Development of a dynamic energy-partitioning model for enteric methane emissions and milk production in goats using energy balance data from indirect calorimetry studies

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Supplementary Table S1 Dairy goat dataset used for model developing. HF = high fat diet; LF = low fat diet; ID = goat observation; BW = body weight, kg; EE = ether extract, %; DMI = dry matter intake, g DM/day; GE = diet gross energy, MJ/kg DM; GEI = gross energy intake, kJ/kg $BW^{0.75}$; E-feces = energy in feces, kJ/kg $BW^{0.75}$; E-urine = energy in urine, kJ/kg $BW^{0.75}$; E-CH_4 = energy in methane, kJ/kg $BW^{0.75}$; MEI = metabolizable energy intake, kJ/kg $BW^{0.75}$; HP = heat production, kJ/kg $BW^{0.75}$; E-milk = energy in milk, kJ/kg $BW^{0.75}$; R = energy in reserves, kJ/kg $BW^{0.75}$.

DIET	ID	BW	NDF	EE	DMI	GE	GEI	E-feces	E-urine	E-CH_4	MEI	HP	E-milk	R
HF	1	46	46	4	1848	18	1862	749	52	59	1001	625	479	-103
HF	2	54	46	4	2168	18	1951	765	72	69	1046	653	509	-116
HF	3	51	46	4	1987	18	1867	670	62	64	1070	624	415	31
HF	4	55	46	4	2048	18	1817	572	67	79	1100	644	455	0
HF	5	46	46	4	1734	18	1748	532	45	58	1113	625	404	85
HF	6	48	46	4	1777	18	1791	483	115	77	1115	632	426	57
HF	7	55	46	4	2110	18	1872	591	86	80	1115	643	473	0
HF	8	54	46	4	2183	18	1964	665	94	69	1136	678	485	-26
HF	9	54	46	4	2191	18	1971	676	75	68	1152	699	414	39
HF	10	45	46	4	1923	18	1979	651	104	68	1156	726	460	-30
HF	11	45	46	4	1991	18	2048	711	101	69	1167	719	439	9
HF	12	46	46	4	1947	18	1962	666	55	57	1184	689	445	50
HF	13	45	46	4	1963	18	2020	690	77	67	1185	728	490	-32
HF	14	47	46	4	2260	18	2259	873	108	80	1198	824	532	-159
HF	15	46	46	4	1988	18	2004	644	56	57	1246	740	479	27
HF	16	54	46	4	2295	18	2065	678	71	69	1247	756	461	30
HF	17	51	46	4	2308	18	2168	756	70	70	1273	812	435	25
HF	18	40	46	4	2132	18	2408	936	93	77	1302	910	547	-154
HF	19	40	46	4	2070	18	2339	860	75	73	1331	904	495	-67
HF	20	46	46	4	2408	18	2447	913	116	79	1339	936	551	-148
HF	21	51	46	4	2271	18	2134	639	82	66	1347	798	489	59
HF	22	47	46	4	2224	18	2223	674	105	81	1364	856	500	7
HF	23	46	46	4	2408	18	2447	881	103	80	1383	944	513	-74
HF	24	45	46	4	2186	18	2249	677	117	67	1387	872	441	75
LF	25	53	33	2	1663	18	1501	365	41	94	1002	533	390	78
LF	26	47	33	2	1786	18	1751	601	37	95	1019	608	401	10
LF	27	53	33	2	1707	18	1540	391	36	89	1025	561	391	73
LF	28	47	33	2	1976	18	1937	734	38	99	1067	664	439	-37
LF	29	53	33	2	1856	18	1675	467	36	99	1073	606	392	76
LF	30	44	33	2	1898	18	1956	670	80	113	1094	697	458	-61
LF	31	54	33	2	1915	18	1704	454	31	92	1127	652	422	54
LF	32	45	33	2	1946	18	1971	675	63	104	1128	675	471	-17
LF	33	51	33	2	2173	18	2019	684	79	112	1144	690	423	32
LF	34	54	33	2	1940	18	1726	411	73	91	1151	648	442	60
LF	35	52	33	2	2193	18	1993	654	61	111	1167	679	428	60
LF	36	54	33	2	1864	18	1659	374	24	91	1169	640	424	105
LF	37	54	33	2	1980	18	1761	444	40	92	1186	651	440	95
LF	38	46	33	2	1951	18	1944	591	57	103	1194	707	478	9
LF	39	45	33	2	1854	18	1878	513	60	106	1199	681	449	69
LF	40	47	33	2	1943	18	1905	563	45	95	1202	670	462	70
LF	41	49	33	2	2033	18	1947	575	68	86	1218	684	474	59
LF	42	45	33	2	1909	18	1934	542	69	105	1219	699	465	56
LF	43	44	33	2	2176	18	2186	773	70	99	1245	803	522	-79
LF	44	44	33	2	2050	18	2059	630	82	97	1250	737	462	52
LF	45	51	33	2	2247	18	2087	654	47	111	1275	746	445	84
LF	46	46	33	2	1961	18	1954	522	39	103	1289	716	438	136
LF	47	46	33	2	2137	18	2130	608	67	102	1353	808	481	64
LF	48	47	33	2	2053	18	2013	514	45	90	1364	750	420	193