

1 **Table S1** Linkage disequilibrium tests of 7 loci in duck *MTNR1A*, *MTNR1B* and *MTNR1C*

2 genes*

	g. 268C>T (<i>MTNR1A</i>)	g. 41C>T (<i>MTNR1B</i>)	g. 161T>C (<i>MTNR1B</i>)	g. 10C>T (<i>MTNR1C</i>)	g. 24A>G (<i>MTNR1C</i>)	g. 108C>T (<i>MTNR1C</i>)	g. 363T>C (<i>MTNR1C</i>)
g. 268C>T (<i>MTNR1A</i>)	-	0.04	0.04	0.07	0.10	0.02	0.05
g. 41C>T (<i>MTNR1B</i>)	0.30	-	1.00	0.21	0.33	0.32	0.22
g. 161T>C (<i>MTNR1B</i>)	0.30	1.00	-	0.21	0.33	0.32	0.22
g. 10C>T (<i>MTNR1C</i>)	0.56	0.04	0.04	-	0.49	0.63	0.71
g. 24A>G (<i>MTNR1C</i>)	0.56	0.08	0.08	0.18	-	0.22	0.75
g. 108C>T (<i>MTNR1C</i>)	0.54	0.03	0.03	0.13	0.91	-	0.46
g. 363T>C (<i>MTNR1C</i>)	0.55	0.03	0.03	0.36	0.29	0.03	-

3 *LD were performed for each SNP using the SHEsisPlus online software platform

4 (<http://shesisplus.bio-x.cn/SHEsis.html>). The figure above diagonal line means the value of D'

5 and the figure under diagonal line mean the value of r².

6

7 **Table S2** Relationship between *MTNR1A* (g. 268C>T) genotype and color of eggshell in

8 Shaoxing ducks

Genotype ¹	Number of white eggshell ²	Number of blue eggshell ²	OR ³	95%CI
TT	35 (4.46)	7 (0.89)	5.671	2.468-13.030
CT	180 (22.93)	102 (12.99)	2.002	1.477-2.713
CC	216 (27.52)	245 (31.21)	1.000	

9 ¹Genotype: number of white eggshell versus number of blue eggshell: $\chi^2=34.848$, $P=0.000$ (3×2

10 contingency table). ²Data reported as n (%). ³ Reference group (CC) designated with an OR of

11 1.000.

12