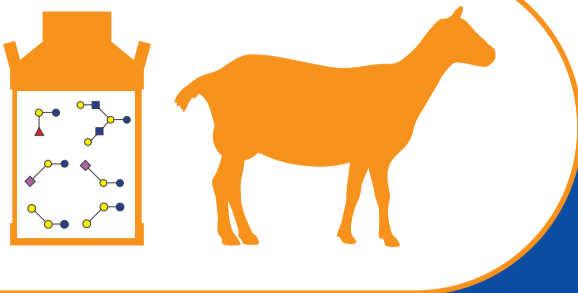


Goat milk Oligosaccharides (gMOS)

Goat milk naturally contains high levels of oligosaccharides. The amount and diversity of oligosaccharides in goat milk is higher than in cow's milk. Goat milk contains several oligosaccharides that are identical to the oligosaccharides found in human milk.



Did you know?
The oligosaccharide profile found in goat milk is more similar to the profile of human milk than cow's milk.¹



Amount

Reported amount of gMOS:²
Colostrum: 200 – 650 mg/L

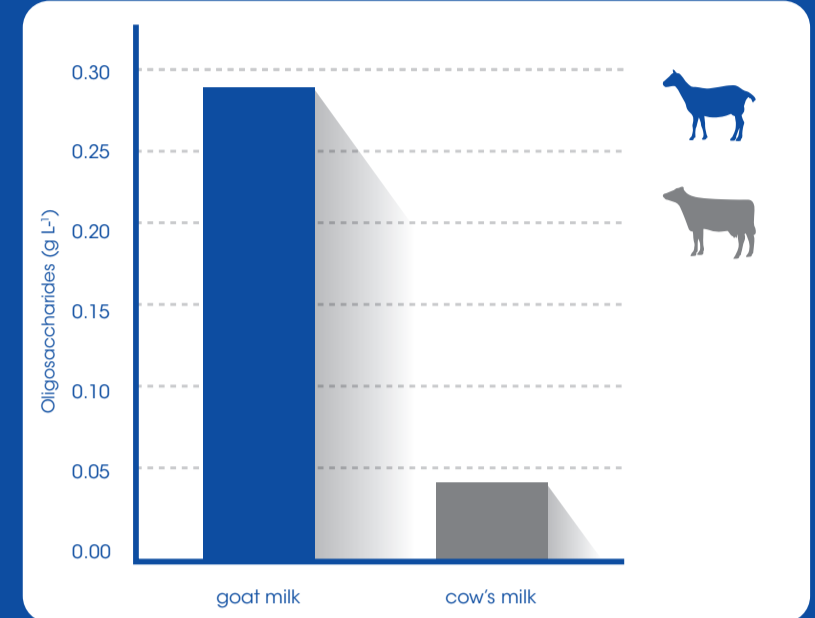
Mature goat milk:
60 – 350 mg/L

The levels of oligosaccharides in goat milk are significantly lower than the levels in human milk, but much higher than in cow's milk.

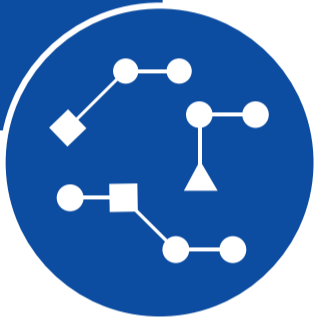
Amounts of gMOS can vary due to:³

- goat breeds
- lactation stages of the goats
- quantification methods

Oligosaccharides are naturally present in goat milk, these amounts are **4-10 times higher** than in cow's milk.^{1,4,5}



(Figure adapted from Martinez-Ferez et al. 2006)



Diversity

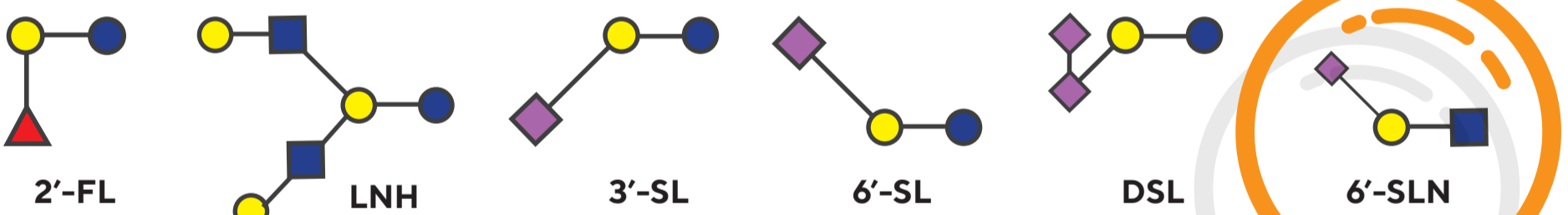
Goat milk oligosaccharides have a higher diversity than cow's milk^{1,6}

- Over 78 gMOS structures were found.²
- 40 gMOS were characterised and identified.²
- Several of the oligosaccharides identified in goat milk are identical to oligosaccharides found in human milk.^{1,2,7,8}

Human milk and goat milk both contain a more complex mixture of oligosaccharides than cow's milk.²

	Human Milk	Goat Milk	Cow's Milk
Structures found	247	78	50

Examples of oligosaccharides that have been identified in both human and goat milk.⁷



Functionality

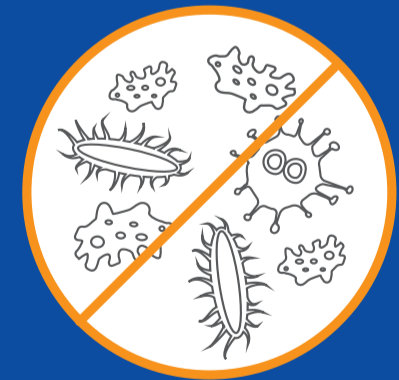


Promote gut microbiota development

Significantly enhanced growth of *Bifidobacteria* and *Lactobacilli*.^{7,9}

"Together, these results suggest that oligosaccharides naturally present in goats' milk-based infant formula exhibit strong prebiotic and anti-pathogen adhesion properties and may confer gut health benefits to infants."

Leong 2019



Protect against pathogens

Reduced amount of pathogens
Reduced adhesion of pathogens
E. Coli and *Salmonella* to gut wall.^{7,9}

References: 1: Martinez-Ferez et al. 2006. 2: Submitted review paper on goat milk oligosaccharides published by UMCG Groningen and Ausnutria B.V. 3: Sousa et al. 2019. 4: Ruhaak & Lebrilla 2012. 5: Thurl et al. 2017. 6: Albrecht et al. 2019. 7: Leong et al. 2019. 8: Kiskini & Difilippo 2013. 9: Oliveira et al. 2012.

Disclaimers:

- Ausnutria acknowledges that breastfeeding is the best food for infants aged 0-6 months and supports prolonging breastfeeding up to 24 months (age 2).
- For health care professionals only.