

Table S1: Primer list

Genes	Forward primer	Reverse primer
Housekeeping		
Cyclophilin	ATGTGGTCTTTGGGAAGGTG	GAAGGAATGGTTTGATGGGT
GAPDH	TGAACGGGAAGCTCACTGG	TCCACCACCCTGTTG CTGTA
HPRT1	GCAGTACAGCCCCAAAATGG	AACAAAGTCTGGCCTGTATCCAA
TBP	TTCGTGCCAGAAATGCTGAA	TGCACACCATTTTCCCAGAAC
Clock		
Bmal1	CCGATGACGAACTGAAACACCT	TGCAGTGTCCGAGGAAGATAGC
Cry1	AAGTCATCGTGCGCATTTCA	TCATCATGGTCGTCGGACAGA
Cry2	TGGATAAGCACTTGGAACGGAA	TGTACAAGTCCCACAGGCGGTA
DBP	CCTTTGAACCTGATCCGGCT	TGCCTTCTTCATGATTGGCTG
Per1	CGCACTTCGGGAGCTCAAACCTC	GTCCATGGCACAGGGCTCACC
Per2	CACCCTGAAAAGAAAGTGCGA	CAACGCCAAGGAGCTCAAGT
Rev-erb α	ACAGCTGACACCACCCAGATC	CATGGGCATAGGTGAAGATTCT
Metabolic		
Fas	CTTGGGTGCCGATTACAACC	GCCCTCCCGTACACTCACTC
Glut2	GTCCAGAAAGCCCCAGATACC	TGCCCCTTAGTCTTTCAAGCT
Glut4	GGGCTGTGAGTGAGTGCTTTC	CAGCGAGGCAAGGCTAGA
HSL	CACACAGCATGGATTTACGCA	ACCTGCAAAGACGTTGGACAG
LPL	CAAAACAACCAGGCCTTCGA	AGCAATTCCCCGATGTCCA
Pdk4	TGGTTTTGGTTACGGCTTGC	TGCCAGTTTCTCCTTCGACA
Pgc1 α	TGCCATTGTTAAGACCGAG	GGTCATTTGGTGACTCTGG
Ppara α	TCACACAATGCAATCCGTTT	GGCCTTGACCTTGTTTATGT
Srebp1c	ACAAGATTGTGGAGCTCAAGG	TGCGCAAGACAGCAGATTTA
Ucp1	AATCAGCTTTGCTTCCCTCA	GCTTTGTGCTTGCACTTCTGA
Ucp3	GCACTGCAGCCTGTTTTGCTGA	ATAGTCAGGATGGTACCGAGCA
Sirt1	TGTTTCCTGTGGGATACCTGA	TGAAGAATGGTCTTGGGTCTTT
Sirt3	GACATACGGGCTGACGTGAT	AGTCGGGGCACTGATTCTG
Fgf21	ACCGCAGTCCAGAAAGTCTC	GGCCTCAGACTGGTACACAT

Table S2: t-test analysis for behavioral and physiological parameters.

		<i>Ad libitum</i>	SEM	6-meal	SEM	<i>P</i> value	Shift
Locomotor Activity	a	379.7	37.9	358.6	8.9	=0.60	~ 2h
	b	221.5	7.1	193.4	9.7	= 0.02	
	c	19.3 (ZT)	0.2	17.3 (ZT)	0.4	< 0.001	
Respiratory exchange ratio	a	0.95	0.003	0.93	0.01	=0.054	~ 10h
	b	0.0214	0.001	0.0206	0.001	=0.73	
	c	19.9 (ZT)	0.1	10.1 (ZT)	0.8	< 0.001	
Temperature	a	36.8	0.1	36.25	0.07	= 0.02	
	b	0.48	0.1	0.34	0.02	=0.46	
	c	17.8 (ZT)	0.3	17.4 (ZT)	0.5	=0.56	
Heat production	a	5.3	0.04	5.1	0.14	=0.16	~2h
	b	1.1	0.05	0.6	0.01	< 0.001	
	c	19.1 (ZT)	0.1	16.8 (ZT)	0.4	< 0.001	

Table S3: t-test analysis on significant cosinor parameters for the clock and clock-controlled genes and protein in SCN.

Genes SCN		<i>Ad libitum</i>		6-meal		<i>P</i> value
		Mean	SEM	Mean	SEM	
<i>Avp</i>	a	42.03	3.85	42.79	2.94	=0.879
	b	--	--	11.31	4.15	
	c	--	--	12.6	1.40	
<i>Per1</i>	a	7.70	0.70	8.94	0.45	=0.15
	b	4.12	0.99	4.74	0.70	=0.61
	c	6.6	0.9	5.6	0.56	=0.35
<i>Per2</i>	a	7.82	0.72	7.94	0.65	=0.90
	b	3.24	1.02	3.75	0.92	=0.70
	c	10.4	1.2	10.7	0.93	=0.80
Protein SCN						
AVP	a	65.25	4.45	64.54	5.65	=0.92
	b	--	--	--	--	
	c	--	--	--	--	

Table S4: Two-way ANOVA analysis for gene expression in SCN.

Genes SCN	2 Way ANOVA Table (<i>P</i> value)		
	Feeding	Time	Interaction
<i>Avp</i>	=0.880	=0.069	=0.587
<i>Per1</i>	=0.164	<0.001	=0.767
<i>Per2</i>	=0.909	<0.001	=0.878
Protein SCN			
AVP	=0.791	<0.001	=0.876