

## Comments on “Overweight status, abdominal circumference, physical activity, and functional constipation in children”

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The article entitled “Overweight status, abdominal circumference, physical activity, and functional constipation in children” by Dias et al.<sup>1</sup> assessed the prevalence of functional constipation and its relationship with food intake, overweight status, and physical activity in children. First, in the scientific context, we need to use technical terms, e.g., “circumference” is wrong; measurements of body surfaces are called “perimeters”; “height” must be “stature”; and “weight” should be “body mass” (note that the concept of BMI is body [mass] index, not body [weight] index)<sup>2</sup>. Besides, the authors used the abdomen perimeter divided by stature; however, this mathematical measurement is wrong because the literature recommends the waist perimeter (waist-to-stature ratio)<sup>3</sup>.

The use of the waist perimeter to assess the risk of metabolic diseases<sup>4,5</sup> is also used to measure the waist-hip ratio<sup>6,7</sup>. However, the waist-hip ratio uses two variables (the waist and hip) that change during body mass loss. Furthermore, the waist-hip ratio disregards body proportionality. For example, patients with smaller stature (e.g., 150 cm) have waist areas with smaller perimeters

compared to taller patients (e.g., 185 cm). This must be considered in the clinical assessment, as body proportionality is supported by Cube law<sup>8</sup>. Therefore, I recommend that researchers and clinicians to use the waist-to-stature ratio<sup>3</sup>. The cutoff point is  $<0.50$  (i.e., the waist perimeter must be less than 50% of the patients’ stature)<sup>9-12</sup>.

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