

Table S1. Erythrocyte free fatty acids correlations to erythrocyte oxylipins.

	Free Arachidonic Acid		Free Adrenic Acid		Free EPA		Free DHA	
	r	p	r	p	r	p	r	p
Tetranor-PGFM	-0.083	0.706	-0.04	0.858	-0.124	0.574	-0.116	0.599
12-HHTrE	0.274	0.206	0.303	0.16	0.23	0.29	0.238	0.273
11-HETE	0.097	0.66	0.207	0.344	0.145	0.508	0.123	0.578
9-HETE	-0.212	0.33	-0.196	0.371	-0.067	0.76	-0.127	0.564
5-HETE	0.293	0.174	0.333	0.121	0.373	0.08	0.38	0.073
15-HETE	0.184	0.401	0.174	0.427	0.228	0.295	0.209	0.337
5,15-diHETE	0.1	0.65	0.13	0.556	0.119	0.59	0.14	0.523
8-HETE	0.470*	0.024	0.440*	0.036	0.497*	0.016	0.441*	0.035
12-HETE	0.132	0.547	0.191	0.383	0.23	0.291	0.251	0.248
19-HETE	-0.199	0.363	-0.24	0.269	-0.26	0.231	-0.29	0.179
11(12)-EET	0.646**	<0.001	0.610**	0.002	0.567**	0.005	0.517*	0.011
11,12-diHETErE	0.336	0.117	0.418*	0.047	0.25	0.251	0.344	0.108
14(15)-EET	0.442*	0.035	0.430*	0.041	0.348	0.103	0.347	0.105
14,15-diHETrE	0.438*	0.037	0.517*	0.012	0.264	0.224	0.339	0.114
5,6-diHETrE	0.387	0.068	0.481*	0.02	0.335	0.096	0.427*	0.042
9-HEPE	0.265	0.222	0.139	0.528	0.454*	0.029	0.334	0.119
11-HEPE	0.274	0.206	0.297	0.169	0.381	0.073	0.3	0.165
18-HEPE	0.135	0.54	0.143	0.515	0.238	0.275	0.169	0.441
15-HEPE	0.084	0.703	0.111	0.615	0.206	0.346	0.081	0.713
12-HEPE	0.081	0.714	0.031	0.889	0.12	0.585	0.046	0.833
4-HDoHE	0.184	0.4	0.133	0.546	0.335	0.118	0.272	0.209
8-HDoHE	0.2	0.361	0.265	0.222	0.22	0.313	0.239	0.273
16-HDoHE	0.295	0.171	0.356	0.096	0.404	0.056	0.417*	0.048
20-HDoHE	0.203	0.352	0.229	0.292	0.31	0.12	0.346	0.106
13-HDoHE	-0.013	0.953	-0.034	0.878	-0.067	0.762	0.005	0.982
10-HDoHE	0.201	0.953	-0.034	0.878	-0.067	0.762	0.005	0.982
14-HDoHE	0.558**	0.006	0.586**	0.003	0.547**	0.007	0.528**	0.01
16(17)-EpDPE	0.419*	0.047	0.318	0.139	0.554**	0.006	0.501*	0.015
15-HETrE	0.031	0.89	-0.01	0.964	0.108	0.625	0.063	0.774
9-HOTrE	0.435*	0.038	0.453*	0.03	0.462*	0.027	0.444*	0.034
13-HODE	0.093	0.673	0.119	0.59	0.208	0.34	0.186	0.396
9-HODE	0.105	0.634	0.119	0.59	0.208	0.34	0.186	0.396
9-oxoODE	-0.082	0.71	0.075	0.733	-0.011	0.961	-0.07	0.75

9(10)-EpOME	-0.046	0.833	0.024	0.914	0.048	0.83	-0.023	0.918
9,10-diHOME	-0.04	0.858	-0.08	0.717	0.082	0.71	-0.037	0.868
12(13)-EpOME	-0.053	0.809	0.068	0.757	-0.079	0.72	-0.064	0.771
12,13-diHOME	-0.071	0.747	-0.166	0.449	0.033	0.883	-0.124	0.574
Free Arachidonic Acid			0.944**	<0.001	0.940**	<0.001	0.944**	<0.001
Free Adrenic Acid	0.944**	<0.001			0.859**	<0.001	0.908**	<0.001
Free EPA	0.940**	<0.001	0.859**	<0.001			0.944**	<0.001
Free DHA	0.944**	<0.001	0.908**	<0.001	0.944**	<0.001		

* $p < 0.05$, ** $p < 0.01$, Spearman correlation coefficients and p -values for free fatty acids and oxylipins.

