Table S1.   Fig. 1 B

One-way ANOVA

DoF	7.92
F	75.36
P	<0.0001
Statistical significance	****

Tukey multiple comparison test	Mean difference	95% CI of difference	Summary
1 vs. 2	8.946	−10.33 to 28.22	NS
1 vs. 3	7.143	−13.47 to 27.75	NS
1 vs. 4	19.46	−2.151 to 41.08	NS
1 vs. 5	34.65	14.80 to 54.51	****
1 vs. 6	34.93	11.89 to 57.97	***
1 vs. 7	42.71	19.67 to 65.76	****
1 vs. 8	43.52	23.66 to 63.38	****
2 vs. 3	−1.803	−21.08 to 17.47	NS
2 vs. 4	10.52	−9.832 to 30.87	NS
2 vs. 5	25.71	7.234 to 44.18	**
2 vs. 6	25.98	4.125 to 47.84	*
2 vs. 7	33.77	11.91 to 55.63	***
2 vs. 8	34.57	16.10 to 53.05	****
3 vs. 4	12.32	−9.294 to 33.94	NS
3 vs. 5	27.51	7.652 to 47.37	**
3 vs. 6	27.79	4.745 to 50.83	**
3 vs. 7	35.57	12.53 to 58.61	***
3 vs. 8	36.37	16.52 to 56.23	****
4 vs. 5	15.19	−5.711 to 36.09	NS
4 vs. 6	15.47	−8.479 to 39.41	NS
4 vs. 7	23.25	−0.6952 to 47.20	NS
4 vs. 8	24.05	3.153 to 44.96	*
5 vs. 6	0.2757	−22.10 to 22.65	NS
5 vs. 7	8.06	−14.31 to 30.43	NS
5 vs. 8	8.864	−10.22 to 27.94	NS
6 vs. 7	7.784	−17.46 to 33.02	NS
6 vs. 8	8.588	−13.79 to 30.96	NS
7 vs. 8	0.8041	−21.57 to 23.18	NS

CI, confidence interval; DoF, degrees of freedom. *, P < 0.05; **, P < 0.01; ***, P < 0.001; ****, P < 0.0001.

Table S2.   Fig. 1 C

One-way ANOVA

DoF	7,39
F	14.18
P	< 0.0001
Statistical significance	****

Tukey multiple comparison test	Mean difference	95% CI of difference	Summary
1 vs. 2	277.2	184.5 to 369.8	****
1 vs. 3	292.3	206.6 to 378.1	****
1 vs. 4	299.5	222.0 to 377.0	****
1 vs. 5	404.8	309.1 to 500.5	****
1 vs. 6	439.9	336.3 to 543.4	****
1 vs. 7	566.5	462.9 to 670.1	****
1 vs. 8	601	492.1 to 709.9	****
2 vs. 3	15.17	−85.92 to 116.3	NS
2 vs. 4	22.3	−71.88 to 116.5	NS
2 vs. 5	127.6	17.95 to 237.2	*
2 vs. 6	162.7	46.09 to 279.3	***
2 vs. 7	289.3	172.7 to 405.9	****
2 vs. 8	323.8	202.5 to 445.1	****
3 vs. 4	7.131	−80.30 to 94.56	NS
3 vs. 5	112.4	8.526 to 216.3	*
3 vs. 6	147.5	36.30 to 258.7	**
3 vs. 7	274.1	162.9 to 385.3	****
3 vs. 8	308.6	192.5 to 424.8	****
4 vs. 5	105.3	8.105 to 202.5	*
4 vs. 6	140.4	35.41 to 245.3	**
4 vs. 7	267	162.0 to 372.0	****
4 vs. 8	301.5	191.3 to 411.7	****
5 vs. 6	35.09	−83.92 to 154.1	NS
5 vs. 7	161.7	42.69 to 280.7	**
5 vs. 8	196.2	72.57 to 319.9	****
6 vs. 7	126.6	1.157 to 252.1	*
6 vs. 8	161.1	31.27 to 291.0	**
7 vs. 8	34.52	−95.34 to 164.4	NS

CI, confidence interval; DoF, degrees of freedom. *, $P < 0.05$; **, $P < 0.01$; ***, $P < 0.001$; ****, $P < 0.0001$.

Table S3.   Fig. 2 B

One-way ANOVA

DoF	5,74
F	20.35
P	< 0.0001
Statistical significance	****

Holm–Sidak multiple comparison test	Mean difference	95% CI of difference	Summary
Uninjected vs. DMSO injected	–1.454	–137.0 to 134.1	NS
Uninjected vs. DMSO injected	–66.43	–168.5 to 35.61	NS
Uninjected vs. DMSO injected	20.74	–111.5 to 153.0	NS

CI, confidence interval; DoF, degrees of freedom. ****, P < 0.0001.

