



RUN

**THE MIND-BODY METHOD OF
RUNNING BY FEEL**

MATT FITZGERALD
FOREWORD BY DATHAN RITZENHEIN

PRAISE FOR *RUN*

"ASICS was on to something when it chose its new name, a Latin abbreviation for 'a sound mind in a sound body.' This philosophy is the key to unlocking all the potential we hold. From my first race in junior high gym class to competing in the 2008 Olympic Marathon, I have found that the stronger my mind and spirit are, the further I am able to push myself. Any runners interested in maximizing potential must study the mind-body connection or their journey will not be complete."

—**RYAN HALL**, 2008 Olympian and two-time American record holder

"The elements and philosophy laid out in *Run* were fundamental and played an essential role in my overall success throughout my career as a self-coached athlete. The ability to run by feel is a learned skill, and without the capacity to self-assess and adjust your training intuitively, you will inevitably fall short of your potential."

—**ALAN CULPEPPER**, 2000 and 2004 U.S. Olympian, sub-4-minute miler, and sub-2:10 marathoner

"The coach knows what to do; the scientist tells us why. Fitzgerald's *Run* artfully and responsibly blends scientifically grounded, supportive research and convincing anecdotal evidence into a message that those of us who take running seriously must heed. Now U.S. athletes can learn the true secrets of the great African runners: That voice in your head that says, 'Too much, too little, too hard, too easy,' despite what the device on your wrist says, is probably right!"

—**BOBBY MCGEE**, renowned running coach and author of *Magical Running* and *Run Workouts for Runners and Triathletes*

"In his latest book, Matt Fitzgerald successfully explains the mind-body method of running. While this concept can be difficult to understand, Fitzgerald describes it in a way that will speak to beginners and elite runners alike. Anyone trying to improve and realize their true running potential should read *Run*."

—**KARA GOUCHER**, 2008 Olympian and World Championship medalist

"After years of searching science journals for secret workouts and fitness techniques, Matt Fitzgerald has decided that the brain is the ultimate training tool. In this insightful and evidence-based book, he challenges us to achieve our potential by enjoying every run and race, even as we accept the pain."

—**AMBY BURFOOT**, *Runner's World* editor-at-large
and 1968 Boston Marathon winner

"As a longtime proponent of effort-based training, I highly recommend *Run*. The reader will learn the most important concept in all of training—how to connect effort with pace. Using the techniques and ideas in this book, runners can expect more consistent training and racing results without the worry of external feedback from devices like GPS and heart rate monitors. I use effort-based training with the beginning runners, middle-of-the-packers, and Olympians I coach, and I recommend that all runners learn this valuable technique."

—**GREG McMILLAN**, MS, McMillanRunning.com online coach

Copyright © 2010 by Matt Fitzgerald

All rights reserved. Printed in the United States of America.

No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic or photocopy or otherwise, without the prior written permission of the publisher except in the case of brief quotations within critical articles and reviews.



1830 55th Street
Boulder, Colorado 80301-2700 USA
(303) 440-0601 · Fax (303) 444-6788 · E-mail velopress@competitorgroup.com

Distributed in the United States and Canada by Ingram Publisher Services

Library of Congress Cataloging-in-Publication Data
Fitzgerald, Matt.

Run: the mind-body method of running by feel / Matt Fitzgerald
p. cm.

ISBN 978-1-934030-57-8 (pbk.: alk. paper)

1. Running—Training. 2. Running—Physiological aspects. I. Title.

GV1061.5.F573 2010

612'.044—dc22

2010008956

For information on purchasing VeloPress books, please call (800) 811-4210, ext. 169, or visit www.velopress.com.

This book is printed on 100 percent recovered/
recycled fiber, 30 percent postconsumer waste,
elemental chlorine free, using soy-based inks.

A rectangular logo with a grey background and green text. The text reads 'CoC - FPO' on the top line and 'Small' on the bottom line.

CoC - FPO
Small

Cover design by Erin Johnson
Cover photograph of Alan Culpepper by Brad Kaminski
Interior design by Jane Raese
Illustrations in Chapter 11 by Chris Gallevo

10 11 12 / 10 9 8 7 6 5 4 3 2 1

My muscles are the type that need a long time to warm up. . . . And I feel that this type of muscle is connected to the way my mind works.

