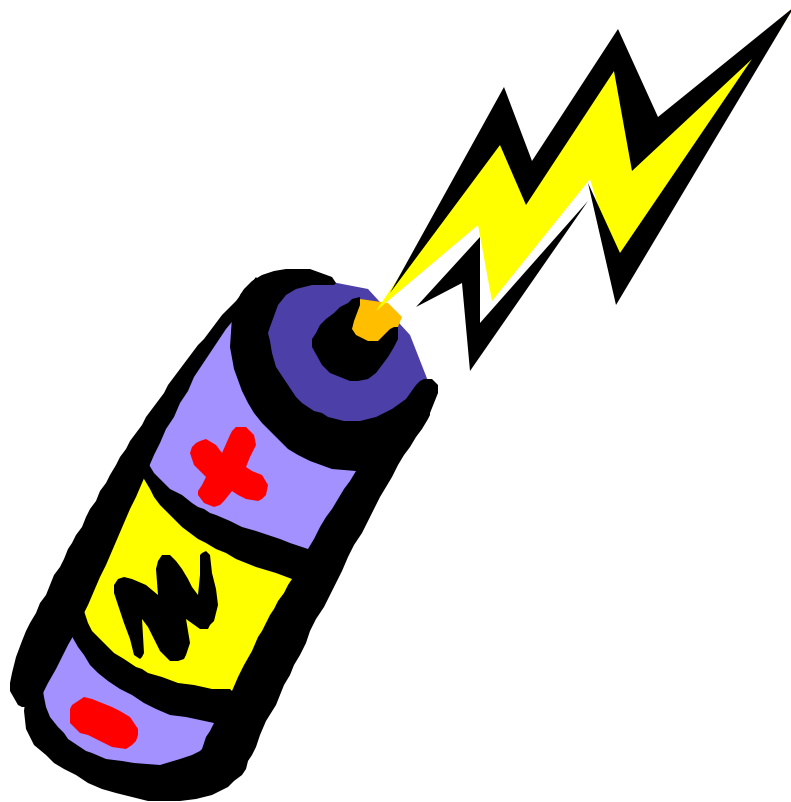


Chapter 7

Physical and Mental Energy



Controlling Your
Energy Levels

PHYSICAL AND MENTAL ENERGY

Controlling Your Energy Level for Competition

I mean I try to just, you know, be calm. Sure, you can be nervous but control your nervousness. That is my key. Controlling it. I've been through it enough to know it is not the end of the world. I've just got to get in there and do as well as I can. I just do not let myself get to the point where I am overly nervous.

American Record holder - - Swimming

I was a little bit too anxious. More anxious than focused in. I was too worried about what other people were doing. And (in the race) I really fought hard to get out in front and I think I went too hard in that first part of the race.

Elite Open Water swimmer

Managing Energy to Facilitate Performance

At the most basic level, you can't perform at a high level without enough energy, just as you can't drive a car without gas, watch TV without electricity, or listen to your Walkman® without batteries. Athletes must have good stores of energy and use them wisely. Success, in part, is based on the proper control of an athlete's energy level. Too low, and you may not have the intensity you need to battle a tough opponent. Too high, and you may be too wired or nervous to perform a complicated skill. "Optimal" energy level is very individualized which means that two swimmers on the same relay team may perform best at very different energy levels.

Read through the following two examples that illustrate how energy levels can impact performance

1. Colby is on the blocks getting ready to swim 200 fly prelims at Regionals. This is his first time at such a high level meet. He is so nervous he feels like

he is going to puke; his muscles feel tight and all he can think about is not embarrassing himself. How do you think he is going to perform?

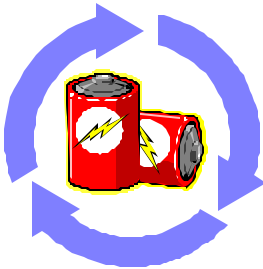
2. Candice is so excited to swim the set of 6 x 800. She knows she is ready to swim fast, she is prepared for the challenge, and knows she needs to focus on even splitting. How will Candice perform in practice?

Energy management can be the difference between making finals or not getting out of prelims; having a great set in practice or just finishing the set. Let's look at how you can start taking control of your energy levels.

