Introduction

- Endearingly referred to as amas de la casa (housewives), Mexican women are the primary caregivers of the family unit, managing food preparation and diet of the whole family.3
- In general, Mexicans have a cultural view that “chubby children are healthy children.”7
- Mexican mothers living in both California and Mexico frequently underestimated their children’s weights. Mexican mothers typically wanted their children to be bigger than they were. Mexican mothers believed larger figures were ideal because they looked healthier.3
- Preference for heavier children is likely related to still significant problems of undernutrition and stunting in Mexico4.

Methods

- A sample of 174 male and female children was recruited to participate from 11 communities near San Miguel de Allende. Inclusion criteria: 1) native of Guanajuato, Mexico 2) elementary school-age children (age 5-11), and 3) a mother accompanied the child and agreed to participate in the survey and to consent to the child’s participation.
- Height (cm) and weight (kg) were collected and used to calculate BMI:
  - Underweight = BMI-for-age percentile <5
  - Overweight = BMI-for-age percentile ≥ 85
- Mothers were presented with a pictorial scale developed by Collins8 and asked:
  - Which image looks the most like the way your child looks?
  - Which image looks the most like the way you want your child to look?
- BMI z-score was calculated for each child based on CDC growth chart mean and standard deviation BMI for age information. The Collins scale choices were converted into z-scores where a rating of 2 became a z-score of 0, with z increasing by +1 for every rating above 4 and decreasing by 1 for every rating below 4. Paired t-tests were performed to evaluate whether BMI z-score differed significantly from maternal preference z-score, as well as whether maternal perception z-score difference significantly from maternal preference z-score.
- Study approved by UNC School of Medicine IRB.

Results

Maternal Perceptions
- Mothers of those children classified as normal weight underestimated their children’s weights by 0.433 standard deviations (p<0.001).
- No significant difference between the way mothers perceived their overweight or underweight children and their actual weights.

Maternal Preferences
- Mothers of overweight children preferred their children to be 0.790 standard deviations lower in weight than the way they perceived them (p<0.05).
- Mothers of underweight children preferred their children to be 1.222 standard deviations greater in weight than the way they perceived them (p<0.02).
- Mothers of normal weight children preferred their children to be 0.384 standard deviations greater in weight than the way they perceived them (p<0.001).

Conclusions

- Mothers of normal weight children underestimate their children’s weights and prefer them to be heavier.
- Mothers of overweight and underweight children are more likely to appropriately estimate their children’s weights, thus recognizing their children’s weight problems.
- Furthermore, these mothers recognize the change that needs to be made and align their preferences with a change towards a healthy weight.
- Possible that the preference is for heavier children, as a compensation for problems of malnutrition and lack of food, but when a child’s weight becomes unhealthy the mothers become more aware of weight status.
- As childhood obesity and adulthood health problems related to obesity become more prevalent in Mexico, maternal awareness of obesity is increasing and preferences are shifting away from having overweight children.
- An obesity intervention should focus on educating mothers about what a healthy weight is and how to maintain it.

Limitations: Study was a convenience sample. Low numbers of overweight and underweight children.

Table 1: Demographics of the Sample (n=174)

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Table 2: Weight Status Distribution

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<tr>
<td>Underweight</td>
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</table>

References


Author Information

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Objective

- Evaluate mothers’ perceptions of their children’s weights and compare this to children’s age-corrected BMI as an indicator of obesity
- Rationale: An obesity intervention must address beliefs and attitudes of the individuals who are targeted for behavior change – in this case, the parents of at-risk children.
- An effective evaluation of maternal perceptions and preferences of weight could direct development of a future obesity intervention.