oxylipin	WAT p-value	WAT FDR	Plasma p-value	Plasma FDR	oxylipin	WAT p-value	WAT FDR	Plasma p-value	Plasma FDR
20-carboxy-AA	0.77	0.87	0.09	0.15	5-HETE	0.66	0.82	0.51	0.57
AA	0.81	0.90	0.14	0.22	8-HETE	0.43	0.71	0.81	0.83
DHA	0.74	0.86	0.17	0.26	11-HETE	0.58	0.78	0.93	0.93
EPA	0.93	0.97	0.62	0.66	12-HETE	0.51	0.74	**0.008***	**0.037**
Linoleic acid	0.31	0.56	**0.015***	**0.055**	15-HETE	0.28	0.53	0.051	**0.10**
10,11-EpDPA	0.54	0.74	**0.0015***	**0.020**	19-HETE	n.d.	n.d.	0.50	0.57
13,14-EpDPA	0.52	0.74	n.d.	n.d.	20-HETE	n.d.	n.d.	**0.045***	**0.10**
16,17-EpDPA	0.12	0.29	n.d.	n.d.	Lipoxin_A4	0.12	0.29	n.d.	n.d.
19,20-EpDPE	0.06	0.22	0.287	0.38	Lipoxin_B4	0.13	0.30	n.d.	n.d.
7,8-DiHDPA	n.d.	n.d.	**0.004***	**0.023**	9-HODE	0.10	0.28	0.49	0.57
10,11-DiHDPA	**0.014***	**0.11**	**0.049***	**0.10**	13-HODE	**0.046***	**0.21**	0.28	0.38
13,14-DiHDPA	n.d.	n.d.	**0.004***	**0.023**	17-HDHA	0.1	0.28	0.16	0.25
16,17-DiHDPA	n.d.	n.d.	**0.014***	**0.055**	22-HDoHE	n.d.	n.d.	**0.015***	**0.055**
19,20-DiHDPA	0.39	0.69	**0.001***	**0.017**	18-HEPE	n.d.	n.d.	0.27	0.37
17,18-EpETE	n.d.	n.d.	**0.019***	**0.057**	PGB2	0.14	0.31	**0.008***	**0.037**
18-HEPE	0.46	0.73	n.d.	n.d.	PGD2	0.74	0.86	0.017	0.057
11,12-DiHETE	n.d.	n.d.	**0.043***	**0.10**	PGE2	0.86	0.93	**0.001***	**0.017**
14,15-DiHETE	0.07	0.24	0.18	0.26	15ketoPGE2	0.60	0.78	n.d.	n.d.
17,18-DiHETE	0.15	0.32	0.08	0.14	6ketoPGF1a	0.89	0.95	n.d.	n.d.
8,9-EET	0.06	0.22	**<0.0001***	**0.005**	PGF2a	0.95	0.97	0.22	0.31
11,12-EET	0.11	0.29	0.05	**0.10**	8isoPGF2a	0.54	0.74	**0.021***	**0.059**
14,15-EET	0.61	0.78	0.55	0.60	TXB2	0.51	0.74	**0.002***	**0.020**
5,6-DHET	**<.001***	**0.026**	**0.023***	**0.059**	11-dehydro-TXB2	0.41	0.70	n.d.	n.d.
8,9-DHET	**0.018***	**0.11**	0.07	0.13	10,11-EpDPA:DiHDPA	0.22	0.43	**0.003***	**0.023**
11,12-DHET	**0.018***	**0.11**	**0.004***	**0.023**	19,20EpDPE:DiHDPA	**0.047***	**0.21**	**0.047***	**0.10**
14,15-DHET	**0.013***	**0.11**	0.07	0.13	8,9-EET:DHET	1.00	1.00	**0.022***	**0.059**
9,10-EpOME	0.18	0.37	0.34	0.41	11,12-EET:DHET	0.74	0.86	0.34	0.41
12,13-EpOME	**0.046***	**0.21**	0.42	0.50	14,15-EET:DHET	0.09	0.28	0.81	0.83
9,10-DHOME	**<.001***	**0.026**	0.08	0.14	9,10-EpOME:DiHOME	**0.006***	**0.077**	0.333	0.41
12,13-DHOME	**0.002***	**0.034**	n.d.	n.d.	12,13-EpOME:DiHOME	**0.026***	**0.15**	**0.019***	**0.057**

Supplementary Table 3. WAT and plasma oxylipin quantification. Oxylipins were quantified in control (N=7), obese (N=52) and obese with T2DM patients (N=26). All significant metabolites decreased while epoxide:diol ratios increased with obesity and T2DM, except for 10,11-EpDPA:DiHDPA. Statistical significance was tested between the three groups using Kruskal-Wallis test; False Discovery Rate (FDR) calculated using Benjamini-Hochberg; n.d., not detected.