Understanding Energy

A first step in learning how to manage energy is to recognize the two types of energy – physical energy and mental energy. Physical energy relates to the activation level of your body from low energy (lethargic) to high energy (heart racing, jittery). Mental energy relates to the activation level of your mind from low (no motivation) to high (racing thoughts, excessively worried). This distinction is critical because different strategies will be used to target mental versus physical symptoms. In both practice and competition, you have an energy level (physical and mental) at which you perform well. The challenge is to manage your physical and mental energy levels so they help your swimming in both practice and competition.

What affects your energy level?



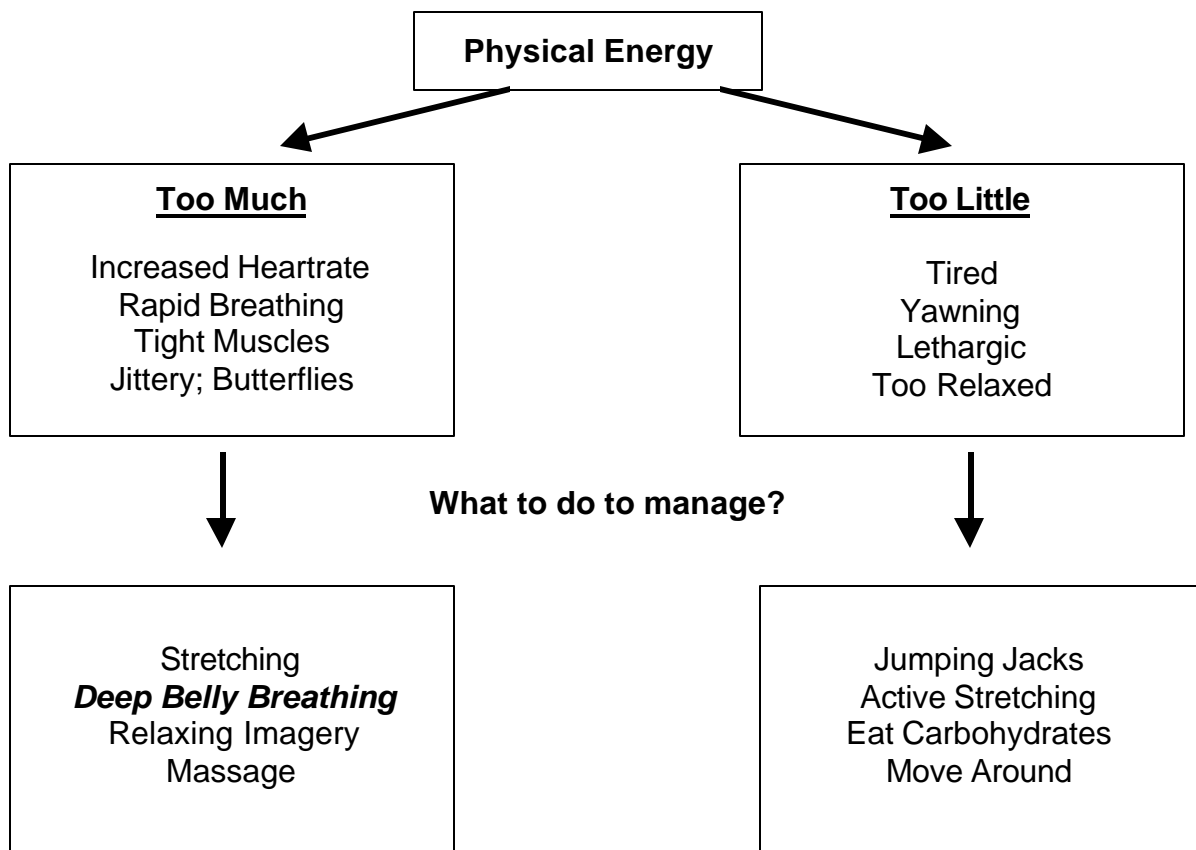
It is sometimes useful to think of yourself as a battery in that you can either be “zapped” of physical and mental energy or you can be “charged” with physical and mental energy. Other people, events, and things can affect your physical and mental energy; knowing how things affect your energy can help you better manage it. Complete the table to help identify what zaps you and what charges you.

