

Supplemental Table 1. Fatty acid (FA) content of control and antibacterial (AB)-treated females for each replicate.

FA ^{1,2}	Control ³					AB ³				
	1	2	3	4	5	1	2	3	4	5
C12:0	7.065	14.867	6.982	16.838	11.414	10.490	4.955	4.065	4.541	8.127
C13:0	0.000	0.007	0.000	0.008	0.006	0.021	0.005	0.013	0.007	0.019
C14:2	0.000	0.000	0.000	0.014	0.000	0.048	0.034	0.030	0.034	0.035
C14:1a	0.228	0.418	0.261	0.577	0.519	0.718	0.454	0.419	0.330	0.584
C14:1b	0.298	0.630	0.358	0.541	0.414	0.365	0.199	0.147	0.183	0.262
C14:1c	1.727	3.693	1.842	3.700	2.557	1.847	0.934	0.537	0.791	1.334
C14:0	8.727	19.662	7.362	21.489	15.970	15.950	7.959	7.231	6.827	13.608
C16:1a	0.050	0.091	0.026	0.075	0.085	0.133	0.085	0.092	0.130	0.120
C16:1b	2.957	5.606	2.624	5.264	4.116	3.302	1.933	1.560	2.068	2.773
C16:0	6.246	12.740	6.149	13.205	10.163	10.955	7.045	6.994	8.022	10.142
C17:0	0.028	0.021	0.017	0.034	0.021	0.028	0.020	0.030	0.020	0.030
C18:2	0.104	0.173	0.109	0.191	0.126	0.293	0.285	0.336	0.279	0.294
C18:1a	2.156	3.546	2.334	3.452	2.813	2.957	2.300	2.283	2.726	2.797
C18:1b	0.142	0.217	0.170	0.197	0.148	0.074	0.040	0.010	0.005	0.077
C18:0	0.914	1.192	1.009	1.309	1.099	1.168	0.987	0.916	0.985	1.389
C20:0	0.148	0.194	0.150	0.160	0.121	0.118	0.091	0.103	0.092	0.130
C22:0	0.021	0.019	0.010	0.018	0.013	0.015	0.009	0.011	0.005	0.015

¹Notation indicates carbon chain length followed by number of double bonds. Positional isomers for C14:1, C16:1, and C18:1 FA species are indicated by "a", "b", and "c".

²Each replicate is comprised of homogenate from 5 flies.

³Raw abundance counts are normalized to the abundance of a spiked standard (pentadecanoic acid).

Supplemental Table 2. Fatty acid (FA) content of control and antibacterial (AB)-treated males for each replicate.

FA ^{1,2}	Control ³					AB ³				
	1	2	3	4	5	1	2	3	4	5
C10:0	0.023	0.020	0.014	0.000	0.016	0.037	0.026	0.013	0.020	0.023
C12:0	3.983	3.124	2.684	0.820	2.894	8.086	3.626	1.999	3.463	3.393
C13:0	0.022	0.012	0.018	0.000	0.013	0.032	0.015	0.000	0.013	0.027
C14:1a	0.549	0.211	0.368	0.193	0.340	0.821	0.567	0.276	0.393	0.577
C14:1b	0.239	0.183	0.158	0.081	0.162	0.363	0.338	0.247	0.310	0.365
C14:1c	0.756	0.656	0.525	0.165	0.626	1.429	0.588	0.497	0.688	0.675
C14:0	7.218	6.113	4.805	1.863	5.638	13.563	6.872	3.829	6.647	6.263
C16:1a	0.139	0.084	0.109	0.075	0.108	0.248	0.181	0.089	0.115	0.161
C16:1b	2.170	2.101	1.815	1.105	1.874	3.424	2.355	2.106	2.613	2.317
C16:0	9.896	10.816	7.957	4.916	8.358	13.568	9.800	6.714	8.666	9.528
C17:0	0.065	0.050	0.052	0.041	0.052	0.059	0.058	0.045	0.048	0.063
C18:2	0.269	0.254	0.236	0.181	0.209	0.373	0.301	0.249	0.205	0.303
C18:1a	3.071	2.617	2.579	1.936	2.447	3.774	2.838	2.415	2.539	2.883
C18:1b	0.187	0.177	0.131	0.079	0.124	0.106	0.079	0.066	0.075	0.076
C18:0	1.428	1.411	1.228	1.063	1.242	1.588	1.368	1.268	1.213	1.357
C20:0	0.241	0.232	0.241	0.176	0.223	0.266	0.221	0.239	0.200	0.269
C22:0	0.044	0.049	0.069	0.060	0.054	0.053	0.050	0.065	0.052	0.077

¹Notation indicates carbon chain length followed by number of double bonds. Positional isomers for C14:1, C16:1, and C18:1 FA species are indicated by "a", "b", and "c".