What I mean is, a person's mind is controlled by his body, right?

Or is it the opposite—the way your mind works influences the structure of the body? Or do the body and the mind closely influence each other and act on each other?

—Haruki Murakami, *What I Talk About When I Talk About Running*

CONTENTS

<i>Foreword</i>	vii
<i>Preface</i>	ix
Introduction: Running by Feel	1
 PART I: LEARNING TO LISTEN	
1 Physical Confidence	17
2 Run Happy	37
3 Finding a Magic Formula	55
 PART II: MASTERING THE PRACTICE OF MIND-BODY RUNNING	
4 Comfort Zones	77
5 Trying Harder	99
6 Winging It	117
7 How Records Are Broken	139
 PART III: THE FINER POINTS OF THE MIND-BODY METHOD	
8 Run Beautifully	163
9 The Gift of Injury	187

VI CONTENTS

10	Anger, Fear, and Speed	209
11	Muscle Talk	225
	Epilogue: Taking the Next Step	241
	<i>Appendix: Workouts</i>	251
	<i>Notes</i>	257
	<i>About the Author</i>	264

FOREWORD

SOMETIMES THE SIMPLEST ANSWER IS THE RIGHT ONE. I have spent many years trying to outthink my competitors and have always looked for the cutting edge. In *Run: The Mind-Body Method of Running by Feel*, Matt Fitzgerald has identified the scientific reasons for the obvious: We know our bodies best; we just need to know what our bodies are telling us.

There are many “industry standards” for the components needed to perform at our best, but sometimes applying those pieces to our training can be difficult. Too often we become dependent on literature and specific training models, and we forget common sense. Matt tries to bring us back to that common sense, encouraging us to listen to our bodies and use their signals to adapt our training programs to help us get the most out of them.

Those signals are not just vague, unimportant feelings that have no bearing on how we feel. They are valuable information about what is the best course of action. Matt brings together the most recent research explaining why we might be feeling a certain way at a specific time and what that feeling might be trying to tell us about our training.

Thinking back to my best races and my most consistent training blocks, I can honestly say that I have thrown out the book, so to speak. There were times when I was completely dependent upon measuring everything. I lived by a heart rate monitor. I measured every course I ran, and I never backed off when my body told me I was tired. As Matt acknowledges, all of those tools can be very useful, and at times they are essential to knowing exactly where you are in training. But when they take priority over what your body is telling you, injury and overtraining are just around the corner.

If I had always followed the signals my body was giving me the way Matt instructs, I believe I could have avoided most of the injuries and bouts of

overtraining I have had in my career. The signs were obvious before I broke the 5,000 m American record and before I won a bronze medal at the World Half-Marathon Championships: I was listening to my body and following my intuition in training on a daily basis, and when I got to the start line, my confidence was unmatched.

The culture of distance running, especially in the United States, is one of “push through the pain” and “the harder you work, the better.” What Matt shows in this book is that there are reasons we feel the way we do, and those indicators can tell us if we are ready for a huge breakthrough or if we are on the cusp of breaking down. Highlighting the experiences of some of the best distance runners in the world, Matt shows what is possible for even the most modest runner. One of the greatest things about distance running is that you can learn the same lessons from your body and mind as can a sub-13-minute 5,000 m runner—you just have to pay attention!

Dathan Ritzenhein

Two-time Olympian,
World Championships medalist,
and U.S. record holder

RUNNING BY FEEL

I can run faster.

—Haile Gebrselassie

I DO NOT HAVE MANY HEROES IN SPORTS. One of the few athletes I venerate is the great Ethiopian distance runner Haile Gebrselassie. I love Geb for more or less the same reasons I love Muhammad Ali, another of my sporting heroes. Geb is not quite the deific figure that Ali is, but he creates a similar type of excitement by combining once-in-a-generation athletic performance with infectious charisma. Such people are very rare. More common are the likes of Michael Jordan, who manifest once-in-a-generation performance and just a regular personality. Ali and Geb are special because their athletic performance seems to be fed by the same source as their towering personalities, and that source is an overflowing lust for life, which to me is perhaps the most attractive of all personality characteristics.

