Evidence Update

Other Infectious Diseases Series

Are probiotics effective for treating infectious diarrhoea?

Probiotics shorten the length of illness in people with acute infectious diarrhoea.

Inclusion criteria

Studies:

Randomized controlled trials.

Participants:

Adults and children with acute diarrhoea (duration less than 14 days) proven or presumed to be caused by an infectious agent.

Intervention:

Specific, identified probiotics compared with placebo or no probiotic.

Outcomes:

Diarrhoea lasting 3 or more days and 4 or more days; duration of diarrhoea; stool frequency and volume; adverse events including withdrawal from trial.

Results

- 23 trials included, involving 1449 infants or children and 352 adults, mainly in countries with low mortality. Five trials were adequately concealed.
- Probiotics reduced diarrhoea at 3 days (relative risk 0.66, 95% confidence interval 0.55 to 0.77; 15 trials) and at 4 days (relative risk 0.31, 95% confidence interval 0.19 to 0.50; 13 trials).
- Diarrhoea episodes were shorter with probiotics on average by 30.48 hours (95% confidence interval 18.51 to 42.46 hours; 12 trials).
- No adverse events were attributed to probiotics in the 12 trials examining this.

Adapted from Allen SJ, Okoko B, Martinez E, Gregorio G, Dans LF. Probiotics for treating infectious diarrhoea. *Cochrane Database of Systematic Reviews* 2003, Issue 4. Art. No.: CD003048. DOI: 10.1002/14651858.CD003048.pub2. *Evidence Update* published in February 2007.

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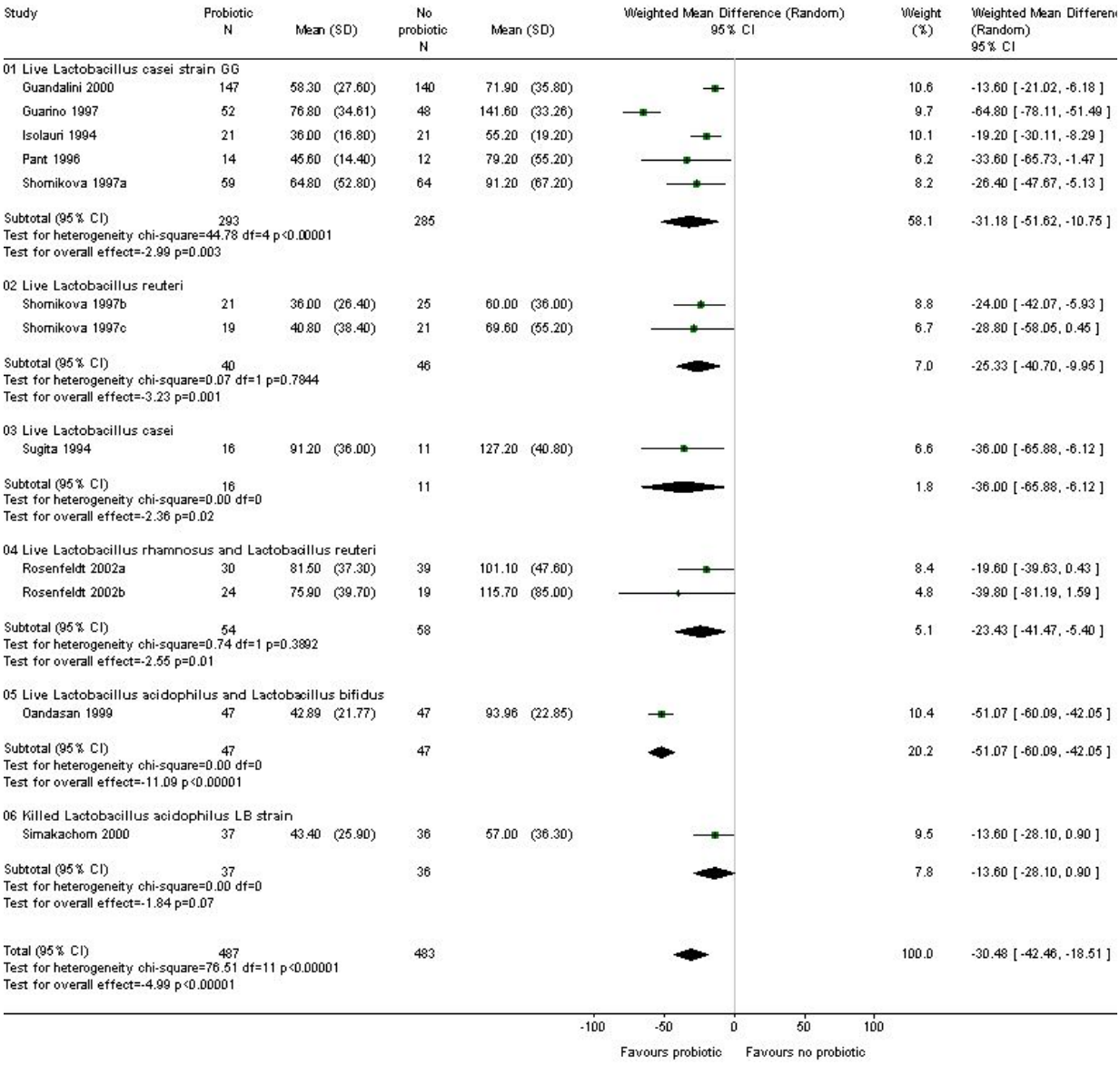
Probiotics versus control: mean duration of diarrhoea in hours



Authors' conclusions

Implications for practice:

Probiotics have modest effects in reducing the duration of an episode of diarrhoea. There are little data on specific probiotic regimens in different groups of patients.

Implications for research:

Randomized controlled trials using specific probiotic regimens in well-defined patient groups are needed. Trials should also evaluate specific probiotic regimens in children with persistent diarrhoea and in diarrhoea associated with malnutrition in low-income countries.