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### Effect of Dietary Level of Pectin on Immunoglobulin and Cytokine Production by Mesenteric Lymph Node Lymphocytes and Interleukin-2 Receptor in Rats

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The present study was carried out to clarify the dietary effect of pectin on immunoglobulin (Ig) and cytokine production of rat lymphocytes. Rats were fed a diet containing 0 (cellulose) and 1, 2 or 5% levels of pectin for 2 weeks. Dietary pectin, as compared with cellulose, enhanced production of IgA, IgG and IgM by mesenteric lymph node lymphocytes, while reducing IgE production. In the lymphocytes obtained from the rats fed pectin, interferon- $\gamma$  production and interleukin-2 receptor expression were significantly higher than in those from the rats fed cellulose. These results suggest that the effect of dietary pectin was exerted through the functioning of Th 1 cells. In this context, dietary pectin was expected to alleviate the type 1 allergy reaction.

**Keywords:** [dietary pectin](#), [interferon- \$\gamma\$](#) , [interleukin-2](#), [IgE production](#), [mesenteric lymph node](#)



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