²Each replicate is comprised of homogenate from 5 flies.

³Raw abundance counts are normalized to the abundance of a spiked standard (pentadecanoic acid).

Supplemental Table 3. Fatty acid (FA) content of control and antifungal (AF)-treated females for each replicate.

FA ^{1,2}	Control ³					AF ³				
	1	2	3	4	5	1	2	3	4	5
C10:0	0.104	0.150	0.000	0.189	0.000	0.000	0.104	0.000	0.099	0.041
C12:0	12.266	22.722	9.747	16.916	8.545	12.991	15.785	10.605	17.472	10.048
C13:0	0.023	0.039	0.015	0.022	0.013	0.030	0.030	0.017	0.033	0.019
C14:2	0.031	0.046	0.040	0.028	0.024	0.042	0.026	0.000	0.042	0.022
C14:1a	0.550	0.923	0.720	0.699	0.466	0.263	0.288	0.190	0.341	0.198
C14:1b	0.369	0.612	0.438	0.423	0.337	0.337	0.360	0.257	0.397	0.226
C14:1c	2.067	0.000	1.497	2.646	1.193	3.183	3.767	2.535	3.501	2.156
C16:1a	0.107	0.125	0.114	0.122	0.078	0.091	0.071	0.072	0.087	0.054
C16:1b	3.147	5.166	2.592	4.194	2.181	4.079	4.706	3.115	4.793	2.385
C16:0	9.728	14.476	8.264	12.099	7.062	9.990	10.940	7.174	11.202	5.828
C17:0	0.050	0.065	0.049	0.050	0.036	0.030	0.028	0.018	0.027	0.022
C18:2	0.174	0.251	0.185	0.217	0.150	0.140	0.117	0.105	0.128	0.092
C18:1a	2.401	3.353	2.549	2.990	1.989	2.160	2.278	1.811	2.505	1.368
C18:1b	0.092	0.138	0.086	0.107	0.082	0.080	0.075	0.000	0.073	0.051
C18:0	1.248	1.581	1.409	1.364	0.963	0.890	0.935	0.811	0.965	0.741
C19:0	0.028	0.042	0.036	0.026	0.017	0.025	0.022	0.000	0.021	0.014
C20:0	0.403	0.477	0.364	0.439	0.285	0.359	0.308	0.229	0.332	0.234
C22:0	0.143	0.140	0.109	0.151	0.097	0.119	0.101	0.082	0.101	0.083

¹Notation indicates carbon chain length followed by number of double bonds. Positional isomers for C14:1, C16:1, and C18:1 FA species are indicated by "a", "b", and "c".

²Each replicate is comprised of homogenate from 5 flies.

³Raw abundance counts are normalized to the abundance of a spiked standard (pentadecanoic acid).

Supplemental Table 4. Fatty acid (FA) content of control and antibacterial (AB)-treated males for each replicate.

