Supplementary Table S1. Summary of the studies included in the meta-analysis

Reference	Conc. (g/kg DM)	Type	Species	Country	Initial weight (g/kg DM)	Age (months)	Experimental duration (days)	Administration form	Tannin source	Concentrate in the diet (g/kg DM)
Abdallah Filho et al., 2016 (1)	0_40	TT	Sheep	Brazil	7_20	1_6	31_90	Plant	*Orbignya phalerata* and *Combretum leprosum*	400_600
Abdallah Filho et al., 2017 (2)	0_40	TT	Sheep	Brazil	7_20	1_6	31_90	Plant	*Orbignya phalerata* and *Combretum leprosum*	400_600
Abarghuei et al., 2010 (3)	21_40	TT	Sheep	Iran	61_71	NR	31_90	Plant	*Vitis vinifera*	<400
Abdullah et al., 2017 (4)	0_20	TT	Sheep	Egypte	41_60	13_24	5_30	Plant	*Orbignya phalerata* and *Combretum leprosum*	400_600
Adejoro et al., 2020 (5)	0_20	CT	Sheep	South Africa	NR	1_6	91_195	Extract	*Acacia mearnsii*	400_600
Aghamohamadi et al., 2014 (6)	0_20	TT	Sheep	Iran	41_60	NR	91_195	Plant	*Quercus persica*	400_600
Al-Dobaib, 2009 (7)	0_40	CT	Sheep	Argentina	41_60	NR	31_90	Extract	Quebracho	NR
Animut et al., 2008 (8)	41_100 and >100	CT	Goat	USA	21_40	7_12	5_30	Plant	*Kobe lespedeza*	NR
Archimède et al., 2015 (9)	0_100	CT	Sheep	French	NR	NR	91_195	Plant	*Glyricidia sepium, Leucaena leucocephala, Manihot esculenta*	NR
Balehegn et al., 2014 (10)	0_20	TT	Goat	Ethiopia	7_20	7_12	NR	Plant	*Ficus thonningii*	<400
Ban et al., 2022 (11)	0_20	CT	Goat	Thailand	21_40	NR	5_30	Plant	*Garcinia mangostana* L.	<400
Bandeira et al., 2017 (12)	41_100 and >100	CT	Sheep	Brazil	7_20	1_6	31_90	Plant	*Mimosa tenuiflora*	400_600
Batchu et al., 2021 (13)	21_40	CT	Goat	USA	21_40	7_12	31_90	Plant	*Sericea lespedeza*	<400
Ben Salem et al., 2005 (14)	0_20	TT	Sheep	Tunisia	-	NR	31_90	Plant	*Acacia cyanophylla*	NR
Chanjula et al., 2022 (15)	0_20	CT	Goat	Thailand	21_40	NR	31_90	Plant	Dried Kratom Leaves	>600
Chikwanha et al., 2019a (16)	21_100	CT	Sheep	South Africa	21_40	1_6	31_90	Plant	*Vitis vinifera*	NR

Chikwanha et al., 2019b (17)	21_100	TT	Sheep	South Africa	41_60	1_6	31_90	Plant	*Vitis vinifera*	NR
Costa et al., 2021 (18)	0_100	CT	Sheep	Brazil	21_40	NR	31_90	Extract	*Acacia mearnsii*	400_600
Dawson et la., 1999 (19)	41_100	CT	Sheep	UK	21_40	NR	31_90	Extract	Quebracho	NR
Dentinho et al., 2014 (20)	0_40	CT	Sheep	Portugal	41_60	25_48	31_90	Extract	*Citrus ladanifer*	400_600
Dey et al., 2008 (21)	0_20	CT	Sheep	India	7_20	1_6	91_195	Plant	*Ficus infectoria*	>600
El-Meccawi et al., 2008 (22)	>100	CT	Sheep	Israel	21-60	7_12	5_30	Plant	*Acacia saligna*	NR
Emami et al., 2015 (23)	0_20	TT	Goat	Iran	7_20	NR	31_90	Plant	Pomegranate seed pulp	>600
