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The Healthy Programmer

Get Fit, Feel Better, and Keep Coding

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The Pragmatic Programmers

The Healthy Programmer

Get Fit, Feel Better, and Keep Coding

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Taking Healthy Pomodoro Breaks

In the late 1980s, Francesco Cirillo was struggling through his first years at college. His productivity was low and his study habits lacked any kind of structure. Even worse, he couldn't focus on individual tasks because the magnitude of the big picture was distracting him. Francesco needed a system that would help him concentrate—so he created the Pomodoro Technique.

The Pomodoro Technique is a method of working on a single task for a short, well-defined period of time. The basic activity loop goes like this:

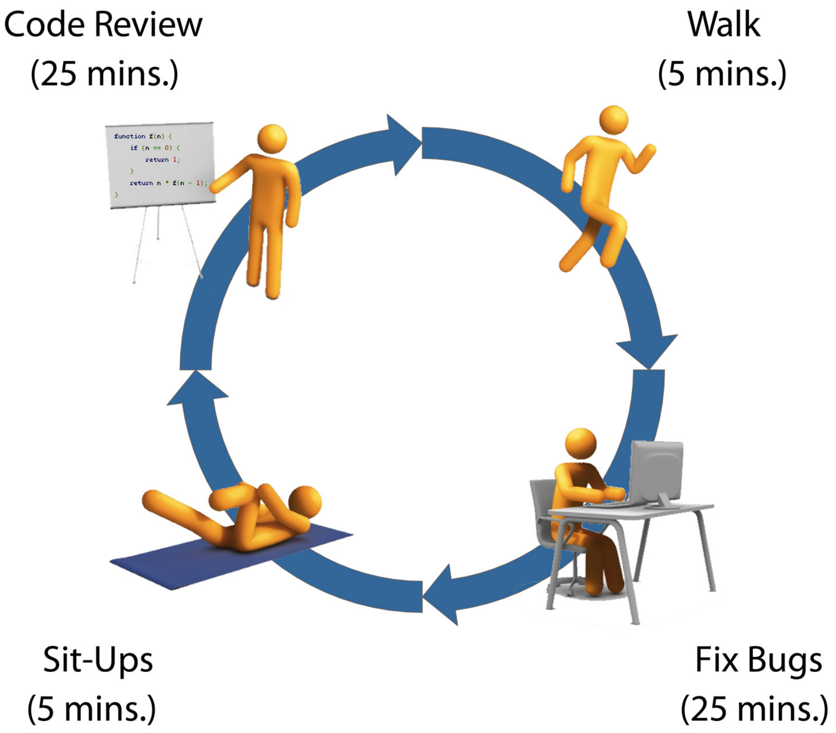
1. Set a timer for twenty-five minutes.
2. Start working on a task.
3. Stop when the timer ends (even if the task is not done).
4. Take a five-minute break, and then return to Step 1.

Try it right now. Pick a task you've been agonizing over, set your timer, and get to work. You'll probably find that having a preset time box lessens the fear of failing at the task, which might be what kept you from starting on it in the first place. Instead of failing, you take a break.

Francesco named the technique after the tomato-shaped kitchen timer he used in college (pomodoro is the Italian word for tomato), and he called each iteration a Pomodoro. But it's the break between Pomodoros where we're going to build on this technique. Instead of surfing the Internet or getting a cup of coffee, you'll do something physically active. The goal is to get your body moving every twenty-five minutes.

We'll call this a Pomodoro workout. Set aside a block of time—two or three hours. Then pick two or three programming tasks you want to do during that time. You'll also need to pick two or three exercises you want to do. They could be walking, nerve-gliding, curl-ups, or any of the other activities you've learned in this book. You'll begin the workout with a programming task. Set your timer for twenty-five minutes and get to work. When the period ends, set your timer for five minutes and switch to your first exercise. After the timer goes off, return to your computer and start the process over again. Repeat this until the block of time you've allotted yourself is over (see Figure 31, A Pomodoro workout, on page 8).

