

Supplemental Table 1. Descriptive statistics of all miRNA parameters.

miRNAs	CTL (n=6)		FO (n=7)		OO (n=10)		All (n=23)
	Filtered air	Ozone	Filtered air	Ozone	Filtered air	Ozone	
<i>let-7d-5p</i>	30.9 (24.8, 37.1)	36.2 (27, 45.5)	32.6 (25.2, 40.1)	32.7 (23.4, 42.0)	29.4 (24.9, 33.9)	28.9 (24.0, 33.8)	31.4 (29.1, 33.6)
<i>let-7e-5p</i>	4.2 (3.6, 4.8)	5.3 (3.5, 7.0)	3.5 (1.8, 5.1)	4.1 (2.8, 5.4)	3.5 (2.3, 4.6)	4.1 (3.2, 4.9)	4.0 (3.6, 4.5)
<i>let-7g-5p</i>	32.9 (26.4, 39.4)	30.8 (25.1, 36.4)	29.1 (21.6, 36.7)	31.9 (26.8, 37.0)	37.3 (26.1, 48.4)	28.7 (22.2, 35.2)	31.9 (29.0, 34.8)
<i>let-7i-5p</i>	58.7 (45.1, 72.3)	58 (43.5, 72.4)	66.1 (50.7, 81.5)	64 (52.5, 75.6)	63.7 (53.5, 73.8)	65.1 (59.1, 71.0)	63.0 (59.3, 66.8)
<i>miR-375</i>	1.0 (0.3, 1.7)	0.9 (0.4, 1.4)	0.9 (0.3, 1.5)	2.1 (0.4, 3.9)	0.7 (0.3, 1.1)	1.0 (0.5, 1.5)	1.1 (0.8, 1.4)
<i>miR-103a-3p</i>	177.2 (150.5, 203.9)	178.2 (143.4, 213)	190.8 (151.9, 229.8)	167.3 (120, 214.7)	180.6 (155.1, 206.0)	167.5 (151.1, 184.0)	176.5 (166.2, 186.8)
<i>miR-106b-5p</i>	50.1 (42.8, 57.3)	52.1 (46.6, 57.6)	51.4 (40.4, 62.4)	50.6 (41.1, 60.0)	55.4 (40.1, 70.6)	49.9 (43.5, 56.3)	51.7 (48.1, 55.4)
<i>miR-122-5p</i>	66.2 (39.4, 93)	127.9 (51.3, 204.5)*	62.2 (22.9, 101.4)	66.8 (44.9, 88.7)	57.8 (46.2, 69.4)	64.2 (32.4, 96.1)	71.5 (58.4, 84.5)
<i>miR-124-3p</i>	0.1 (0.0, 0.1)	0.1 (0.0, 0.2)	0.1 (0.0, 0.3)	0.2 (0.0, 0.4)	0.2 (0.0, 0.4)	0.2 (0.0, 0.5)	0.2 (0.1, 0.2)
<i>miR-125a-5p</i>	0.2 (0.0, 0.4)	0.1 (0.0, 0.3)	0.1 (-0.1, 0.4)	0.3 (0.1, 0.5)	0.2 (-0.1, 0.5)	0.2 (0.1, 0.3)	0.2 (0.1, 0.3)
<i>miR-125b-5p</i>	0.1 (-0.1, 0.3)	0.2 (0.0, 0.3)	0.3 (0.0, 0.6)	0.1 (0.0, 0.1)*	0.1 (0.0, 0.2)	0.2 (0.0, 0.4)	0.2 (0.1, 0.2)
<i>miR-126-3p</i>	78.1 (70.9, 85.4)	79.0 (62.9, 95)	76.0 (65.8, 86.3)	79.8 (57.7, 101.9)	80.6 (70.9, 90.4)	78.6 (70.0, 87.1)	78.8 (74.7, 82.9)