Emami et al., 2015 (24)	0_20	TT	Goat	Iran	7_20	1_6	31_90	Plant	Pomegranate seed pulp	>600
Emami et al., 2015 (25)	0_20	CT	Goat	Iran	7_20	1_6	31_90	Plant	Pomegranate seed pulp	>600
Fernandez et al., 2021 (26)	0_40	TT	Sheep	Brazil	21_40	NR	31_90	Plant	*Mimosa tenuiflora* hay	400_600
Froutan et al., 2015 (27)	0_20	CT	Goat	Iran	7_20	1_12	91_195	Plant	Oak acorn	>600
Galvão et al., 2020 (28)	0_20	TT	Goat	Brazil	21_40	1_6	5_30	Plant	Tamarind residue	400_600
García-Salas et al., 2022 (29)	0_20	CT	Sheep	Mexico	21_40	NR	31_90	Extract	*Acacia mearnsii*	NR
Guerreiro et al., 2019 (30)	0_40	CT	Sheep	Portugal	7_20	1_6	31_90	Plant and extract	*Cistus ladanifer*	<400
Ghaffari et al., 2013 (31)	0_40	TT	Sheep	Iran	41_60	NR	31_90	Plant	Pistachio by-products	400_600
Giller et al., 2021 (32)	21_40	TT	Sheep	Switzerland	NR	1_6	31_90	Plant	Grape seed	400_600
Girard et al., 2014 (33)	21_40 and >100	TT	Sheep	Switzerland	21_40	1_6	91_195	Plant	*Lotus corniculatus* L.	<400
Hashemzadeh et al., 2022 (34)	0_20	TT	Sheep	Iran	41_60	7_12	5_90	Plant	Herbal mixture	>600
Hart et al., 2011 (35)	21_100	TT	Sheep	UK	21_40	NR	91_195	Plant	Pea silage	400_600
Hatami et al., 2017 (36)	0_40	TT	Sheep	Iran	21_40	1_6	31_90	Plant	Pomegranate marc	>600
Ibrahim et Hassen, 2022 (37)	0_20	TT	Sheep	South Africa	21_40	NR	91_195	Extract	Mimosa	400_600
Jabalbarezi Hukerdi et al., 2019 (38)	0_20	TT	Goat	Iran	21_40	1_6	31_90	Plant	Olive leaf	>600
Jacondino et al., 2022 (39)	41_100	TT	Sheep	Brazil	21_40	1_6	31_90	Extract	*Acacia mearnsii*	<400

Kafle et el., 2021 (40)	21_100 and >100	CT	Goat	USA	41_60	7_12	31_90	Plant	Peanut skin	NR
Kamel et al., 2018 (41)	0_40	CT	Sheep	Saudi Arabia	21_40	1_6	31_90	Extract	Quebracho	>600
Kamel et al., 2019 (42)	0_40	CT	Sheep	Saudi Arabia	41_60	13_24	31_90	Extract	Quebracho	>600
Karamnejad et al., 2019 (43)	0_20	TT	Sheep	Iran	7_20	1_6	91_195	Plant	Pomegranate pulp	>600
Kazemi et al., 2021 (44)	0_20	TT	Goat	Iran	7_20	7_12	31_90	Plant	*Cydonia oblonga Mill.),Pyrus communis L., Olea europaea L., Prunus domestica L., Prunus domestica L., Prunus cerasus L.,* and *Diospyros kaki L.*	400_600
Lee et Min, 2021 (45)	21_100	CT	Goat	USA	21_40	7_12	31_90	Plant	Bermuda grass and *Sericea lespedeza*	>600
Lima et al., 2019 (46)	21_40	TT	Sheep	Brazil	NR	NR	31_90	Extract	*Acacia mearnsii*	400_600
Mahgoub et al., 2008 (47)	0_20	CT	Sheep	Omâ	21_40	7_12	91_195	Plant	B-products	NR
Majewska and Kowalik, 2019 (48)	0_20	TT	Sheep	Poland	7_20	NR	31_90	Plant	Lingonberry leaves and Oak bark	>600