Table S4.   Fig. 2 C

One-way ANOVA

DoF	4,87
F	11.17
P	<0.0001
Statistical significance	****

Holm-Sidak multiple comparisons test (compared to DMSO injected)	Uninjected	10 µM HG bath	10 µM HG injected	100 µM HG injected
n	14	23	21	21
t	2.183	4.319	5.679	5.598
Statistical significance	*	****	****	****

CI, confidence interval; DoF, degrees of freedom; n, number of oocytes. *, P < 0.05; ****, P < 0.0001.

Table S5.   Fig. 2 D

Ordinary two-way ANOVA

Alpha	0.05

Source of variation	% of total variation	P value	P value summary
Interaction	6.148	0.0141	*
Row factor	7.061	<0.0001	****
Column factor	12.82	<0.0001	****

Dunnett multiple comparison test	Mean difference	95% CI of difference	Summary
Row 1			
Uninjected vs. DMSO injected	20.74	–11.26 to 52.75	NS
Uninjected vs. 10 µM HG bath	26.73	–2.670 to 56.13	NS
Uninjected vs. 10 µM HG injected	19.4	–9.642 to 48.45	NS
Uninjected vs. 100 µM HG injected	30.16	–1.169 to 61.50	NS

Row 2

Comparison	Mean diff	95% CI	Sig
Uninjected vs. DMSO injected	16.16	−14.09 to 46.40	NS
Uninjected vs. 10 µM HG bath	3.837	−21.83 to 29.50	NS
Uninjected vs. 10 µM HG injected	16.16	−9.741 to 42.06	NS
Uninjected vs. 100 µM HG injected	33.6	7.705 to 59.50	**

Row 3

Comparison	Mean diff	95% CI	Sig
Uninjected vs. DMSO injected	−11.75	−43.08 to 19.59	NS
Uninjected vs. 10 µM HG bath	13.88	−13.06 to 40.82	NS
Uninjected vs. 10 µM HG injected	31.76	4.592 to 58.92	*
Uninjected vs. 100 µM HG injected	35.41	8.246 to 62.57	**

Row 4

Comparison	Mean diff	95% CI	Sig
Uninjected vs. DMSO injected	−20.06	−52.14 to 12.01	NS
Uninjected vs. 10 µM HG bath	18.67	−6.998 to 44.33	NS
Uninjected vs. 10 µM HG injected	33	7.102 to 58.90	**
Uninjected vs. 100 µM HG injected	32.19	6.286 to 58.09	**

CI, confidence interval. *, $P < 0.05$; **, $P < 0.01$.

Table S6. Fig. 3 A

Unpaired two-tailed *t* test	
P value	<0.0001
Summary	****
One- or two-tailed P value?	Two tailed
t, DoF	4.847, 34.94

DoF, degrees of freedom. ****, $P < 0.0001$.

Table S7. Fig. 3 B

Unpaired two-tailed *t* test	
P value	<0.0001
Summary	****
One- or two-tailed P value?	Two tailed
t, DoF	8.731, 24.89

DoF, degrees of freedom. ****, $P < 0.0001$.

Table S8. Fig. 3 E

Ordinary one-way ANOVA	
DoF	3,51
F	17.6
P	<0.0001
Statistical significance	****

Bonferroni multiple comparison test	Uninjected vs. 100 µM HG 9-91-01	Sh WF M356C vs. Sh WF M356C + 100 µM HG
n1, n2	16, 21	8, 10
P	<0.0001	<0.0001
Statistical significance	****	****

DoF, degrees of freedom; n, number of oocytes. ****, $P < 0.0001$.

Table S9.   Fig. 3 F

Unpaired two-tailed *t* test

P value	0.5414
Summary	NS
One- or two-tailed P value?	Two tailed
t, DoF	0.6395. 7.561

DoF, degrees of freedom.

Table S10.   Fig. 3 G

Unpaired two-tailed *t* test

P value	0.0324
Summary	*
One- or two-tailed P value?	Two tailed
t, DoF	3.637, 3.183

DoF, degrees of freedom. *, P < 0.05.

Table S11.   Fig. 3 H

Unpaired two-tailed *t* test

P value	0.0085
Summary	**
One- or two-tailed P value?	Two tailed
t, DoF	3.318, 9.379

DoF, degrees of freedom. **, P < 0.01.

