B328 A Study on Microflora in Human Intestine Ingested via Fermented Milk Containing Encapsulated *Bifidobacterium longum*

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A fermented milk product containing encapsulated *Bifidobacterium longum* manufactured from a dairy company was administrated to twenty-four healthy volunteers twice per day 30 minutes before having meals during 14 days. The volunteer's stools were anaerobically incubated at 37℃ for 36h and the typical colonies of bifidobacterium, clostridia, lactobacilli and streptococci, staphylococci, Gram negative enteric bacteria and total anaerobic bacteria appeared on each plate were counted as colony forming units per gram of stool. Bifidobacterium and total anaerobic bacteria were apparently increased from 10^8cfu/g to 10^9cfu/g after 3 days and prevailed over staphylococcus and Gram negative enteric bacteria during the entire period, which were decreased sharply from 10^7cfu/g to 10^5cfu/g. However, the colonies appeared on RCM agar plate were steadly maintained high numbers about 10^9cfu/g and the changes of the numbers of lactobacilli and streptococci were not observed. It may conclude that the fermented milk product containing *B. longum* could enhance the intestinal health by providing the intestine with beneficial microflora such as bifidobacterium. The effects of the non-capsulated fermented milk on human intestine are still under investigation.

B329 Detection of enteric viruses in the raw water by the nested multiplex PCR.

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Enteric viruses are transmitted by fecal-oral route and lots of them are documented to be causing water-borne diseases. In this study, we have tried to detect three medically important enteric viruses (group A rotavirus, adenovirus, enterovirus) in the raw water by using triplex PCR which is more efficient than monoplex PCR because of time-savings and cost-effectiveness. Multiplex PCR is about 1 order less sensitive than monoplex PCR but we chose nested multiplex PCR as a identifcation method for the amplified PCR products to compensate for this drawback. By using nested multiplex PCR methodology we could achieve a similar sensitivity to monoplex PCR. Environmental samples were concentrated and purified by the adsorption-elution/PEG precipitation/sephadex resin spun chromatography and used for PCR. The target viruses were estimated to be present in the range of 10^1 -10^2 / L in the colder season and 10^0-10^1 / L in the warmer season.