

**[BIO12]**

**High cell density cultivation of *Lb. salivarius* i24 using fed-batch fermentation technique**

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The performance of fed-batch culture technique for the cultivation of *Lb. salivarius* i24 was investigated using 2 L fermentor. In constant fed-batch fermentation, the highest cell concentration (7.225g/L) was obtained when the feeding media, which was five times higher than the batch media concentration, was constantly fed at a flow rate of 0.05L/h. The cell production obtained in constant fed-batch was about 3.4 times higher than that obtained in conventional batch cultivation method (3.004g/L). Moreover, the highest productivity of the cell in constant fed-batch was also attained at flow rate 0.05L/h that was 0.595 g/L.h if compared to the other flow rates (0.03L/h and 0.1L/h).