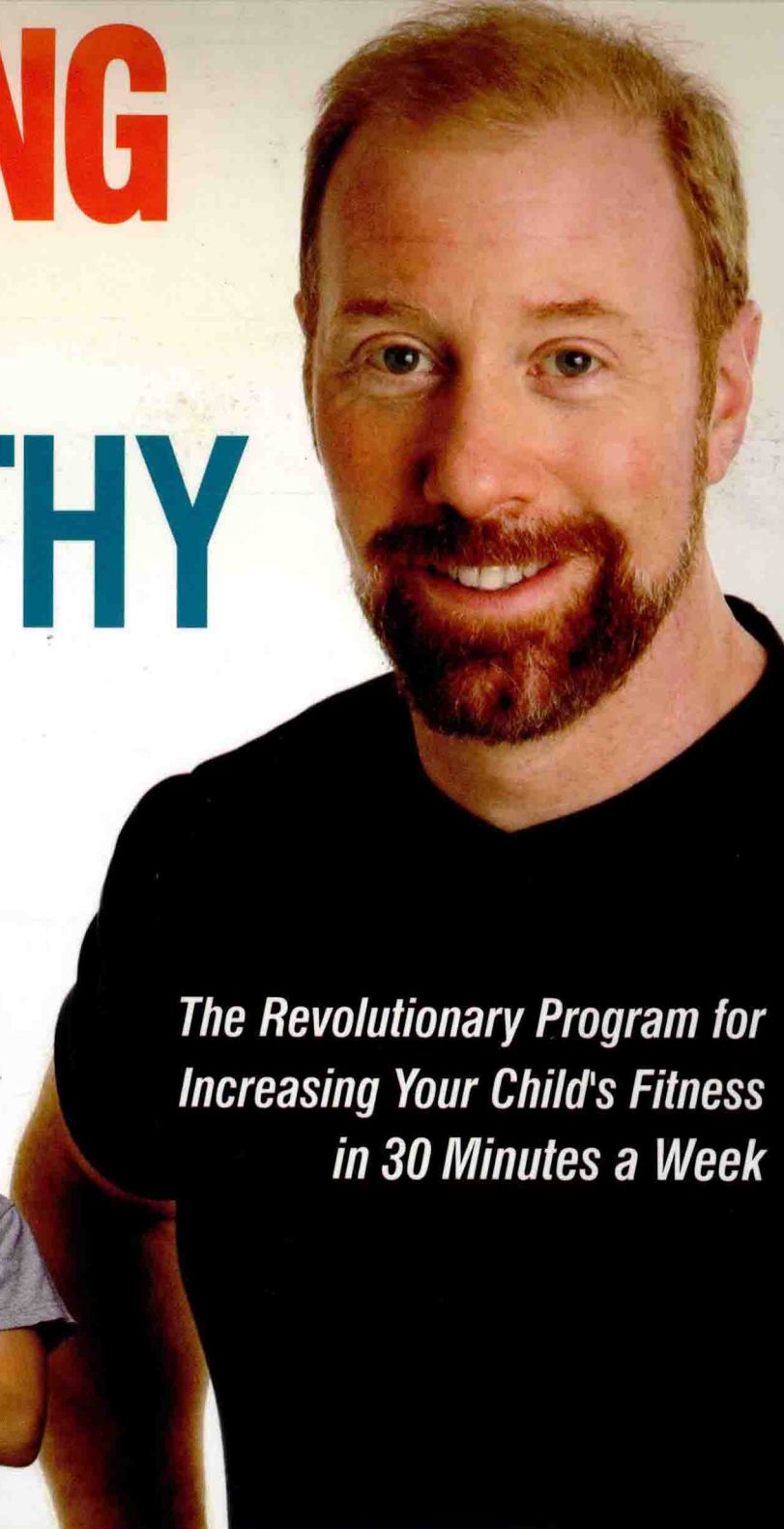


STRONG KIDS HEALTHY KIDS



*The Revolutionary Program for
Increasing Your Child's Fitness
in 30 Minutes a Week*

FREDRICK HAHN
Author of *The Slow Burn™ Fitness Revolution*

Strong Kids, Healthy Kids

The Revolutionary Program for Increasing Your
Child's Fitness in 30 Minutes a Week

FREDRICK HAHN

Foreword by Wayne L. Westcott, Ph.D.



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MORE ADVANCE PRAISE FOR *STRONG KIDS, HEALTHY KIDS*

“In nearly 30 years as a medical reporter, the one thing that I continue to be amazed at is how much of what we once “knew” in health and medicine has proven to be wrong. From stem cells in adult hearts and brains to the causes and treatment of disease, medical knowledge is ever changing and growing. To that list we can now add the myth that weight training is dangerous for kids. Fred Hahn not only dispels the misconception that it’s harmful, he’s shown that it’s beneficial in numerous ways, not the least of which may be weight control for our increasingly sedentary young people. Better yet, Fred has shown us how to strength-train our children in a safe, effective, and, yes, even enjoyable manner. This is a book all parents need...for the health of their children.”

