

## **Australian study: common bread additive causes behavior problems in many children**

A common bread preservative, calcium propionate, can cause aberrant behavior in children, according to a recent study in Australia.

Sue Dengate and Alan Ruben identified 27 children whose behavior improved when they were placed on the Royal Prince Alfred Hospital diet, which eliminates food additives, natural salicylates, amines, and glutamates. In a double-blind crossover study, the researchers measured each child's response to bread containing either a placebo or calcium propionate.

The researchers say, "A statistically significant difference existed in the proportion of children whose behaviors worsened with challenge (52 percent), compared to the proportion whose behavior improved with challenge (19 percent)." The adverse behavioral effects in the children receiving the bread containing calcium propionate occurred within days, and appear to be cumulative.

Dengate told ABC News in Perth, "What we found when we did this study is that [the effect] is not hyperactivity, which is what people think of when they think of children's behavior and food additives. It's irritability. So these kids will appear to be fine when they're enjoying themselves, but if they're asked to do something they don't like... then they will over-react." In addition, she says, "There is also restlessness and inattention, so they don't want to do their homework, they can't read properly, and there are also sleep disturbances."

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"Controlled trial of cumulative behavioural effects of a common bread preservative," S. Dengate and A. Ruben, *Journal of Paediatrics and Child Health*, Vol. 38, No. 4, August 2002, 373-6. Address: Sue Dengate, P.O. Box 85, Parap, Northern Territory 0804, Australia.

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"Bread causes bad behaviour in children," ABC Perth, August 14, 2002.