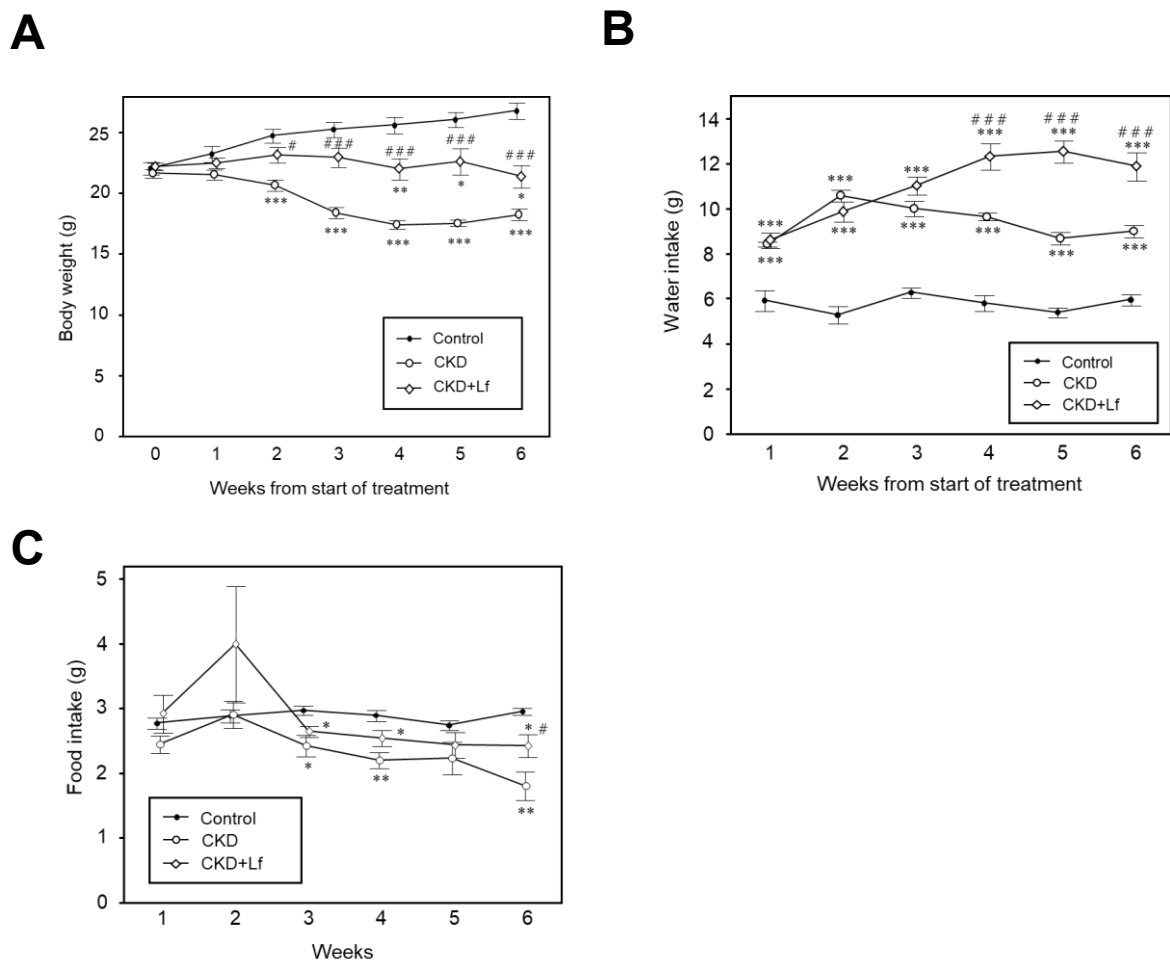


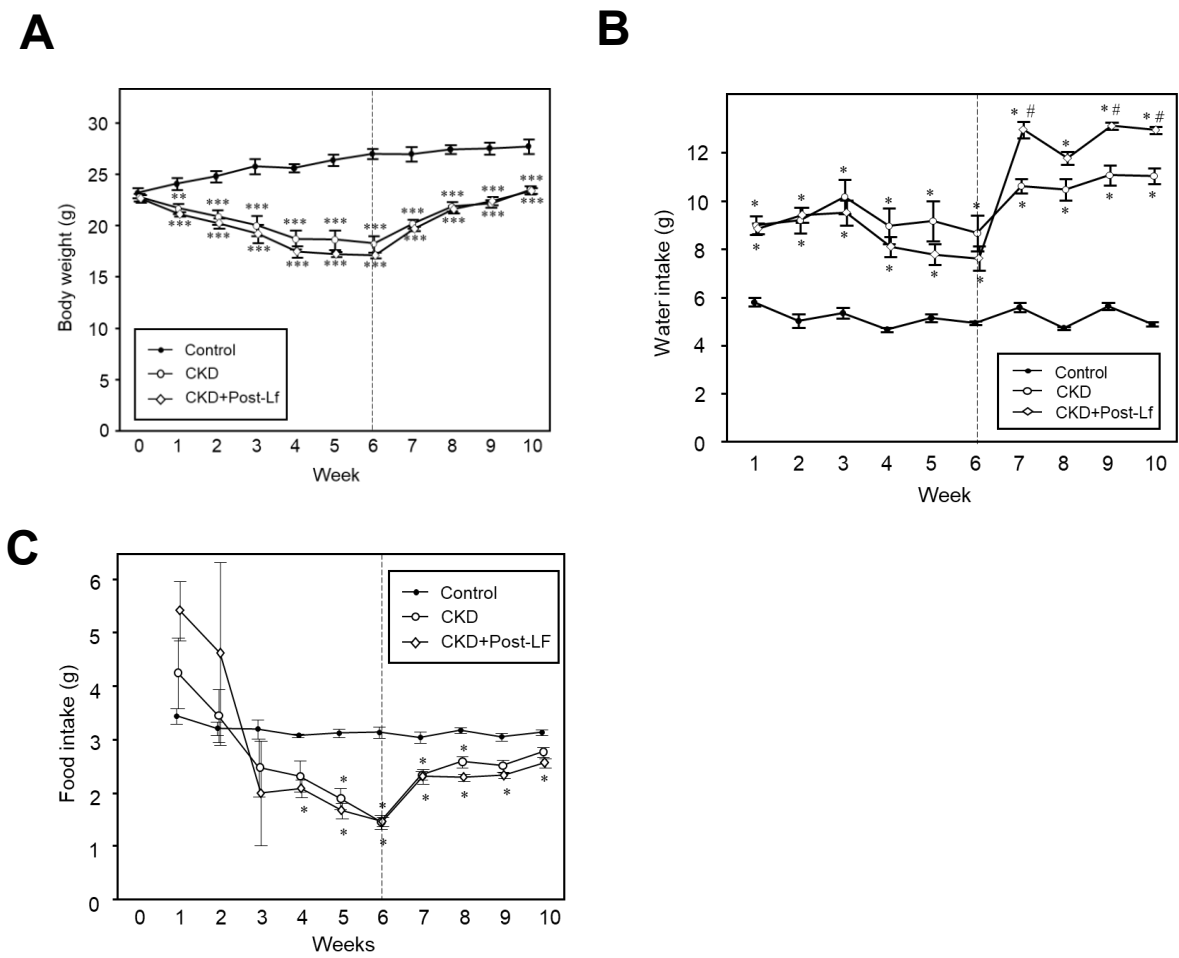
Supplemental Figure 1



Supplemental Figure 1 Body weight change and water intake

(A) Successive changes of body weight from treatment week 0 to week 6. (B) Water intake from 0 week to 6 weeks. (C) Food intake from 0 week to 6 weeks. Data were shown mean \pm SEM, Tukey-Kramer's test; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (vs Control), †† $p < 0.01$, ††† $p < 0.001$ (vs CKD).