FA ^{1,2}	Control ³					AF ³				
	1	2	3	4	5	1	2	3	4	5
C10:0	0.000	0.034	0.000	0.000	0.040	0.128	0.084	0.126	0.128	0.099
C12:0	1.237	2.106	1.538	2.049	2.912	18.338	11.392	15.394	14.043	12.401
C13:0	0.000	0.000	0.000	0.000	0.035	0.027	0.000	0.000	0.000	0.021
C14:1a	0.163	0.261	0.055	0.086	0.098	0.436	0.300	0.340	0.319	0.323
C14:1b	0.105	0.121	0.061	0.093	0.094	0.430	0.336	0.383	0.289	0.361
C14:1c	0.219	0.222	0.235	0.320	0.496	2.371	1.590	1.879	1.298	2.064
C14:0	1.647	2.906	2.126	2.893	3.807	15.036	9.881	11.775	11.224	13.129
C16:1a	0.061	0.073	0.039	0.048	0.062	0.126	0.097	0.094	0.109	0.115
C16:1b	1.015	1.205	1.026	1.302	1.631	2.910	2.229	2.375	1.908	2.673
C16:0	4.831	6.299	4.662	5.684	7.136	7.786	5.180	6.122	6.089	7.336
C17:0	0.040	0.049	0.032	0.030	0.046	0.028	0.000	0.026	0.025	0.030
C18:2	0.203	0.269	0.131	0.140	0.213	0.205	0.143	0.167	0.209	0.190
C18:1a	1.736	2.361	1.343	1.586	1.817	2.115	1.675	1.843	1.839	2.064
C18:1b	0.105	0.152	0.083	0.095	0.114	0.152	0.158	0.184	0.181	0.159
C18:0	0.874	1.083	0.859	0.861	0.983	0.966	0.870	0.947	0.998	0.970
C20:0	0.196	0.233	0.136	0.162	0.173	0.266	0.222	0.249	0.263	0.274
C22:0	0.064	0.072	0.045	0.051	0.069	0.069	0.066	0.072	0.070	0.072

¹Notation indicates carbon chain length followed by number of double bonds. Positional isomers for C14:1, C16:1, and C18:1 FA species are indicated by "a", "b", and "c".

²Each replicate is comprised of homogenate from 5 flies.

³Raw abundance counts are normalized to the abundance of a spiked standard (pentadecanoic acid).

Supplemental Table 5. Fatty acid (FA) content of control and antibacterial and antifungal (AB+AF)-treated females for each replicate.

FA ^{1,2}	Control ³					AB+AF ³				
	1	2	3	4	5	1	2	3	4	5
C12:0	8.412	17.665	17.424	15.381	17.827	18.195	11.926	15.477	15.780	13.357
C14:1a	2.308	1.388	1.107	0.953	1.102	0.288	0.170	0.236	0.268	0.222
C14:1b	1.843	0.690	0.645	0.497	0.553	0.271	0.166	0.210	0.204	0.177
C14:1c	6.579	2.969	2.905	2.047	2.486	3.800	2.304	3.038	2.677	2.896
C14:0	10.557	18.048	18.498	16.274	18.385	16.430	11.245	12.892	12.243	11.991
C16:1a	0.588	0.217	0.206	0.198	0.179	0.133	0.061	0.100	0.071	0.081
C16:1b	14.969	4.492	4.498	3.606	3.988	4.239	2.394	3.216	2.844	2.890
C16:0	11.079	14.910	14.011	11.904	13.210	10.564	5.994	8.865	7.476	7.969
C17:0	0.000	0.063	0.052	0.050	0.059	0.000	0.000	0.000	0.000	0.000
C18:2	7.345	0.346	0.307	0.294	0.310	0.200	0.135	0.170	0.150	0.145
C18:1a	26.397	3.832	3.717	3.034	3.373	2.574	1.461	2.244	1.966	1.714
C18:1b	1.236	0.178	0.175	0.155	0.126	0.073	0.000	0.062	0.062	0.000
C18:0	2.344	2.391	2.206	1.711	1.891	1.077	0.987	1.222	0.990	0.840
C19:0	0.000	0.000	0.000	0.000	0.000	0.000	0.168	0.000	0.000	0.000
C20:0	0.432	0.396	0.332	0.332	0.343	0.208	0.168	0.196	0.200	0.167

¹Notation indicates carbon chain length followed by number of double bonds. Positional isomers for C14:1, C16:1, and C18:1 FA species are indicated by “a”, “b”, and “c”.

²Each replicate is comprised of homogenate from 5 flies.

³Raw abundance counts are normalized to the abundance of a spiked standard (pentadecanoic acid).

Supplemental Table 6. Fatty acid (FA) analysis of male testes in control and antibiotic and antifungal (AB+AF)-treated males for each replicate.

