10.1071/RD14321_AC

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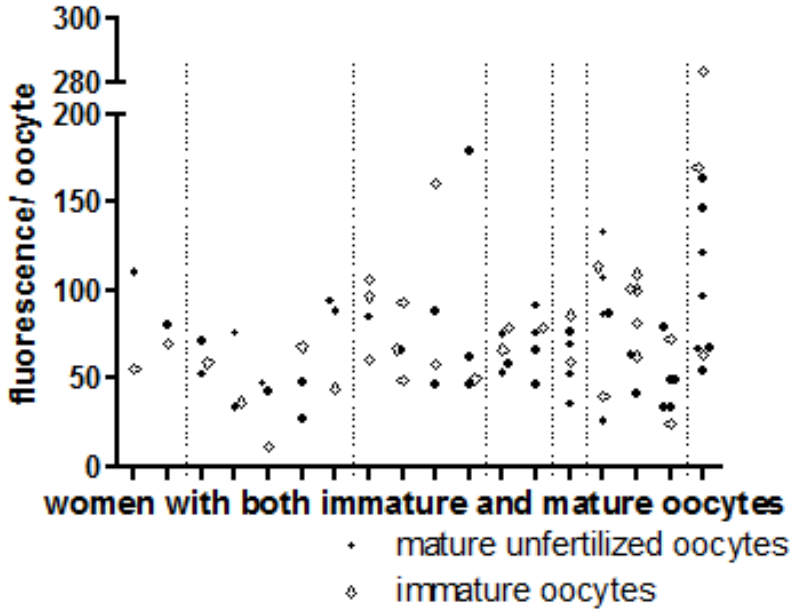
Table S1. The mean percentage (± s.d.) of fatty acid types and each specific fatty acid* in serum and follicular fluid of n = 84 women. Differences between serum and follicular fluid levels were determined by paired t-test.

	Serum (%)	Follicular fluid (%)	Difference *P*-value
Saturated fat (%)	36.95 ± 6.54	48.78 ± 8.65	0.000
Monounsaturated fat (%)	45.36 ± 9.72	33.01 ± 8.67	0.000
Trans fatty acid (%)	0.59 ± 0.23	0.37 ± 0.57	0.000
n-9 (omega 9) fatty acid (%)	40.52 ± 10.05	29.00 ± 8.39	0.000
n-6 (omega 6) fatty acid (%)	13.20 ± 5.64	14.84 ± 5.45	0.01
n-3 (omega 3) fatty acid (%)	3.32 ± 1.46	2.29 ± 0.81	0.000
n-7 (omega 7) fatty acid (%)	4.63 ± 1.84	3.93 ± 1.28	0.38
14:0 Myristic acid	1.40 ± 0.50	1.36 ± 0.26	0.68
15:0 Pentadecanoic acid	0.25 ± 0.08	0.25 ± 0.10	0.89
dma16:0 Dimethyl acetyl Hexadecanoate	0.15 ± 0.44	0.02 ± 0.08	0.009
16:0 Palmitic acid	24.57 ± 4.01	31.34 ± 5.18	<0.001
dma18:0 Dimethyl acetyl Octadecanoiate	0.06 ± 0.18	0	0.007
18:0 Stearic acid	10.40 ± 2.86	15.63 ± 3.62	<0.001
20:0 Arachidic acid	0.03 ± 0.07	0.08 ± 0.14	0.11
22:0 Behenic acid	0.04 ± 0.13	0.08 ± 0.27	0.46
24:0 Lignoceric acid	0.04 ± 0.07	0.02 ± 0.07	0.002
Trans 16:1 Transpalmitelaidic acid	0.06 ± 0.07	0	<0.001
Trans 18:1 n-9 9-octadenoic acid	0.26 ± 0.17	0.23 ± 0.55	<0.001
Trans 18:1n-7 Δ7 transvaccenic acid	0.26 ± 0.19	0.14 ± 0.12	<0.001
14:1 Myristoleic acid	0.22 ± 0.13	0.21 ± 0.33	0.01
15:1 Pentadecenoic acid	0.03 ± 0.06	0.94 ± 0.38	0.53
16:1n-9 Δ9 palmitelaidic acid	0.35 ± 0.20	0.24 ± 0.10	<0.001
16:1n-7 Elaidic acid	2.97 ± 1.41	1.94 ± 0.66	<0.001
17:1 Heptadecenoic acid	0.19 ± 0.21	0.26 ± 0.53	<0.001
18:1 n-9 9-octadenoic acid	39.55 ± 10.46	27.36 ± 8.91	<0.001
18:1n-7	1.66 ± 0.47	1.99 ± 0.81	0.001