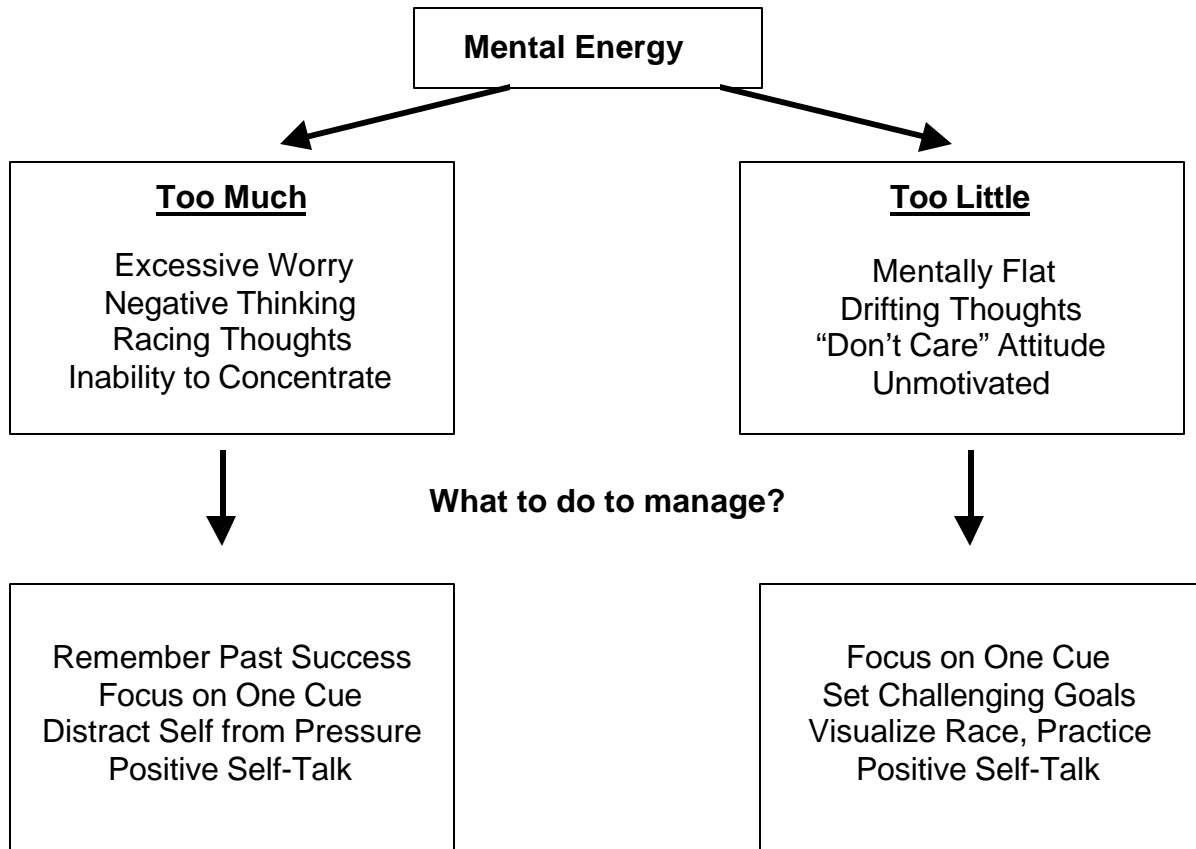
| | Examples | You |
|----------------|--|-----|
| Zappers | Poor Sleep Not Eating Well Negative People Worry/Stress | |
| Charges | Listening to Music Being Confident Being Physically Active Remembering a Great Race | |

This chart is duplicated as exercise one at the end of the chapter for your convenience.

Strategies to Manage Energy Levels

Now that you are aware of what zaps and charges you, let's take it a step further and discuss specific strategies you can use to manage your physical and mental energy. In doing so, we'll also discuss symptoms related to too much or too little energy to help you identify when you need to put these strategies into play. One of the strategies, Belly Breathing, will be discussed in detail at the end of the chapter as it is useful when trying to manage excessive nervousness - - a common ailment of athletes.





Now that you know about physical and mental energy, the importance of managing energy in practice and competition, and strategies to help you manage your energy levels . . . it is time to GET STARTED! Begin with monitoring your mental and physical energy levels in practice. Use some of the strategies outlined in the previous figures and at the end of the chapter when you feel your energy is either too high or too low. Then, once you have practiced these skills and strategies, use them in competition to help you manage your energy.



Coaches Guide

- Being by describing what is meant by energy level.
- Talk about the two types of energy levels: mental and physical
- Read the descriptions of the two types of athletes and have your swimmers guess which one is going to perform well and which one isn't
- Remind your swimmers that not everyone is the same, what might be right for one athlete is totally wrong for another.
- Have your athletes fill out the chart that identifies both their drains and charges (Exercise 1).
- Talk about these charges and drains and help your athletes develop strategies to get them into the right energy zone. (Exercises 4 and 5)
- Take some time to teach your athletes belly breathing. Some athletes may need to use this technique to calm down before a race where as other athletes may only need to use this skill the night before when trying to get a good night's sleep.

