

[Available Issues](#) | [Japanese](#)

Author:  [ADVANCED](#) | Volume  Page

Keyword:



[TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

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## **Differences in Enzymatic Activities of Cecal Content of Rats Fed on Differently Processed Dietary Fibers**

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Enzymatic activities in cecal contents were studied on rats fed on high amylose ferulic acid arabinosyl ester (FAX) and arabinosyl ester (AX); both refined corn bran (RCB) and were compared with those of cellulose. The enzymatic activities in the ceca changed according to the

arabinofuranosidase activity and ferulic acid esterase activity appeared in FAX- and AX-fed rats, but these activities were not observed in the RCB-fed rats. FAX and AX showed a tendency to decrease serum cholesterol first, xylanase and arabinofuranosidase were supposed to attack the main chain and side chain, and thus high molecular weight FAX and AX were degraded into low molecular weight fragments. At that time, ferulic acid esterase activity was lower. FAX was degraded lower. These enzymes might act synergistically.

**Keywords:** [dietary fiber](#), [rat cecum](#), [ferulic acid](#), [enzymatic activity](#), [arabinofuranosidase activity](#), [ferulic acid esterase activity](#)

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