Vaccenic acid			
19:1 Nonadecanoic acid	0.02 ± 0.05	0	0.02
20:1 n-11 Δ11 eicosanoic acid	0.06 ± 0.10	0.05 ± 0.12	0.01
20:1n-9 Eicosenoic acid	0.20 ± 0.12	0.43 ± 0.22	<0.001
22:1n-9 13-docosenoic acid	0.04 ± 0.09	0.17 ± 0.24	0.001
24:1n-9 Nervonic acid	0.06 ± 0.05	0.23 ± 0.09	<0.001
18:2n-9	0.04 ± 0.08	0.03 ± 0.13	0.002
20:2n-9 Eicosadienoaic acid	0.28 ± 0.41	0.55 ± 0.59	0.001
9,11 18:2 cLA	0.25 ± 0.19	0.13 ± 0.13	<0.001
18:2 n-6 9,12-octadecadienoate	11.30 ± 4.98	12.24 ± 4.93	0.09
18:3n-6 (GLA) Gamma-linolenic acid	0.17 ± 0.20	0.15 ± 0.16	0.76
20:2n-6 Eicosadienoic acid	0.20 ± 0.12	0.52 ± 0.24	<0.001
20:3n-6 (DGLA) Homo-gamma-linolenic acid	0.27 ± 0.24	0.32 ± 0.13	<0.001
20:4n-6 Docosatetraenoic acid	1.03 ± 0.70	0.82 ± 0.47	0.04
22:2 n-6 Docosadienoic acid	0	0.09 ± 0.12	<0.001
22:4n-6 Docosatetraenoic acid	0.15 ± 0.07	0.58 ± 0.28	<0.001
22:5n-6 Clupanodonicate	0.08 ± 0.07	0.12 ± 0.11	0.008
16:2 n-3 Palmitoleatic acid	0.10 ± 0.08	0.03 ± 0.06	<0.001
18:3n-3 (ALA) α-linolenic acid	1.45 ± 0.89	0.39 ± 0.21	<0.001
18:4 n-3 Parinaric acid	0.02 ± 0.06	0	0.19
20:3n-3 (ETA) Eicosatrienoic acid	0.28 ± 0.17	0.57 ± 0.33	<0.001
20:5n-3 (EPA) Eicosapentaenoic acid	0.28 ± 0.25	0.12 ± 0.16	<0.001
22:5n-3 (DPA) Docosapentaenoate	0.31 ± 0.19	0.33 ± 0.18	0.10
22:6n-3 (DHA) Docosahexaenoic acid	0.90 ± 0.61	0.77 ± 0.38	0.49

*There was no detectable 8:0, 9:0, 10:0, 11:0, 12:0, 13:0, 11:1, 12:1, 13:1, 18:1 n-12 or 20:3 n-9 in either follicular fluid or serum.

(A)



(B)

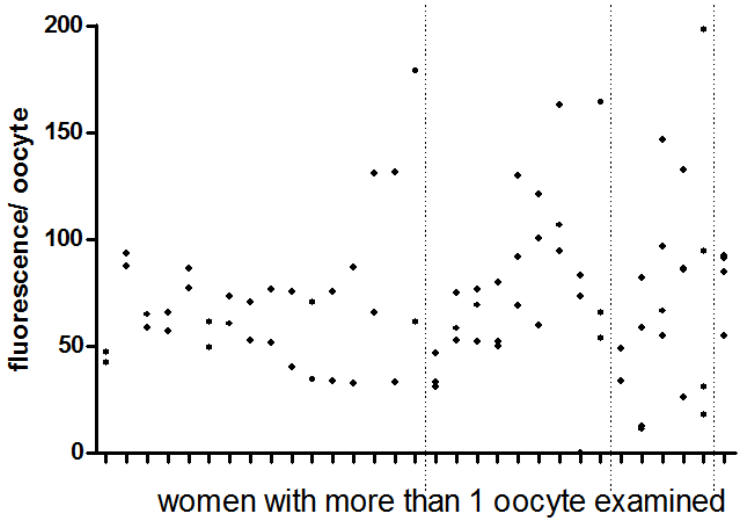


Fig. S1. Lipid content of unfertilized human oocytes. (A) Comparison of neutral lipid in oocytes from women who had both immature oocytes (open symbol) and mature unfertilised oocytes (solid symbol) examined. Each column represents the oocytes from one woman and these were arranged left to right according to the number of oocytes examined; women with two oocytes examined (n = 2), three oocytes (n = 5), four oocytes (n = 4), five oocytes (n = 2), six oocytes (n = 1), seven oocytes (n = 3) and 10 oocytes (n = 1). There was no difference in oocyte lipid levels between immature and mature oocytes. (B) Comparison of neutral lipid levels in all oocytes from women who had ≥2 oocytes. Each column represents the oocytes from one woman and these were arranged left to right according to the number of oocytes examined. Mixed linear model showed there was more variability in oocyte lipid levels within each individual than between individuals.