Manuel-Pablo et al., 2020 (49)	0_100	TT	Goat	Mexico	7_20	13_24	31_90	Extract	*Caesalpinia coriaria* (Jacq.) Willd	NR
Mavasa et al., 2022 (50)	0_20	TT	Goat	South Africa	7_20	7_12	5_30	Plant	Sorghum	NR
Maxiselly et al., 2022 (51)	0_20	TT	Goat	Thailand	21_40	7_12	31_90	Plant	Coffee Cherry Pulp	>600
Menci et al., 2023 (52)	0_20	TT	Sheep	France	21_40	1_6	5_30	Plant	Chestnut shells and Sainfoin	<400
Mendo et al., 2023 (53)	0_40	TT	Sheep	Mexico	21_40	1_6	31_90	Plant	*Guazuma ulmifolia*	>600
Min et al., 2012 (54)	0_40	CT	Goat	USA	21_40	1_6	31_90	Plant	Pine bark	>600
Min et al. 2015 (55)	0_40	CT	Goat	USA	21_40	1_6	5_30	Plant	Pine bark	NR

Molina-Alcaide and Yanez-Ruiz, 2007 (56)	0_20	CT	Goat and sheep	Spain	41_60	NR	5_30	Plant	Olive cake	<400
Moreira et al., 2013 (57)	21_40	CT	Sheep	Brazil	21_40	7_12	5_30	Plant	*Leucaena leucocephala, Styzolobium aterrimun, Mimosa aesalpiniaefolia*	<400
Narjisse et al., 1995 (58)	0_20	TT	Sheep	Morocco	7_40	13_24	5_30	Extract	*Quercus ilex*	NR
Ngámbi et al., 2022 (59)	21_100	CT	Sheep	South Africa	21_40	NR	5_30	Extract	-	NR
Nobre et al., 2020 (60)	0_20	TT	Sheep	Brazil	21_40	1_6	31_90	Plant	Guava	400_600
Obeidat et al., 2011 (61)	0_20	CT	Sheep	Jordan	7_20	1_6	31_90	Plant	*Ceratonia siliqua*	>600
Olafadehan et al., 2020 (62)	0_40	CT	Goat	Nigeria	7_20	1_6	31_90	Plant	*Daniellia oliveri*	NR
Olafadehan, 2011 (63)	0_100	CT	Goat	Nigeria	7_20	1_6	31_90	Plant	*Pterocarpus erinaceus*	NR
Orlandi et al., 2020 (64)	0_20	TT	Sheep	Brazil	41_60	NR	31_90	Extract	*Acacia mearnsii*	NR
Osakwe and Drochner, 2006 (65)	0_20	CT	Sheep	Nigeria	21_40	13_24	5_30	Plant	*Morinda lucida*	NR
Pannell et al., 2022 (66)	0_20	CT	Goat	USA	21_40	NR	31_90	Plant	Dried distillers grains with solubles	400_600
Pathak et al., 2017 (67)	0_20	CT	Sheep	India	7_20	1_6	91_195	Plant	*Ficus sinfectoria* + *Psidium guajava*	NR
Peng et al., 2016 (68)	41_100	CT	Sheep	Canada	21_40	1_6	31_90	Plant	*Dalea purpurea*	400_600
Pérez et al., 2021 (69)	0_20	TT	Sheep	Mexico	21_40	1_6	31_90	Extract	-	NR
Pimentel et al., 2021 (70)	0_100	CT	Goat	Brazil	7_20	1_6	31_90	Extract	*Acacia mearnsii*	400_600
Priolo et al., 2000 (71)	21_40	CT	Sheep	Italy	7_20	1_6	91_195	Plant	*Ceratonia siliqua*	400_600
Priolo et al., 2005 (72)	0_20	TT	Sheep	Italy	21_40	1_6	31_90	Plant	*Hedysarum coronarium*	>600
Priolo et al., 2009 (73)	21_40	TT	Sheep	Italy	21_40	1_6	91_195	Plant	*Schinopsis lorentzii*	>600
Raju et al., 2018 (74)	21_100	TT	Goat	India	7_20	7_12	91_195	Plant	Oak Leaves	<400
Reynolds et al. 2020 (75)	21_40	CT	Goat	USA	21_40	7_12	31_90	Plant	Pine bark	NR
Roja-Romàn et al., 2017 (76)	0_20	TT	Sheep	México	21_40	NR	5_30	Extract	-	>600
