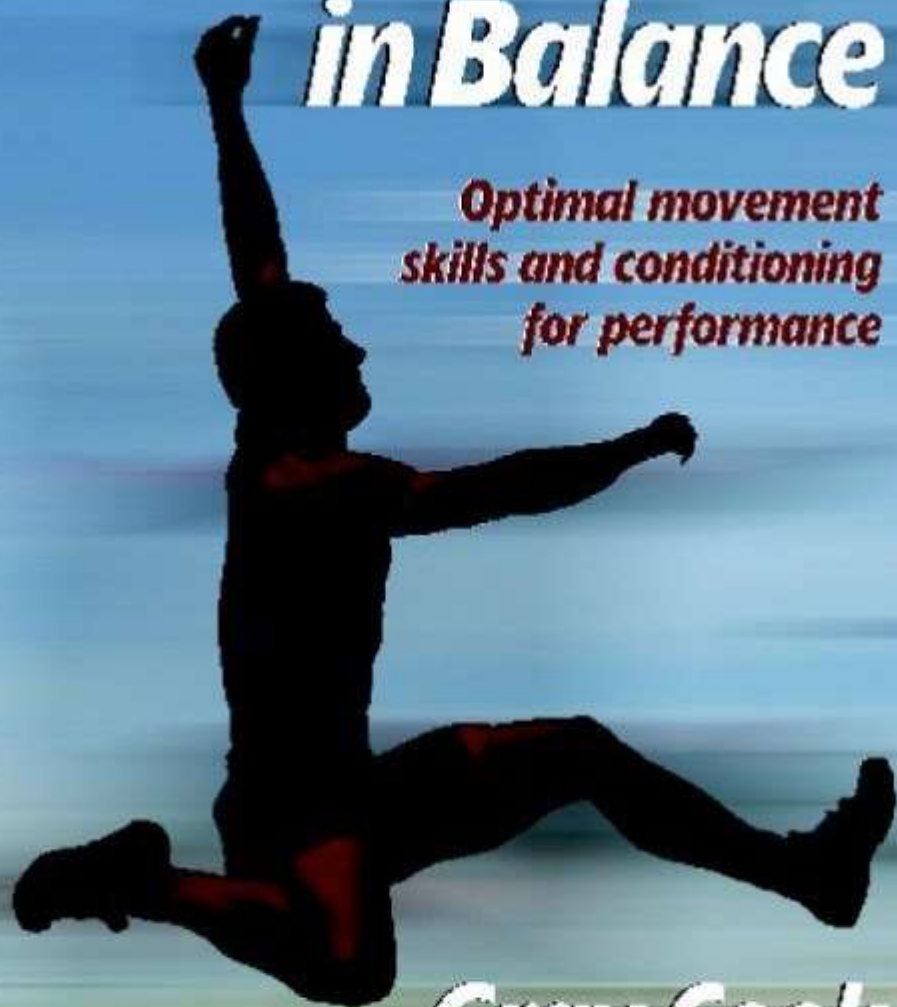


# ***Athletic Body in Balance***

***Optimal movement  
skills and conditioning  
for performance***



***Gray Cook***

## Preface

Anyone who has studied strength and conditioning has come in contact with an abundance of prepackaged information in a cookbook format. This material is based on the philosophy that any athlete can fit in any program. *Athletic Body in Balance*, on the other hand, adopts the philosophy that a program should be built around the athlete.

I designed the system in this book based on my experience as an orthopedic and sports physical therapist and strength and conditioning specialist. I've had the unique opportunity to witness the human body perform through all angles of the physical spectrum. I've seen amazing feats of athletic accomplishment as well as intense struggles in recuperation and rehabilitation. This book has evolved from my experience, mistakes, and success. I am on a continual quest to develop a model to refine athletic conditioning, prevent injuries, improve performance, and simplify the assessment and problem-solving process.

Throughout my journey, two key words have emerged—*efficient* and *effective*. In my mind, these two words dance around each other in a yin-and-yang waltz. *Efficient* describes action without wasted movement or unnecessary energy expenditure. It's best described as the level at which a champion actually gets to enjoy being a champion. At the height of their careers, the great ones are relaxed and enjoy themselves in the midst of constant chaos and challenge.

