

Goat milk has excellent digestibility, because goat milk contains smaller a2—"protein globules" that can be broken down better by digestive enzymes than cows' milk a1 proteins. The a2 Goat milk formula is based exclusively on the a2 Beta—Casein protein.

The a2 Goat milk formula contains Omega-3 fatty acids DHA (from fish oil) and Omega-6 fatty acid ARA. Both are important for the normal development of a baby in the first few years. Added to this are the latest generation of the prebiotic HMO—human milk oligosaccharides which have been shown to promote the child's immune system and healthy intestinal flora.

#### Benefits a2 Goat formula

### Our a2 Goat milk baby formula is grass fed and GMO free

While both goat milk formula and other kinds contain lactose, goat's milk has less (about a half a percent difference). Cow's milk, loaded with lactose, is oftentimes the culprit when people have gas, bloating, or other digestive issues.

Goat milk formula contains selenium! This is a great mineral to help support the immune system and give the baby that extra boost they need. It makes sense that any mother would want to protect their child from sicknesses.

Milk and other formulas create curds by reacting with the baby's stomach acid. Some formulas create hard curds while others create soft curds. This influences how it passes through the baby's stomach. Goat milk formula creates a softer curd, which makes it easier for the baby to digest.

Goat's milk is smoother in many ways than cow's milk, and it does not cause inflammation. If your baby is suffering from bowel inflammation, goat's milk is the obvious choice. Between the nutritional benefits and the digestive ease, goat milk formula may be an excellent choice for your baby. It goes down easier, and there is nothing harmful that may inflame your baby's insides.

It is undeniable that there are problems with the agriculture industry when it comes to livestock. The conditions in which cows are kept are often unsatisfactory and harmful. It is important to remember that animals are just that: Animals, and not products just for human consumption.

a2 Goat Milk formula

Stage 1

a2 Goat Infant Formula is a gentle solution for formula fed babies from birth or when changing from breastfeeding. It is nutritionally formulated with optimal ingredients that support your baby's normal growth and development.

# Stage 2

a2 Follow-On Formula based on goat milk is gentle on little tummies. It is suitable for growing babies from 6-12 months of age and is appropriate when you are starting to introduce solid foods into your little one's diet.

## Stage 3

As part of your toddler's varied diet, a 2 Goat Toddler Milk Drink is a nutritionally formulated supplementary food for young children, made with the goodness of goat milk, added Omega-3 DHA and 16 vitamins and minerals to support your toddler's normal growth and development.