Salami et al., 2018 (77)	21_40	HT	Sheep	Italy	7_20	NR	31_90	Extract	Chestnut (HT) and Tannins T80® (CT)	>600

Sánchez et al., 2018 (78)	0_20	CT	Sheep	Mexico	21_40	NR	31_90	Plant	*Caesalpinia coriaria*	NR
Santos et al., 2020 (79)	0_100	TT	Sheep	Brazil	7_20	1_6	91_195	Extract	Quebracho	<400
Sena et al., 2015 (80)	0_20	TT	Sheep	Brazil	21_40	NR	5_90	Plant	*Passiflora edulis f. flavicarpa*	400_600
Seyedin et al., 2022 (81)	0_20	TT	Sheep	Iran	21_40	1_6	31_90	Plant	*Berberis vulgaris*	>600
Sliwinski et al., 2002 (82)	0_20	TT	Sheep	Switzerland	21_40	1_6	91_195	Extract	-	400_600
Sinz et al., 2020 (83)	21_40	TT	Sheep and goat	Mexico	7_20	1_6	31_90	Plant	Grapeseed extract	400_600 and >600
Solaiman et al., 2010 (84)	0_40	CT	Goat	USA	21_40	1_6	31_90	Plant	*Servicea lespedeza*	NR
Soltan et al., 2013 (85)	0_20	TT	Sheep	Brazil	61_71	1_6	31_90	Plant	*Leucaena leucocephala*	<400
Soltani et al., 2016 (86)	0_20	TT	Sheep	Iran	21_40	1_6	31_90	Plant	Pistachio by-products silage	400_600
Taethaisong et al., 2023 (87)	0_20	CT	Goat	Thailand	7_20	NR	31_90	Plant	Neem Leaf	NR
Uushona et al., 2023 (88)	0_40	CT	Sheep	South Africa	21_40	1_6	31_90	Plant	*Acacia mearnsii* leaf	NR
Vasta et al., 2007 (89)	21_40	CT	Sheep	Italy	NR	1_6	31_90	Plant	*Ceratonia siliqua*	400_600
Vasta et al., 2009 (90)	21_40	TT	Sheep	Italy	21_40	1_6	31_90	Plant	*Vicia sativa*	>600
Vasta et al., 2009 (91)	41_100	TT	Sheep	Italy	21_40	1_6	31_90	Plant	*schinopsis lorentzii*	>600
Wang et al., 2018 (92)	0_20	TT	Sheep	France	61_71	13_24	31_90	Plant	*Corylus avellana*	>600
Wang et al., 2023 (93)	0_20	TT	Sheep	China	21_40	1_6	31_90	Plant	Chestnut	>600
Wu et al., 2021 (94)	0_20	CT	Sheep	China	21_40	1_6	31_90	Plant	Sweet sorghum silage	<400
Yisehak et al., 2016 (95)	41_100	CT	Goat	Ethiopia	7_40	13_24	31_90	Plant	*Albizia schimperiana* and *Ficus elastica*	NR
Yusuf et al., 2018 (96)	0_20	TT	Goat	Malaysia	7_20	1_6	91_195	Plant	*Andrographis paniculata* leaves	400_600
Zhao et al., 2019 (97)	0_20	TT	Sheep	China	21_40	1_6	31_90	Extract	-	400_600

TT: total tannins; CT: condensed tannins; HT: hydrolyzable tannins; UK: United Kingdom; USA: United States of America; NR: not reported.

Supplementary Table S2. Meta-regression of the covariate effect on weighted mean differences (WMD) between tannin and control treatments on diet nutrient intake and digestibility, fermentation, blood parameters, carcass characteristics, meat quality, and fatty acid profile. The adjusted R^2 is the proportion of between-study variance (heterogeneity) explained by the covariate.