Table S12.   Fig. 3 I

Unpaired two-tailed *t* test

P value	0.0011
Summary	**
One- or two-tailed P value?	Two tailed
t, DoF	4.830, 8.400

DoF, degrees of freedom. **, P < 0.01.

Table S13.   Fig. 5 B

Ordinary two-way ANOVA

Alpha	0.05		
Source of variation	**% of total variation**	**P value**	**P value summary**
Interaction	3.398	0.0171	*
Row factor	3.763	0.0009	***
Column factor	82.38	<0.0001	****

Tukey multiple comparison test	Mean difference	95% CI of difference	Summary
1			
Vegetal vs. animal	132.2	94.55 to 169.9	****
Vegetal vs. melanin	133.1	95.45 to 170.8	****
Animal vs. melanin	0.9	−36.78 to 38.58	NS
2			
Vegetal vs. animal	98.44	67.67 to 129.2	****
Vegetal vs. melanin	143.7	112.9 to 174.5	****
Animal vs. melanin	45.25	14.49 to 76.02	**
3			
Vegetal vs. animal	98.42	74.59 to 122.2	****
Vegetal vs. melanin	105.7	70.63 to 140.8	****
Animal vs. melanin	7.291	−27.79 to 42.37	NS
4			
Vegetal vs. animal	114.6	76.88 to 152.2	****
Vegetal vs. melanin	171.7	134.0 to 209.4	****
Animal vs. melanin	57.15	19.47 to 94.83	**

CI, confidence interval. *, $P < 0.05$; **, $P < 0.01$; ***, $P < 0.001$; ****, $P < 0.0001$.

Table S14.   Fig. 5 C

Ordinary one-way ANOVA	
DoF	(2,9)
F	74.64
P	<0.0001
Statistical significance	****

Tukey multiple comparisons test	Mean difference	95% CI of difference	Summary
Vegetal vs. animal	132.2	97.21 to 167.2	****
Vegetal vs. melanin	133.1	98.11 to 168.1	****
Animal vs. melanin	0.9	−34.11 to 35.91	NS

CI, confidence interval; DoF, degrees of freedom. ****, $P < 0.0001$.

Table S15.   Fig. 5 D

Ordinary one-way ANOVA	
DoF	(2,9)
F	47.55
P	<0.0001
Statistical significance	****

Tukey multiple comparison test	Mean difference	95% CI of difference	Summary
Vegetal vs. animal	114.6	64.48 to 164.6	****
Vegetal vs. melanin	171.7	121.6 to 221.8	****
Animal vs. melanin	57.15	7.081 to 107.2	*

CI, confidence interval; DoF, degrees of freedom. *, $P < 0.05$; ****, $P < 0.0001$.

Table S16.   Fig. 6 C

Unpaired two-tailed *t* test	
P	0.7365
Summary	NS
Significantly different? (P < 0.05)	No
One- or two-tailed P value?	Two tailed
t, DoF	0.3444, 12

DoF, degrees of freedom.

Table S17.   Fig. 6 D

Ordinary one-way ANOVA	
DoF	(2,11)
F	1.718
P	0.2243
Statistical significance	NS

Tukey multiple comparison test	Mean difference	95% CI of difference	Significant?	Summary
Vegetal vs. animal	109.5	−353.9 to 572.9	No	NS
Vegetal vs. melanin	296.9	−140.0 to 733.8	No	NS
Animal vs. melanin	187.4	−276.0 to 650.9	No	NS

CI, confidence interval; DoF, degrees of freedom.

Table S18.   Fig. 6 E

Ordinary one-way ANOVA	
DoF	(2,11)
F	1.414
P	0.2879
Statistical significance	NS

Tukey multiple comparison test	Mean difference	95% CI of difference	Significant?	Summary
Vegetal vs. animal	−12.56	−56.63 to 31.51	No	NS
Vegetal vs. melanin	−25.58	−67.39 to 16.23	No	NS
Animal vs. melanin	−13.02	−54.83 to 28.79	No	NS

CI, confidence interval; DoF, degrees of freedom.

Table S19. Fig. 6 F

Ordinary one-way ANOVA	
DoF	(2,11)
F	55.36
P	<0.0001
Statistical significance	****

Tukey multiple comparison test	Mean difference	95% CI of difference	Significant?	Summary
Vegetal vs. animal	−2.732	−8.677 to 3.213	No	NS
Vegetal vs. melanin	17.91	12.30 to 23.51	Yes	****
Animal vs. melanin	20.64	14.70 to 26.59	Yes	****

CI, confidence interval; DoF, degrees of freedom. ****, P < 0.0001.