

# **Effect of *Bifidobacterium lactis* DN173 010 on the Intestinal Transit Time, the Condition of Defecation and Intestinal Microflora: A Randomized, Double-blind,**

## **Placebo-controlled, Cross-over Study among Healthy Japanese Women**

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The effect of a probiotic strain *Bifidobacterium lactis* DN173 010 on the intestinal transit time has been studied in Europe but not in Japan. A randomized, double-blind, placebo-controlled, cross-over study was conducted, in which 50 healthy Japanese women (mean age, 19.43 years) consumed 170 g/day (85 g x 2 cups) of a test yogurt containing 10<sup>8</sup> cfu/g of *B. lactis* DN173 010 or a placebo yogurt without *B. lactis* 173 010 for 14 consecutive days. The intestinal transit time was significantly reduced during the test yogurt ingestion period, in comparison with the observation period that preceded the said yogurt ingestion period. Among those subjects who had a slow transit time of 40 hours or more (STT), a tendency for a reduction of intestinal transit time in the test period was observed in comparison with the placebo period ( $p=0.055$ ). The defecation frequency also increased significantly. Furthermore, the cell count and occupation ratio of *Bifidobacterium* significantly increased, while the cell count of *Clostridium* lecithinase (+) was significantly reduced. These results suggest that *B. lactis* 173 010 has an effect to regulate the intestinal transit time, intestinal microflora, and especially defecation frequency in those Japanese with a slow transit time.