—Dr. Max Gomez, Medical Correspondent for CBS-TV, New York

“Are you concerned that your kid is weak, obese, even headed toward Type 2 diabetes? If so, you will find the answers on how to help your kid become strong, healthy, and fit in Fred Hahn’s new book, *Strong Kids, Healthy Kids*. And the treatment is not some dangerous drug. Rather it is whole foods, pure water, exercise, and strength training à la Fred Hahn.”

—Dr. Bruce West, Founder, HealthAlert.com

This book is dedicated to my daughters
GEORGIA and **AMBER**
and to all the children of the earth.

The information in this book is intended for children who are considered healthy by their physicians. It is not intended to treat children who suffer from metabolic abnormalities or diseases that are known to cause or contribute to weakness or obesity. Although the information in this book will help any child, always consult the appropriate physician for advice and guidance. Always consult an appropriate and qualified physician prior to beginning any exercise program to make sure that your child is healthy enough to exercise.

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To the parents of the children who train at Serious Strength. Good for you for such a commitment to your family!

Lastly, to my wife, Linda, who has helped me every step of the way and in every way and who keeps our kids healthy, happy, and strong. Love ya!

Foreword

Years ago there was a very popular monthly magazine titled *Strength and Health*. At first, I thought the words should be reversed, as health seemed to be a much broader and important life attribute than strength. However, after conducting research in the area of muscular fitness over the past 30 years, I now realize that for most practical purposes as your strength goes...so goes your health. Fred Hahn's new book, *Strong Kids, Healthy Kids*, is therefore a perfect title for showing the direction we need to take to enhance the health and fitness of our nation's young people.

As Fred clearly explains in his well-written text, the best time to be strong is during youth and the best time to develop strength is during youth. It's a perfect match, and yet one that is poorly understood by most people and rarely recommended by fitness or medical professionals. Part of the problem is the myth that, from an injury perspective, resistance exercise is unsafe and interferes with normal bone growth. Actually, nothing could be further from the truth. In all of the studies conducted on youth strength training over the past 30 years, not one has reported a serious injury resulting from supervised resistance exercise. With respect to bone, research reveals that

preadolescent girls who strength train experience four times greater increase in bone mineral density during their ninth year of life than those who don't perform resistance exercise. Let it be clearly understood that the best time to develop a strong musculoskeletal system (for life) is during youth, and that the best way to achieve this is through a sensible strength training program.

Although some people may think that resistance exercise is boring, we have never had that response from our youth strength training program participants. Throughout 20 years of conducting youth strength training studies, our classes have averaged better than a 90 percent attendance rate and a 95 percent completion rate. Youth enjoy both the process and the product of sensible strength training, especially those children who are overweight. Whereas heavier children typically perform poorly in sports that involve speed, endurance, and agility, they generally use higher resistance than their lighter peers, which makes strength training a highly reinforcing physical activity for them.

As youth develop a stronger musculoskeletal system, they experience improved physical capacity and performance power, which encourages them to be more active and athletically inclined. Of course, more physical activity results in greater energy expenditure which leads to less body fat. First, resistance exercise is a vigorous activity that burns six to eight calories per minute when performed in a circuit-training format. Second, after a few weeks of regular resistance exercise, the new and conditioned muscle requires more energy for tissue remodeling and maintenance purposes 24 hours a day, resulting in a higher resting metabolism. As Fred explains clearly in his text, these advantageous aspects of strength training are major factors for calorie use and fat loss.

While strength training may be the most important physical activity for youth, it should be performed in a safe and effective manner. Fred wisely advises against fast and momentum-assisted strength training, as explosive movements with added

resistance can place excessive stress on joint structures. Our research supports Fred's slow-speed exercise protocol for maximizing strength development and minimizing injury risk. Equally important, the recommended strength training programs can be successfully performed in a time-efficient manner.

Indeed, if there is one activity that boys and girls in our sedentary society should be doing for strength and health it is sensible strength training. *Strong Kids, Healthy Kids*, by fitness expert Fred Hahn, presents essential information and excellent guidelines for safely, effectively, and efficiently achieving these most desirable goals.

—**Wayne L. Westcott, Ph.D.**
Fitness Research Director,
South Shore YMCA

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Introduction

"For the children will inherit our earth."

—FREDRICK HAHN

Have you ever said (or thought) any of these things about your kid:

- She needs to be in better shape.
- How come he seems to be out of breath during a game even though he's at practice five days a week?
- He's got to get stronger if he wants to make the team.
- They spend too much time watching TV, texting, and playing video games.
- How come he's so involved in sports, and is still too fat?
- She's skinny, but if she had to run anywhere, I think she'd keel over.
- I think what I'm feeding him is right, but how come he's still so heavy?