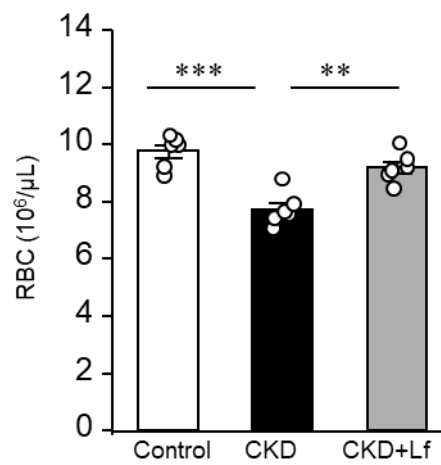
Supplemental Figure 2



Supplemental Figure 2 Body weight change and water intake

(A) Successive changes of body weight from treatment week 0 to week 10. Adenine diet was given for 6 weeks (0-6 weeks) to induce renal damage, followed by 2% Lactoferrin for 4 weeks (7-10 weeks). The feed was switched on the dotted line. (B) Water intake from 0 week to 10 weeks. The drinking water was switched on the dotted line. (C) Food intake from 0 week to 6 weeks. Data were shown mean \pm SEM, Tukey-Kramer's test; * p <0.05, ** p <0.01, *** p <0.001 (vs Control), †† p <0.01, ††† p <0.001 (vs CKD).