I met Haile Gebrselassie in March 2009, in Los Angeles, at a media event hosted by his shoe sponsor, adidas. Geb made his first appearance at the event with no entourage. He had come all the way from Ethiopia alone. The photographers and video crews present showered him with digital attention as he walked outside surrounded by a mob of starstruck writers, including me. Geb then led us on a short, slow jog along the beach, which he interrupted to guide us through a brief session of those crazy calisthenics that Ethiopian runners like to do before workouts. Of the scores of people

we passed on our little jaunt, only two recognized Geb: a German tourist, who behaved like a 12-year-old girl at a Jonas Brothers concert, and an Ethiopian American cab driver who shouted delightedly, “Haile!” from the window of his passing vehicle.

Geb is known as the runner who always smiles, and indeed he wore a childlike grin throughout our run. I think he smiles all the time partly because he is an innately positive person and partly because he is thrilled by how his life has turned out. Much as Muhammad Ali loves being Muhammad Ali, Haile Gebrselassie loves being Haile Gebrselassie. His passion for running is unmatched, and he can scarcely believe his good fortune at being the second-fastest distance runner in history (after his younger countryman Kenenisa Bekele).

His will for speed is insatiable. After he set his second marathon world record in the 2008 Berlin Marathon, the first words out of his mouth were, “I can run faster.” That is all the proof anyone could need that being a happy runner is compatible with being a runner who is never satisfied. In fact, the spirit of discontent does not stand in the way of Gebrselassie’s enjoyment of running; it is the very manner in which he enjoys running. He just can’t get enough speed in the same way new lovers can’t get enough time together and some musicians can’t get enough performing. In interviews, Geb refuses to talk of retiring, but promises instead to keep training, racing, and striving until he is effectively dragged out of the sport by the corporeal disintegration of aging.

On the morning after our beach run, we journalists took a bus to the Home Depot Center in Carson and gathered at the track. Geb was now joined by the other big adidas track-and-field stars: world champion sprinters Allyson Felix, Tyson Gay, and Veronica Campbell-Brown; world and Olympic champion 400 m runner Jeremy Wariner; Olympic medalist sprinter Christine Ohuruogu; and Olympic champion high jumper Blanka Vlasic. One by one these winners were paraded before our seated journalistic assembly until they stood in a line of self-consciousness like so many beauty pageant contestants. After joining the lineup next to the 6-foot-4 Vlasic, Gebrselassie, all of 5 foot 3, made a show of standing on his tiptoes and drawing up his shoulders as he stole a glance upward at her head. We laughed heartily as the other star athletes stood stone-faced.

Throughout the morning, the champions took turns demonstrating for us various training drills and exercises and describing how their adidas footwear and apparel helped their performances. Each did so with the posture and attitude of a person fulfilling a contractual obligation—with one exception.

A treadmill had been set up at the edge of the track some distance away from the high-jump area. As Vlasic entertained us with a demonstration of her practice run-ups, Geb began warming up on the treadmill, gradually increasing his pace. By the time we were shepherded over to him, he was running at his world record marathon pace of 4:43 per mile. It was an awesome spectacle to behold. What struck me most was that I could not hear his feet landing on the treadmill, although I stood six feet from him. There was just a slight change in the pitch of the machine's whirring motor when his foot struck the belt, but the actual impact of the shoe on the belt was totally inaudible. The man was light on his feet.

Something called a heat camera was trained on Geb as he ran. A video screen displayed an image of him with coloring effects that showed how much heat was coming off various parts of his body. The ostensible point of this demonstration was to show off the thermoregulation properties of Geb's adidas apparel. As an adidas rep blathered on and on about this stuff, Geb just kept running. Eventually, he started jabbing at the treadmill's control panel. Is he going to slow down? I wondered. No, he was speeding up. Geb's thighs were now coming up nearly to 90 degrees on each swing-through.

"How fast are you going now?" someone asked. Geb used a hand to create shade over the machine's display console (a bright morning sun stood smack behind him) and positioned his nose just inches away from it, squinting. "Four thirty-six per mile!" he announced with boyish enthusiasm. There were murmurs and whistles.

The adidas rep wrapped up his song and dance and asked Geb if he would like to slow down and step off the treadmill so that he could talk about his shoes, shorts, and singlet. Geb politely refused, saying he could talk as he ran. Moments later he was jabbing at the control panel again, and his pace accelerated further. He knew what we were really there for, and he was happy—beyond happy—to put on a show.

