

## Propagation of *Bifidobacterium bifidum* NCDC 232 in various mediums

Mahadevaiah, H. M. Jayaprakasha and K.B. Suresha

The work was under taken to optimize the propagation of *Bifidobacterium bifidum* NCDC 232 in different mediums for blending into the functional weaning food. Sterilized cheese whey was used to propagate *Bifidobacterium bifidum* NCDC 232 (Bb-N) along with supplementation of honey, carrot and tomato (CT) juice and WPH. With the increase in the level of inoculum from 0.5 to 1.5 per cent, there was significant decrease in pH at all duration of incubations. There was significant increase in the viable counts when the level of inoculum increased from 0.5 to 1.5 per cent level. 1.5 per cent inoculum and incubation for a period of 15 h is optimum for obtaining the maximum effect in decreasing pH of whey medium. Addition of honey has significant effect on the growth and development of Bb-N and addition of honey at 2 per cent and incubating a period of 15 h is optimum. It is noteworthy that supplementation of CT juice has further significant effect on the growth of probiotics in addition to honey supplementation. The extent of viable counts attained was significantly higher with 4 per cent supplementation of CT juice as compared to without supplementation.

**Key Words :** Whey, Bifidobacterium, Prebiotics, Probiotics, Carrot juice, Comato juice

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