

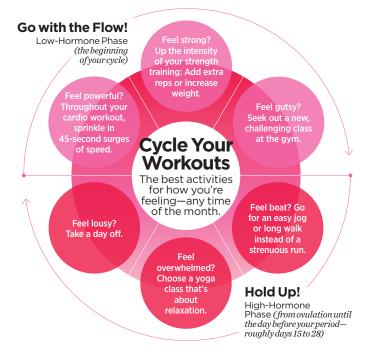
Call it the female advantage. At the same time in your cycle that you have cravings and cramps, hormonal changes can give you boosts in pain tolerance and muscle recovery that can pay off at the gym. In fact, at other points in your cycle (when you don't have your period), exercise could feel more challenging. Learning how your hormonal shifts affect your body can help you understand why some days you feel like leader of the pack in spin class and other days it's as if you're stuck in the mud. And that might encourage you to push harder when you've got the extra oomph, and scale back (without guilt!) when you don't.

## **Period Power**

How's this for irony: When you have your period (and the week after), your body is more like a man's. During this part of your cycle, your levels of the female hormones estrogen and progesterone are at their lowest, making vou a little more dudelikeat least metabolically, says Stacy Sims, Ph.D., an exercise physiologist at Stanford

University and a leading researcher on the impact of menstruation on athletic performance.

"It's a subtle hormonal shift, but it's enough that it could make you feel more powerful during exercise," savs Sims, who began her investigation out of personal curiosity (she suspected her hormones affected her performance in a triathlon).



Her research shows that during this low-hormone phase, women also recover faster and have a higher pain tolerance. Why? "A probable theory is that your body isn't preoccupied with preparing for a possible pregnancy," she says. "Your baseline is reset into a more relaxed mode, so these other systems operate optimally."

Granted, feeling crampy can make it tough to part with your heating pad. But once you're at the gym, you might find that you breeze through your routine. So challenge yourself with that advanced yoga class or increase the incline on the treadmill. Besides, exercise can relieve the discomfort of cramps and an aching lower back, says Trina Rowe, a doctor of physical therapy at Bauerfeind Performance Center in Los Angeles. It will also burn calories, a boon if you're a hormonal Count Chocula.

## Hormones Soar, Energy Slumps

For roughly two weeks before your period, you're in the high-hormone phase. At this point in your cycle, which starts when you ovulate and ends with the first day of your

period, your estrogen and progesterone levels peak. Yep, this is when you may find yourself crying during sappy commercials and going ballistic when you break a nail (particularly on the days leading up to your period).

But that's not the only downside of your heightened hormones. During this phase, Sims says, you're less tolerant of heat, because elevated progesterone delays your sweat response, causing your body to take longer to expel excess warmth. You could also be sluggish: Your metabolism shifts to use fat as its primary energy source

over carbs, and those fatty acids are slower to release as energy; with fewer carbs available, you have less fuel for power. You might feel bloated, as increased estrogen causes your kidneys to redistribute water flow.

"These physical shifts are a direct result of the process the body undergoes to prepare itself to carry a fertilized egg and sustain a pregnancy," says Sims. "During this time, that's your body's main priority. So it changes metabolic processes to support that, without regard to the side effects."

Cranky and tired and bloated—oh my! You might as well take a sabbatical from the gym, right? Not so fast. Here's the unexpected clincher: Research shows that these effects aren't major enough to sap you of strength or power. Perhaps you won't feel like biking fast or swinging heavy kettlebells, but your body is capable of handing its usual workload.

And you certainly shouldn't let your cycle stop you from participating in an event, says Nina S. Stachenfeld, Ph.D., an associate fellow at the John B. Pierce Laboratory and an associate professor of obstetrics, gynecology, and reproductive sciences at the Yale University School of Medicine. "If you're training

for a race, don't worry about your cycle phase," she says. "Hormonal fluctuations don't impact endurance." So when your hormones are at their peak, your performance doesn't have to take a hit. You can still do it all.

That said, if you're really feeling lousy, this is the time of the month to give yourself a break without feeling like a slacker. Go for an easy run instead of doing intervals. Skip tricky yoga poses and opt for relaxing ones. Heck, take a whole day off. Researchers at the Institute of Sport Sciences, in Germany. studied women who lifted weights every third day through both phases of their cycle and compared them with women who lifted just once a week during the highhormone phase and every other day during the lowhormone phase. The women in the second group—the ones who backed off when their hormones were high and made up for it when they were low-experienced an increase in strength of 32.6 percent, compared with their counterparts' 13 percent gain.

That's why it's important to think of your workout plan as a monthly cycle. Give yourself the flexibility to push hard when you're feeling good and to back off when you're not. Now that's flow.