"How fast now?" someone shouted.

"Four twenty-six!" Geb beamed. His next move was now inevitable. He jabbed his right index finger into the panel repeatedly, and his stride opened up wider and wider.

"Four minutes per mile!" he shouted with the pride of a motorcycle daredevil taking a bow after leaping over a bunch of school buses. He held the pace for maybe half a minute, throwing his arms overhead and pumping his fists in celebration before quitting at last. When he stepped off the treadmill, he was given a rapturous ovation.

I guess you could say he won the beauty pageant.

As a final encore, Geb talked very sincerely about how much he liked his adidas racing flats. Whatever adidas paid this peerless ambassador, the company was getting its money's worth.

After lunch I sat down with Geb one-on-one for a 15-minute interview. I was a bit apprehensive because I had never read or seen an interview with him that was particularly revealing. He always spoke in generalities and platitudes, such as "One must train very hard." At dinner the previous night, I had asked *Track & Field News* managing editor Sieg Lindstrom, who has known Geb since he burst onto the international athletics scene in the early 1990s, for some tips on interviewing the great man. Lindstrom was not terribly encouraging.

"Is it a language barrier?" I asked him.

"That's part of it," he said. "English is his second language, so he puts things in simpler terms when he's speaking it. But the other part is that the Africans think about running in simpler terms anyway. I think they feel we overanalyze it and make it more complicated than it needs to be."

This advice did not help me coax any more from Gebrselassie than I had heard and read before, but it did help me understand his answers a little better. I asked how he plans his training, and he answered, "It comes from what kind of competition. Is it marathon, half marathon? What level I am. What I have to do. Stuff like that, you know? You just put it together, just like that."

Yes, just like that. I guess.

Only later, through conversations with English sports nutrition researcher Asker Jeukendrup, Geb's onetime nutrition adviser, and other native English speakers familiar with the details of Geb's training, did I learn

that he really does not plan his training in the way that most Western runners do. There are no fancy multiphase periodization schedules. Instead, he trains the same way pretty much all the time, going a little lighter when he has just come off a big race and a little heavier when the next big race is close, and going a little faster when the next big race is shorter and a little slower when the next big race is longer.

I got a hint of the repetitiveness in Geb's training formula when I asked him, "Do you have certain test workouts that you do to measure your progress in training?"

He replied, "Because I am training for a marathon now, once a week there is a route in training—20 km, 30 km—I will run that and compare it to just a week ago, a few weeks ago, last year."

Again, through later research I was able to determine that this 20 km or 30 km run was in fact a time trial. He runs a 20 km or 30 km time trial every week in marathon training, which shows not only how repetitive his training is, but also how hard.

I asked Gebrselassie to name his favorite workout. If I had known him better, I would not have been so surprised to learn that his favorite session was also his toughest. "Hill training is my favorite," he said. "Because that's the one that gives you a lot of problems. Pain. Breathing too much. Struggling too much. Of course, you don't enjoy it during training, but after training, after you reach the top and you look down, and say, 'That is what I did,' it gives you confidence."

Let me just repeat that, with emphasis. Hill training (by which, I later learned, he means 90 minutes hard straight up Entoto Mountain outside of Ethiopia's capital city, Addis Ababa) is Gebrselassie's favorite workout, he says, "*because* that's the one that gives you a lot of problems. *Pain*." Now that's interesting.

I asked Geb if he still worked with a coach. He answered: "I have a coach, but he just tells me the things I know. I don't do it if he tells me to do just 200, 400 m [intervals] today. No use. I know already this kind of program is going to kill me. I need a coach, but when you talk about a coach, a coach's job is not only to arrange a program or to take a time."

I took this answer to mean that Geb knew what worked for him as a runner, and he therefore did not need a coach to prescribe workouts. While he

did not spell out what he needs a coach for, I guessed it is to hold him back when he needs to be held back, help him troubleshoot when problems arise, and perform other counseling and advisory services, as many coaches of experienced elite runners limit themselves, or are limited, to doing.

