

# Laminarin enhanced immunological disorders of septicemic albino rats infected with *Aeromonas hydrophila*

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*Aeromonas hydrophila* is increasingly recognized as a pathogen of man that gives rise to both intestinal and extraintestinal infection. This study examined the effect of one the immunostimulants; fungal cell-wall beta-1, 3-D-glucan (Laminarin) on the immune response to *Aeromonas hydrophila* in albino rats. Intraperitoneal injection of 0.2 ml of 1% laminarin (15 mg/100 g b.wt) stimulated humoral immunity. On the ninth day, after application of laminarin in vivo, a statistically higher value of total Ig ( $p < 0.05$ ) was observed. At the same time, serum total immunoglobulins ( $25.5 \pm 2$ ) g/L in bacterial groups were significantly higher ( $p < 0.05$ ), compared to the control group ( $17 \pm 2$ ) g/L. For *Aeromonas* infected group, all Ig classes showed increase statistically significant ( $p < 0.05$ ). On the other hand laminarin groups exhibited reduced values of Ig subclasses but still higher than control values. This was reported for all time period. Rats were divided into 3 equal groups designated, *Aeromonas* infected, Laminarin-treated and control groups. Infection was carried out by intraperitoneal injection of  $2 \times 10^6$  bacteria daily for 6 days.