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## **General hygienic condition of packaged lettuce samples purchased from selected supermarkets in Gampaha district, Sri Lanka**

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Lettuce (*Lactuca sativa*) is usually consumed in raw form or processed minimally. Therefore, consumption of contaminated raw lettuce is associated with food outbreaks due to poor hygienic condition. Lettuce leaves can be contaminated with pathogenic microorganisms during harvesting, packaging and transportation processes. This study focuses on the general hygienic condition of the packaged lettuce available in supermarkets. Ten packaged samples were purchased from ten supermarkets of Gampaha district, Sri Lanka and they were labeled as L1, L2, L3, L4 and so on. 10 g of each lettuce sample was weighed and transferred to stomacher bags containing 90 mL of sterilized peptone water aseptically. After homogenization, a dilution series was prepared for each sample up to  $10^{-6}$ . One-milliliter aliquot of dilutions from  $10^{-2}$  to  $10^{-6}$  of each sample was plated using pour plate method. The used agar medium was Plate Count Agar. The inoculated agar plates were incubated at 30°C for 24 hours. Duplicates were used for all the plated dilutions of each sample. Average Colony Forming Units per gram (CFUg<sup>-1</sup>) was calculated. The calculated CFU/g values of L1 to L10 were  $2.1 \times 10^6$ ,  $1.8 \times 10^6$ ,  $2.8 \times 10^6$ ,  $2.3 \times 10^5$ ,  $2.0 \times 10^6$ ,  $1.2 \times 10^5$ ,  $2.5 \times 10^5$ ,  $1.9 \times 10^4$ ,  $1.3 \times 10^5$  and  $2.2 \times 10^6$  respectively. The highest obtained CFU per gram of lettuce was for L3. The lowest value was given by sample L8. Very high microbial load in packaged lettuce samples may indicate the poor hygienic condition.

**Keywords:** Lettuce, Microbiological quality, Food hygiene, Packaged vegetables