Being one year older than Geb, who was 36 at the time of our interview, I did not allow our little sit-down to conclude before I had asked him a few questions about age. While he did confess to having altered his training for fear of injuries—avoiding those 200 m and 400 m repeats, lifting weights, riding a bike, and (if we can call it training) getting daily postworkout massages—he also said regarding his age: “That’s why I keep winning. One of my advantages now is longtime experience. I know what I have to do to win the race, before the race, after the race, with recovery. That’s one of the advantages for old runners. That’s why I keep running well. The young runners have enough power just to do whatever they want. But if you think with strategy, you have a kind of advantage.”

HAILE GEBRSELASSIE, NEUROSCIENTIST

I thought about my experiences with Haile Gebrselassie while driving home to San Diego. There was a certain pattern in his behaviors and words. They expressed a man who very much runs by feel—whose choices and actions as a runner are determined by what his body, and in particular his gut and his heart, tell him to do, rather than by theory or convention with some assistance from technology. His happiness is not incidental to his success in running; it is the secret to his success. He not only runs because it makes him happy, but he also runs in the way that makes him happiest. If it feels good, he does it. Although living by such a principle might lead a runner to avoid pain, Geb derives so much enjoyment from his never-ending quest to run faster than he has ever run before (and often faster than any human has ever run before) that he has learned to enjoy the pain that comes with it, such as the pain of those mountain climbs.

He does not perform specific workouts in a particular sequence to stimulate a precise set of physiological adaptations calculated to increase his performance; he trains to build confidence. If a workout makes him feel

ready to break a world record, he's ready to break a world record. He can just feel it. His coach's job is mainly to help him develop confidence in his ability to achieve goals.

His training is a familiar, trusted routine. It is not exactly the way he was taught to train as a young runner. That is the foundation, but he has customized the details based on an ever-improving sense of which methods work for him individually and which ones do not. He not only was born with near-perfect running genes, but he also learns from experience in running better than others learn. No wonder he rates his experience as an advantage against the greater power of younger runners.

What interested me particularly about this notion of history's second-greatest distance runner also being the ultimate run-by-feel runner was how it validated new scientific ideas about the functioning of the brain and the singular importance of the brain—not merely the mind, but that wet, three-pound, electrified physical organ the brain—in relation to endurance performance. Recent discoveries in the neurophysiology and neuropsychology of exercise have inspired the development of a new model of endurance performance that views the brain as a central hub regulating every facet from pacing and fatigue to adaptation and recovery. This new model has important practical implications for how runners approach the sport, and I believe that it calls for a train-by-feel approach specifically. Consider these selected findings:

- Research out of the University of Cape Town, South Africa, has shown that subjective perception of effort (how hard exercise *feels*) predicts fatigue in exercise better than heart rate, blood lactate level, oxygen consumption, muscle fuel depletion, or any other physiological factor.¹ As the great Dr. Timothy Noakes likes to say, “The feeling of fatigue *is* fatigue.”
- Research by exercise psychologists has demonstrated strong correlations among exercise enjoyment, exercise adherence, self-efficacy, and endurance fitness.² Specifically, the fitter people are, the more competent they feel in exercise, and the more competent they *feel*, the more they enjoy exercise, and the more they enjoy exercise, the more likely they are to stick with it, and so forth. But there's

real-world evidence that the converse is also true: The more people enjoy exercise, the fitter it makes them.

- In a study performed at the University of Exeter, England, subjects were given four chances to complete a 4 km cycling time trial as fast as possible. However, they were not told the distance of the time trials before starting the first; they were told only that whatever it was, the distance was the same in all four. Nor were they given any distance or duration feedback during the cycling time trials. Yet despite this blindness, the subjects completed the last time trial in exactly the same amount of averaged time as another group given time and distance information. The subjects in the first group naturally and cautiously went much slower in the first time trial, became a little more aggressive in the next, and so forth. They gradually *felt* their way toward optimal pacing.³
- Research by biomechanics expert Benno Nigg has shown that runners are less likely to suffer injuries when they choose running shoes that *feel* most comfortable.⁴
- A team of scientists at the University of Birmingham, England, discovered that subjects performed better in a cycling time trial when they rinsed their mouths out but did not swallow a sports drink, because the carbohydrates in the drink activated a reward center in the brain that made the effort *feel* easier.⁵

Such studies hint at an overarching truth: Through our brains, our bodies tell us almost everything we need to know to maximize our performance as runners. Tuning in to how we feel—and manipulating how we feel where possible—is a more powerful way to monitor and delay fatigue, control pace, prevent injuries, enjoy running, and simply run faster than guiding ourselves strictly by conventional training methods, science, and technology.

