



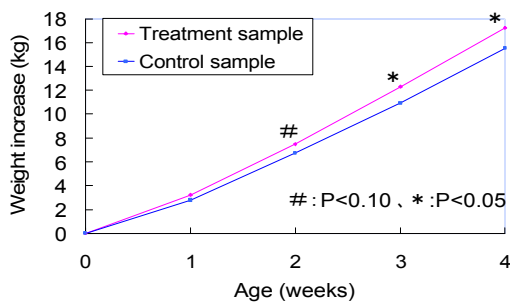
## Cello-oligosaccharides: Weight-increase data

It has been established that administering NPC Cello-Oligo® to weaning pigs and calves results in outstanding feeding performance.

### Weaning pigs (National Institute of Livestock and Grassland Science)

NPC Cello-Oligo® was added to the feed of pigs at a concentration of 0.5% and administered to 4-week-old Weaning pigs (n=6) for a period of 4 weeks

In the case of the NPC Cello-Oligo® treatment sample, increasing of feed intake was observed, and the daily increase in weight of the piglets rose by approximately 10% (p<0.05).



Effect of cello-oligosaccharides on Weaning pigs

	Control sample	Treatment sample	t-test
Weight increase (g/day)	559 ± 33	617 ± 25	*
Feed intake (g/day)	726 ± 53	819 ± 53	NS
Feed efficiency (gain/feed)	0.77 ± 0.02	0.76 ± 0.03	NS

Key: \* indicates p < 0.05; NS indicates not significant

### Calves (Chiba Prefectural Livestock Research Center and others)

Dairy calves produced at experimental facilities in Chiba and 5 other prefectures (Aichi, Ishikawa, Toyama, Ibaraki and Kanagawa) were the subject of testing. For the first 90 days after delivery, information relating to the calves' growth, feed intake, incidence of diarrhea, etc. was recorded. The sample fed with NPC Cello-Oligo® demonstrated increases in both weight and feed intake of approximately 10%, a result that has been verified as being statistically significant.

NPC Cello-Oligo® appears to (a) inhibit the occurrence of diarrhea and (b) reduce the amount of E.coli found in the animals' feces.

CE sample: 5g of NPC Cello-Oligo® administered per head per day

SY sample: 5g of Synbiotic product (Dextran -oligosaccharides + *Lactobacillus casei*) administered per head per day

#### Growth

		Control sample	SY sample	CE sample
Starting weight	kg	40.5	42.2	42.8
Final weight	kg	107.0 a	112.4	116.3 b
No. of days suckling	days	46	47	46
DG period	kg	0.73 a	0.78	0.82 b
Before weaning	kg	0.62	0.59	0.61
After weaning	kg	0.89 a	1.01	1.06 b

Statistically significant (5%) difference

#### Feed Intake & Feed Efficiency

		Control sample	SY sample	CE sample
DM	Feed intake (kg)	135	139	143
	Feed efficiency	0.50	0.51	0.52
	Before weaning	0.74	0.71	0.70
	After weaning	0.40 a	0.43	0.45 b
TDN	Feed intake (kg)	112	115	118
	Feed efficiency	0.60	0.62	0.63
	Before weaning	0.67	0.64	0.63
	After weaning	0.56 a	0.60	0.62 b

Statistically significant (5%) difference

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