Supplemental Figure 3

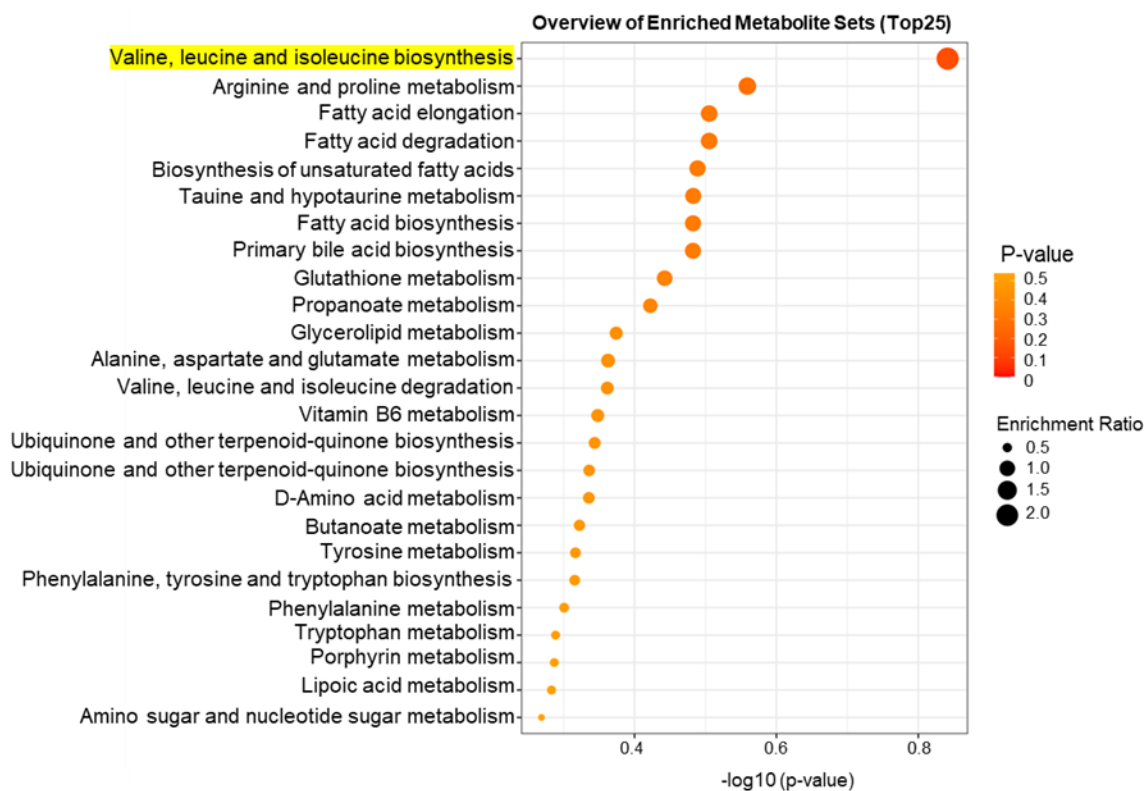


Supplemental Figure 3 Comparison of red blood cell number

Concentrations of red blood cell (RBC) on 5 weeks from start of experiment.

Tukey-Kramer's test; ** $p < 0.01$, *** $p < 0.001$, $n = 6$ per group.

Supplemental Figure 4



Supplemental Figure 4 Overview of enriched metabolites set (Top25)

Enrichment analysis of metabolite sets in the skeletal muscle between chronic kidney disease (CKD) group and CKD+Post-Lf group.

Supplemental Table 1

Gene	Species	Set ID
<i>Gapdh</i>	mouse	MA050371
<i>Ctgf</i>	mouse	MA028643
<i>Tgfb1</i>	mouse	MA148599

Gene	Species	Type	Sequences (5'-3')
<i>Col1a1</i>	mouse	F	TGACTGGAAGAGCGGAGAGT
		R	GAATCCATCGGTCATGCTCT
<i>Col3a1</i>	mouse	F	GTGAAACTGGTGAACGTGGCTCTA
		R	AGGACCTGGATGCCCCACTTG
<i>Col4a1</i>	mouse	F	GGCTATTCCTTCGTGATGCA
		R	CTAAACTCTTCCAGACAGGAC
<i>Pai1</i>	mouse	F	TTCAGTGGCCAATGGAAGACTCCT
		R	AGGGCAGTTCCACAACGTCATACT

Supplemental Table 2

	Cont (n=6)	CKD (n=6)	CKD+Lf (n=6)
BW (g)	26.8 ± 0.718	18.3 ± 0.718*	21.4 ± 0.718* #
Kidney/BW	0.0068 ± 0.0003	0.0056 ± 0.0003*	0.0067 ± 0.0003#
Liver/BW	0.050 ± 0.0015	0.053 ± 0.0015	0.048 ± 0.0015
Heart/BW	0.0056 ± 0.0002	0.0058 ± 0.0002	0.0053 ± 0.0002
BAT/BW	0.0059 ± 0.0005	0.0063 ± 0.0005	0.0072 ± 0.0005
WAT/BW	0.019 ± 0.0010	0.0046 ± 0.0010*	0.0068 ± 0.0010*
Brain/BW	0.017 ± 0.0006	0.024 ± 0.0006*	0.021 ± 0.0006* #

BW; body weight, BAT; brown adipose tissue, WAT; white adipose tissue

Supplemental Table 3

	Cont (n=6)	CKD (n=6)	CKD+Post-Lf (n=6)
BW (g)	27.7 ± 0.4894	23.4 ± 0.4894***	23.4 ± 0.4894***
Kidney/BW	0.0068 ± 0.0002	0.0036 ± 0.0002**	0.0041 ± 0.0002** #
Liver/BW	0.049 ± 0.0018	0.048 ± 0.0018	0.048 ± 0.0018
Heart/BW	0.0062 ± 0.0002	0.0072 ± 0.0002**	0.0065 ± 0.0002#
BAT/BW	0.0045 ± 0.0002	0.0033 ± 0.0002**	0.0039 ± 0.0002
Brain/BW	0.017 ± 0.0004	0.020 ± 0.0004**	0.019 ± 0.0004*

BW; body weight, BAT; brown adipose tissue, WAT; white adipose tissue