

Keto and low-carb diets during pregnancy risks



What keto and low-carb mean in pregnancy

Keto is a very low-carbohydrate, high-fat eating pattern designed to push the body toward ketosis, a state in which the liver produces ketone bodies from fat. A low-carb diet is broader and may simply mean reducing refined starches and sugars without necessarily reaching sustained ketosis. That distinction matters in pregnancy, because the goal of fetal nutrition is not just weight control or glucose reduction; it is reliable support for growth, organ development, and maternal health.

Pregnancy also changes insulin sensitivity. In the second and third trimesters, many pregnant people develop physiologic insulin resistance, which helps keep more glucose available for the placenta and fetus. Because of that normal shift, the body is already working differently than it does outside pregnancy. A strict ketogenic pattern can therefore have a different risk profile than it would for a nonpregnant adult, even if the same plan once seemed effective or well tolerated.

Why the nutritional margin is narrower

Pregnancy raises the need for total energy, protein, and key micronutrients

such as folate, iron, iodine, calcium, vitamin D, and choline. It also raises the need for fluids and often fiber. When carbohydrate foods are sharply reduced, it can become harder to meet those needs with everyday meals, especially if the pattern crowds out fruit, legumes, whole grains, fortified grains, and other nutrient-dense foods. In practical terms, a restrictive diet can create nutrient displacement in pregnancy, where the diet fills up with foods that are very high in fat but not rich enough in vitamins, minerals, or fiber.

That problem is more than theoretical. Some pregnant people already struggle with nausea, aversions, reflux, or early fullness, which makes variety and flexibility important. If the diet also cuts out several common food groups, constipation, fatigue, lightheadedness, and low overall intake become more likely. A plan that looks disciplined on paper can still leave a pregnant person short on the nutrients needed for maternal tissue expansion and fetal growth.

Ketones, fasting, and the fetal environment

Ketones are not inherently exotic; the body can produce them during fasting, calorie deficit, or prolonged carbohydrate restriction. The concern in pregnancy is not a brief rise during an overnight fast, but sustained or recurrent ketone exposure from chronic under-eating or a very low-carb pattern. That is why people sometimes discuss ketosis from fasting in pregnancy as a related warning sign: if the body is regularly running low on carbohydrate and energy, ketone production may rise.

The literature has raised concerns that ketogenic dieting in pregnancy could affect maternal brain function and offspring neurodevelopment, but human evidence is limited and not strong enough to prove a precise threshold of harm. Even so, the theoretical concern is biologically plausible because the fetus depends on a stable supply of maternal glucose, and pregnancy is a period of rapid brain development. The safest interpretation is cautious rather than alarmist: ketones are not proof of injury, but persistent ketosis is not something to casually aim for without medical oversight.

What the evidence says and what it does not say

One reason this topic feels confusing is that the evidence base is incomplete. A review in the American Diabetes Association literature notes that there is not enough evidence to draw strong conclusions about whether ketones or carbohydrate restriction directly harm pregnancy outcomes. That means there is a gap between certainty and concern: researchers cannot confidently define every risk, but they also cannot confidently label strict keto as safe.

Because of that uncertainty, many guidelines and clinicians remain conservative. They tend to prioritize the known benefits of adequate maternal nutrition over the unproven benefits of ketosis. In other words, the absence of definitive proof is not the same as proof of safety. For an expectant parent, especially one with a history of restricted eating, diabetes, or poor weight gain, the practical question is less about whether keto can be made to work in theory and more about whether it is the best choice given pregnancy physiology and the available evidence.

Diabetes, gestational diabetes, and individualized carbohydrate targets

People with pre-existing diabetes or gestational diabetes often hear conflicting advice about carbohydrate intake. Some degree of carb distribution and meal planning may be useful, but that is very different from a true ketogenic approach. With diabetes, lowering carbohydrate too aggressively can increase the risk of hypoglycemia if insulin or glucose-lowering medication is being used, and in some settings it can also increase ketone production. That is why blood glucose monitoring in pregnancy is so important when any major dietary change is being considered.

For gestational diabetes, meal structure and gestational diabetes meal timing may be part of an evidence-based plan, but those adjustments are ideally made with an obstetric clinician, endocrinologist, or registered dietitian who knows pregnancy care. A less restrictive, balanced pattern often allows for adequate carbohydrate intake while still supporting glucose control. The goal is not perfect numbers at the expense of nutrition; it is a plan that protects both maternal metabolic control and fetal growth without creating unnecessary ketosis or food fear.

A safer practical approach and when to get help

If you are pregnant and thinking about keto or low-carb eating, the safest next step is to review the plan with your healthcare professional before making a major change. Many clinicians favor a balanced prenatal pattern with enough carbohydrate to support fetal needs, plus protein, healthy fats, fiber, and micronutrient-rich foods. If you want to lower added sugar or refined starches, that is a different goal from forcing ketosis, and it can often be discussed in a much more flexible way.

Seek prompt advice if you have vomiting, trouble keeping fluids down, rapid weight loss, dizziness, fainting, signs of dehydration, or very poor intake. If you already started a restrictive diet and just found out you are pregnant, do not panic, but do not continue in silence either. A supportive conversation with your obstetric team can help you move toward a pattern that is more sustainable. The same is true if you are trying to conceive or breastfeeding, because the nutrition considerations remain important across those stages as well.