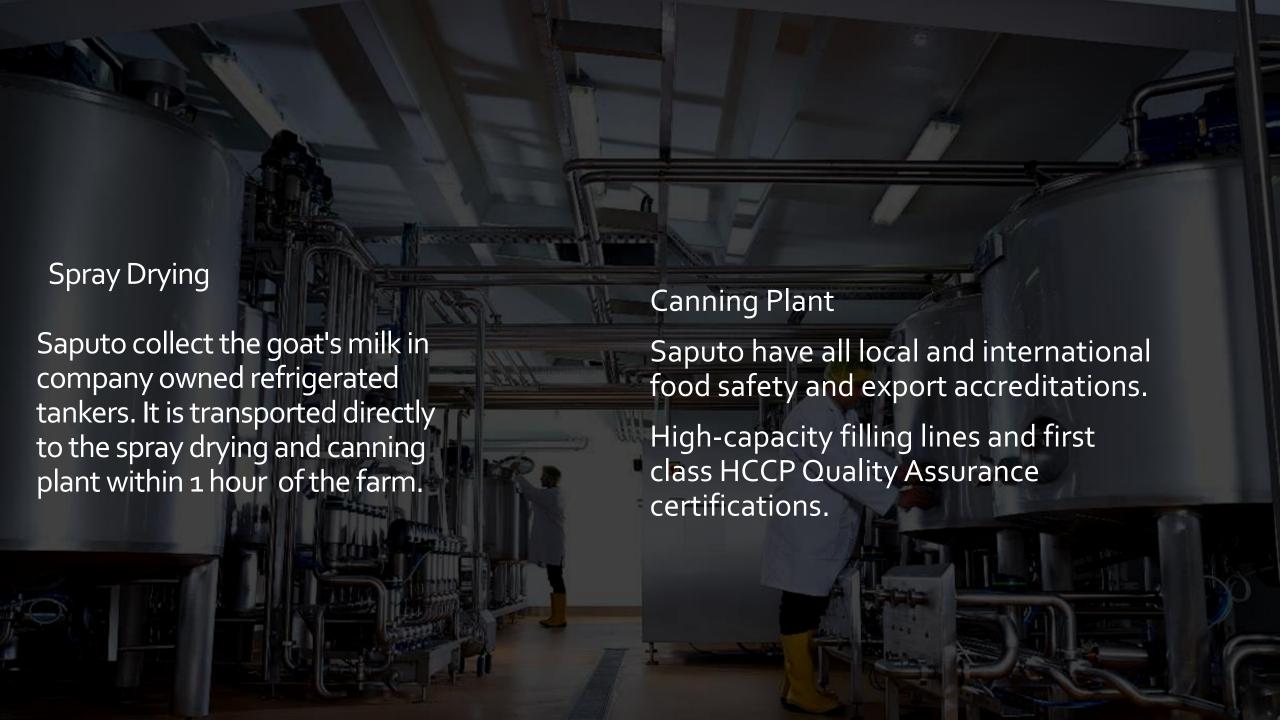






# The Process

- Quality Assurance is critical in the supply chain of infant formula.
- Importantly the goat milk is supplied from one farm only.
- This guarantees easy and precis traceability from farm gate to baby.
- a2 Goat Milk formula is the only brand produced in Australia or New Zealand that can boast such a claim.
- Our preferred supplier and partner Saputo dairy manages the entire process:
  - 1. Collecting the milk.
- 2. Spray drying the milk and other important ingredients in one process. This is called "wet mix".
- 3. The canning plant facility is on the same site.
- Zero risk of contamination!



## Nutrient Information for Children's Health

- Children between the ages of 1 and 5 years are still considered nutritionally vulnerable, although their growth rate is slower than in infancy and their nutritional needs in relation to their body size are proportionally reduced. Relative to their body weight, however, children's nutrient and energy requirement are still greater than those of adults.
- Compared with adults, young children are unable to exert as much control over what they eat. Too little
  or too much food, or an imbalance of nutrients or energy over a period, can alter the natural progress
  of physical growth. A child's rate of growth is a fundamental indicator of dietary adequacy and health,
  and parents and other carers must be aware of and responsive to the developmental and nutritional
  needs of children. Growth is the most important indicator of good nutrition.
- Childhood is a period of continuous education about eating and good nutrition, and appropriate use of food is important in establishing lifetime nutrition practices.

#### **Protein**

- Protein is an important nutrient needed by everyone on a daily basis. It is made up of essential and non-essential amino acids, which are the "building blocks" for healthy bodies. Essential amino acids are amino acids that the body needs but is unable to synthesize; therefore, they must come from the diet. Protein has a number of different roles in the body including the following:
- Repair body cells
- Build and repair muscles and bones
- Provide a source of energy
- Control many of the important processes in the body related to metabolism.

#### Nucleotides

 Found naturally in human breast milk, nucleotides are non-protein nitrogenous compounds that play a role in almost all biological processes; they are the building blocks for DNA and RNA. Nucleotides have been identified as conditionally essential nutrients during periods of rapid growth, like infancy, in order to achieve optimal function in rapidly growing tissues. Nucleotides have been shown to improve the maturation of the immune system and the gut and are vital for the growth and repair of tissues.

#### Lactoferrin

- One of the more abundant whey proteins found in human breast milk. Lactoferrin is also found in the milk of many other mammalian species and in other exocrine fluids like saliva and tears. Research has shown lactoferrin to have a range of biological functions including antibacterial, antiviral, antifungal, anti-inflammatory, antioxidant and immunomodulatory effects.
- One of lactoferrins key pathogen-fighting properties is its ability to sequester iron. Many pathogenic bacteria thrive on iron, and lactoferrin stops the bacteria's progress by making iron unavailable to them. It also functions as a natural antioxidant by binding to free ferric ions and inhibiting the formation of free radicals.
   Lactoferrin also has a demonstrated inhibitory effect on a number of viruses and is thought to bind directly to viral particles and inhibit their replication. It has been shown to have anti-inflammatory effects.

#### Taurine

Taurine is the most abundant free amino acid in human breast milk and research suggests that it may be essential during periods of development. Taurine plays a role in fat absorption and liver function, and may also play a role in nerve protection particularly in the eyes and ears. Taurine is also found in high concentrations in the developing brain.