Exercises to Develop Your Energy Management Skills

The following exercises are designed to help you become aware of your energy levels and control them in both practice and competition.

Exercise **1** can be used in conjunction with the coaches talk, to help athletes recognize what charges and zaps them.

Exercise **2** can be used to help swimmers of all ages understand what energizes them and what depletes their energy stores.

Exercise **3** takes athletes through a series of questions helping them to discover their optimum energy levels for performance.

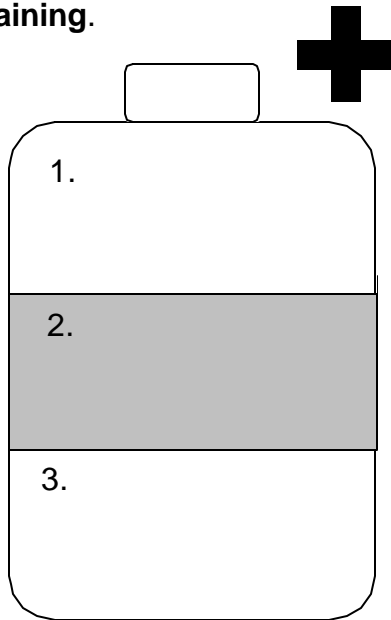
Exercise **4** teaches athletes a relaxation technique to help them control their energy levels when they are too high.

Exercise 1: What are your Physical and Mental Charges and Drains?

| | Examples | You |
|----------------|--|------------|
| Drains | Poor Sleep Not Eating Well Negative People Worry/Stress | |
| Charges | Listening to Music Being Confident Being Physically Active Remembering a Great Race | |

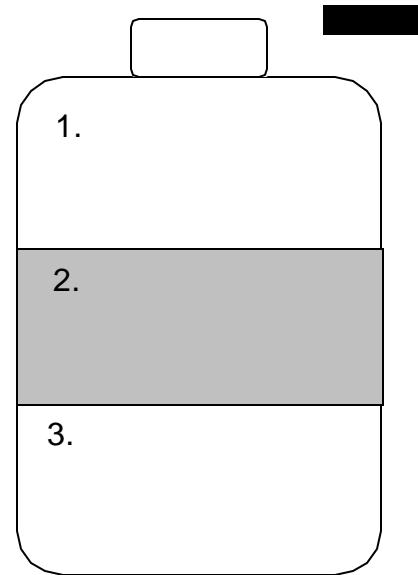
Energy Management Exercise 2: What Affects Your Energy Level?

Write down three things that charge your physical and mental energy in training.



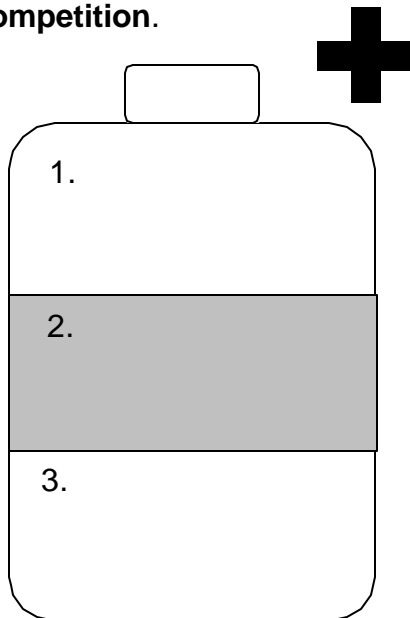
A diagram of a battery with three sections. The top section is labeled '1.', the middle section is shaded gray and labeled '2.', and the bottom section is labeled '3.'. A large black plus sign is positioned to the right of the top section.

Write down three things that zap your physical and mental energy in training.



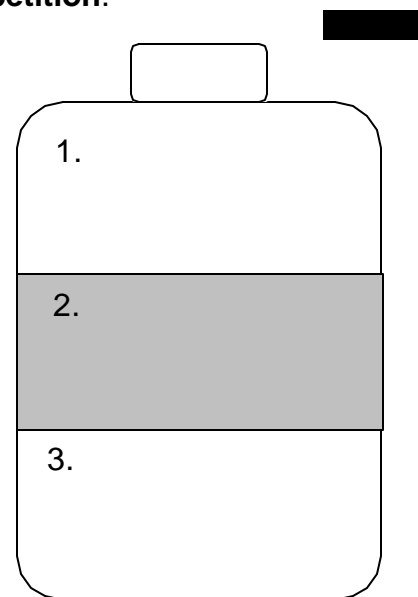
A diagram of a battery with three sections. The top section is labeled '1.', the middle section is shaded gray and labeled '2.', and the bottom section is labeled '3.'. A large black minus sign is positioned to the right of the top section.

