Benefits of Flavored Lactose-free Milk for Korean Adults with Lactose Intolerance

경희대학교병원 내과[1], 경희대학교 소화기내과[2]

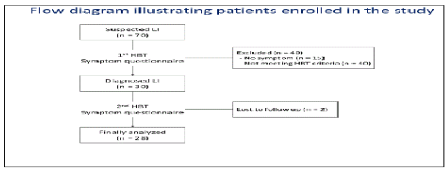
손영설[1], **김정욱**[1,2], **오치혁**[1,2], **김기애**[1,2], **장재영**[1,2]

Background/Aims: Although lactose-free dairy products for the clinical management of lactose intolerance (LI) are widely available, scientific evidence on their efficacy is still lacking. This study comparatively analyzed the efficacy of flavored lactose-free milk (LFM) and whole milk (WM) in reducing symptoms in South Korean adults with LI

Methods: This prospective study was conducted with adults suspected of LI. All screened participants underwent the hydrogen breath test (HBT) using 570 mL of WM (20 g of lactose) and responded to a symptom questionnaire. LI was confirmed when the ⊿H2 peak exceeded 16 ppm above baseline values and the occurrence of symptoms after WM consumption. The participants who were diagnosed with LI underwent the HBT again with 570 mL of flavored LFM (0 g of lactose), followed by the symptom questionnaire survey after 1 week.

Results: After excluding 40 participants who did not meet the diagnostic criteria for LI and two who were lost to follow-up, a total of 28 lactose-intolerant individuals were enrolled in the study. The ⊿H2 values in the first HBT were significantly higher than those in the second HBT (33.3 ± 21.6 ppm vs. 8.6 ± 6.3 ppm, P < 0.001). Similarly, there was a significant reduction in the total symptom score in the second HBT (4.18 ± 1.51 vs. 0.61 ± 0.98, P < 0.001). The reduction in ⊿H2 values and total symptom scores after LFM consumption were not significantly different by age, sex, and body mass index

Conclusions: Flavored LFM is well tolerated in South Korean adults diagnosed with LI based on the HBT and symptom questionnaire **results**. Therefore, it may be an alternative to WM.



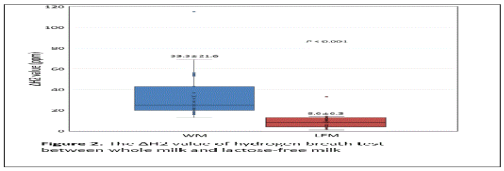


Figure 2. The ΔH2 value of hydrogen breath test between whole milk and lactose-free milk

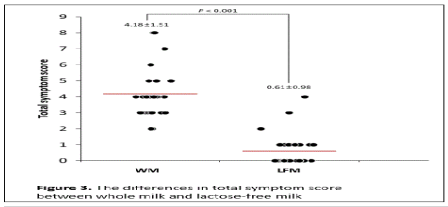


Figure 3. The differences in total symptom score between whole milk and lactose-free milk