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Family Meals Protect against Obesity: Exploring the Mechanisms

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The prevention of obesity will require multicomponent programs addressing multiple factors that impact weight development. Targeting core energy balance behaviors (ie, caloric intake and physical activity levels) remains necessary for ideal growth and weight maintenance.¹ Evidence suggests, however, that additional modifiable behaviors, including eating meals with family members, associate with the protection against the development of obesity.² Prior studies have linked family meals with healthy dietary behaviors (eg, fruit and vegetable intake), though the relationship between family meals and adolescent weight status has been inconclusive.³⁻⁶

In this issue of *The Journal*, Berge et al report on the longitudinal relationship between family meal frequency during adolescence and their weight status after 10 years.⁷ The study by Berge et al is especially notable for their focus on adolescents, which is associated with emerging independence and likely changes in family interactions, including meals consumed at home.⁸ Further, Berge et al included a large (n = 2117), diverse sample of participants, ranging across socioeconomic status, race, and ethnicity. Adolescent participants reported the frequency of family meals by indicating how many times in the past 7 days a meal at home had been consumed with most or all family members. Participants also reported their height and weight to assess body mass index at baseline and follow-up. Logistic regression analyses were conducted to predict long-term weight status based on the baseline assessment of family meal frequency, controlling for demographic variables (ie, sex, race, socioeconomic status, and baseline weight status). Results showed that eating family meals together, ranging from 1-2 to 5 or more times during 1 week, was significantly predictive of lower odds of being overweight and obese 10 years later. Interestingly, a significant interaction for race was identified, in which the protective effect of family meals against overweight and obesity was largest among African American participants compared with White participants. The results of this study highlight theoretical, methodological, and clinical issues worth discussion.

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Theoretically, research on family meals will benefit from further construct development to define the key components of family meals beyond frequency. The results by Berge clearly showed that family meals, beyond not eating family meals, associated with a healthier weight status. However, relatively little is known about the environmental characteristics of family meals in relation to weight status. For example, family meals may have a different impact on weight development when being consumed during media use vs no distractions. Correlational evidence has shown significant differences in food quality consumption and communication during meals with media use,^{9,10}

Family meals will also benefit from clarification on the location of meal preparation (ie, take-out, drive-through, delivery, or made at home).⁴ To date, few studies have examined the differences in family meals based on meal location, although survey data have linked fewer family meals from fast-food sources with reports of more nutritious foods (vegetables and milk) being served at home.¹¹ The interactive effect of family members remains poorly understood, particularly during adolescence. It remains unknown who actually needs to be present for the family meals to be protective against obesity development. Given the disorganized or disconnected schedules for some families, it may not be possible (or necessary) for some families to create a meal that is attended by all family members; no studies have clarified who (parents, older or younger siblings, grandparents, etc.) is critical for attendance to create a “family” meal.⁴

There may also be important aspects of how well caregivers structure family meals (eg, routinely at the same time), communicate during meals (eg, emotionally supportive, media rules to promote conversations), and behaviorally manage (eg, offering healthy foods without pressure or punishment), all of which may impact adolescent dietary intake and weight status compared with less positive caregiver interactions.^{12,13} Future studies on family meals will benefit from these finer grained analyses of family meals to better identify the key components for interventions that target family meal frequency.

Methodologically, research on family meals can benefit from experimental studies that include trials that manipulate the quantity and quality of family meals compared with control groups. Although some interventions have included increasing family meals as a targeted component, outcomes failed to show an increase in reported family meals.¹⁴ Although the longitudinal study by Berge et al showed a temporal link with changes over time, it remains unclear how directly measured modifications of family meals can impact health outcomes. Thus, experimental work will further clarify the effect size of family meals on weight status.

From a clinical perspective, the process of family meals is certainly varied by developmental differences in child and adolescent functioning. How caregivers structure and manage meals at home with others will potentially vary on multiple factors, including temperament, maturity, food preferences, child emotional and behavioral functioning, and family dynamics, including family chaos, parenting stress, cohesiveness, and communication during mealtimes.⁴ Clinical interventions that include recommendations to increase family meal frequency may benefit from discussions that provide developmentally matched parenting behaviors about effective feeding practices during family meals.⁴

To summarize, in the study by Berge et al, family meals in adolescence had a protective impact on weight status over time.⁷ Understanding the mechanisms that mediate the link between eating meals together as a family and how they impact on health-related behaviors and weight require additional research. This type of research has important clinical implications. Family meals are a potentially modifiable factor that could be tested for the prevention and treatment of obesity. Thus, further research on the theoretical and methodological issues of family meals could be one factor resulting in more effective childhood obesity prevention and intervention as well as, consequently, reduced overweight and obesity prevalence over time.

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