

Policy Extract

[Weight Gain During Pregnancy: Reexamining the Guidelines](#)

The new guidelines for GWG are formulated as a range for each category of prepregnancy BMI. This approach reflects the imprecision of the estimates on which the recommendations are based, the reality that good outcomes are achieved within a range of weight gains, and the many additional factors that may need to be considered for an individual woman.

The new guidelines differ from those issued in 1990 in two ways. First, they are based on the WHO cutoff points for the BMI categories instead of the previous ones, which were based on categories derived from the Metropolitan Life Insurance tables. Second, and most importantly, the new guidelines include a specific, relatively narrow range of recommended gain for obese women.

DEVELOPMENT OF THE GUIDELINES FOR WEIGHT GAIN DURING PREGNANCY

The committee worked from the perspectives that the reproductive cycle begins before conceptions and continues through the first year post-partum and that maternal weight status throughout the entire cycle affects both the mother and her child.

The committee began its work by considering appropriate BMI cutoff points and describing trends over time in maternal prepregnancy BMI and GWG among American women. In addition, data were sought on both the determinants and consequences of GWG. The search for such data revealed major gaps in data collection and analysis.

Key Finding S-1: The WHO cutoff points for categorising BMI have been widely adopted and should be used for categorising prepregnancy BMI as well.

Key Finding S-2: Currently available data sources are inadequate for studying national trends in GWG, or postpartum weight, or their determinants.

Action Recommendation S-1: The committee recommends that the Department of Health and Human Services conduct routine surveillance of GWG and postpartum weight retention on a nationally representative sample of women and report the results by prepregnancy BMI (including all classes of obesity), age, racial/ethnic group, and socioeconomic status.

Action Recommendation S-2: The committee recommends that the National Institutes of Health and other relevant agencies should provide support to researchers to conduct studies in large and diverse populations of women to understand how dietary intake, physical activity, dieting practices, food insecurity and, more broadly, the social, cultural, and environmental context affect GWG.

Key Findings S-3: Evidence from the scientific literature is remarkably clear that prepregnancy BMI is an independent predictor of many adverse outcomes of pregnancy. As a result, women should enter pregnancy with a BMI in the normal weight category.

Key Findings S-4: Although a record-high proportion of American women of childbearing age have BMI values in obesity classes II and III, available evidence is insufficient to develop more specific recommendations for GWG among these women.

Research Recommendation S-2: The committee recommends that the National Institutes of Health and other relevant agencies should provide support to researchers to conduct studies in all classes of obese women, stratified by the severity of obesity, on the determinants and impact of GWG, pattern of weight gain, and its composition on maternal and child outcomes.

Key Findings S-5: There are only limited data available with which to link GWG to health outcomes of mothers and children that occur after the neonatal period.

Research Recommendation S-3: The committee recommends that the National Institutes of Health and other relevant agencies should provide support to researchers to conduct studies on the eating behaviors, patterns of dietary intake and physical activity, and metabolic profiles of pregnant women, especially obese women, who experience low gain or weight loss Weight Gain During Pregnancy: Reexamining the Guidelines Copyright National Academy of Sciences. All rights reserved. In addition, the committee recommends that researchers should conduct studies on the effects of weight loss or low GWG, including periods of prolonged fasting and the development of ketonuria/ketonemia during gestation, on growth and on development, and long-term neurocognitive function in the offspring.

Research Recommendation S-4: The committee recommends that the National Institutes of Health and other relevant agencies should provide support to researchers to conduct observational and experimental studies on the association between GWG and (a) glucose abnormalities and gestational hypertensive disorders that take into account the temporality of the diagnosis of the outcome and (b) the development of glucose intolerance, hypertension, and other cardiovascular risk factors as well as mental health and cancer later in a woman's life.

Research Recommendation S-5: The committee recommends that the National Institutes of Health and other relevant agencies should provide support to researchers to conduct studies that (a) explore mechanisms, including epigenetic mechanisms, that underlie effects of GWG on maternal and child outcomes and (b) address the extent to which optimal GWG differs not only by maternal prepregnancy BMI but also by other factors such as age (especially among adolescents), parity, racial/ethnic group, socioeconomic status, co-morbidities, and maternal/paternal/fetal genotype.

Research Recommendation S-6: The committee recommends that the National Institutes of Health and other relevant agencies should provide support to researchers to conduct observational and experimental studies to assess the impact of variation in GWG on a range of child outcomes, including duration of gestation and weight and body composition at birth, and neurodevelopment, obesity and related outcomes, and asthma later in childhood.

Research Recommendation S-7: To permit the development of improved recommendations for GWG in the future, the committee recommends that the National Institutes of Health and other relevant agencies should provide support to researchers to (a) conduct studies to assess utilities (values) associated with short- and long-term health outcomes associated with GWG for both mother and child and (b) include these values in studies that employ decision analytic frameworks to estimate optimal GWG according to category of maternal prepregnancy BMI and other subgroups.

APPROACHES TO ACHIEVING RECOMMENDED WEIGHT GAIN DURING PREGNANCY

Action Recommendation S-3: The committee recommends that appropriate federal, state, and local agencies as well as health care providers should inform women of the importance

of conceiving at a normal BMI and that all those who provide health care or related services to women of childbearing age should include preconceptional counselling care.

Action Recommendation S-4: The committee recommends that relevant federal agencies, private voluntary organizations, and medical and public health organizations adopt these new guidelines for GWG and publicize them to their members and also to women of childbearing age.

Action Recommendation S-5: To assist women to gain within the guidelines, the committee recommends that those who provide prenatal care to women should offer them counseling, such as guidance on dietary intake and physical activity, that is tailored to their life circumstances.

Research Recommendation S-8: The committee recommends that the Department of Health and Human Services should provide funding for research to aid providers and communities in assisting women to meet these guidelines, especially low-income and minority women. The committee also recommends that the Department of Health and Human Services should provide funding for research to examine the cost-effectiveness (in terms of maternal and offspring outcomes) of interventions designed to assist women in meeting these guidelines.