MIND-BODY RUNNING

“Mind-body running” is the term I use to refer to the practice of feeling our way toward better running performance and a better running experience. It

is something that we all do to some degree. For example, every time we step outside and run at our natural running pace, which research has shown to be determined by feel (that is, by perceived exertion), not physiology, we are practicing mind-body running as I define it.⁶ But while running by feel is automatic to an extent, some runners do it better than others—for example, Haile Gebrselassie has elevated mind-body running to the level of genius—and virtually all runners in the Western world are actively discouraged from running by feel beyond a certain point. Just about any running book or magazine will show this to be the case.

Since learning about the run-by-feel implications of the new brain-centered model of running performance, I have noticed that many of the world's most successful runners rely on a mind-body approach to training. Haile Gebrselassie is not unique. For example, listening to his body instead of doing what other elite runners of his era did led Steve Jones to run much less and much faster in training than was normal and also led the Welshman to run a 2:07:13 marathon in 1985. Now an elite coach based in Boulder, Colorado, Jones shows his athletes how to trust their guts and hearts in their training, saying he would rather inspire them than know what the hell he is doing. Members of the Nike Oregon Project, including Galen Rupp and Amy Yoder-Begley, have discarded the practice of following training plans and instead, under the guidance of their coach, Alberto Salazar, they decide on the format of each run only hours before doing it.

Over the past few years, I have studied the run-by-feel methods of the world's best runners through the prism of the new brain-centered model of exercise performance and applied them in my own running. Following the examples of Salazar's runners, and mindful of research suggesting that intuitive decisions are often better than deliberative ones, I abandoned the use of scripted training plans and began winging it. Then following the example of Haile Gebrselassie, and aware of studies showing that exercise is more effective when it is more fun, I began to rely on enjoyment as much as objective performance data in steering the course of my training. And so forth. This mind-body approach lifted my running to a whole new level, and my overall experience with it inspired me to write this book, whose purpose is to clear away all the theoretical, scientific, and technological junk that Western runners are exposed to and reveal a much more reliable way

to run better and with greater fulfillment: by listening to and learning from the body.

It may seem self-evident that runners do not need to be shown how to effectively listen to their bodies, but nothing is further from the truth. While every runner gains a degree of mind-body competence automatically, developing an exceptional capacity to run by feel is difficult and rare, and the likes of Haile Gebrselassie, who figure it all out on their own, represent one-in-a-million anomalies. I believe that even the most serious competitive runners never realize their full potential largely because they never fully develop their capacity to run by feel.

Mindfulness must be trained in running just as it must be cultivated in life. In life, doing what feels good leads to happiness only if a person has become mindful enough to recognize what feels best in the long term. For example, indulging anger may feel good momentarily, but in the long term it can poison relationships and prevent the angry person from developing better emotional coping and communication skills. Similarly, runners, fearing the prospect of experimenting with different methods, might find that it feels good to blindly follow training plans or at least a general training system created by some great expert. But if they bite the bullet and experiment anyway, they can ultimately create a whole new and better comfort zone of training customized to their unique physiology and personality.

Running by feel is the best way to run. However, you cannot always trust your feel for running in any given moment. Often, you may feel multiple sensations simultaneously, some of which are mutually contradictory. For example, the pain of an incipient injury might tell you to stop, while your work ethic and your addiction to running might tell you to keep going. To consistently choose the right feeling to trust, you must cultivate the capacity to step back and observe yourself objectively—or, if not objectively, then from a perspective based on accumulated wisdom. You must cultivate mindfulness. This process will proceed most rapidly and efficiently if you make a conscious commitment to it, but a good guide can help it along.

In this book, I will be your teacher of mindful, or mind-body, running. It's not that I am such a great expert in the practice. I will be the first to admit that Haile Gebrselassie, Steve Jones, and Alberto Salazar have mastered this skill much more fully than I ever will. I make many mistakes, am

still learning, and have a lot more to learn. There is a difference between a role model and a guide, however. While my contact with great runners and coaches who have mastered the practice of mind-body running and my study of the brain's role in running enable me to volunteer myself as your guide to running by feel, it is the runners and coaches who have figured it out for themselves, each in his or her own way, who will be your primary role models in these pages.

