

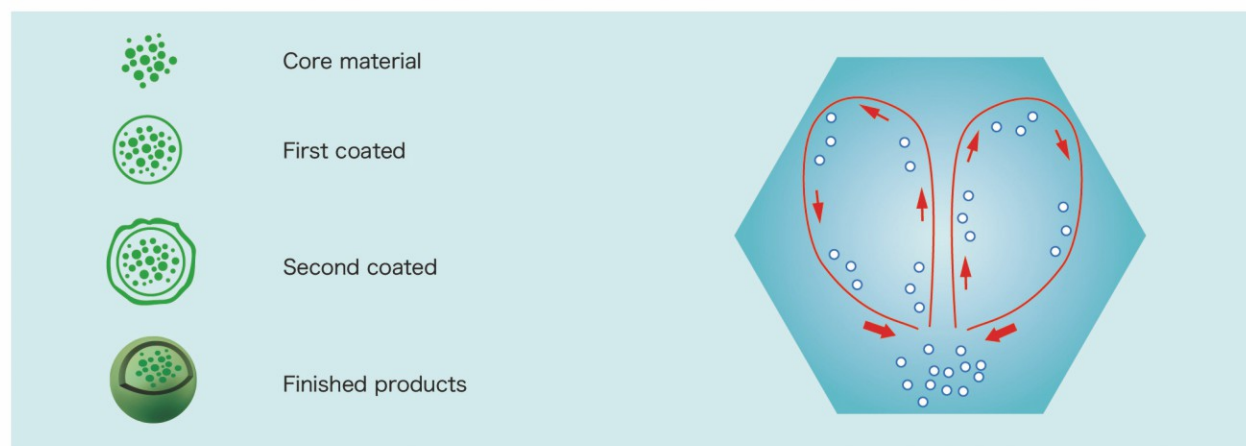
ColProt™

Rumen bypass choline chloride

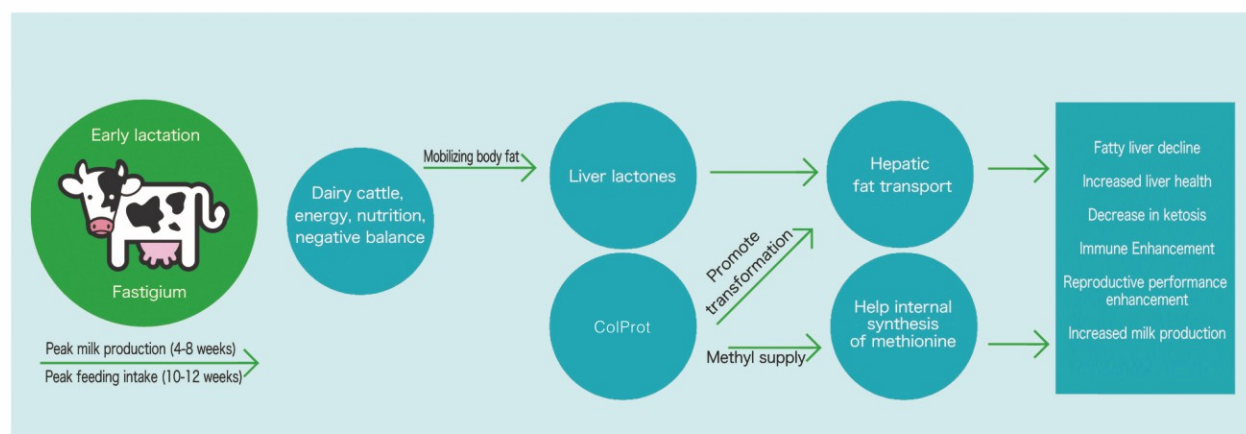


- ▶ The microcapsules can pass through the rumen smoothly
- ▶ Prevention and treatment of fatty liver in dairy cows
- ▶ Reducing subclinical state of ketosis
- ▶ The milk yield of dairy cows was significantly increased and the peak lactation period was prolonged
- ▶ Improve blood biochemical indexes
- ▶ The microcapsule particles have good dispersion and are not easy to absorb moisture, which is beneficial to feed processing