<i>miR-133a-3p</i>	0.8 (-0.2, 1.8)	0.4 (-0.1, 0.9)	0.6 (-0.2, 1.4)	0.9 (-0.4, 2.1)	0.5 (0.0, 1.0)	0.6 (0.2, 1.0)	0.6 (0.4, 0.9)
<i>miR-133b</i>	0.7 (-0.3, 1.7)	0.3 (-0.2, 0.7)	0.5 (-0.2, 1.1)	0.6 (-0.3, 1.6)	0.5 (-0.1, 1.2)	0.4 (0.1, 0.8)	0.5 (0.3, 0.7)
<i>miR-142-3p</i>	1.1 (0.3, 1.8)	1.1 (0.0, 2.2)	0.7 (0.3, 1.1)	1.0 (0.4, 1.6)	0.9 (0.4, 1.4)	0.9 (0.6, 1.3)	0.9 (0.7, 1.1)
<i>miR-144-5p</i>	0.14 (-0.07, 0.35)	0.16 (0.0, 0.32)	0.01 (-0.01, 0.03)	0.19 (0.04, 0.34)*	0.16 (-0.02, 0.34)	0.09 (-0.02, 0.20)	0.12 (0.07, 0.18)
<i>miR-145-5p</i>	4.3 (1.7, 6.9)	3.8 (2.6, 5.1)	3.8 (1.6, 6.0)	3.9 (2.6, 5.3)	4.2 (3.3, 5.1)	4.5 (3.1, 5.8)	4.1 (3.6, 4.6)
<i>miR-146a-5p</i>	99.8 (83.0, 116.5)	99.1 (81.5, 116.7)	129.0 (106.2, 151.8)	119.1 (90.0, 148.2)	112.2 (94.9, 129.6)	110.7 (99.0, 122.5)	112.2 (105.3, 119.1)
<i>miR-150-5p</i>	21.5 (13.1, 30.0)	36.1 (7.7, 64.4)	27.1 (12.7, 41.4)	45.1 (14.6, 75.6)	43.2 (22.2, 64.3)	43.3 (19.5, 67.1)	37.3 (29.3, 45.4)
<i>miR-155-5p</i>	0.4 (-0.2, 1.1)	0.6 (0.3, 1.0)*	0.8 (0.3, 1.3)	0.5 (0.1, 1.0)	0.3 (0.0, 0.7)	0.7 (0.4, 1.0)	0.6 (0.4, 0.7)
<i>miR-15b-5p</i>	84.8 (72.3, 97.2)	90.6 (80.7, 100.5)	82.0 (66.4, 97.5)	84.2 (75.2, 93.1)	81.6 (74.6, 88.7)	84.8 (75.2, 94.4)	84.3 (80.8, 87.8)
<i>miR-16-5p</i>	1060.3 (807.4, 1313.1)	1156.2 (809.5, 1502.9)	1165.5 (857.5, 1473.6)	1223.1 (863.3, 1582.8)	1174.3 (878.7, 1469.9)	1170.6 (937.1, 1404.2)	1162.4 (1063.4, 1261.3)
<i>miR-17-5p</i>	282.5 (265.4, 299.6)	280.8 (255.8, 305.9)	302.4 (268.6, 336.2)	285.0 (274.9, 295.1)	289.2 (279.4, 298.9)	287.8 (274.8, 300.9)	288.3 (282.1, 294.5)
<i>miR-181b-5p</i>	3.9 (2.3, 5.5)	4.3 (3.6, 5.0)	2.3 (1.3, 3.4)	3.7 (2.9, 4.5)	3.6 (1.4, 5.8)	4.0 (2.6, 5.3)	3.6 (3.1, 4.2)