Running by feel is a rebellion against our modern traditions of training for distance running. Fittingly, then, this book is not a conventional running book. What follows is not the usual concatenation of tips culminating in the one-size-fits-all training plans found in many running books. Instead, this book presents a collection of essays that explore broad ideas touching on various aspects of what I hope emerges as a coherent run-by-feel philosophy. If you are looking for "First do this, then do that" guidelines, you will be disappointed. In mind-body running, you are ultimately on your own. Only you can feel your way to better running. All I can do here is to create a clear and solid conceptual framework that you can use to find your own way. But I would like to think that the limited service this book provides (like the limited service that the best running coaches provide their best runners) will do more to improve your running than the more traditional running book, which does all of the thinking for you and ignores the *feeling*.

ENHANCING THE CAPACITY TO FEEL

Japanese novelist and runner Haruki Murakami wrote a memoir, entitled *What I Talk About When I Talk About Running*, that captures a common fantasy among runners. In this slender volume, Murakami tells the story of running his first (and only) ultramarathon. Initially, he says, it was easy. But the going got rough after 50 km, and Murakami had to try every psychological trick in the book to force himself to keep running despite the astonishing pain and suffering he was experiencing. Eventually, he told himself: "I'm not a human. I'm a piece of machinery. I don't need to feel a thing. I just forge on ahead." Then a funny thing happened: It worked. Murakami did not, of course, turn into a machine, nor did he cease to feel anything, but

somehow the very repetition of this thought enabled him to find a certain peace with his pain and suffering and catch a second wind. "My muscles silently accepted this exhaustion now as a historical inevitability, an ineluctable outcome of the revolution," he wrote. "I had been transformed into a being on autopilot, whose sole purpose was to rhythmically swing his arms back and forth, move his legs forward one step at a time." Now fully "in the zone," Murakami found himself easily passing the scores of runners who had passed him in his earlier rough patch. "It's weird, but at the end I hardly knew who I was or what I was doing," he recounted. "By then running had entered the realm of the metaphysical. First there came the action of running, and accompanying it there was this entity known as me. I run; therefore I am."

I love this passage because it describes every competitive runner's occasional fantasy: to be numb. In some moments each of us wishes to be a robot running without feeling. After all, this metamorphosis would spare us a lot of pain and enable us to run better, because suffering slows us down, right? Murakami's story seems to validate this wish. He slowed down as he suffered; then he numbed himself and sped up. But Murakami did not really eliminate feeling in the way that a robot has no feeling. While he viewed his brain as the problem during his rough patch and wished to solve the problem by essentially shutting his brain off, it was actually his brain that turned things around for him. He did not incapacitate his feelings; instead, he used his capacity to feel to identify a problem and fix it—ironically, by cooperating with his conscious mind to create a fantasy of incapacitating his feelings.

It is natural to sometimes wish you could run without your brain, yet this is the vainest of wishes, because your brain does absolutely everything when you run. It is responsible for every contraction of every fiber of every muscle on every stride. It makes your heart beat and your lungs fill and empty in the right rhythm. It regulates your fuel supply. It lets you see where you are going. The notion of running without a brain is not just funny; it's laughable. The only reason a nervous system even exists at all in any animal is to enable movement. There is a very primitive species of sea creature with a very primitive nervous system; the creature swims around a bit in the first part of its life and then plants itself and remains stationary

for the second part of its life. And as soon as the self-implantation occurs, the creature devours its own brain. No movement, no brain; no brain, no movement.

Of course, what we really mean when we say we wish we could run brainlessly is that we wish we could run without feeling. But that is part of the package. The big difference between a human and a robot is that humans are alive. All living things want to stay alive, and feelings help us stay alive by doing things like signaling harm. Our capacity to feel does not always produce pleasant results when we run, but it keeps us from running ourselves to death. Don't think for a minute that the capacity to feel holds anyone back, though: A dead runner, or even a dying one, cannot run very fast.

