

Table S1. Individual characteristics of farms enrolled in the study: Organic farms without antibiotic treatments (O) and organic farms (OA) and conventional farms (CA) using antibiotic treatments. Data are presented as arithmetic mean and range (n° of parturitions. milk yield. calving interval).

Farm	Farm group	Predominant breed ¹	Type of farm	Herd size	N° of parturitions	Calving interval	Milk yield	Forage intake ²	Pasture ³	Udder hygiene ⁴	Dry Cow therapy	N° of mastitis treatments/cow/year
1	O	56.0% HF	Free stall barn	24	2.70 (1-9)	414 (383-443)	5000 (4580-5910)	85.9%	65.1%	Yes	No	0
2	O	90.5% HF	Free stall barn	22	4.36 (1-8)	433 (317-545)	5790 (5253-6226)	72.5%	84.2%	Yes	No	0.2
3	O	70.2% HF	Free stall barn	30	4.76 (2-8)	411 (346-471)	5140 (4652-6150)	85.2%	100%	Yes	No	0
4	O	98.0% HF	Tie stall barn	22	3.73 (1-10)	450 (354-466)	6300 (5562-6800)	75.7%	100%	No	No	0.04
5	O	100% HF	Tie stall barn	37	3.31 (1-10)	437 (340-513)	5520 (5325-5985)	79.5%	69.1%	No	No	0.5
6	O	100% HF	Free stall barn	23	5.09 (1-10)	447 (344-572)	5350 (5125-5890)	70.9%	45.6%	Yes	No	0.03
7	OA	91.4% HF	Free stall barn	40	4.01 (1-10)	434 (322-486)	6023 (5890-6545)	73.9%	25.2%	Yes	Selective (32%)	0.03
8	OA	79.6% HF	Free stall barn	26	3.58 (1-8)	420 (325-457)	6100 (5654-6958)	90.6%	83.2%	No	Selective (33%)	0
9	OA	97.6% HF	Free stall barn	16	2.83 (1-4)	409 (331-426)	6800 (6315-7125)	84.8%	43.5%	Yes	Selective (32%)	0
10	OA	95.0% HF	Free stall barn	19	2.50 (1-5)	429 (382-512)	8452 (7202-9152)	81.9%	40.8%	No	Selective (28%)	0.13
11	OA	100% HF	Free stall barn	48	4.80 (1-12)	425 (368-493)	6857 (5890-7562)	62.9%	38.4%	Yes	Selective (12%)	0.05
12	OA	58.8% BS	Free stall barn	34	4.43 (1-8)	415 (393-482)	5600 (4900-6125)	78.9%	19.8%	Yes	Selective (28%)	0.19
13	OA	100% HF	Free stall barn	22	3.23 (1-6)	418 (355-532)	6100 (5764-6892)	79.0%	51.9%	Yes	Selective (31%)	0.07
14	CA	100% HF	Free stall barn	26	2.89 (1-5)	413 (331-543)	9012 (6300-12060)	92.6%	100%	Yes	Blanket	0.35
15	CA	100% HF	Free stall barn	31	2.32 (1-5)	379 (325-430)	8552 (7020-10350)	78.1%	15.7%	Yes	Blanket	0.55
16	CA	100% HF	Free stall barn	32	1.95 (1-4)	361 (313-477)	8390 (5820-10650)	76.3%	52.2%	Yes	Blanket	0.34
17	CA	100% HF	Free stall barn	23	2.77 (1-8)	398 (326-450)	9062 (6870-12120)	79.0%	72.3%	Yes	Blanket	0.22
18	CA	100% HF	Free stall barn	18	3.20 (1-7)	387 (330-463)	8062 (3960-11580)	68.4%	21.0%	Yes	Blanket	0.16

¹Brown Swiss (BS) and Holstein Friesian (HF); ²Expressed as percentage of dry matter intake (DMI); ³Expressed as percentage of forage intake; ⁴Pre-dipping and post-dipping