Development of a selective and differential media for the isolation and enumeration of *Bacillus cereus* from food samples

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In the present study, starch-blood-egg yolk-polymyxin B-trimethoprime-ceftazidime (SBYPTC) agar was developed for the isolation and enumeration of *B. cereus* from food samples. The ability of the medium to select for *B. cereus* from pure cultures and food samples with high background microbiota was evaluated and compared with that of commercially available MYPA and PMBA. In pure cultures, there was no statistical difference in the recoverability of *B. cereus* between the three media, whereas SBYPTC agar showed greater exclusivity. For evaluation of SBYPTC in food samples, three levels of *B. cereus* were artificially spiked into lettuce sample with high background microbiota. There was no significant difference between MYPA and PEMBA. However, SBYPTC exhibited greater selectivity and exclusivity and made the differentiation easier by allowing growth of *B. cereus* in separated colonies and inhibiting competing microbiota. Our results show that SBYPTC could be a useful tool to enumerate *B. cereus* from food samples with high background microbiota.