Recent exercise science has clearly demonstrated that at the point of exhaustion, athletes always have reserve capacity left in their muscles and that the amount of reserve capacity left is variable. Factors such as experience, training, and motivation affect how close athletes are able to come to true physiological limits before fatiguing. As athletes, we covet that knowledge of how close we are to our limits. When it comes time to race, we would like to tap this reserve, taking our performance as close to those limits as is physically possible. Imagine the advantage of having a "dashboard" to look to, giving feedback on where this reserve stood. The brain is the window to this feedback, the key to unlocking more of that reserve (although, again, there is always going to be some reserve).

The physiology of running performance is incredibly complex. There is no single factor that determines how fast and how far we can go. Dozens of interdependent factors conspire to influence this determination. It is the brain that ultimately decides, however, basing its calculation largely on a synthesis of data extracted from ongoing monitoring of all the relevant physiological factors. The brain is, of course, part of the body and coevolved with it over millions of years. It is exquisitely designed for the function of maximizing running performance (among many other functions, of course). In fact, the brain cannot possibly be improved on. No humanmade instrument could ever do a more superior job than the brain of enabling a human runner to perform better.

In this book we will explore how you can use the emotions of confidence and enjoyment to shape your future training; learn from how your

body responds to training and develop your personal magic training formula; use repetition in training to cultivate a performance-enhancing force called psychological momentum; manipulate your brain to enable you to run harder (hence faster) in key workouts and races; train without the use of training plans; use fear, anger, and even injuries to run better; and improve communication between your brain and muscles to reduce your injury susceptibility and improve your stride.

Much of this work is performed on a subconscious level. But much of the feedback that the brain receives from the body and interprets becomes conscious feeling—the feeling of rhythmically contracting and relaxing muscles, the feeling of burning lungs, the feeling of “God this hurts, but I still think I have enough left to outkick this guy to the finish line,” and so forth. Thus, it is largely because of the capacity to feel that no humanmade instrument will ever be capable of regulating running performance better than the brain. This is a fact. But beyond being true, isn’t that also great? Isn’t it just great that nothing that comes in a box can enhance running performance more than communication between the brain and the rest of the body? Who would want it any other way?

ABOUT THE AUTHOR



Matt Fitzgerald took up writing when he was 9 years old. He became a runner two years later after running the last mile of the 1983 Boston Marathon with his father (who, of course, ran the whole thing). More than a quarter century later, Matt is still running and writing—mostly about running. He has authored or coauthored more than 17 books and written for numerous national publications and Web sites, including *Outside* and *Runner's World*. Currently he serves as a senior editor for *Triathlete* magazine and senior producer for the Competitor Running Web site (Running.Competitor.com). He has run more than 15 marathons and recorded a personal best time of 2:41 at age 37. Matt lives in San Diego with his wife, Nataki.

“RUN is full of information that will help all runners start training by feel. Once you learn to trust your instincts in training, your injuries will decrease and your personal records will fall.”

—Amy Yoder Begley, 2008 Olympian and four-time U.S. national champion

“The elements and philosophy laid out in RUN were fundamental and played an essential role in my overall success throughout my career as a self-coached athlete.”

—Alan Culpepper, 2000 and 2004 U.S. Olympian,
sub-4-minute miler, sub-2:10 marathoner

YOUR BODY KNOWS HOW TO RUN FASTER. But are you listening? The best elite runners have learned that the key to faster running is to hear what your body is telling you.

Drawing on the latest research on endurance sports, best-selling author Matt Fitzgerald explores the practices of elite runners to explain why their techniques can be effective for you. **RUN** will help you reach your full potential by employing the same techniques to train in the most personalized way.

Fitzgerald's mind-body method will revolutionize your training, redefine your limits, and extend your running potential. With **RUN**, you can find the optimal balance of intensity and enjoyment, volume and recovery, repetition and variation. As the miles add up, you will become increasingly confident that you are doing the right training on the right day, from one season to the next.

RUN marks the start of a better way to train. The culmination of science and personal experience, the mind-body method of running by feel will lead you to faster, more enjoyable running.

MATT FITZGERALD is the author of numerous books on running and endurance sports, including *Brain Training for Running*, *Racing Weight*, and *The Runner's Diary*. He is senior producer of *Competitor Running* (Running.Competitor.com).

\$18.95

 **velopress**

www.velopress.com

ISBN: 978-1-934030-57-8



9 781934 030578