FA ^{1,2}	Control ³					AB+AF ³				
	1	2	3	4	5	1	2	3	4	5
C10:0	0.029	0.027	0.538	0.033	0.017	0.184	0.055	0.136	0.151	0.157
C12:0	2.170	1.713	0.731	2.627	2.401	17.762	9.845	15.572	17.372	17.656
C13:0	0.000	0.012	0.000	0.000	0.000	0.035	0.023	0.047	0.024	0.049
C14:1a	0.209	0.236	0.885	0.283	0.365	0.221	0.148	0.240	0.248	0.296
C14:1b	0.100	0.138	0.885	0.168	0.227	0.220	0.150	0.188	0.240	0.241
C14:1c	0.332	0.324	0.885	0.417	0.399	3.646	2.381	3.547	4.000	3.688
C14:0	3.092	2.652	0.923	3.266	2.971	16.230	12.033	15.208	18.271	17.586
C16:1a	0.064	0.079	1.038	0.083	0.087	0.080	0.030	0.117	0.054	0.081
C16:1b	1.545	1.520	1.038	1.638	1.622	3.769	2.802	3.704	4.355	3.870
C16:0	7.583	7.470	1.077	7.124	6.858	9.437	6.684	10.126	10.165	11.987
C17:0	0.037	0.056	1.154	0.049	0.052	0.000	0.000	0.019	0.018	0.024
C18:2	0.234	0.248	1.192	0.232	0.200	0.182	0.096	0.198	0.171	0.219
C18:1a	2.685	2.623	1.192	2.492	2.512	2.504	1.488	2.377	2.420	2.630
C18:1b	0.217	0.202	1.192	0.200	0.192	0.000	0.055	0.093	0.085	0.090
C18:0	1.138	1.119	1.231	1.047	1.203	1.124	0.752	0.916	1.097	1.159
C20:0	0.138	0.149	1.346	0.170	0.193	0.154	0.117	0.139	0.189	0.221
C22:0	0.019	0.034	1.462	0.032	0.041	0.023	0.022	0.024	0.040	0.050

¹Notation indicates carbon chain length followed by number of double bonds. Positional isomers for C14:1, C16:1, and C18:1 FA species are indicated by "a", "b", and "c".

²Each replicate is comprised of homogenate from 5 flies.

³Raw abundance counts are normalized to the abundance of a spiked standard (pentadecanoic acid).

Supplemental Table 7. Fatty acid (FA) analysis of male testes in control and antibiotic (AB)-treated males for each replicate.

FA ^{1,2}	Control ³				AB ³				
	1	2	3	4	1	2	3	4	5
C10:0	0.000	0.005	0.000	0.000	0.002	0.000	0.000	0.001	0.001
C12:0	0.024	0.050	0.036	0.146	0.011	0.021	0.027	0.013	0.021
c14:1b	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001
c14:1c	0.000	0.004	0.000	0.014	0.001	0.000	0.005	0.001	0.005
C14:0	0.050	0.085	0.065	0.223	0.021	0.045	0.066	0.025	0.043
C16:1a	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
C16:1b	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.002
C16:0	0.006	0.033	0.013	0.024	0.014	0.033	0.036	0.017	0.027
C17:0	0.777	1.025	1.063	1.115	0.921	0.698	0.594	0.634	0.633
C18:2	0.009	0.014	0.010	0.010	0.009	0.008	0.007	0.008	0.008
C18:1a	0.000	0.000	0.000	0.000	0.001	0.005	0.004	0.002	0.002
C18:1b	0.014	0.047	0.030	0.032	0.036	0.098	0.083	0.049	0.044
C18:0	0.000	0.012	0.017	0.019	0.003	0.000	0.000	0.003	0.008
C20:0	0.361	0.469	0.485	0.406	0.457	0.253	0.213	0.257	0.241
C22:0	0.008	0.016	0.009	0.008	0.006	0.008	0.007	0.005	0.010

¹Notation indicates carbon chain length followed by number of double bonds. Positional isomers for C14:1, C16:1, and C18:1 FA species are indicated by "a", "b", and "c".

²Each replicate is comprised of homogenate from 5 flies.

³Raw abundance counts are normalized to the abundance of a spiked standard (pentadecanoic acid).