Supplemental Table 1 continued

<i>miR-18a-5p</i>	11.4 (8.5, 14.3)	10.7 (6.3, 15.0)	11.8 (9.5, 14.0)	10.5 (8.9, 12.2)	10.2 (9.2, 11.3)	9.7 (7.3, 12.2)	10.6 (9.8, 11.4)
<i>miR-192-5p</i>	5.1 (3.2, 7.1)	7.4 (3.6, 11.1)	5.8 (2.3, 9.3)	7.8 (4.9, 10.6)	5.4 (3.9, 6.9)	6.1 (3.5, 8.6)	6.2 (5.3, 7.1)
<i>miR-194-5p</i>	2.5 (1.2, 3.9)	3.6 (1.4, 5.9)	2.3 (1.3, 3.3)	3.1 (2.3, 3.8)	2.3 (1.7, 2.8)	2.8 (1.9, 3.7)	2.7 (2.4, 3.1)
<i>miR-195-5p</i>	73 (46.4, 99.6)	87.6 (43.4, 131.8)	57.2 (43, 71.4)	62.7 (46.5, 78.9)	71.7 (49.4, 93.9)	61.3 (46.2, 76.3)	68.1 (60.2, 76)
<i>miR-199a-3p</i>	55.3 (44.5, 66.1)	52.3 (33.6, 70.9)	52.4 (36.5, 68.3)	51.1 (38.1, 64.1)	55.0 (45.9, 64.2)	50.0 (39.1, 60.9)	52.6 (48.5, 56.8)
<i>miR-199a-5p</i>	31.4 (25.8, 37.0)	26.7 (17.5, 36)	33.1 (26.3, 39.9)	27.0 (20.4, 33.5)	28.9 (24.2, 33.6)	26.2 (21.1, 31.3)	28.7 (26.6, 30.8)
<i>miR-19a-3p</i>	15.2 (8.9, 21.5)	11.2 (9.5, 12.8)	12.4 (9, 15.9)	13 (8.7, 17.3)	15.1 (11.5, 18.8)	10.5 (8.3, 12.8)*	12.9 (11.6, 14.2)
<i>miR-1-3p</i>	0.2 (-0.1, 0.6)	0.1 (0.0, 0.3)	0.3 (-0.1, 0.6)	0.3 (-0.1, 0.7)	0.2 (0.0, 0.5)	0.2 (0.0, 0.4)	0.2 (0.1, 0.3)
<i>miR-208a-3p</i>	0.2 (-0.2, 0.5)	0.1 (-0.1, 0.3)	0.2 (-0.1, 0.4)	0.2 (0.0, 0.4)	0.2 (0.0, 0.3)	0.1 (0.0, 0.3)	0.2 (0.1, 0.2)
<i>miR-208b-3p</i>	0.2 (-0.1, 0.4)	0.2 (0.1, 0.3)	0.2 (0.0, 0.4)	0.2 (-0.1, 0.6)	0.2 (0.0, 0.4)	0.2 (0.1, 0.3)	0.2 (0.1, 0.3)
<i>miR-20b-5p</i>	119.3 (100.1, 138.5)	119.9 (92.5, 147.2)	100 (86.3, 113.8)	103.6 (79.6, 127.7)	110.5 (82.7, 138.4)	98.7 (82.3, 115.1)	107.7 (99.8, 115.6)
<i>miR-210-3p</i>	0.9 (0.3, 1.6)	0.6 (0.1, 1.1)	0.8 (0.5, 1.1)	1.3 (0.6, 2.0)	0.7 (0.3, 1.1)	1.0 (0.6, 1.3)	0.9 (0.7, 1.0)
<i>miR-214-3p</i>	1.1 (0.4, 1.9)	1.3 (0.2, 2.4)	0.5 (0.2, 0.9)	0.9 (0.3, 1.4)	1.0 (0.4, 1.6)	0.7 (0.3, 1.0)	0.9 (0.7, 1.1)
<i>miR-21-5p</i>	27.2 (18.2, 36.2)	21.4 (14.5, 28.3)	24.6 (14.2, 35.1)	22.2 (15.7, 28.7)	29.2 (20.8, 37.6)	24.2 (19.7, 28.6)	25.1 (22.4, 27.7)
