

**Supplemental table S2: Effects of fixed effects in the models 1a-c on metabolites of cows.**  
**The table includes log transformed Least-squares means (LSMeans) with corresponding SE, number of observations (n) and P-value.**

Metabolite	Model	Fixed effect	effect class	LSMeans (log transformed)	SE	n	P-value
TG(16:0_38:7)	1a	mTHI-class	mTHI >= 60	-0.3244	0.04105	16	**
			mTHI < 60	-0.1632	0.03114	28	
		time of blood sampling	10:00 am to 12:00pm	-0.1756	0.03561	23	**
			12:01pm to 15:15pm	-0.3120	0.03592	21	
PC aa C38:1		mTHI-class	mTHI >= 60	-0.2159	0.07198	19	**
			mTHI < 60	0.04197	0.05876	29	
		time of blood sampling	10:00 am to 12:00pm	-0.00475	0.06153	27	n.s.
			12:01pm to 15:15pm	-0.1692	0.06875	21	
3-IPA	mTHI-class	mTHI >= 60	0.3887	0.06642	19	*	
		mTHI < 60	0.1855	0.05422	29		
	time of blood sampling	10:00 am to 12:00pm	0.1812	0.05678	27	*	
		12:01pm to 15:15pm	0.3930	0.06344	21		
lysoPC a C20:3	1b	mTHI-class	mTHI >= 60	0.03977	0.04742	19	*
			mTHI < 60	0.1687	0.04648	29	
		calving condition	no birth assistance	0.1724	0.02689	41	n.s.
			minor birth assistance/dystocia	0.03609	0.07466	5	
DiCA(12:0)	1c	mTHI-class	mTHI >= 60	-0.3639	0.02245	18	***
mTHI < 60			-0.2440	0.01769	29		
TG(18:0_32:1)		mTHI-class	mTHI >= 60	0.4392	0.04526	17	**
mTHI < 60			0.5996	0.03527	28		
TG(18:0_36:2)		mTHI-class	mTHI >= 60	0.8472	0.04320	16	*
mTHI < 60			0.9597	0.03266	28		
TG(14:0_34:0)		mTHI-class	mTHI >= 60	0.2127	0.04119	16	*
			mTHI < 60	0.3484	0.03114	28	
Sarcosine		mTHI-class	mTHI >= 60	0.3652	0.02621	19	*
			mTHI < 60	0.2811	0.02121	29	