Dependent variable (Y, WMD)[2]	Intercept	Continent	Species	Animals age (months)	Initial weight (kg)	Exp. duration (days)	Tannins CC (g/kg DM)	Tannin type	Admin. form	Conc. Diet	Adjusted R^2 (%)
Intake (g/day)											
Dry matter	-101.34 (0.14)	21.12 (0.80)	188.96 (0.01)	1.32 (0.01)	0.93 (0.20)	60.45 (0.72)	-2.22 (0.98)	13.0 (0.52)	9.58 (0.65)	11.27 (0.18)	4.54
Crude protein	-0.04 (<0.001)	5.07 (0.08)	4.05 (0.06)	1.58 (<0.001)	0.50 (0.85)	2.11 (0.80)	-1.66 (0.02)	2.39 (0.40)	-0.23 (0.20)	6.39 (<0.001)	91.59
NDF	22.50 (<0.001)	27.17 (0.24)	-	0.63 (<0.001)	0.26 (0.66)	13.23 (0.52)	-1.56 (0.008)	13.44 (0.24)	0.19 (0.45)	24.12 (0.20)	52.31
Digestibility (g/kg DM)											
DM	4.35 (<0.001)	3.19 (0.11)	0.48 (0.43)	-0.84 (0.002)	-1.31 (0.23)	1.43 (0.03)	-9.24 (<0.001)	0.17 (0.43)	-0.81 (0.74)	0.70 (0.73)	68.91
CP	3.95 (<0.001)	7.35 (0.07)	2.66 (0.29)	-1.56 (<0.001)	-1.40 (0.59)	2.40 (0.29)	-0.41 (<0.001)	2.71 (0.16)	-1.42 (0.30)	4.96 (0.17)	77.24
NDF	2.86 (0.03)	0.56 (0.11)	-0.46 (0.55)	-1.51 (0.25)	-0.83 (0.36)	-0.43 (0.27)	-0.55 (0.02)	-0.23 (0.17)	-0.11 (0.51)	-0.02 (0.22)	17.62
ADF	12.10 (<0.001)	2.85 (0.17)	0.32 (0.68)	-0.60 (0.10)	-1.23 (0.65)	1.70 (0.05)	-1.21 (0.001)	0.68 (0.14)	-0.54 (0.76)	1.69 (0.20)	72.23
Fermentation parameters											
Rumen pH	-0.45 (<0.001)	0.12 (0.92)	0.57 (0.06)	0.003 (0.02)	0.54 (0.08)	0.21 (0.07)	0.84 (0.67)	0.69 (<0.001)	0.04 (0.46)	0.42 (0.78)	67.12
NH_3-N (mg/dL)	-1.94 (0.003)	-0.81 (0.42)	-0.004 (0.001)	-0.58 (<0.001)	-0.54 (0.04)	-0.39 (0.23)	0.32 (0.75)	-0.63 (0.48)	-0.50 (0.86)	-0.69 (0.21)	44.81
SCFA, mol/100 mol											
Acetate	0.34 (0.004)	-0.16 (<0.001)	-0.86 (0.06)	-0.07 (0.06)	-0.41 (0.56)	-0.21 (0.73)	-0.07 (0.70)	0.05 (0.02)	0.16 (0.10)	-0.16 (0.68)	55.04

Propionate	1.99 (0.02)	0.64 (0.10)	1.81 (0.02)	0.40 (0.02)	1.56 (0.38)	0.66 (0.61)	-0.55 (0.52)	0.49 (0.88)	0.29 (0.63)	0.33 (0.01)	53.35
TVFA	-2.71 (0.06)	0.98 (0.07)	0.50 (0.15)	0.16 (0.32)	0.19 (0.62)	0.14 (0.04)	0.22 (0.56)	0.04 (0.55)	-0.06 (0.61)	0.94 (0.02)	46.79
N metabolism											
N intake	-1.80 (<0.001)	3.79 (0.08)	1.10 (0.94)	0.80 (0.29)	0.98 (0.21)	0.11 (0.04)	2.08 (0.89)	0.81 (0.55)	-0.69 (0.02)	1.02 (0.32)	65.79
