

# The Implications of the Pediatric Obesity Epidemic on Weight-Based Dosing of Prescription Medications

by

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**Background:** Pediatric obesity is a nationwide public health concern that contributes greatly to the morbidity and mortality of the US population. Not only does obesity predispose a patient to various chronic health conditions, but it also affects their body's natural metabolic processes.

**Purpose:** The current pharmacologic management of the pediatric population utilizes total body weight as the standard for determining dosage, but there is significant evidence of this method producing undesired outcomes in patients due to immature physiologic mechanisms. This research sought to identify a single method of adjusted body measurement that could replace the current standard of care to provide a more individualized treatment approach for this subset of pediatric patients.

**Methods:** A search of current literature from the past ten years was performed to identify strengths and weaknesses of alternate dosing methods used to treat obese children. Specifications such as inclusion and exclusion criteria, validity, and qualitative analyses were used to identify the articles with the most relevant and credible data.

**Results:** All three studies evaluated in this Evidence-Based Clinical Review determined that a form of adjusted body measurement other than total body weight dosing provided more optimal therapy for obese pediatric patients.

**Conclusion:** Although many of the studies concluded that total body weight dosing should not be used routinely to manage obese pediatric patients, the findings were inconclusive with regard

to isolating a single approach that would be a sufficient replacement for the standard of care.

There are many gaps in research that will better address the efficacy of pharmacologic therapy in this population.