Take, for example, Jack Nicklaus, Michael Jordan, Wayne Gretzky, and countless other professional and amateur athletes who played long enough to relax and enjoy competition. The word *relax* in no way implies taking competition lightly or giving less than 100 percent. It means to compete without anxiety. These elite athletes embody the confidence that can come only from training as one should train and playing as one should play. This is the result of time and self-criticism. With this competitive maturity come wisdom and perspective for oneself and the game. Perspective and experience affect preparation by reducing wasted energy in training. With continually refining training, a subtle confidence emerges and reduces the anxious feeling that preparation may not be complete. These individuals become efficient in exercise.

Efficiency removes the fluff and fanfare from exercise, disregards the gimmicks and trends, and gets to the heart of the movements that create improvement and keep everything in tune.

*Effective* simply means yielding results. If a workout is trimmed to save time but is not helping the athlete achieve performance goals, the workout—although efficient—is not *effective* at improving or refining

performance. This book will help you create a balanced dance of efficient and effective exercise suited to your needs, breaking down the fundamental factors of consistent performance and putting them into an assessment sequence that will allow you to customize a training program. *Efficiency and effectiveness* is the underlying theme of training suggestions throughout this book.

Every great coach clings to a fundamental system. The basic principles of the system provide a way to test new techniques and exercises to make sure they fit into the system before incorporating them into the athlete's program. The system prevents the coach from incorporating trendy exercises or techniques that may be counterproductive or potentially dangerous. The principles of the system do not change even as new techniques and exercises are introduced. Systems provide structure and feedback. If new fads and exercise trends don't fit within the structure, they are not implemented. If they do not provide the necessary feedback, they cannot be effectively used.

The system in this book includes tests for each phase of conditioning. The scores on these tests will reveal strengths and weaknesses. Step by step, the athlete will work to overcome weaknesses. Many of the concepts and strategies in this book will seem familiar. Many may be alien or seem like a waste of time. However, they have been included specifically because they work and, just as important, they work in a specific sequence. Don't skip a step or work on a different aspect of conditioning. Using the chapters in this book out of sequence or outside of their intended progression will not yield efficient and effective long-term results.

Throw away any ideas about a quick fix or a fast track. Trends and fads usually are created to sell something. We want things better and faster than humanly possible, but something always suffers when we try to rush natural processes. Training and conditioning require a conscious balance of body systems. Good training is about implementing effective assessment strategies and being in touch with specific needs at every stage of physical development. Conditioning decisions should not be made on a whim. Nor should exercises be randomly deleted just because they don't result in immediately perceptible benefits. Many excellent conditioning programs have been changed or trashed right before the results would have been apparent. An efficient and effective system will provide structure and feedback even when immediate changes aren't seen or felt.

Early in the book, I use automobiles and computers as metaphors because, although few of us are experts on either, most of us depend on their technology. Even if you can't program a computer or tune an automobile, you should still be an educated consumer. To the extent that you understand the workings and systems of automobiles or computers, you can save time and be more productive (that is, be more

efficient and more effective).

A basic knowledge of automobiles and computers can save time and money and keep someone from falling victim to schemes and ads that prey on ignorance. In the same way, the more educated an athlete becomes about the workings of the body, with all its limitations and potential, the less intimidated and insecure the athlete will be when making decisions about training. Many athletes waste time dabbling in different training methodologies, trying to discover their personal formulas. This book provides a glimpse into the human body and its function in a format that is not intimidating or confusing.

Injury prevention is an important theme in this book. By adopting efficient and effective training systems early, many injuries caused by an unbalanced approach and poor problem-solving techniques can be prevented. Injury prevention is not a glamorous subject, and it's a hard issue to research and prove (much harder than performance enhancement). Steps have been taken in the assessment and exercise sections of this book to focus on early indicators and warning signs of potential injuries. Not all injuries can be avoided, because sport and competition sometimes push the body beyond its limits. However, many injuries can be prevented, especially those that occur in training and conditioning. An injury can change the outcome of an athlete's career—costing an athlete a scholarship, a sign-on bonus, or even a starting position.

