ABSTRACT

OBJECTIVE: Probiotic consumption effects on cold and influenza-like symptom incidence and duration were evaluated in healthy children during the winter season.

METHODS: In this double-blind, placebo-controlled study, 326 eligible children (3-5 years of age) were assigned randomly to receive placebo (*N* = 104), *Lactobacillus acidophilus* NCFM (*N* = 110), or *L acidophilus* NCFM in combination with *Bifidobacterium animalis* subsp *lactis* Bi-07 (*N* = 112). Children were treated twice daily for 6 months.

RESULTS: Relative to the placebo group, single and combination probiotics reduced:
- Fever incidence by 53.0% (single strain) and 72.7% (strain combination).
- Coughing incidence by 41.4% (single strain) and 62.1% (strain combination).
- Rhinorrhea incidence by 28.2% (single strain) and 58.8% (strain combination).
- Fever, coughing, and rhinorrhea duration was decreased significantly, relative to placebo, by 32% (single strain) and 48% (strain combination).
- Antibiotic use incidence was reduced, relative to placebo, by 68.4% (single strain) and 84.2% (strain combination).
- Subjects receiving probiotic products had significant reductions in days absent from group child care, by 31.8% (single strain) and 27.7% (strain combination) compared with subjects receiving placebo treatment.

CONCLUSION: Daily dietary probiotic supplementation of 5 billion CFU's twice daily for 6 months was a safe effective way to reduce fever, rhinorrhea, and cough incidence and duration and antibiotic prescription incidence, as well as the number of missed school days attributable to illness, for children 3 to 5 years of age.

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