<i>miR-25-3p</i>	89.8 (74.9, 104.8)	90.4 (63.6, 117.2)	95.6 (67.8, 123.5)	92.6 (72.8, 112.4)	86.9 (68.1, 105.8)	90.7 (70.5, 111.0)	90.8 (83.6, 97.9)
<i>miR-26a-5p</i>	117.5 (97.7, 137.3)	113.9 (87.6, 140.1)	122.3 (96.5, 148.1)	109.1 (81.1, 137.1)	105.1 (87.7, 122.5)	108.6 (92.2, 125.0)	111.8 (104.6, 119.1)
<i>miR-26b-5p</i>	6.6 (4.8, 8.4)	6.1 (5.4, 6.8)	5.3 (4.4, 6.3)	4.3 (2.9, 5.8)	5.2 (3.1, 7.4)	4.6 (3.9, 5.2)	5.3 (4.7, 5.8)
<i>miR-27a-3p</i>	46.9 (41.0, 52.7)	48.7 (36.8, 60.7)	50.0 (43.1, 56.8)	55.5 (47, 64.1)	53.9 (45.1, 62.7)	51.1 (40.9, 61.4)	51.4 (48.2, 54.6)
<i>miR-27b-3p</i>	31.8 (30.0, 33.6)	32.3 (26.7, 37.9)	32.7 (28.1, 37.3)	35 (29.6, 40.5)	34.8 (28.1, 41.5)	32.1 (26.0, 38.2)	33.2 (31.2, 35.2)
<i>miR-28-5p</i>	14.8 (12.4, 17.3)	13.7 (6.1, 21.3)	13.0 (8.6, 17.3)	11.0 (8.2, 13.9)	12.6 (8.6, 16.6)	13.5 (11, 16)	13.0 (11.7, 14.4)
<i>miR-29a-3p</i>	21.7 (16.2, 27.3)	26.9 (19.8, 34)	23.7 (16.9, 30.5)	29.3 (23.3, 35.3)	30.9 (22.2, 39.6)	30.1 (24.0, 36.2)	27.7 (25.1, 30.3)
<i>miR-29b-3p</i>	8.4 (7.0, 9.7)	7.9 (5.4, 10.4)	7.6 (3.7, 11.4)	7.9 (6.7, 9.0)	10.4 (4.9, 15.9)	8.7 (7.4, 10.1)	8.6 (7.4, 9.8)
<i>miR-30a-5p</i>	0.7 (0.4, 1.0)	0.9 (0.3, 1.6)	0.8 (0.5, 1.1)	1.0 (0.6, 1.5)	0.7 (0.3, 1.2)	0.6 (0.3, 0.9)	0.8 (0.7, 0.9)
<i>miR-320b</i>	102.9 (93.9, 112.0)	88.3 (74.4, 102.2)	100.0 (89.7, 110.3)	98.5 (85.9, 111.0)	85.6 (74.1, 97.1)	94.6 (81.2, 108.0)	94.3 (89.8, 98.8)
<i>miR-328-3p</i>	9.6 (6.5, 12.6)	7.4 (2.1, 12.8)	9.3 (6.2, 12.3)	8.1 (4.7, 11.5)	5.7 (3.7, 7.7)	7.2 (4.7, 9.7)	7.7 (6.6, 8.7)
<i>miR-335-5p</i>	5.9 (2.8, 8.9)	5.1 (3.0, 7.1)	4.1 (2.7, 5.6)	4.5 (1.6, 7.5)	5.4 (3.2, 7.6)	5.1 (3.7, 6.5)	5.0 (4.3, 5.7)
<i>miR-337-5p</i>	2.1 (0.6, 3.6)	2.2 (-0.6, 4.9)	1.6 (0.6, 2.6)	1.7 (0.2, 3.2)	1.4 (0.6, 2.2)	2.0 (0.6, 3.4)	1.8 (1.3, 2.3)