The goal of this program is to be as complete and holistic as possible. Many programs may provide quick results in one aspect of performance but neglect another. My hope is that you are not in a rush and will take the information in this book and slowly blend it into your current routine. I also hope that you will not overlook the secret to success—consistency and hard work. It is best if the consistency and hard work are applied in the right direction. *Athletic Body in Balance* will serve as a quiet coach. It will consistently remind you to stay focused on your goals and to be patient as you work through the system.

Welcome to the journey. I hope it's a positive one.

## Introduction

This is not just another training and conditioning book. What makes it unique is its focus on building a program around the athlete, rather than the other way around. The athlete is the best resource in developing a sound conditioning program. Why is that so important?

Exercise fads and trends will keep coming. Some will work; some will not. Many athletes try things because their friends, training partners, teammates, or favorite pros say that they work. They read magazine articles that recycle and repackage exercises for every ailment, problem, and body part. They buy equipment because they think that in this age of technology there may be a secret way to train better or faster. But even if an athlete does stumble onto what seems to be the right workout, how can the athlete be sure something isn't being left out? What type of assessment is used to decide what needs to be done? The claimed value of an exercise is often based on nothing more than how much a particular muscle burns when a particular movement is performed. It may seem like science, but it's not.

Many exercise and conditioning programs are a mix of fact, fiction, biased opinions, advertising, media hype, and personal anecdotes. Ultimately, athletes and trainers have to wade through all these options to decide how to spend training time. This book will provide the tools for an effective assessment and build a philosophy of balance that will act as a guide through the confusion of training and conditioning. You will learn to refine movement and explore potential. You will learn to base exercise practices on what assessments show. You will assess your movement patterns and train accordingly. Movement, not muscles, will be a constant guide throughout this book.

So, here you are at the beginning. This can be a daunting place to be. Think of it as a trip. Dr. Steven Covey, author of *The Seven Habits of Highly Effective People*, describes a trip in terms of both *efficient* and *effective* travel. You need both a clock and a compass to make sure the journey is efficient and effective. If you look at the clock but not the compass, you may make great time but arrive at the wrong place. If you look only at the compass, you may eventually arrive at the right place but it may take too long.

For your trip, first you must create a map. Second, you must correctly read and interpret the map. Finally, you must consistently execute the necessary steps in the correct sequence in order to physically travel the journey.

To create a map for personal physical conditioning, you must understand and follow some physical laws and allow for your personal

limitations. The physical laws that govern the human body and the neuromuscular system dictate how the body responds to conditioning. These laws must be taken into account as you develop your map. Every athlete has physical limitations with regard to time, space, and ability. Proper assessment tools will help you understand where you are and then set objective and attainable goals. This book will help you understand the tools and techniques to be used and where they will be effective during the journey.

To read the map, you need consistent and objective feedback and should follow a specific sequential approach. This is about pacing. Strength and conditioning professionals call this *periodization*: it's a way to make sure the athlete peaks at the necessary time, usually at a point of vital competition. It's easy to make mistakes by misinterpreting the map or by rushing through one leg of the journey only to be hindered in another leg by poor planning.

The steps of your journey must be executed in the proper sequence. The journey itself is about the physical act of taking the daily steps necessary to progress forward and attain conditioning goals.

This book presents efficient and effective methods for enhancing performance by addressing the fundamentals of human conditioning. It offers assessments for key fitness parameters and introduces basic building blocks of human performance that are often overlooked. These fundamental parameters explain why some injuries linger and others quickly disappear and why some athletes get better sports performance through weight training while others simply get bigger with no change or even a decline in sports performance.

Most programs are developed without all of the necessary information, leaving more to chance than necessary. Driving without a complete map may be fun, but it is not likely to get you where you want to go. The assessments in this book will help set a baseline (the accurate information needed to draw a complete map) and help identify your strengths and weaknesses. The majority of the time will be spent on improving weaknesses. Many sports and conditioning philosophies advocate maximizing strengths, but it is better to confront weaknesses and move through problem areas.

Either nature or competition will find an overlooked weakness, so failing to address your weaknesses is simply not a good idea. This book will explain how and why a weak link can increase the potential for injury and negatively influence performance. Fix the problems when you find them, and remember that there are no shortcuts to greatness.

The stages, or levels, of conditioning provided in this book dictate where to start the program. The sequential approach will help you understand how to move through each level, maintaining gains and modifying the program to address specific needs. You get control, keep control, and, most important, understand why.