

Chug-A-Bug

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Bugging your kids may turn out to be the right thing to do if they're living with HIV. Cornell University research has found that 13 HIV positive children experiencing "failure to thrive" -- meaning that, for their age, they were low in weight and short in height -- improved when given probiotic (beneficial) bacteria in a fruit juice drink. The bug called *Lactobacillus plantarum* 299v -- a bacterium normally found in the gastrointestinal tract and a cousin of the acidophilus found in yogurt -- was chosen because it would reproduce well. As it grows, it pushes out such harmful organisms as *Candida albicans* (the cause of yeast infections such as thrush). The end result, hypothesizes Cornell immunologist Susanna Cunningham-Rundles, PhD, is a helpful retuning of the immune system. "The microorganisms you take orally affect your immune response, probably via the effects on cytokines [immune-system messenger chemicals]." And with this push toward immune normalization in children comes improved growth.

In this placebo-controlled trial, researchers found that kids who sipped the bacteria drink had statistically significant increases in height (considered the best measure of "failure to thrive" in HIV positive children; see "[Commanding Heights](#)") during each month of the five-month study. Significant weight gain was seen in two of the monthly measurements. In addition, those previously suffering from thrush -- the fungal overgrowth in the mouth that can cause pain and difficulty eating -- saw the problem disappear. Children were given packets of the powdered *plantarum* bacteria and instructed to mix half a packet in half a cup of juice or water and drink it twice daily. Since the powder has little taste and can be mixed with a kid's favorite juice, no noses were turned up at the bacterial blend. Although the study used a Swedish product not available in the U.S., Cunningham-Rundles says that other probiotic *Lactobacillus* products such as Culturelle tablets could be substituted. Gee, kids, this may be the only time your mom tells you to eat bugs.
