only at a pace that enables sustainable production scaling.

This philosophy includes thinking of our stakeholders in New Zealand, our neighbours, our communities, and ensuring we understand what they expect from us too. We are committed to maintaining our social licence in order to provide operational certainty, which provides production certainty. We believe in doing what is right.

Our international consumer wants 'free from' nutrition: free from antibiotics, free from chemicals, free from genetic modification. Our domestic community expects that we have high animal welfare standards, a positive impact on the environment and that our teams have an enriching experience. We are wholly committed to delivering all expectations.

Sheep are sensitive creatures and stressed or 'unhappy' sheep don't produce well. Our flock of 5,000 elite dairy sheep living on our central North Island farms graze free-range on beautiful rich white and red clover pastures, and on our hybrid farms they also enjoy weather-proof shelters. Sheep aren't inclined to do anything they don't want to, so milking these sheep requires everything on the farm, in the milking parlour, and in the lamb-rearing process to be calm and in tune with the natural flow of the sheep.

What makes sheep milk truly unique?

Sheep milk is truly special; it is one of the most nutritious milks available and may be helpful for people with cow's milk allergies and stomach or digestion intolerances. We often refer to it as nature's super-milk!

One of the key bits of feedback we get back about sheep milk is that some people who struggle with digestion or have an upset stomach from drinking cow's milk are able to enjoy sheep's milk. Studies have found similar results.



CASE STUDY



SHEEP MILK NATURALLY CONTAINS UP TO 60% MORE PROTEIN AND CALCIUM WHEN COMPARED TO GOAT AND COW MILK.

We are doing a lot of work to understand all the processes that create this result but there appear to be lots of different, great things about sheep milk that help this to occur:

- Proteins in sheep's milk are very different to those in cow's milk, in both structure and composition;
- Sheep milk is lower in a protein called alpha-S1 Casein, which has been linked to allergic sensitisation in young children;
- Sheep's milk is naturally an A2-type milk, free from A1 beta-casein protein found in most cow's milk. A1 has been associated with digestive discomfort such as painful cramps and bloating;
- Sheep's milk is also higher in short to medium chain fatty acids, which means these fats may be easier to digest due to more efficient metabolism;
- Sheep's milk is also easier to absorb. The absorption of important nutrients like amino acids, the body's building blocks, is significantly higher in sheep's than cow's milk.

We have recently completed full clinical trials looking at the health benefits of sheep's milk on humans. Although we are not in a position to share details, the results were favourable and we are looking forward to releasing the details later in 2019.

Sheep's milk is also naturally richer in many vitamins and minerals. Fresh sheep's milk has higher levels of vitamins - A, B₁, B₂, B₆, B₁₂, C, E - and minerals - Calcium, Magnesium, Phosphorous, Zinc - than cow's and goat's milk. Sheep's milk naturally contains up to 60% more protein and calcium when compared to milk from goats and cows.

It's not just nutritionally unique. It also has a special structure. Sheep's milk needs to be carefully handled to maintain its quality so keeping milk really cold is important. We ensure milk is held at less than 2 degrees Celsius - well ahead of some industry standards for food safety and quality.

Even our transportation methods are careful, using modern methods with low agitation systems, designed to protect the quality and structure of the milk. Preserving the unique attributes of our sheep's milk is all part of our desire to respect the product from production to consumption.



What are your products and who are they targeting?

Our consumer focus is the first 1,000 days of a human's life and providing them with naturally digestible protein that is nutrient-dense. When we started, we worked through a series of products to test the market. While all the products, such as gelato products, were popular, they didn't all have a sustainable commercial model. The products we have available now are sheep milk powder, three different kinds of sheep milk calcium tablets, which also include added probiotics, DHA and Iron, or Vitamin D3, and the recently launched toddler formula. All products have no added preservatives and are a great source of calcium.

Geographically, our focus is South East Asia. We are currently in Malaysia, Vietnam, Taiwan and a few cities in China.

As your customer base grows, what are your plans for securing future supply?

We will continue to enter new markets, but only at a pace that enables sustainable scaling of production, which means scaling based on demand. It was an important part of our business model at the start to intimately understand supply methodologies so we could clearly establish what a socially, environmentally and economically viable farming model looks like.

Looking to the future, as we need more supply we are keen to bring farmers on as suppliers using a franchise-type model. Our suppliers will be those who have passion and absolute pride in animal farming and those who align closely with our values and philosophy. We won't compromise quality for supply and we want genuine business partnerships. We will work very closely with new suppliers, providing a farming 'blue-print' for guidance and support. Farmers will be brought in to understand everything about how we operate and our consumer insights so they understand why we require them to produce in a particular way.

It's extremely important that our suppliers' businesses are financially viable. We are currently working closely with some suppliers to support their conversion journey and provide long-term commercial contracts for supply. We see this as a great opportunity for those highly skilled producers to diversify and complement their existing businesses and diversify land use, giving them a viable commercial option to lower their environmental impact.

The data we've collected over the years provides an incredible level of insight for any new starters in the industry. We have collected data on environmental impact right the way through monitoring each milking ewe.

For each milking ewe, we know exactly how much milk she is producing as well as overall volumes so we can monitor trends over time. This information isn't just about monitoring supply but also allows us to carefully monitor the health of our very precious sheep.

What's next?

We have openly shared what we've learnt on our journey to improve the overall quality of the industry and we will continue to do this. New potential markets will be developed and partnerships with suppliers will continue to grow as we seek to ensure both our commercial viability and growth while maintaining strong values and ensuring environmentally sound decision-making.

We want Spring Sheep to support the future success of New Zealand's food and fibre industry and we believe we can extract financial value without compromising our environmental or social values, being good for people and the planet.



Scottie Chapman
Chief Exec. & Director
Spring Sheep



Nick Hammond
Chief Operating Officer
Spring Sheep