Oxylipins: prostaglandin F Metabolite (PGFM), hydroxyheptadecatrienoic acid (HHTre), hydroxyoctadecatrienoic acid (HOTre), epoxyoctadecenoic acid (EpOME), dihydroxy-octadecenoic acid (diHOME), hydroxyoctadecadienoic acid (HODE), hydroxyeicosapentaenoic acid (HEPE), hydroxydocosahexaenoic acid (HDoHE), hydroxyeicosatrienoic acid (HETre), dihydroxyeicosa-trienoic acid (di-HEIre), oxo-octadecadienoic acid (oxoODE), hydroxyeicosatetraenoic (HETE), dihydroxyeicosatetraenoic acid (diHETE), epoxy-eicosatrienoic acid (EET), epoxy-docosapentaenoic acid (EpDPE).

Table S2. Erythrocyte free fatty acids(%) correlations to erythrocyte oxylipins.

	Linoleic acid (18:2n-6)		α -linolenic acid (18:3 n-3)		Linoleic acid (20:3 n-6)		Arachidonic acid (20:4 n-6)		Eicosapentaenoic acid (20:5 n-3)		Docosahexaenoic acid (22:6 n-3)	
	r	p	r	p	r	p	r	p	r	p	r	p
Tetranor-PGFM	0.107	0.628	0.193	0.378	-0.208	0.342	0.255	0.24	0.034	0.879	-0.383	0.071
12-HHTrE	-0.364	0.088	0.095	0.666	-0.508*	0.013	0.196	0.37	0.047	0.83	0.014	0.95
11-HETE	-0.114	0.606	0.357	0.095	-0.152	0.488	-0.231	0.288	-0.081	0.713	-0.089	0.687
9-HETE	-0.155	0.48	0.243	0.264	-0.023	0.918	-0.251	0.248	-0.043	0.847	-0.209	0.339
5-HETE	-0.169	0.441	0.289	0.2	-0.102	0.644	-0.329	0.125	-0.024	0.914	0.18	0.412
15-HETE	-0.347	0.105	0.264	0.224	-0.299	0.165	-0.039	0.861	0.031	0.89	-0.01	0.964
5,15-diHETE	0.049	0.832	0.313	0.146	-0.412	0.05	-0.286	0.186	0.28	0.196	0.221	0.312
8-HETE	-0.469*	0.024	0.183	0.403	-0.22	0.314	0.072	0.743	0.272	0.209	0.073	0.74
12-HETE	-0.384	0.07	0.181	0.409	-0.077	0.727	-0.03	0.893	0.187	0.394	-0.076	0.73
19-HETE	0.213	0.329	-0.431*	0.04	0.219	0.315	0.107	0.627	-0.24	0.269	0.069	0.753
11(12)-EET	-0.4	0.058	0.06	0.785	0.001	0.996	0.451*	0.031	0.216	0.321	-0.075	0.73.5
11,12-diHETErE	-0.538*	0.008	-0.099	0.652	-0.234	0.281	0.462*	0.026	*0.02	0.928	0.001	0.996
	*											
14(15)-EET	-0.444*	0.034	-0.340	0.158	-0.09	0.682	0.422*	0.045	0.079	0.72	-0.074	0.737
14,15-diHETrE	-0.474*	0.022	-0.182	0.406	-0.048	0.826	0.478*	0.021	-0.148	0.5	-0.125	0.568
5,6-diHETrE	-0.331	0.122	-0.029	0.897	0.246	0.257	-0.027	0.904	-0.148	0.5	-0.125	0.612
9-HEPE	-0.276	0.202	0.445*	0.033	-0.349	0.102	-0.25	0.251	0.529**	0.009	0.306	0.156
11-HEPE	-0.31	0.15	0.191	0.383	-0.408	0.053	-0.312	0.149	0.489*	0.018	0.461*	0.027
18-HEPE	-0.189	0.389	0.26	0.231	-0.33	0.124	-0.326	0.128	0.409	0.053	0.142	0.519
15-HEPE	-0.186	0.396	0.128	0.562	-0.145	0.508	-0.192	0.38	0.094	0.67	0.129	0.559
12-HEPE	-0.274	0.207	0.268	0.215	-0.245	0.259	-0.189	0.388	-0.002	0.995	-0.029	0.869
4-HDoHE	-0.367	0.085	0.393	0.063	-0.525*	0.01	-0.105	0.635	0.475*	0.022	0.197	0.367
8-HDoHE	-0.128	0.56	-0.085	0.699	-0.272	0.209	-0.051	0.819	-0.252	0.247	0.088	0.689
16-HDoHE	-0.420*	0.046	-0.089	0.686	-0.166	0.448	0.106	0.63	0.187	0.392	0.174	0.727
20-HDoHE	-0.420*	0.046	-0.089	0.686	-0.166	0.448	0.106	0.63	0.187	0.392	0.174	0.426
13-HDoHE	0.042	0.848	0.203	0.352	-0.348	0.103	0.007	0.975	0.084	0.704	-0.234	0.283
10-HDoHE	-0.503*	0.014	-0.052	0.815	-0.151	0.492	0.481*	0.02	0.231	0.288	-0.131	0.551
14-HDoHE	-0.439*	0.036	0.085	0.701	-0.269	0.215	0.05	0.822	0.256	0.239	0.222	0.309
16(17)-EpDPE	-0.424*	0.044	0.173	0.43	-0.404	0.056	-0.178	0.417	0.420*	0.046	0.368	0.084
15-HETrE	-0.181	0.409	0.025	0.911	0.016	0.943	-0.055	0.802	-0.166	0.449	-0.073	0.74
9-HOTrE	-0.22	0.312	0.332	0.122	-0.304	0.158	0.004	0.986	0.381	0.073	0.047	0.832
13-HODE	-0.065	0.768	0.486*	0.019	-0.164	0.455	-0.347	0.105	0.021	0.925	-0.048	0.826
9-HODE	-0.11	0.618	0.512*	0.013	-0.089	0.687	-0.193	0.378	0.022	0.922	-0.267	0.218
9-oxoODE	0.114	0.606	0.461*	0.027	0.263	0.226	-0.123	0.578	-0.193	0.378	-0.354	0.098

