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Rice bran oil supplementation protects swine weanlings against diarrhea and lipopolysaccharide challenge

Key words: Rice bran oil; Gut microbiota; Weaned piglets; Oxidative Stress; Lipopolysaccharide

Research Summary

This research aims to ascertained the proper rice bran oil supplementation level, and subsequently determined its effects on lipopolysaccharide induced intestinal dysfunction in weaned piglets. These findings suggested that 0.02% rice bran oil was a suitable dose to protect against lipopolysaccharide-induced intestinal damage, oxidative stress, and jejunal microbiota dysbiosis in early weaned piglets.

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Innovation points

- **Ascertained 0.02% was the optimal dose of dietary RBO supplementation based on diarrhea, average daily gain, and average daily feed intake indices in early weaned piglets. (Figure. 1)**

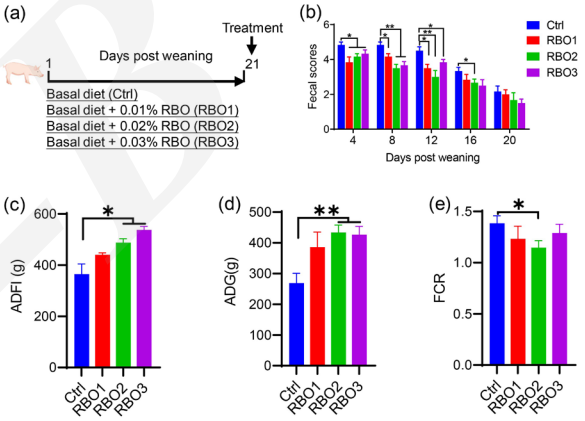


Figure 1

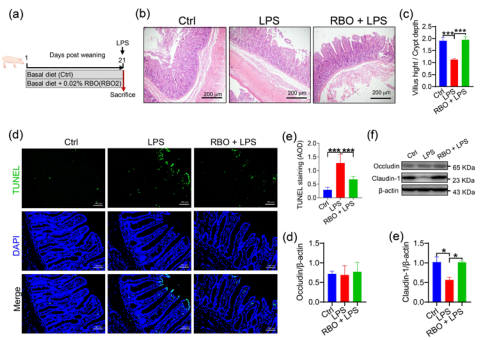


Figure 2

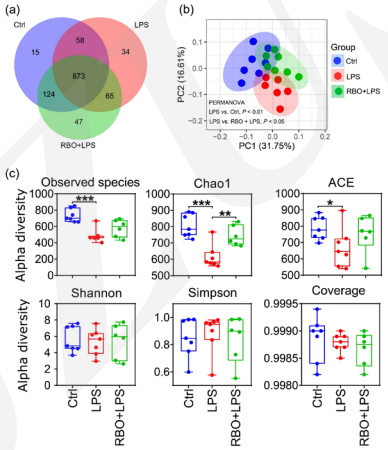


Figure 3

- **Suggested that 0.02% RBO was a proper dose to protect against LPS-induced intestinal damage, oxidative stress, and jejunal microbiota dysbiosis in early weaned piglets. (Figure. 2-3)**