Supplemental Table 1 continued

<i>miR-342-3p</i>	11 (9.1, 12.9)	12.7 (9.8, 15.5)	11.9 (8.6, 15.3)	18.1 (11.7, 24.5)*	15.4 (11.6, 19.2)	15.8 (12, 19.7)	14.4 (12.9, 16)
<i>miR-34a-5p</i>	0.5 (0.0, 1.0)	1.6 (-0.3, 3.5)*	1.2 (0.7, 1.6) [#]	1.1 (-0.1, 2.3)	0.8 (0.4, 1.2)	1.1 (0.5, 1.7)	1.0 (0.7, 1.3)
<i>miR-363-3p</i>	2.2 (0.9, 3.5)	2.6 (0.9, 4.4)	1.8 (0.7, 2.9)	1.4 (0.7, 2.1)	1.5 (0.8, 2.2)	1.1 (0.4, 1.7)	1.7 (1.3, 2.0)
<i>miR-370-3p</i>	0.4 (-0.1, 0.8)	0.6 (0.3, 0.9)	0.5 (0.1, 0.9)	0.5 (0.2, 0.9)	0.4 (0.1, 0.8)	0.5 (0.1, 0.8)	0.5 (0.4, 0.6)
<i>miR-423-5p</i>	70.9 (60.8, 81.1)	70.6 (50.8, 90.4)	77.1 (64.2, 89.9)	84.1 (70.5, 97.6)	69.6 (61.7, 77.4)	75.7 (61.9, 89.5)	74.6 (70.1, 79)
<i>miR-433-3p</i>	0.3 (-0.3, 1.0)	0.2 (-0.2, 0.6)	0.6 (0.3, 1.0)	0.6 (-0.2, 1.3)	0.5 (0.0, 1.0)	0.3 (-0.1, 0.7)	0.4 (0.2, 0.6)
<i>miR-451a</i>	800.1 (432, 1168.2)	727.6 (379.9, 1075.4)	639.1 (284.2, 994.1)	757.8 (414.9, 1100.8)	795.8 (540.5, 1051.1)	746.0 (521.3, 970.7)	747.0 (647.7, 846.3)
<i>miR-485-3p</i>	3.6 (0.9, 6.3)	3.0 (1.3, 4.6)	2.0 (0.4, 3.6)	1.6 (0.4, 2.7)	2.5 (0.7, 4.3)	2.7 (1.1, 4.3)	2.5 (1.9, 3.1)
<i>miR-486-5p</i>	90.3 (41.9, 138.7)	83.3 (57.1, 109.4)	81.3 (48.2, 114.4)	99.5 (65.6, 133.5)	95.8 (63.2, 128.4)	92.5 (72.1, 112.9)	91.1 (80.5, 101.7)
<i>miR-499a-5p</i>	0.2 (-0.2, 0.7)	0.3 (0.1, 0.4)	0.3 (-0.1, 0.7)	0.1 (0.0, 0.3)	0.1 (0.0, 0.2)	0.1 (0.0, 0.1)	0.2 (0.1, 0.2)
<i>miR-505-5p</i>	0.6 (0.1, 1.1)	0.4 (0.0, 0.7)	0.3 (-0.1, 0.7)	0.6 (0.2, 1.0)	0.3 (0.0, 0.6)	0.4 (0.1, 0.7)	0.4 (0.3, 0.5)
<i>miR-590-5p</i>	0.7 (0.3, 1.2)	0.3 (0.1, 0.5)	0.6 (0.3, 0.9)	0.6 (0.1, 1.0)	0.7 (0.3, 1.1)	0.8 (0.3, 1.2)	0.6 (0.5, 0.8)
<i>miR-92a-3p</i>	111.1 (84.0, 138.1)	103.2 (84.4, 122.1)	112.4 (96.2, 128.5)	124.6 (103.0, 146.1)	110.8 (88.9, 132.7)	100.4 (86.8, 113.9)	109.9 (103, 116.8)
<i>miR-93-5p</i>	249.6 (226.5, 272.7)	235.0 (209.1, 261)	245.7 (221.1, 270.3)	249.2 (223.6, 274.9)	253.0 (234.8, 271.2)	246.4 (225.9, 266.9)	247.1 (239.6, 254.6)

For descriptive statistics, mean and 95% confidence intervals of all 65 miRNAs post filtered air and O₃ exposure were presented for each dietary group.