9(10)-EpOME	0.077	0.727	0.535**	0.009	-0.186	0.396	-0.4	0.058	0.043	0.844	-0.127	0.562
9,10-diHOME	0.378	0.075	0.391	0.065	0.15	0.494	-0.274	0.206	-0.462	0.46	-0.123	0.578
12(13)-EpOME	0.122	0.581	0.373	0.08	0.002	0.993	-0.33	0.124	-0.232	0.286	-0.148	0.5
12,13-diHOME	0.096	0.664	0.570**	0.005	-0.053	0.809	-0.294	0.173	-0.123	0.578	-0.157	0.474
Linoleic acid (18:2n-6)			0.204	0.352	0.202	0.356	-0.430*	0.041	-0.365	0.087	-0.157	0.474
α -linolenic acid (18:3 n-3)	0.204	0.352			0.008	0.971	-0.432*	0.04	0.212	0.33	-0.148	0.5
Linoleic acid (20:3 n-6)	0.202	0.356	0.008	0.971			0.142	0.517	-0.358	0.094	-0.286	0.187
Arachidonic acid (20:4 n-6)	-0.430*	0.041	-0.432*	0.04	0.142	0.517			-0.233	0.284	-0.447*	0.033
Eicosapentaenoic acid (20:5 n-3)	-0.365	0.087	0.212	0.33	-0.358	0.094	-0.233	0.284			0.535**	0.009
Docosahexaenoic acid (22:6 n-3)	-0.157	0.474	-0.148	0.5	-0.286	0.187	-0.447*	0.033	0.535**	0.009		

* $p < 0.05$, ** $p < 0.01$, Spearman correlation coefficients and p -values for fatty acids and lipids. Olay lipins: prostaglandin F Metabolite (PGFM),

hydroxyheptadecatrienoic acid (HHTe), hydroxyoctadecatrienoic acid (HOTnE), eicosadecadienoic acid (EpOME), dihydroxyoctadecanoic acid (dHOME) hydroxyoctadecadienoic acid (HODE) in hydroxyeicosapentaenoic acid (HEPE), hydroxy docosahexanoic acid (HDoHE, hydroxyeicosatrienoic acid

(HETnE), dihydroxyeicosatrienoic acid (d-HET1E), oxo-octadecadienoic acid (axODE), hydroxy eicosatrienoic acid (HETE) dihydroxy eicosatrienoic acid (diHETE), epoxy-eicosatrienoic acid (EET), epoxy-docosapentaenoic acid EpDPE). * $p < 0.05$, ** $p < 0.01$