Newborns who weigh less than 5 pounds, 8 ounces, are classified as being of low-birth weight (LBW). (A related category, small for gestational age [SGA], is sex specific and includes children who are less than the 10th percentile for birth weight and gestational age.) LBW, a marker for fetal underdevelopment, has been linked to a variety of causes, for example, maternal tobacco and alcohol use, maternal age, poor maternal nutrition, lower socioeconomic status, and so forth. Moreover, LBW newborns face significant health risks as adults, the most significant of these risks include comorbidities associated with adult obesity. Numerous studies, ranging from animal-based models to diverse population-based cohort studies that encompass decades, have addressed the health impacts of LBW throughout the life cycle.

Recent research has associated LBW-related obesity with several causes. Animal-based studies have highlighted the role of maternal nutritional and hormonal levels on predisposing factors such as tumor necrosis factor-α upon appetite levels and metabolic efficiency among offspring. Investigators have also examined the impact of caregiver practice among LBW infants. Healthcare professionals, significant others, and caregivers may overfeed LBW (or SGA) children to help him or her to achieve a normal developmental trajectory. Accelerated postnatal development, existing research suggests, increases subsequent risk for central obesity, dyslipidemia, Type 2 diabetes, insulin resistance, cardiovascular disease, sympathetic nerve dysfunction, and sensorineural hearing loss, findings consistent across diverse populations in the Americas, Europe, Asia, and Australasia. The association of LBW and obesity raises important disease prevention issues for healthcare professionals. Assumptions about the benefits of developmental catch-up for LBW infants may require reconsideration in light of potential health outcomes in adulthood.

The association of LBW and obesity raises important disease prevention issues for healthcare professionals.

- obesity
- gestational age
- birth weight
- health care
- disease prevention
• disease
• infants

David P. Adams, Ph.D., M.P.H. Armstrong Atlantic State University
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See Also:

- Infant Weight Gain and Childhood Overweight
- Pregnancy

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