For statistical analysis, data were first log-transformed and a two-factor (O₃ exposure and supplementation status) mixed effects model with a participant-specific random intercept. Pair-wise comparisons were adjusted using Tukey's tests. * *p* < 0.05 indicate significant differences between filtered air and O₃ exposure in each dietary group. [#] *p* < 0.05 indicate significant differences in FO or OO group compared with CTL group on the filtered air or O₃ exposure day.

CTL: control, FO: fish oil, OO: olive oil.

Supplemental Table 2. Parameters of type III statistics of changes in circulating miRNAs affected by experimental conditions.

miRNAs	Ozone exposure		Dietary supplementation		Interaction	
	F value	p	F value	p	F value	p
<i>let-7d-5p</i>	0.460	0.506	0.910	0.420	0.740	0.488
<i>let-7e-5p</i>	4.210	0.0536	1.500	0.246	0.040	0.961
<i>let-7g-5p</i>	0.430	0.520	0.120	0.891	1.410	0.267
<i>let-7i-5p</i>	0.000	0.997	0.910	0.419	0.100	0.901
<i>miR-375</i>	2.930	0.103	1.580	0.231	0.240	0.790
<i>miR-103a-3p</i>	2.050	0.168	0.040	0.963	0.660	0.527
<i>miR-106b-5p</i>	0.050	0.830	0.010	0.987	0.360	0.702
<i>miR-122-5p</i>	7.090	0.015	1.210	0.320	2.860	0.081
<i>miR-124-3p</i>	0.690	0.421	0.970	0.404	0.080	0.922
<i>miR-125a-5p</i>	1.420	0.256	0.370	0.700	0.270	0.772
<i>miR-125b-5p</i>	0.320	0.588	0.000	0.998	3.090	0.095
<i>miR-126-3p</i>	0.010	0.935	0.120	0.885	0.050	0.954
<i>miR-133a-3p</i>	0.000	0.949	0.500	0.616	0.490	0.625
<i>miR-133b</i>	0.020	0.892	0.070	0.937	0.080	0.920
<i>miR-142-3p</i>	0.300	0.589	0.060	0.942	0.350	0.709
<i>miR-144-5p</i>	6.390	0.0448	1.220	0.359	4.420	0.066
<i>miR-145-5p</i>	0.110	0.746	0.520	0.600	0.220	0.808
<i>miR-146a-5p</i>	0.370	0.549	3.860	0.0383	0.240	0.785
<i>miR-150-5p</i>	3.040	0.0964	0.750	0.487	1.460	0.256
<i>miR-155-5p</i>	2.840	0.116	1.220	0.327	3.050	0.082
<i>miR-15b-5p</i>	1.430	0.245	0.560	0.581	0.070	0.929
<i>miR-16-5p</i>	0.450	0.508	0.100	0.902	0.050	0.955
<i>miR-17-5p</i>	1.080	0.310	1.060	0.365	0.550	0.583
<i>miR-181b-5p</i>	2.630	0.121	0.720	0.500	0.640	0.538
<i>miR-18a-5p</i>	2.230	0.151	0.740	0.489	0.020	0.983
<i>miR-192-5p</i>	4.370	0.0496	0.300	0.746	0.920	0.414
<i>miR-194-5p</i>	7.830	0.0111	0.050	0.955	0.440	0.651
<i>miR-195-5p</i>	0.160	0.696	0.870	0.432	1.130	0.342
<i>miR-199a-3p</i>	0.710	0.410	0.100	0.904	0.220	0.808
<i>miR-199a-5p</i>	7.140	0.0146	0.360	0.700	0.280	0.755
<i>miR-19a-3p</i>	5.470	0.0299	0.040	0.958	2.200	0.137
<i>miR-1-3p</i>	1.070	0.335	0.040	0.957	0.640	0.557
<i>miR-208a-3p</i>	0.040	0.840	0.220	0.809	0.320	0.737
<i>miR-208b-3p</i>	1.540	0.239	0.140	0.867	0.140	0.875
<i>miR-20b-5p</i>	0.110	0.741	1.680	0.212	0.190	0.826
<i>miR-210-3p</i>	0.920	0.351	0.770	0.477	0.750	0.488
<i>miR-214-3p</i>	0.370	0.552	2.310	0.128	2.130	0.148
<i>miR-21-5p</i>	2.810	0.109	0.890	0.427	0.240	0.789

