

# Longitudinal Intervention Effects on Parenting of the Aventuras para Niños Study

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**Background:** Parenting interventions have achieved changes in factors associated with childhood obesity but few have tested the effects on multiple parental influences.

**Purpose:** This study examined the efficacy of an intervention aimed at improving several dimensions of parenting related to childhood obesity.

**Design:** The study used a  $2 \times 2$  factorial design.

**Setting/participants:** In 2003, a sample of 13 Southern California schools was randomized to one of four conditions: micro-environment only, macro-environment only, micro-plus-macro-environment, and no treatment control condition. Participants included 811 predominantly Mexican immigrant/Mexican-American mothers with children in kindergarten through second grade.

**Intervention:** In both micro conditions, participants received monthly home visits by a promotora over a 7-month period plus monthly mailed newsletters.

**Main outcome measures:** In 2008, intervention effects were examined on (1) parenting strategies, including limit setting, monitoring, discipline, control, and reinforcement related to children's diet and physical activity; (2) parental support for physical activity; (3) parent-mediated family behaviors such as family meals eaten together and TV watching during family dinners; and (4) perceived barriers and other parent cognitions related to children's eating and activity.

**Results:** At the 2-year follow-up, significant improvements were observed in three of five parenting strategies, parental support, and two of four parent-mediated family behaviors among parents receiving the micro intervention (i.e., those who received promotora visits and monthly newsletters), as compared with those in the macro-only and control conditions.

**Conclusions:** Aspects of parenting related to children's risk for obesity and related health outcomes are modifiable with the support of a promotora and print media.

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## Introduction

The prevalence of overweight and obesity among U.S. children, especially pronounced among Mexican-American youth,<sup>1</sup> necessitates the implementation of interventions that target factors contributing to this epidemic. Socioecologic theory,<sup>2</sup> as well as frameworks presented by Rhee,<sup>3</sup> Ventura and Birch,<sup>4</sup> and Birch and Davison,<sup>5</sup> indicate that parenting is among the most important family-level determinants of childhood obesity. At least five mechanisms by which Latino parents influence their children's risk for obesity have been identified: (1) parenting style (a more indulgent parenting