Supplemental Table 8. Fatty acid (FA) analysis of male testes from control and antifungal (AF)-treated males for each replicate.

FA ^{1,2}	Control ³					AF ³				
	1	2	3	4	5	1	2	3	4	5
C10:0	0.004	0.011	0.003	0.010	0.004	0.007	0.011	0.012	0.008	0.002
C12:0	0.036	0.284	0.354	0.282	0.036	0.052	0.046	0.049	0.040	0.055
C14:1a	0.000	0.000	0.010	0.004	0.000	0.000	0.000	0.000	0.000	0.000
C14:1b	0.000	0.000	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.000
C14:1c	0.003	0.030	0.062	0.024	0.003	0.000	0.000	0.000	0.000	0.004
C14:0	0.038	0.238	0.350	0.248	0.038	0.079	0.062	0.060	0.047	0.059
C16:1b	0.009	0.024	0.068	0.024	0.009	0.011	0.012	0.007	0.005	0.006
C16:1c	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.002
C16:0	0.678	0.987	0.921	0.965	0.678	1.112	1.367	1.144	1.302	0.714
C17:0	0.008	0.023	0.007	0.014	0.008	0.026	0.024	0.025	0.015	0.006
C18:1a	0.011	0.025	0.045	0.014	0.011	0.048	0.065	0.037	0.011	0.007
C18:1b	0.005	0.013	0.013	0.010	0.005	0.023	0.029	0.018	0.010	0.006
C18:0	0.254	0.506	0.259	0.333	0.254	0.604	0.815	0.608	0.627	0.256
C20:0	0.004	0.025	0.005	0.014	0.004	0.030	0.034	0.025	0.015	0.003
C22:0	0.000	0.003	0.000	0.003	0.000	0.009	0.013	0.000	0.000	0.000

¹Notation indicates carbon chain length followed by number of double bonds. Positional isomers for C14:1, C16:1, and C18:1 FA species are indicated by “a”, “b”, and “c”.

²Each replicate is comprised of homogenate from 5 flies.

³Raw abundance counts are normalized to the abundance of a spiked standard (pentadecanoic acid).

Supplemental Table 9. Fatty acid (FA) analysis of male testes in control and antibiotic- and antifungal (AB+AF)-treated males for each replicate.

FA ^{1,2}	Control ³					AB+AF ³				
	1	2	3	4	5	1	2	3	4	5
C12:0	0.013	0.012	0.011	0.010	0.015	0.265	0.035	0.183	0.118	0.110
C14:1a	0.000	0.001	0.000	0.001	0.001	0.004	0.000	0.003	0.001	0.001
C14:1b	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.003	0.001	0.001
C14:1c	0.001	0.002	0.002	0.001	0.001	0.058	0.009	0.039	0.016	0.021
C14:0	0.030	0.042	0.037	0.034	0.034	0.355	0.049	0.306	0.161	0.162
C16:1a	0.002	0.002	0.000	0.002	0.002	0.003	0.000	0.002	0.001	0.000
C16:1b	0.018	0.029	0.021	0.022	0.021	0.090	0.019	0.076	0.023	0.030
C16:0	0.601	0.598	0.564	0.595	0.559	0.714	0.554	0.731	0.761	0.768
C17:0	0.011	0.010	0.010	0.011	0.010	0.010	0.008	0.011	0.011	0.011
C18:2	0.002	0.003	0.002	0.003	0.003	0.007	0.001	0.002	0.001	0.002
C18:1a	0.048	0.067	0.051	0.052	0.062	0.079	0.030	0.068	0.027	0.033
C18:1b	0.003	0.004	0.002	0.003	0.003	0.007	0.002	0.005	0.012	0.013
C18:0	0.378	0.334	0.357	0.336	0.316	0.324	0.302	0.396	0.418	0.442
C20:0	0.008	0.010	0.009	0.008	0.010	0.020	0.006	0.012	0.010	0.013

¹Notation indicates carbon chain length followed by number of double bonds. Positional isomers for C14:1, C16:1, and C18:1 FA species are indicated by "a", "b", and "c".

²Each replicate is comprised of homogenate from 5 flies.

³Raw abundance counts are normalized to the abundance of a spiked standard (pentadecanoic acid).