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Association between Single Nucleotide Polymorphisms of Fatty Acid Synthase and Fat Deposition in the Liver of the Overfed Goose

Wei Wu*, Xuan Guo¹, Lei Zhang², and Dan Hu

College of Animal Science and Technology, Jilin Agricultural University, Changchun 130118, China

- Supplementary Data -

Supplementary Table S1. Relationship between different genotype combinations and the performance of geese

Genotype	Sample	Fatty liver	Abdominal	Intestinal	Construe	Sample	Fatty liver	Abdominal	Intestinal
	number	(g)	fat (g)	fat (g) Genotype		number	(g)	fat (g)	fat (g)
AACCEE	8	503.81±28.33 ^a	415.10±32.35 ^a	321.25±17.37 ^a	AADDEE	1	680.00±0.00 ^a	370.45±0.00 ^a	260.11±0.00 ^a
AACCFF	3	531.72 ± 57.75^a	450.20 ± 45.09^a	$450.20{\pm}30.55^a$	AADDEF	1	890.00 ± 0.00^a	500.50 ± 0.00^a	330.13 ± 0.00^a
AACCEF	3	813.30 ± 46.26^{a}	416.67 ± 47.03^a	323.33 ± 38.44^a	AADDFF	1	870.00 ± 0.00^a	$420.50{\pm}0.00^a$	410.50 ± 0.00^a
AACDFF	2	$600.00{\pm}70.82^a$	$445.25{\pm}55.00^a$	340.11 ± 20.00^a	ABDDEE	5	880.00 ± 71.61^a	$450.50{\pm}24.49^a$	340.10 ± 37.20^a
AACDEF	5	694.00 ± 55.96^a	352.23 ± 46.41^a	356.23 ± 27.13^a	ABDDEF	1	$1,140.00\pm0.00^a$	$340.35{\pm}0.00^a$	312.10 ± 0.00^a
AACDEE	11	617.71 ± 43.76^a	$449.09{\pm}18.80^a$	350.31 ± 13.35^a	ABDDFF	3	930.02±57.81a	$470.24\!\pm\!11.55^a$	420.12 ± 45.09^{a}
ABCCEF	6	733.31 ± 81.70^a	418.33 ± 22.12^{a}	366.67 ± 20.60^a	ABCDFF	20	854.51 ± 40.28^a	400.30 ± 22.04^a	370.33 ± 16.92^a
ABCCFF	4	$748.85{\pm}100.07^a$	435.25 ± 41.33^a	380.20 ± 39.37^a	ABCDFF	9	794.42±200.14 ^a	370.22±73.31 ^a	320.20 ± 116.73^a

Different letters indicate counterparts in the same row having significant difference between the average value (Mean± standard error) (p<0.05).

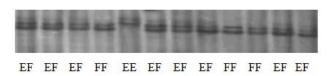
Supplementary Table S2. Hardy-Weinberg test of the genotypes

	P_1			P_2			P_8		
	EE	FF	EF	CC	DD	CD	AA	AB	BB
Observed number	47	47	30	44	68	14	39	85	0
Observed frequency	0.380	0.380	0.242	0.355	0.549	0.113	0.315	0.385	0
Theoretic frequency	0.324	0.490	0.186	0.400	0.466	0.137	0.432	0.451	0.118
Theoretic number	40.20	60.67	23.06	49.60	57.78	16.99	53.57	55.89	14.59
x^2		6.36			1.96			19.12	

 $df \ge 1$, $P_{0.01} = 6.63$, $P_{0.05} = 3.84$. P_1 site was imbalanced, and P_2 site was balanced.



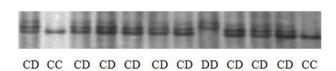
Supplementary Figure S1. Position of the SNPs in the *FAS* gene 5' region. The number in brackets represents the loci of base mutation, and the number in figure shows the relative position of polymorphic loci in 5'region. SNPs, single nucleotide polymorphisms; FAS, fatty acid synthase.



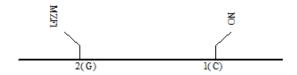
Supplementary Figure S4. SSCP band patterns of PCR product amplified by P1. SSCP, single-strand conformation polymorphism; PCR, polymerase chain reaction.



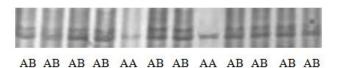
Supplementary Figure S2. Predicted transcription factor binding in the 5' region SNPs before mutation. The number in brackets represents the loci of base mutation, and the number in figure shows the relative position of polymorphic loci in 5'region. SNPs, single nucleotide polymorphisms.



Supplementary Figure S5. SSCP band patterns of PCR product amplified by P2. SSCP, single-strand conformation polymorphism; PCR, polymerase chain reaction.



Supplementary Figure S3. Predicted transcription factor binding in the 5' region SNPs after mutation. The number in brackets represents the loci of base mutation, and the number in figure shows the relative position of polymorphic loci in 5'region. SNPs, single nucleotide polymorphisms.



Supplementary Figure S6. SSCP band patterns of PCR product amplified by P8. SSCP, single-strand conformation polymorphism; PCR, polymerase chain reaction.