

**S7 Table: Statistical comparison of the fatty acid profile in transgenic *fat-1* mice and wild type animals (WT-STD) on a standard sunflower oil based diet, as well as in wild type mice on the same diet enriched with EPA and DHA (WT-STD+n3) after 30 days of feeding. Statistical differences were determined using one-way ANOVA followed by Tukey's post test (\* p<0.05, \*\* p<0.01, \*\*\* p<0.001, \*\*\*\* p<0.0001; n.s. = not significant).**

		EPA	DHA	ARA	n6-PUFA	n3-PUFA	MUFA	SFA
Whole Blood	WT-STD vs <i>fat-1</i>	n.s.	****	****	****	****	n.s.	n.s.
	WT-STD vs STD+n3	****	****	****	****	****	n.s.	***
	<i>fat-1</i> vs WT-STD+n3	****	****	****	****	****	n.s.	**
Plasma	WT-STD vs <i>fat-1</i>	+	****	*	***	**	n.s.	n.s.
	WT-STD vs STD+n3	+	****	****	****	****	n.s.	n.s.
	<i>fat-1</i> vs WT-STD+n3	****	****	****	****	****	n.s.	n.s.
Blood Cells	WT-STD vs <i>fat-1</i>	+	****	****	****	****	n.s.	n.s.
	WT-STD vs STD+n3	+	****	****	****	****	n.s.	**
	<i>fat-1</i> vs WT-STD+n3	****	****	****	****	****	n.s.	*
Liver	WT-STD vs <i>fat-1</i>	+	**	*	*	*	n.s.	n.s.
	WT-STD vs STD+n3	+	****	****	****	****	n.s.	n.s.
	<i>fat-1</i> vs WT-STD+n3	****	****	****	****	****	*	n.s.
Kidney	WT-STD vs <i>fat-1</i>	**	****	n.s.	**	****	n.s.	n.s.
	WT-STD vs STD+n3	****	****	****	****	****	*	n.s.
	<i>fat-1</i> vs WT-STD+n3	****	****	****	****	****	n.s.	n.s.
Spleen	WT-STD vs <i>fat-1</i>	****	**	***	****	****	n.s.	n.s.
	WT-STD vs STD+n3	****	****	****	****	****	n.s.	n.s.
	<i>fat-1</i> vs WT-STD+n3	****	****	***	****	****	n.s.	n.s.
Brain	WT-STD vs <i>fat-1</i>	+	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
	WT-STD vs STD+n3	+	n.s.	*	*	*	n.s.	n.s.
	<i>fat-1</i> vs WT-STD+n3	****	**	n.s.	n.s.	**	n.s.	n.s.
Colon	WT-STD vs <i>fat-1</i>	n.s.	n.s.	n.s.	**	n.s.	n.s.	n.s.
	WT-STD vs STD+n3	****	****	*	****	****	n.s.	**
	<i>fat-1</i> vs WT-STD+n3	****	****	n.s.	**	****	n.s.	*

+ For analytes that were not detectable in the WT-STD group, a t-test (two-tailed, unpaired), with Welch correction in case of unequal variances, was performed comparing *fat-1* and WT-STD+n3 groups.