

The High-Performance Pregnancy

CrossFit delivers a supercharged baby and fit mom with a modified program that dials down the intensity and puts strength and safety first.

Andrea Nitz



"Is it safe to exercise while pregnant?" is an age-old question. In earlier times, pregnant women were told to stay in bed and rest, due to their "delicate" condition. Even today, some doctors will tell their pregnant patients not to do anything more strenuous than walking.

As CrossFitters, we see things differently.

We know what we are doing is good for our bodies, how could it be bad for our babies? As many studies have shown, it's not. It is actually very good for the kid. All of the great things that you are doing for your cardiovascular system by exercising, you are also doing for your baby's. Having trained many pregnant clients and been forced to develop safe, specific maternity-oriented exercises and rules as a trainer at CrossFit Brand X in Ramona, Calif. (also the HQ of CrossFit Kids), I have seen for myself that babies born to CrossFitting moms have a number of similar traits that make for a smoother transition to life outside the womb.

FACTS ABOUT MATERNITY WORKOUTS

Women who exercise during pregnancy:

Have reduced weight gain and fat deposition during pregnancy

Have fewer pregnancy discomforts

Report a more rapid physical and emotional recovery from delivery

Tend to have easier, shorter and less complicated labors

Have less need for pain relief during labor

Have more stamina during labor

Increase their aerobic capacity

Decrease their susceptibility to illness

Increase their energy level

Babies of exercising moms:

Have significantly lower heart rates than babies of non-exercising moms

Are better able to cope with the stress of birth

Have a greater ability to adapt to life outside the uterus

Are more healthy at birth

Are leaner at birth and tend to stay lean as they grow

Sleep through the night sooner

Are better able to self-calm

Score higher on tests of general intelligence and oral language skills

Have decreased risks of cardiovascular and metabolic diseases later in life

Have better attention spans often in their second year of life (if the mom ingested Omega-3 during pregnancy)

CrossFit babies are more capable of handling the stress of labor and delivery. They tend to be born closer to their due dates. And according to the data I have collected so far with my clients and through my [CrossFitMoms website](#), they are calmer, happier babies who sleep through the night sooner. Studies show that babies born to mothers who exercised during pregnancy tend to be healthy and strong, with better mental and motor development than their peers. They also tend to be born leaner, and seem to stay that way throughout their childhood. In five years or so, I'll check in with all the babies born this year to see if I can confirm that.

In the meantime, the parade of pregnant CrossFitters keeps on coming. And we keep fine-tuning their workouts to keep them and their babies sound and safe as a tidal wave of physiological changes add unique challenges to exercising moms.

Your body's more vulnerable. Don't push it.

Everything about the female body seems to change during pregnancy, the most obvious being the woman's center of gravity as the baby grows, which can cause problems with balance and agility. But other changes aren't so apparent. A ten-fold increase in the body's production of the hormone relaxin—designed to relax the joints in the pelvis to give the baby room to pass through the birth canal—causes a softening of the ligaments, which may make them more vulnerable during strenuous movements. Another key change is an increase in blood volume and cardiac output, and corresponding rise in heart rate.



How should you adjust your workouts to deal with these changes?

Well, there's a general answer and a specific answer. The general first: Each woman's body and pregnancy and motivation are different, and the same guidelines will not apply to everyone. At the CrossFit Mom website, which lists exercises by trimester and some do's and don'ts, the information is for a very broad range of people and abilities with workouts scaled accordingly. How you choose to work out during your pregnancy is up to you, but I cannot tell you how important it is to listen to your body.

Now, the specific answer: How hard and long you do your CrossFit workouts depends on if and how hard and long you were doing CrossFit before you become pregnant.

If you are just starting CrossFit, and are, or are soon to be pregnant, you should proceed with extreme caution. You should use light weights and low reps. And this is not the time to ramp up the intensity.

That may sound frustrating to Type-A women, but they can still get all the workout they need—and what they need is to maintain strength, stamina and flexibility, gain only the necessary weight, and prepare themselves for child-birth. Remember that you are doing weighted workouts the whole time! As you progress in your pregnancy and things become uncomfortable, stop doing them or find substitute exercises.

On the other hand, if you're a long-time CrossFitter, your programming will be different. You will be able to do most workouts for 4-6 months into the pregnancy, depending on the individual. There are a few things to consider, but again, go by what your body tells you. If it feels weird, painful or uncomfortable, don't do it.

Dial down the intensity with the "talk test"

True or False?

- Don't lie on your back after the first trimester.
- Don't do anything inverted.
- Don't let your heart rate go above 140 bpm.

These are the three most common warnings about exercise and pregnancy, but only half of them are true. Here's the math:

The first one is true. After four months or so, the baby has grown enough that lying on your back will put pressure on the vena cava (major veins that return blood to the heart). This can reduce blood flow and oxygen to the baby, and can make you very dizzy and lightheaded.