According to Staffan Nöteberg, the author of *Pomodoro Technique Illustrated* *[Nöt09]*, this kind of physical activity during Pomodoro breaks is ideal. He even does it himself. "I always leave the office chair during my Pomodoro breaks," Staffan says. "Normally I take a one-minute walk."


Code Review
(25 mins.)
Walk
(5 mins.)
Sit-Ups
(5 mins.)
Fix Bugs
(25 mins.)

```
function f(n) {
    if (n == 0) {
        return 1;
    }
    return n * f(n - 1);
}
```

Figure 31—A Pomodoro workout

However, Staffan emphasizes the importance of time-boxing your breaks in addition to your work periods. That is to say, you probably shouldn't go for a three-mile run between iterations. "Your breaks shouldn't be longer than five minutes to be able to continue quickly from where you left off," he emphasizes.

Keeping your breaks short doesn't render them useless, though. Small spurts of exercise in between Pomodoros can have profound effects on your health. In fact, these microactivity breaks may be more important to your health than longer workouts.

A 2008 publication from a group of researchers at The University of Queensland in Australia found that getting thirty minutes of exercise per day was less effective at preventing type-2 diabetes, cardiovascular disease, and obesity when it was done in one lump sum—especially when another fifteen hours of the day were spent sitting. Surprisingly, subjects who split up their exercise across the day were at lower risk for those health issues. The study suggests that long periods of nonexercise can actually counteract the benefits of regularly going to the gym.[2] But as you learned in Chapter 3, A Farewell to Chairs?, on page ?, just five minutes is enough to mitigate these dangers.

To make things even better, Staffan believes that the mental benefits of doing physical activity during your breaks align well with the other goals of the Pomodoro Technique. “One of the benefits of regularly taking short breaks is that you recharge your brain,” Staffan asserts. “When you return to your desk, it’s not uncommon that you have three awesome new ideas about how to solve the problem you were struggling with before the break. If you focus on something non-theoretical, like push-ups, it’ll probably help even more.”

When you do a Pomodoro workout, there’s a lot happening in your brain. Neurons are being recruited and new pathways are being created. In Chapter 2, Bootstrapping Your Health, on page ?, you learned how exercise promotes the production of BDNF, which strengthens this process. However, an ideal plan for the best type, duration, and frequency of exercise that builds brain power has not been identified. That kind of research just hasn’t been done yet. It may happen in the next decade, but until then the Pomodoro Technique can provide excellent structure that blends with your career goals and your health goals.

Most programmers who use the Pomodoro Technique like that it pairs well with large-scale methodologies such as Scrum, agile, and spiral (all of which use time-boxed iterations). Given that, and how well Pomodoro also aligns with the goals in this book, it’s a sure win for staying healthy, smart, and productive. It can also help rebuild your habits. But if you’re going to make fitness a habit, you’re also going to require a reward. For that, you’ll need some feedback.

Goal 11

Do a Pomodoro workout

Get a timer and do a Pomodoro Technique workout. In the breaks between iterations you can do some of the activities you’ve learned thus far in the book. Table 4, An Example Pomodoro Workout, on page 10 shows an example plan. It includes four iterations with three breaks for a total of two hours.

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[2] *Too much sitting: a novel and important predictor of chronic disease risk? [OBB09]*

Work	Break	Duration
Write code (sitting desk)		25 min
	Walk stairs	5 min
Fix bugs (standing desk)		25 min
	Nerve-gliding	5 min
Refactor code (sitting desk with exercise ball)		25 min
	Curl-ups	5 min
Code review (standing desk with balance board)		25 min
	Push-ups	5 min
TOTAL		*2 hours*

Table 4—An Example Pomodoro Workout

You can make your Pomodoro Technique workout any length you'd like, and you can do it at any time of day. You can also fill your breaks with whatever activity you prefer. Some people prefer to only walk during their breaks. Later in the book you'll learn some more exercises that you can add to your workouts.