Supplemental Table 2 continued

<i>miR</i> -25-3p	0.000	0.982	0.200	0.817	0.090	0.917
<i>miR</i> -26a-5p	0.720	0.406	0.410	0.672	0.950	0.404
<i>miR</i> -26b-5p	1.480	0.238	3.940	0.0361	0.590	0.563
<i>miR</i> -27a-3p	0.140	0.712	0.520	0.605	0.980	0.392
<i>miR</i> -27b-3p	0.000	0.993	0.120	0.886	0.760	0.479
<i>miR</i> -28-5p	0.200	0.656	0.550	0.584	0.660	0.526
<i>miR</i> -29a-3p	2.830	0.108	1.530	0.240	0.800	0.461
<i>miR</i> -29b-3p	0.000	0.960	0.930	0.409	0.450	0.643
<i>miR</i> -30a-5p	0.020	0.876	1.300	0.295	0.140	0.869
<i>miR</i> -320b	0.360	0.553	1.640	0.218	3.110	0.067
<i>miR</i> -328-3p	0.160	0.690	1.130	0.344	1.420	0.265
<i>miR</i> -335-5p	0.050	0.826	0.910	0.419	0.070	0.936
<i>miR</i> -337-5p	0.110	0.740	0.450	0.647	0.890	0.428
<i>miR</i> -342-3p	4.080	0.0571	2.110	0.148	1.560	0.234
<i>miR</i> -34a-5p	4.770	0.0441	0.960	0.404	2.950	0.081
<i>miR</i> -363-3p	0.570	0.458	3.210	0.0617	0.440	0.650
<i>miR</i> -370-3p	3.010	0.102	0.040	0.963	0.290	0.752
<i>miR</i> -423-5p	0.480	0.496	1.770	0.196	0.290	0.753
<i>miR</i> -433-3p	0.000	0.986	0.580	0.587	1.790	0.236
<i>miR</i> -451a	0.030	0.857	0.150	0.864	0.690	0.513
<i>miR</i> -485-3p	0.230	0.638	1.270	0.307	1.580	0.234
<i>miR</i> -486-5p	0.630	0.436	0.080	0.923	0.500	0.616
<i>miR</i> -499a-5p	0.100	0.758	0.030	0.974	1.320	0.315
<i>miR</i> -505-5p	0.240	0.632	0.060	0.938	2.550	0.123
<i>miR</i> -590-5p	1.220	0.284	0.880	0.431	0.600	0.561
<i>miR</i> -92a-3p	0.090	0.770	1.160	0.335	1.170	0.331
<i>miR</i> -93-5p	1.100	0.306	0.200	0.823	0.740	0.491

For statistical analysis, data were first log-transformed and a two-factor (O_3 exposure and supplementation status) mixed effects model with a participant-specific random intercept. F and p values of the type III statistics of the mixed-effects model are presented for each miRNA.
 CTL: control, FO: fish oil, OO: olive oil.