This happens to most, but not all moms.

The second one is half-true. I have not found any research to show that the act of being inverted is actually harmful, but because of the increase in blood volume, you could become dizzy and fall.

The third one—avoiding a 140-plus heart rate—is false. Until 1994, the American College of Obstetrics and Gynecology did recommend keeping the heart rate at or below 140 bpm during exercise, in order to maintain a safe core temperature. They revised this guideline when they discovered no evidence of correlation between the two. It turns out that the heart rate doesn't have anything to do with core temperature, as originally thought.

Besides, the real risk factor turns out to be intensity — specifically, high enough intensity to subject the baby to oxygen deprivation—and 140 bpm is not as intense as it sounds. A pregnant mother has an increased blood volume that gives her a higher relative bpm in all activities, rest included. So she may hit 140 pretty quickly, without as much exertion as normal. She even may hit 150 —but if she isn't gasping for air at that point, her baby probably isn't either.

This is why *perceived exertion* is a much more accurate way to be sure you are keeping your intensity at a safe level. Sure, go over 140 bpm if you can breathe easily, but don't work yourself into a hypoxic state doing Fran. Hypoxia indicates that there is insufficient oxygen in your blood, from which babies get their oxygen—the lack of which can cause brain damage.

Therefore, the rule on perceived exertion is simple: You should be able to carry on a conversation while you are working out. Use common sense; if you're breathing hard enough to fail this "talk test," back off.

I also warn newbie CrossFitters to be extra cautious about pushing it because pregnancy would be a really bad time to induce Rhabdo, which has the potential to affect any beginner.

Common-sense ground rules: Limit potential falls, slow down, and down-scale

Through trial-and-error experimentation and simple logic, I've developed a simple checklist that I find myself continually reminding my pregnant clients about:

- Stay hydrated. Even if it isn't hot, you need to drink a lot of fluids.

- Do not allow your core temperature to get too high (above 102). It can increase the risk of central nervous system abnormalities in your baby.
- Because the relaxin hormone causes the joints to be softer, beware of ballistic and quick lateral movements, and squatting below parallel.
- Cross certain exercises off the list until the baby is born. The no-go list includes the following:
 1. Rope climbs and handstand push-ups; they are just not necessary. You can substitute beginner rope climbs or rope pull-ups instead. It is not worth the risk of falling
 2. Heavy or max effort lifts. Too many things can go wrong.
 3. Back or hip extensions will be ok for a few months, but stay away from GHD sit ups!
 4. Box jumps, which pose a much higher risk of loss of balance and falling given your new weight distribution, are among the first exercises that will weed themselves out of your workouts.

As for general strategy, I emphasize the following:

- Take “for time” out of your workouts for now. Rushing can lead to tripping.
- Do not work to exhaustion. Remember, that’ll limit the baby’s oxygen supply.
- Run and row until you can’t any more.
- Down-scale the things that you want to do. If squats start to become difficult, stand in front of a jump box, sit down, and then stand up. If pull ups become impossible, do ring rows. Do knees-to-elbows instead of sit ups. Elevate your push ups on a tire, box or against the wall. When your belly gets too big, substitute dumbbells for barbells.

It is easy to continue your workouts with a little thought and imagination. To get the best return on your investment, make sure you work out at least three days a week. Of course, if you have a high-risk pregnancy, your doctor may not want you to do anything. In that case, there are things you can do while on bed rest, so you won’t go crazy.

Bottom line: Downshift on the highway to health

Keeping fit during your pregnancy increases the chance of giving birth to a fit baby who, studies show, will be more likely to enjoy standout strength, coordination,

and general health in his/her early years. It’ll also help you maintain the health and fitness you need to spend a quality life with your child. But be aware that the pregnant body is not the high-performance CrossFit machine you’re used to driving. To protect yourself and your passenger, you don’t necessarily need to get off the fitness expressway. Just downshift out of the fast lane. You’ll be rewarded with a bouncing CrossFit baby who might end up setting the bar for health and fitness for the next generation.



About The Author

Andrea Nitz has been a Massage Therapist for over 13 years, specializing in deep tissue, Swedish and pregnancy massage. She is a Certified CrossFit Trainer, CrossFit Certified Olympic Weightlifting Trainer, Certified CrossFit Kids Trainer, Certified Pre/Post Natal Exercise Specialist, and teaches at CrossFit Brand X. She is also the owner of [CrossFit Mom](#).

Sample Workout: “Baby Nancy”

Advanced

5 rounds Run or row 400m 15 overhead squats #45 bar

Intermediate

4 rounds Run, row or walk 400m 15 overhead squats #25 bar

Beginner

3 rounds Row or walk 200m 10 overhead squats #10 bar or PVC

Remember to only squat to parallel.

