Food cravings are common, especially for women during pregnancy. It is estimated that 50-90% of women in the U.S. experience cravings for specific foods during pregnancy. In the U.S., chocolate is the most commonly craved food and women are twice as likely to crave chocolate as men. Despite the ubiquity of food cravings during pregnancy, little is understood about the cause of these unique cravings.

In an article published in the September 2014 issue of *Frontiers in Psychology*, Orloff and Hormes investigated four commonly believed hypotheses about food cravings during pregnancy and evaluated the scientific evidence supporting or discounting each hypothesis. Most relevant to our group, they explored the role of restrained eating and disordered eating behaviors in cravings and excess weight gain during pregnancy.

The authors define food cravings as “strong urges for foods that are more specific than mere hunger and very difficult to resist.” During pregnancy, food cravings typically emerge by the end of the first trimester, peak in frequency and intensity during the second trimester, and subside as pregnancy progresses to term, with a significant drop in cravings following delivery.

Below are the four hypotheses that the researchers investigated, along with the evidence from prior research supporting or discounting each theory.

**Hypothesis 1: Craving is caused by fluctuating levels of hormones.** Do fluctuations in the ovarian hormones estrogen and progesterone cause cravings? Unfortunately, research studies have not directly examined the links between hormone fluctuations and cravings. However, hormones may indirectly influence cravings due to their effect on sensory perception during pregnancy, including altered taste perception.

**Hypothesis 2: Craving is a response to nutritional deficits.** Are cravings our bodies’ way of getting us to eat foods high in nutrients that our body needs during pregnancy? Prior research did not find evidence for a significant association between food cravings and dietary quality. The foods commonly craved during pregnancy are rarely nutrient dense, which is evidence against this hypothesis.

**Hypothesis 3: Craving is due to pharmacologically active ingredients in the desired foods.** It is possible that cravings develop as a way to encourage consumption of foods known to prevent or alleviate pregnancy symptoms of nausea and vomiting. Food aversions and food cravings commonly co-occur during pregnancy; a fact that provides some support for this hypothesis. However, more research is needed to determine the causal role of craved foods in alleviating nausea and vomiting.
Hypothesis 4: Craving is caused by cultural and psychosocial factors. The authors propose a model in which food craving results from ambivalence, or a tension between approach (the desire to indulge) and avoidance (efforts to restrict consumption) towards highly palatable foods. They argue that most women in the U.S abstain from consuming calorically dense foods in an attempt to meet culturally defined ideals of beauty. Pregnancy may act as a culturally sanctioned disinhibitor and give women permission to consume food items that would otherwise be restricted. In support of this model, the most commonly craved foods are those that are both appealing and “forbidden.” Ironically, efforts to avoid foods that cause conflicting feelings have the paradoxical effect of increasing craving and consumption (often overconsumption or binge-eating) of that food. Cross-cultural differences in prenatal cravings indicate that there is a factor unique to US culture that increases the likelihood that cravings during pregnancy will lead to excess GWG in pregnancy. Perhaps this unique factor is our culture’s value of the thin ideal and resulting prevalence of restrained and disordered eating behaviors? Women with a history of disordered eating, who are restrained eaters, and dieters are more likely to experience overeating and excess GWG during pregnancy.

Although this article does emphasize the health risks of excess GWG, it seems clear that the most common prescriptions to treat and prevent excess GWG (dieting or restriction of food intake) will only increase the risk of overeating, disordered eating, and excess GWG. Hopefully we can use this knowledge to help our patients manage their feelings about their changing bodies and eating habits during the vulnerable time of pregnancy and have the healthiest pregnancies possible.