Supplemental Table 3. Descriptive statistics of blood protein parameters

Biomarkers	CTL (n=6)		FO (n=7)		OO (n=10)		All (n=23)
	Filtered air	Ozone	Filtered air	Ozone	Filtered air	Ozone	
CRP	525 (88, 962)	546.7 (3, 1090.3)	788.8 (-45.7, 1623.3)	792.2 (-124.4, 1708.8)	794.6 (-203.1, 1792.4)	1347.6 (-888.9, 3584.1)	846.1 (356.7, 1335.5)
D-Dimer	130.5 (82.5, 178.5)	121.1 (74.1, 168)	170.7 (63.3, 278.1)	151.1 (59.5, 242.7)	132.2 (86, 178.5)	125.2 (83.1, 167.3)	137.8 (116, 159.5)
E-selectin	44 (28.1, 59.9)	40.9 (23.1, 58.6)	48.4 (31.8, 65.1)	43.5 (28.5, 58.4)*	43.2 (33.7, 52.7)	42.4 (32.3, 52.4)	43.7 (39.3, 48)
IL-6	0.5 (0.4, 0.6)	1.1 (0.8, 1.5)*	0.8 (0.3, 1.3)	1.1 (0.6, 1.5)	0.6 (0.3, 1)	1.4 (0.9, 1.8)*	0.9 (0.8, 1.1)
IL-8	2.2 (1.5, 2.8)	2.4 (1.8, 3)	2.5 (1.8, 3.2)	2.8 (1.6, 3.9)	2.5 (2, 3)	2.4 (2, 2.8)	2.5 (2.2, 2.7)
IL-1 β	0.1 (0.1, 0.1)	0.1 (0.1, 0.1)	0.1 (0.1, 0.1) [#]	0.1 (0.1, 0.1)	0.1 (0.1, 0.1) [#]	0.1 (0.1, 0.1)	0.1 (0.1, 0.1)
SAA	1426.8 (346.9, 2506.8)	1073.2 (319.3, 1827.1)	948.2 (378.4, 1518)	828.3 (331.2, 1325.4)	2526.6 (-1557.9, 6611.1)	5295.7 (-5006.6, 15598.1)	2296.9 (172.1, 4421.7)
TNF α	0.8 (0.6, 1)	0.8 (0.6, 1)	0.7 (0.5, 0.9)	0.7 (0.5, 0.8)	0.9 (0.7, 1)	0.8 (0.7, 1)	0.8 (0.7, 0.8)
sICAM1	202 (172.4, 231.5)	202.7 (174, 231.3)	212.8 (171.4, 254.2)	213.9 (173, 254.9)	215 (194.7, 235.3)	213.4 (190.4, 236.4)	210.9 (201, 220.7)
sVCAM1	251.3 (215.9, 286.8)	256.1 (214.5, 297.6)	233.7 (188.7, 278.7)	240.5 (181.9, 299.1)	291.2 (248.4, 333.9)	294.9 (253.1, 336.8)	265.8 (249, 282.5)
vWF	11.8 (8.9, 14.7)	13.6 (9.1, 18)	10.4 (5.8, 14.9)	10 (6.5, 13.6)	12.5 (9.7, 15.3)	11.6 (9.3, 13.9)	11.7 (10.5, 12.8)

For descriptive statistics, mean and 95% confidence intervals of all 11 protein biomarkers post filtered air and O₃ exposure were presented for each dietary group.

For statistical analysis, data were first log-transformed and a two-factor (O₃ exposure and supplementation status) mixed effects model with a participant-specific random intercept. Pair-wise comparisons were adjusted using Tukey's tests. * p < 0.05 indicate significant differences between filtered air and O₃ exposure in each dietary group. # p < 0.05 indicate significant differences in FO or OO group compared with CTL group on the filtered air or O₃ exposure day.

CRP: c-reactive protein, CTL: control, IL: interleukin, FO: fish oil, OO: olive oil, SAA: serum amyloid A, sICAM1: soluble intercellular adhesion molecule 1, sVCAM1: soluble vascular cell adhesion molecule 1, TNF α : tumor necrosis factor alpha, vWF: von Willebrand factor.