N urine	-0.71 (<0.001)	-1.57 (0.65)	-	-0.62 (0.12)	-2.42 (<0.001)	-0.73 (0.85)	-2.67 (0.25)	-1.07 (0.64)	-1.50 (0.30)	-0.89 (0.98)	59.77
N fecal	11.68 (0.09)	-1.32 (0.09)	0.86 (0.96)	2.24 (0.04)	1.32 (0.15)	0.89 (0.40)	5.80 (0.20)	1.16 (0.67)	0.63 (0.99)	1.07 (0.11)	22.71
N retained	-6.21 (0.04)	3.91 (0.09)	1.78 (0.53)	-0.39 (0.09)	-0.37 (0.18)	0.25 (0.02)	1.32 (0.94)	1.21 (0.75)	-0.22 (0.29)	1.17 (0.63)	31.84
Blood metabolites											
Blood urea nitrogen	-0.58 (<0.001)	-1.79 (0.12)	-1.41 (0.34)	-1.49 (0.64)	-1.28 (0.68)	-1.56 (0.07)	0.39 (0.26)	-1.41 (0.39)	-0.69 (0.49)	-1.13 (0.11)	38.07
Antioxidant activity											
ALT	0.20 (0.005)	0.30 (0.04)	-	-0.01 (0.31)	-0.01 (0.04)	-0.31 (0.62)	-0.41 (0.20)	-0.08 (0.32)	0.84 (0.05)	0.55 (<0.001)	48.84
Growth performance											
Final body weight (kg)	0.43 (0.03)	0.01 (0.02)	0.18 (0.20)	0.27 (0.43)	0.62 (0.39)	0.06 (0.58)	-0.70 (0.001)	0.13 (0.20)	-0.08 (0.63)	0.24 (0.38)	13.88
Average daily gain (g/day)	-111.64 (<0.001)	0.42 (0.11)	1.94 (0.68)	153.41 (0.07)	391.8 (0.01)	0.08 (0.98)	-2.35 (0.27)	48.66 (0.43)	168.67 (0.006)	167.07 (0.04)	22.14
Feed conversion ratio	-0.08 (<0.001)	-1.77 (0.02)	-1.13 (0.02)	-0.41 (<0.001)	-1.69 (0.03)	-0.15 (<0.001)	-1.85 (0.59)	-0.19 (0.46)	-0.22 (0.74)	-1.66 (0.001)	59.20
Carcass characteristics											
Cold carcass weight	-9.65 (<0.001)	-0.63 (0.06)	-0.19 (0.42)	-0.41 (0.29)	-2.11 (0.34)	-	-0.67 (0.08)	-0.37 (0.90)	-1.06 (0.01)	-0.70 (0.07)	71.43
Hot carcass weight	0.12 (0.04)	0.30 (0.02)	-0.19 (0.71)	0.10 (0.15)	-0.44 (0.55)	0.31 (0.01)	-1.80 (0.004))	-0.14 (0.87)	-0.22 (0.71)	-0.05 (0.04)	15.74
Meat quality											

Cooking loss	-17.97 (0.05)	-0.04 (0.71)	-0.54 (0.21)	-0.21 (0.66)	-4.88 (0.05)	-	0.51 (0.21)	-0.01 (0.29)	-0.55 (0.22)	0.05 (0.75)	21.87
pH meat	-0.45 (0.11)	0.07 (0.04)	-0.08 (0.05)	0.92 (0.67)	-0.56 (0.12)	0.13 (0.99)	0.58 (0.57)	0.43 (0.49)	0.37 (0.58)	0.09 (0.06)	12.61
Fatty acid profile (g/100 g FA)											
Stearic (C18:0)	1.43 (0.01)	-0.70 (0.26)	-0.07 (0.26)	0.003 (0.47)	-0.69 (0.03)	-0.29 (0.25)	-1.01 (0.41)	-0.14 (0.14)	0.25 (0.05)	-0.01 (0.07)	42.33
