Electronic Supplementary Material (ESI) for Food & Function.


# *Lactobacillus rhamnosus* GG ameliorates deoxynivalenol-induced kidney oxidative damage and mitochondrial injury in weaned piglets

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Table S1 Ingredient and nutritional level of diets（as-fed basis）

| Ingredients (%) | | Nutritional levels [b] (%) | |
|---|---|---|---|
| Corn | 63.30 | Net energy（kcal/kg） | 2565 |
| Full-fat expanded soybean | 9.00 | Crude protein（CP） | 18.24 |
| Peeled soybean meal | 13.00 | Lysine | 1.44 |
| Whey powder | 5.00 | Methionine | 0.42 |
| Fish meal | 4.00 | Threonine | 0.89 |
| Soybean oil | 2.00 | Calcium | 0.74 |
| Lysine (98%) | 0.60 | Total phosphorus | 0.60 |
| Methionine (98%) | 0.10 | Available phosphorus | 0.33 |
| Threonine (98%) | 0.20 | | |
| Calcium hydrogen phosphate | 0.70 | | |
| Limestone | 0.70 | | |
| Salt | 0.40 | | |
| Premix [a] (1%) | 1.00 | | |

[a] Premix provided the following per kilogram of diet: Cu, 20.2 mg; Zn, 106.5 mg; Se, 0.3 mg; Mn, 3 mg; Fe, 120 mg; I, 0.2 mg; vitamin A, 5000 IU; vitamin $D_3$, 1250 IU; vitamin E, 47.5 IU; vitamin K, 2.2 mg; vitamin $B_1$, 3.6 mg; vitamin $B_2$, 8.0 mg; vitamin $B_6$, 4.1 mg; vitamin $B_{12}$, 0.04 mg; pantothenic acid, 18 mg; niacin, 29.7 mg; folate, 1.9 mg and biotin, 0.4 mg.

[b] Nutrient levels were calculated values.

Table S2 Primer sequences used for RT-qPCR analysis. (F: forward; R: reverse)

| GenBank | Sequences (5'→3') | Gen Bank No. |
|---|---|---|
| β-actin | F: ATGCTTCTAGGCGGACTGT | AY550069 |
| | R: CCATCCAACCGACTGCT | |
| Nrf2 | F: CCAATTCAGCCAGCACAACACATC | XM_013984303.2 |
| | R: GACTGAGCCTGGTTAGGAGCAATG | |
| keap1 | F: AGGCTATGATGGTCACACATTCTTGG | NM_001114671.1 |
| | R: CAATCTGCTTCCGACAGGGTTCC | |
| NQO1 | F: AGGCTTTGAAGAGGAGAGGATGGG | NM_001159613.1 |
| | R: CCTTTCTGGAGATGACGGGATTGAAG | |
| HO-1 | F: CCAGGTCCTCAAGAAGATTGCTCAG | NM_001004027.1 |
| | R: GGGTCATCTCCAGAGTGTTCATTCG | |
| GCLC | F: AGTTCAACACGGTGGAGGACAATATG | XM_021098556.1 |
| | R: CGGGCAGCCTAATCTGGGAAATG | |
| GCLM | F: TGTGATGCCGCCCGATTTAACTG | XM_001926378.4 |
| | R: CCACTCATGTGCCTCGATGTCAG | |
| SOD1 | F: CTCTCGGGAGACCATTCCATCATTG | NM_001190422.1 |
| | R: TTCTTCATTTCCACCTCTGCCCAAG | |
| CAT | F: AGCCTACGTCCTGAGTCTCTGC | NM_214301.2 |
| | R: TCCATATCCGTTCATGTGCCTGTG | |
| GST | F: CGGCATCAAGTCATCAACATCAACC | NM_214050.2 |
| | R: AGAACTGGCACCAGACCTGAGG | |
| GPX1 | F: GCGTCGCTCTGAGGCACAAC | NM_214201.1 |
| | R: GGTCGGACGTACTTGAGGCAATTC | |

Table S3 Primer sequences used for RT-qPCR analysis. (F: forward; R: reverse)

| GenBank | Sequences (5'→3') | Gen Bank No. |
|---|---|---|
| PGC-1α | F: ATGGAGCAATAAAGCGAAGAGCATTTG | NM_213963.2 |
| | R: GAGGAGGGTCATCATTTGTGGTCAG | |
| Nrf1 | F: CGATGCTTCAGAATTGCCAACTACAG | XM_021078997.1 |
| | R: GCGTTGTCTGGATGGTCATCTCAC | |
| TFAM | F: AAATTGCTGAGCTGTGGAGGGAAC | NM_001130211.1 |
| | R: TACACCTGCCAGTCTGCCCTATAAG | |
| VDAC1 | F: TCAGAAGGTGAACAAGAAGTTGGAGAC | NM_213960.1 |
| | R: CGATCTGGTACTTGGCTGCTATTCC | |
| Cyt C | F: CGAGTGGTGGCTTGTCTGTTGAG | NM_001129970.1 |
| | R: GGCACTGGGCACACTTCTGAAC | |
| Mfn1 | F: TGGACTTTATCCGAAACCAGATGAACC | NM_001315732.1 |
| | R: AACCTTATTTGCCACCTCCTCTGTAAC | |
| Mfn2 | F: CCACACCACCAACTGCTTCCTG | XM_021095369.1 |
| | R: TCTTGACGCTCCTCTTCTCCTCTG | |
| OPA1 | F: ACAGAGGATGGTGCTTGTTGACTTAC | XM_021070063.1 |
| | R: ACACAGTATGATGGCGTTGGGATTC | |
| Fis1 | F: CAGACAGAGCCACAGAACAACCAG | XM_021086263.1 |
| | R: CAAGTCCAATGAGTCCAGCCAGTC | |
| MFF | F: CAGGTTCCAGAGAGAATTGTCGTAGC | NM_001244126.1 |
| | R: TTAGTGCCAGAGGTTTAAAGGGAGTTG | |
| Bnip3 | F: GAGGAGGATTACATGGAGAGGAGGAG | XM_003359404.4 |
| | R: TCGGGTGCTTGAAGAGGAGGAAC | |
| PINK1 | F: GGCGGTGATTGACTACAGCAAGG | XM_021095478.1 |
| | R: TGGTAACTGCGGCTTTCAAGGTG | |
| p62 | F: CTGCCTGAAGACTATTACACGAGACC | NM_001244307.1 |
| | R: GAAGATGCTTGTGCCGAGGATAGAG | |
| LC3I | F: GCCTTCTTCCTGCTGGTGAACC | NM_001170827.1 |
| | R: GGGAGGCGTAGACCATGTAGAGG | |
| LC3II | F: TTCTTCCTGTTAGTGAACGGACATAGC | NM_001190290.1 |
| | R: ATCCATCTTCATCCTTCTCGCTTTCG | |