

**Table S3:** Stability of endogenous glycerol esters and representative fatty acid ethanolamides during storage at  $-80\text{ }^{\circ}\text{C}$ . Concentrations were determined in triplicate and tested with one-way ANOVA and Bonferroni's post hoc test. Significant changes with  $p < 0.05$  are presented in a dashed box. Time-dependent changes in analyte concentrations are presented in percent relative to its value on time point zero.

(n = 3)	time (days)			
	0	7	35	56
	<b>2-AG (%)</b>			
pH 5.8	100	96	100	82
pH 4.7	100	88	104	85
0.5 KSCN pH 4.7	100	92	114	80
	<b>1-AG (%)</b>			
pH 5.8	100	103	110	98
pH 4.7	100	117	93	86
0.5 KSCN pH 4.7	100	102	72	87
	<b>2-LG (%)</b>			
pH 5.8	100	93	90	71
pH 4.7	100	90	93	64
0.5 KSCN pH 4.7	100	82	61	50
	<b>1-LG (%)</b>			
pH 5.8	100	87	95	98
pH 4.7	100	78	114	86
0.5 KSCN pH 4.7	100	65	96	87
	<b>2-OG (%)</b>			
pH 5.8	100	82	67	57
pH 4.7	100	79	77	58
0.5 KSCN pH 4.7	100	93	65	55
	<b>PEA (%)</b>			
pH 5.8	100	89	105	98
pH 4.7	100	95	97	107
0.5 KSCN pH 4.7	100	102	93	125
	<b>OEA (%)</b>			
pH 5.8	100	94	127	132
pH 4.7	100	94	113	129
0.5 KSCN pH 4.7	100	107	109	128
	<b>AEA (%)</b>			
pH 5.8	100	96	108	100
pH 4.7	100	90	95	111
0.5 KSCN pH 4.7	100	92	96	105