Oleic (C18:1 c9)	-7.73 (0.02)	-0.16 (0.16)	-0.72 (0.29)	2.34 (0.03)	-0.48 (0.61)	0.19 (0.93)	-0.14 (0.44)	-0.86 (0.04)	-1.53 (0.04)	0.31 (0.20)	37.17
Linoleic (LA, C18:2 ω6)	-1.61(0.09)	0.79 (0.85)	0.87 (0.76)	0.65 (0.92)	0.96 (0.83)	0.72 (0.37)	1.32 (0.07)	0.72 (0.73)	0.95 (0.57)	0.19 (0.48)	24.92
Conjugated linoleic acid (CLA, C18:2 c9t11)	-1.72 (0.34)	-0.14 (0.09)	0.40 (0.82)	0.33 (0.88)	0.71 (0.62)	-	-0.36 (0.93)	-0.14 (0.08)	0.37 (0.85)	-0.14 (0.05)	10.24
α-Linolenic (ALA, C18:3 ω3)	-0.30 (0.09)	1.11 (0.71)	-	1.01 (0.99)	1.39 (0.85)	-	-0.20 (0.01)	1.38 (0.27)	1.83 (0.13)	0.09 (0.35)	26.51
Arachidonic (ARA, C20:4 ω6)	-1.54 (0.23)	0.03 (0.41)	0.30 (0.45)	0.50 (0.54)	0.90 (0.71)	-	1.64 (0.04)	0.38 (0.34)	0.63 (0.99)	-0.15 (0.50)	18.81
Eicosapentaenoic (EPA, C20:5 ω3)	0.48 (0.22)	-0.20 (0.11)	-0.04 (0.07)	0.44 (0.22)	0.14 (0.44)	-	1.70 (0.26)	0.21 (0.09)	0.50 (0.92)	-0.15 (0.24)	19.43
Doccosapentaenoic (DPA, C22:5 ω3)	-1.81 (0.004)	-0.02 (0.8)	0.52 (0.66)	0.26 (0.11)	0.40 (0.71)	0.54 (0.04)	1.50 (0.17)	0.56 (0.59)	0.79 (0.74)	0.00 (0.55)	56.69
Docosahexaenoic (DHA, C22:6 ω3)	1.90 (0.001)	-	0.21 (0.86)	-	-0.10 (0.87)	-	2.32 (0.02)	-0.13 (0.28)	-0.30 (0.16)	1.14 (0.001)	72.12
Saturated fatty acids (SFA)	4.67 (<0.001)	-0.57 (0.10)	0.22 (0.21)	-0.07 (0.82)	0.11 (0.13)	-0.04 (0.01)	-1.76 (0.03)	0.23 (0.03)	0.51 (0.01)	-0.57 (0.08)	61.17
Monounsaturated fatty acids (MUFA)	1.26 (0.08)	0.38 (0.36)	-0.56 (0.51)	-0.54 (0.49)	-0.46 (0.28)	-0.34 (0.97)	0.01 (0.08)	-0.41 (0.74)	-0.80 (0.10)	0.38 (0.21)	27.02
Polyunsaturated fatty acids (PUFA)	2.84 (0.002)	0.12 (0.15)	0.99 (0.93)	1.03 (0.35)	1.94 (0.26)	0.90 (0.02)	1.60 (0.10)	0.84 (0.50)	0.91 (0.85)	0.12 (0.42)	54.69

Exp. Experimental; CC: Concentration:; Admin.: Administration: Conc.: Concentrate; DM: Dry matter: CP: Crude protein; NDF: Neutral detergent fiber; ADF: Acid detergent fiber; SCFA: Short-chain fatty acids; TVFA: Total volatile fatty acids; ALT: Alanine aminotransferase; SCFA: Short-chain fatty acids; SFA: Saturated fatty acid; MUFA: Monounsaturated fatty acid; PUFA: Polyunsaturated fatty acids.

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