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## ABBERRVIATIONS AND SYMBOLS

|                        |  |
|------------------------|--|
| Ab                     | antibody                                   |
| ADFI                   | average daily feed intake                  |
| ADG                    | average daily gain                         |
| AFCR                   | average feed conversion ratio              |
| Ag                     | antigen                                    |
| APPH                   | 2, 2'-azobis dihydrochloride               |
| AR Grade               | analytical reagent grade                   |
| BSA                    | bovine serum albumin                       |
| °C                     | degree Celsius                             |
| CAT                    | catalase                                   |
| CDs                    | cell surface antigens                      |
| Conj                   | conjugate                                  |
| CV                     | coefficient of variance                    |
| DHA                    | dehydroascorbate                           |
| ELISA                  | enzyme-linked immunosorbent assay          |
| Enz                    | enzyme                                     |
| g                      | gravity                                    |
| gm                     | gram                                       |
| GON                    | gamma oryzanol                             |
| GSH                    | glutathione                                |
| Glutathione peroxidase | GSHPX                                      |
| HACCP                  | hazard analysis and critical control point |
| HLA-DR                 | human leukocyte associated antigen         |
| HNE                    | 4-hydroxynonenal                           |
| HPLC                   | high performance liquid chromatography     |
| ICAM-1                 | intercellular adhesion molecule-1          |
| IgA                    | immunoglobulin A                           |



|          |                                       |
|----------|---------------------------------------|
| IgG      | immunoglobulin G                      |
| IgM      | immunoglobulin M                      |
| Igs      | immunoglobulins                       |
| LFA      | leukocyte-function-associated antigen |
| MALT     | mucosal associated lymphoid tissue    |
| MDA      | malondialdehyde                       |
| mg       | milligram                             |
| MHC      | major histocompatibility complex      |
| ml       | milliliter                            |
| NK       | natural killer                        |
| OD       | optical density                       |
| PGRB     | purple glutinous rice bran            |
| pIgR     | polymeric Ig receptor                 |
| PMN      | polymorphonuclear neutrophils         |
| PUFA     | polyunsaturated fatty acid            |
| RBO      | rice bran oil                         |
| ROS      | reactive oxygen species               |
| rpm      | revolution per minute                 |
| SC       | membrane secretory component          |
| S.D.     | standard deviation                    |
| SDA      | semidehydroascorbate                  |
| Se       | selenium                              |
| S.E.     | standard error                        |
| SIgA     | secretory immunoglobulin A            |
| SIgM     | secretory immunoglobulin M            |
| SOD      | superoxide dismutase                  |
| TWG      | total weight gain                     |
| $\alpha$ | alpha                                 |
| $\beta$  | beta                                  |
| $\gamma$ | gamma                                 |

|               |            |
|---------------|------------|
| $\delta$      | delta      |
| $\Delta$      | delta      |
| $\mu\text{g}$ | microgram  |
| $\mu\text{l}$ | microliter |



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