

## Cycling Running Energy

Whenever you exert a running effort you push against your internal metabolic resistance to effort, which I call energy. You will always experience a measurable amount of energy during a running workout. If you happen to have a lot of energy, your effort encounters little resistance and you feel like you're flying. But when you're out of energy, even an easy run can be tough to do.

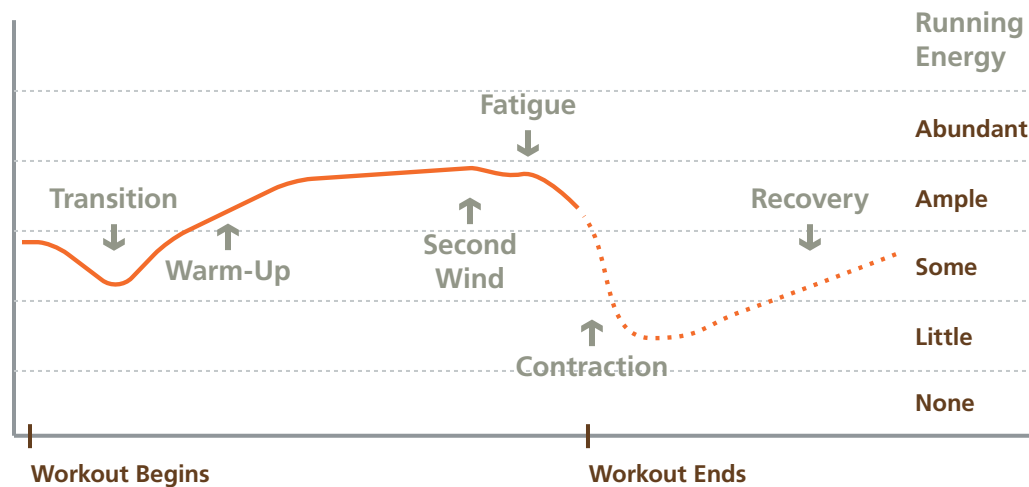
The ability to distinguish different levels of energy is one of the most important skills in running. Being successful in the competitive game depends on coordinating your training effort with your fluctuating sense of energy. Thus, your energy is not merely an arbitrary factor that sometimes hinders performance and sometimes enables it. Rather, measuring and accommodating fluctuations in your energy should be the primary focus of the training process.

Fortunately, you don't need a special energy monitor to measure your energy. All you need to do is take a run and feel it: no energy, little energy, some energy, ample energy, or abundant energy. The interesting thing about running energy is the way it can change from moment to moment during a run. Most runners have noticed, for example, how they can start off with only some energy, but after a while they develop ample energy—even enough for a hard workout.

This changeability of energy is a quality of its cyclic nature. Left to its own designs, your energy always fluctuates from the start of a workout to the finish. First it contracts, then it expands, then it contracts again. These fluctuations form the basic cycle of energy pictured in Figure 3-1.

**Figure 3-1: A Basic Workout Energy Cycle (Ready-to-Run-Hard)**

The arrows represent metabolic forces that affect running energy and create a workout energy cycle.



Notice in Figure 3-1 how the upward and downward arrows (representing metabolic forces) change your energy during a run. Depending on its starting level, the flow of energy—from the start of a workout to the finish—forms a pattern of running energy that I call workout energy.

There are five distinct workout energy patterns: sluggish, tired, lazy, ready, and eager (see the scale below for brief definitions). Each pattern is distinct from the others, but, because they exist on a continuum from sluggish to eager, I can experience my energy during a single run exactly as it's described in one of the following definitions, or I can experience it as being slightly more or less than the definition indicates.

### **Workout Energy (Patterns)**

- \* **Sluggish:** You have no energy and it never develops. You feel terrible for the whole workout.
- \* **Tired:** A little energy can develop, but you can only run short and slow without feeling burdened by the effort.
- \* **Lazy:** Little energy at the start. Some energy develops slowly—perhaps even to ample energy—but it runs out early.
- \* **Ready (to-Run-Hard):** Ample energy develops after a short warm-up, and it lasts long enough for hard workout.
- \* **Eager (to-Race):** Abundant energy and an aggressive attitude are sustainable at a racing pace.

The specific energy pattern illustrated in Figure 3-1 is called ready-to-run-hard. It is characterized by some energy at the start of the workout, which develops into ample energy after a ten or fifteen-minute slow, jogging warm-up. Ample energy is sufficient to accommodate a hard workout. By this I mean that you can do a noticeably fatiguing workout that you would consider difficult, and recover from it in 48 to 60 hours.

Effort and energy are the fundamental building blocks of adaptation. Although both must be considered in the adaptive process, energy must be given the primary focus. In practice, you must know how to coordinate your workout efforts with the specific patterns of energy that develop from day to day as you train. Otherwise, your training loses its adaptive focus and you are apt to blunder into over—or undertraining.