

[illegible]

Simple ID	Primary ID	Secondary ID	Brain (Area)		Eye (Area)		Gill (Area)		Intestine (Area)		Liver (Area)		Brain		Eye		Gill		Intestine		Liver	
			Int.		Int.		Int.		Int.		Int.		Int.		Int.		Int.		Int.		Int.	
			Final	Fold	Final	Fold	Final	Fold	Final	Fold	Final	Fold	Final	Fold	Final	Fold	Final	Fold	Final	Fold	Final	Fold
PC 36:3	PC 18:1/18:2	PC 18:0/18:3   18:1/18:2																				
	PC 16:0/20:3 (a)																					
	PC 16:0/20:3 (b)																					
	PC 16:0/20:3 (c)																					
	PC 18:0/18:3																					
PC 36:2	PC 18:1/18:1	PC 18:0/18:2																				
	PC 16:0/20:2 (a)																					
	PC 16:0/20:2 (b)																					
PC 38:6	PC 18:0/18:2	PC 18:0/18:2																				
	PC 16:0/22:6																					
PC 38:8	PC 18:3/20:5	PC 18:3/20:5																				
	PC 16:2/22:6																					
PC 38:7	PC 18:3/20:4	PC 18:3/20:4																				
	PC 18:2/20:5																					
	PC 16:1/22:6 (a)																					
PC 38:6	PC 18:3/20:3	PC 18:3/20:3																				
	PC 18:2/20:4																					
	PC 18:1/20:5																					
PC 38:5	PC 16:0/22:6	PC 16:0/22:6																				
	PC 18:1/20:4 (a)																					
	PC 18:1/20:4 (b)																					
PC 38:4	PC 16:0/22:5 (a)	PC 16:0/22:5 (a)																				
	PC 18:0/20:5																					
	PC 16:0/22:5 (b)																					
PC 38:3	PC 18:2/20:2	PC 18:2/20:2																				
	PC 18:1/20:3																					
	PC 18:0/20:3																					
PC 38:2	PC 18:0/20:2	PC 18:0/20:2																				
	PG 22:5/22:6 (a)																					
	PG 22:5/22:6 (b)																					
PC 40:9	PC 20:4/20:5 (a)	PC 20:4/20:5 (a)																				
	PC 18:3/22:6																					
	PC 20:4/20:5 (b)																					
PC 40:8	PC 18:3/22:5	PC 20:4/20:4																				
	PC 20:3/20:5																					
	PC 18:2/22:6 (a)																					
PC 40:7	PC 18:2/22:6 (b)	C20:3/20:4																				
	PC 18:2/22:5																					
	PC 20:2/20:5																					
PC 40:6	PC 18:1/22:5 (a)	PC 18:1/22:5 (a)																				
	PC 18:1/22:5 (b)																					
	PC 18:0/22:6																					
PC 40:5	PC 18:0/22:5 (a)	PC 16:0/24:5   20:1/20:4																				
	PC 20:0/20:5																					
	PC 18:0/22:5 (b)																					
PC 40:4	PC 18:1/20:5	PC 18:0/22:4   18:1/22:3																				
	PC 16:0/22:6																					
	PC 20:1/20:3 (a)																					
PC 42:10	PC 20:1/20:3 (b)	PC 18:0/22:4																				
	PC 18:0/22:4																					
	PC 20:0/20:4																					
PC 42:9	PC 18:1/20:4	PC 18:1/20:4																				
	PC 18:0/20:5																					
	PC 18:0/20:4 (a)																					
PC 42:7	PC 18:0/20:4 (b)	PC 20:2/22:4																				
	PC 20:1/20:1																					
	PC 18:1/22:1																					
PC 42:6	PC 20:5/22:5	PC 20:2/22:4																				
	PC 20:4/22:6 (a)																					
	PC 20:4/22:6 (b)																					
PC 44:7	PC 20:4/22:5	PC 22:3/20:1																				
	PC 20:3/24:1																					
	PC 20:4/24:0																					
PC 44:5	PC 20:2/24:1 (a)	PC 18:1/26:2																				
	PC 20:2/24:1 (b)																					
	PC 24:1/22:5																					
PC 46:5	PC 20:5/26:2	PC 22:4/24:1																				
	PC 20:4/26:1 (a)																					
	PC 20:4/26:1 (b)																					

Supplementary Figure S1. Individual lipid isomers detected using LC-MS/MS triple quad mass spectrometry, across 5 tissues and two timepoints. Data is given as absolute peak area (red low, green high area counts) and fold change within a lipid structure (i.e. PC 42:10). The secondary ID indicates a co-eluting peak was detected. For fold changes, green represents GM diet up regulation, with red representing control diet up regulation. For t-test scores, \*\* < 0.01, \* 0.01-0.05, with red values being those which fell below the Benjamini-Hochberg multiple-test critical value.

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Supplementary Figure S2. Individual lipid isomers detected using LC-MS/MS triple quad mass spectrometry, across 5 tissues and two timepoints. Data is given as percentage composition and percentage change within a lipid structure (i.e. PC 42:10), with the percentage point change relative to the control. The secondary ID indicates a co-eluting peak was detected. For percentage point changes, green represents GM diet up regulation, with red representing control diet up regulation. For t-test scores, \*\* < 0.01, \* 0.01-0.05, with red values being those which fell below the Benjamini-Hochberg multiple-test critical value.