#### Fats

Dietary fat is an important component of infant's diet for a number of reasons. It provides a concentrated source of energy, supporting the infant's high energy needs and small stomach capacity. Fat is also vital to the development of the nervous system, aids in the absorption of the fat soluble vitamins A, D, E and K and supplies the essential fatty acids linoleic (omega 6) and α-linolenic acid (omega 3). The essential fatty acids should make up around 15% of an infant's total fat intake. Breast milk is naturally rich in essential fatty acids. The essential fatty acids are also precursors for the long-chain polyunsaturated fatty acids, arachidonic acid (ARA) and docosahexaenoic acid (DHA).

#### **ARA & DHA**

- DHA and ARA have very important roles for the growing infant including optimal development of the nervous system, especially the brain and eyes. DHA and ARA are rapidly accumulated in the nervous tissue of brain and retina, which takes place primarily from the last trimester of pregnancy to up to 2 years of age. While the omega 6 and omega 3 fatty acids can be converted to DHA and ARA by humans, evidence exists that suggests that this process is insufficient to achieve optimal accumulation of DHA and ARA in infants and a dietary source is required to meet demand.
- Breastfeeding has long been associated with cognitive and visual advantages for the infant. Breast milk is a natural source
  of DHA and ARA. Trials conducted on infants show that diets containing DHA and ARA may have beneficial effects on their
  visual and cognitive development. The benefits of DHA and ARA appear greatest when present in combination.

## Carbohydrates

Carbohydrates provide infants with an additional source of energy to support their growing bodies' needs
and spare protein as a source of energy allowing the protein to be used as a building block for growth. In
their simplest form a carbohydrates are called sugars; these sugars combine to form more complex
molecules which are essentially chains of sugar. Oligosaccharides are chains of 3 to approximately 10 sugars.

#### FOS & GOS

• Human milk oligosaccharides play an important role in the development of an infant's immune system and may explain the reduced incidence of allergic disorders in breastfed children. Oligosaccharides resist digestion in the digestive tract and are instead fermented in the large intestine stimulating the production of microflora (the good bacteria), in other words they have prebiotic effect on the intestine. The microflora serves as a defense mechanism against invading pathogens. Oligosaccharide mixtures of short-chain galactic-oligosaccharides (GOS) and long-chain fructo-oligosaccharides (FOS) have been developed to resemble the human milk oligosaccharides. Supplementation with FOS & GOS in infants has been shown to effectively stimulate the turnover of the appropriate bacteria in the large intestine which in turn stimulates and enhances the mucosal immune system.

#### Vitamins & Minerals

 There are 13 vitamins and 16 or more minerals known to be essential to the human body, each with its own biological function. Achieving optimal vitamin and mineral status is essential for optimal growth and development and the prevention of deficiency disorders. Breast milk contains all the essential vitamins and minerals babies need to grow and develop; if the decision not to breastfeed has been made infant formula provides a nutritionally complete substitute.

#### Carotenoids

Carotenoids are a group of micronutrients with a range of biological functions, including functioning as an antioxidant. Humans are unable to synthesize carotenoids and therefore must obtain them from food. Fruits and vegetables are the primary source of carotenoids for adults; infants obtain them from breast milk and fortified formula. Some key carotenoids relating to infant health are β-carotene and Lutein.

## β-carotene

- A carotenoid with strong antioxidant properties, one of the functions of  $\beta$ -carotene includes protecting cells from oxidative damage which is a feature of many human diseases. Lower rates of cancer and heart disease are seen in populations consuming diets rich in  $\beta$ -carotene. In essence,  $\beta$ -carotene enhances the immune system, and may provide long-term protection from chronic disease.
- Another feature of β-carotene is its provitamin A activity, meaning it can be converted to Vitamin A after ingestion. Vitamin A plays an important role in normal vision, growth and physical development, and immune function.

#### Lutein

Lutein is a carotenoid that plays an important role in vision and eye health. Lutein is one of the only carotenoids normally found within the tissues of the eye. Lutein protects the retina of the eye via two main pathways. Firstly, it functions as an antioxidant protecting the retina from oxidative damage, a feature particular important for infants as they are unable to down-regulate blood flow in the vessels of the eye which leads to an excess deliver of oxygen to the retina and increases the risk of oxidative damage. Secondly, lutein functions as a light filter protecting the retina from light damage and improving vision.