Write down three things that charge your physical and mental energy in competition.



A diagram of a battery with three sections. The top section is labeled '1.', the middle section is shaded gray and labeled '2.', and the bottom section is labeled '3.'. A large black plus sign is positioned to the right of the top section.

Write down three things that zap your physical and mental energy in competition.



A diagram of a battery with three sections. The top section is labeled '1.', the middle section is shaded gray and labeled '2.', and the bottom section is labeled '3.'. A large black minus sign is positioned to the right of the top section.

How much control do you have over these charges and drains? One key step in increasing your energy for training and competition is to take charge of your environment, adding as many charges as you can, and eliminating as many drains as you can. Make an energy plan for competitions, and then make one for daily training sessions.

Energy Management Exercise 3: Finding the Correct Energy Level

To swim well, it is critical for athletes to know what energy level works best for them. We know, from research and practical experience with elite athletes, that athletes can be physically and mentally over-activated, leading to nervousness, muscle tension, and/ or attention difficulties. We have also seen athletes who simply can't get "fired up" enough to mentally focus or to activate their bodies for the task at hand.

To figure out the ideal energy level for you, think of your 3 best and 3 worst performances. Try your best to remember how you felt before and during those performances.

Best Performances

| | Lo | | Moderate | | | Hi | |
|-------------------|-----------|---|-----------------|---|---|-----------|---|
| Muscle Tension | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Heart Rate | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Breathing | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Doubts/ Worry | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Negative Thinking | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Worst Performances

| | Lo | | Moderate | | | Hi | |
|-------------------|-----------|---|-----------------|---|---|-----------|---|
| Muscle Tension | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Heart Rate | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Breathing | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Doubts/ Worry | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Negative Thinking | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

I bet there is a difference between your best and worst performances in terms of what was going on related to your physical and mental energy.

How do you think your physical and mental energy levels influenced your performance when you swam poorly?

What can you do to "create" this physical and mental energy level prior to your races?



Exercise 4: Gaining Control of Your Energy Level Energizing or “Relaxation” Techniques

We all know how to breathe, we do it every day without knowing it, and it doesn't even take practice. However, if controlled properly, we can use breathing as a form of relaxation during stressful situations.

Controlled Breathing

Breathing is one of the easiest physiological systems to control. If done correctly, breathing can have a calming effect on the body by delivering the appropriate amounts of oxygen to the body as well as working to remove waste products associated with physical activity.

Breathing from the Diaphragm

Diaphragmatic (Belly) breathing is a key component to using the breath as a relaxation tool. To learn diaphragmatic breathing follow these steps.

1. Lay down on your back. Place one hand by your side and the other on your stomach, on top or just below the belly button.
2. As you breathe concentrate on using your diaphragm to fill your lungs. You will know when you have done this by the way your stomach expands each time you take a breath. The hand you placed on your stomach should rise and fall each time you take a breath. Try not to raise your shoulders as you breathe in.

Rhythmic Breathing

Rhythmic breathing involves breathing to a measured count. For instance, you might inhale for a count of four, hold your breath for a count of four and exhale for a count of four (i.e. count it as IN-2-3-4, HOLD-2-3-4, OUT-2-3-4). While doing rhythmic breathing become aware of each breath you take. Try to fill your lungs completely when inhaling, as well as, completely exhaling by squeezing your muscles to eliminate all the air. Also pay attention to the period of time when you are holding your breath. Become aware of the tension felt in the muscles as well as the release of this tension when you are exhaling.

Ratio Breathing

Ratio Breathing consists of using a specific ratio for breathing. For instance a 2:1 pattern. When using this ratio you might breathe in for a count of four and exhale for a count of eight (i.e. IN-2-3-4, OUT-2-3-4-5-6-7-8). At first you may have to concentrate heavily on the breathing pattern, however, as you become better at controlling your breathing these breaths should become automatic.



Learning to control your breathing over time will help to improve overall balance, power and coordination, which eventually should lead to a greater tolerance for the physical pain associated with training.