ColProt unique coated technology



ColProt action mechanism

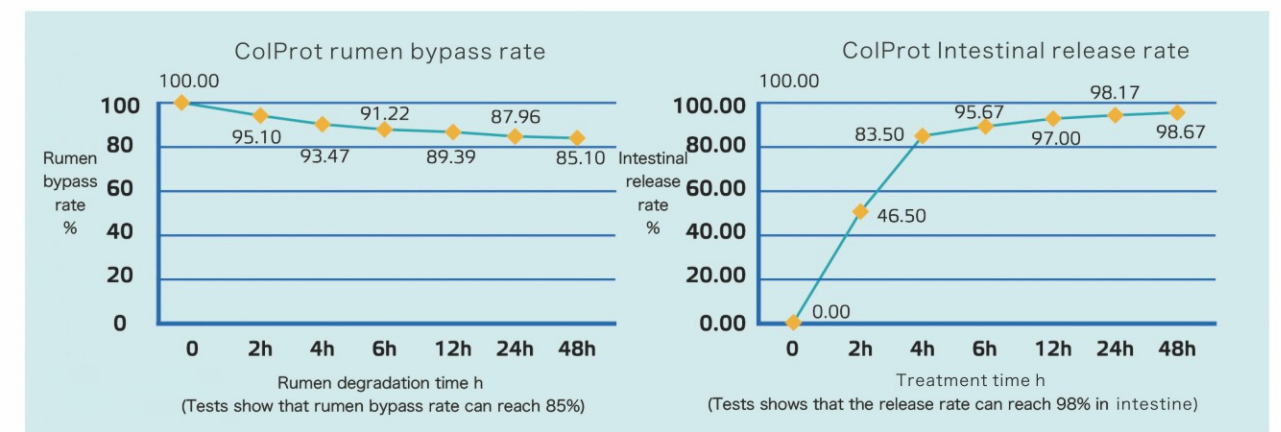


Application effect

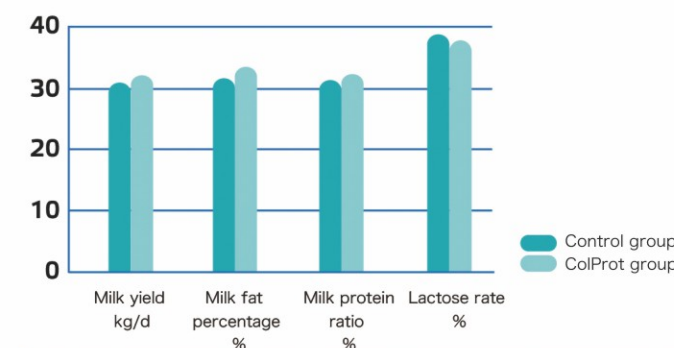
The influence of blood biochemical indexes on dairy cows

Item	Group	Prenatal week	Calving day	Postpartum week	Two weeks postpartum
NEFA	Control group	290.20±6.13	297.95±6.25	319.02±6.24	288.39±7.29
Umo1/l	30 g ColProt	225.10±4.62	264.12±5.42	265.92±8.75	256.29±4.33
BHBA	Control group	448.46±12.04	532.03±9.78	567.17±13.26	518.30±9.46
Umo1/ml	30 g ColProt	396.36±11.26	474.54±9.65	513.17±7.18	450.82±10.37
TG	Control group	0.46±0.01	0.46±0.01	0.47±0.05	0.47±0.02
Mo1/l	30 g ColProt	0.48±0.01	0.47±0.02	0.48±0.02	0.47±0.02

Item	Group	Postpartum time			
		15	30	45	60
Milk yield kg/d	Control group	29.82±6.21	30.39±6.98	31.19±6.22	32.57±5.67
	30 g ColProt	31.11±5.19	33.04±5.83	39.15±6.48	40.52±5.39
Milk fat percentage %	Control group	4.23±0.04	4.18±0.03	4.13±0.03	4.07±0.04
	30 g ColProt	4.25±0.02	4.20±0.02	4.14±0.03	4.09±0.04
Milk protein ratio %	Control group	3.25±0.01	3.22±0.01	3.21±0.01	3.19±0.02
	30 g ColProt	3.28±0.02	3.25±6.25	3.23±0.02	3.21±0.02



ColProt effects on the performance of dairy cows at early lactation stage



ColProt Application scheme

Animals	Dosage
Dairy cow	15-50 grams/head/day
Beef cattle	10-20 grams/head/day
Concentrated feed	1-2 kg/ton

It is recommended to mix well with other feed ingredient.

Package: 25kg/bag
Storage: Store in ventilated, dry place and use as soon as possible after opening.
Shelf life: 18 months.

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