What are you doing about it? Perhaps you've read all the articles, watched all the specials, spoken to all the coaches, and now you have a plan—or, at least, you think you do. If your child is *overfat** you know you should send your child to soccer camp, make him or her try out for the basketball team, throw out the television, insist on long family walks, and banish all fatty foods from the home.

If your child is weak and skinny, your plan is to do almost the same thing. If your kid's athletic, you do everything the coaches tell you and encourage your kid to follow the coach's advice. Do all this, and your son or daughter will slim down, beef up, improve athletic performance, and live happily, healthily ever after, correct?

Let me say right here and now that I will tell you—sometimes bluntly—that many widespread beliefs about fat loss, athletic performance, diet (a nasty little four-letter word), and exercise for kids are completely false, dangerous, and inane. I've got two daughters of my own whom I love as you love yours and I've had it up to here with the lies and misinformation.

Truth be told, almost all the so-called fitness programs for getting kids lean and strong are either wrong or misguided. Almost all the books on the subject of how kids should eat are wrong. As we all know, kids today are more unfit than ever before in history. Fewer kids walk or ride their bikes to school, work on farms, or carry heavy books. Mass transportation, minivans, and electric scooters have decreased the amount of

*I use the term *overfat* instead of overweight throughout the book because a child's weight isn't the real issue. Having too much fat is the issue. And by using this choice of words, we keep our eye on the target. Remember, there is nothing wrong with body fat. A certain amount is healthy and vital to health. But too much can be unhealthy. What your child weighs doesn't really matter; however, his body composition does matter. A large-boned, tall child may weigh in as overweight for his age, but he may be perfectly healthy and possess a normal and healthy level of body fat.

locomotion kids do: farming is now almost entirely motorized and electronic; heavy traffic makes riding a bike to school too dangerous in many places; and heavy textbooks are often replaced by their electronic counterparts. This is not, however, the main reason so many children today are overfat and unhealthy. Well, what should we do about it? What *can* we do about it?

All right, I'm going to tell you something shocking. Get ready. There is one type of exercise program that will not only solve all of these problems but also address, solve, and fix all of the previously mentioned queries and questions that parents, teachers, doctors, and other adults have. That exercise program is *weight training*, which is also known as strength training or resistance training.

WHAT ARE THE BENEFITS OF STRENGTH TRAINING FOR KIDS?

The benefits of strength training are profound and comprehensive, and include the following:

- Increased lean body mass (bone and muscle)
- Improved flexibility
- Improved body composition (less fat/more muscle)
- Improved base metabolic rate (calories burned)
- Increased muscle strength and power
- Decreased fat mass
- Gaining of confidence and self-esteem
- Improved general fitness
- Greater resistance to injury

- Reduction in the severity of injuries sustained during other physical activities
- Improvement in all aspects of cardiovascular health (cholesterol, blood pressure, aerobic endurance, power, and strength)
- Improved coordination
- Help in stabilizing blood sugar to offset type II diabetes
- Improvement in the ability to perform physical activities
- Encouragement of kids to participate in physical activities

Why do you need this book? Well, if the previous questions are ones that you've thought about, this book is your short, simple, and safe answer to improving your child's life in ways that no other type of exercise or eating plan can achieve. If you follow the program within this book, your kid will be given the best chance possible to run faster, jump higher, trim down, and gain confidence in ways that no other type of program offers. All the information is grounded in science. The plan is universal, meaning, all kids can benefit. The results, as you will see in Chapter 2, are profound and heartwarming. And the bonus is that it can work for you, too!

Strength Training for Kids

In this book, we are talking about a strength training program designed for kids. And the best part? It takes only 30 minutes of training a week.

This "miracle" cure is actually simple. In strength training, specifically, slow and controlled speed strength training, you do each exercise very slowly using an appropriate weight or resistance until the muscles being worked are totally fatigued or exhausted after several repetitions, generally lasting for

60 to 90 seconds per exercise. Why slow? Instead of letting momentum take over for a portion of the exercise (as happens when you jerk or toss a weight too fast), you push or resist the weight under control, asking the muscles alone to do all the work, which reaps a proportionately greater reward. And theoretically it's safer.

IS SLOW SPEED STRENGTH TRAINING SAFE FOR KIDS?

The American writer Mark Twain is known for his witty and poignant remarks. He is credited with having said: "The truth is easy to kill. But a lie well told is immortal."

I want to state up front and center that if done correctly and with proper supervision, weight lifting or strength training is completely safe for kids. I'm sure that you've heard around the playground and in the schoolyard that weight lifting is dangerous for children. Even some doctors still hold this myth as a truth. The common thought by people who don't know better is a fear of damage to the bone growth plates. Yet there has never been a single such case ever reported in medical literature. Others say it can delay a child's musculoskeletal development, when the opposite is true. Studies have proven that strength training actually benefits musculoskeletal growth in kids—dramatically so. In an eight-week study on fifth graders, 20 boys and girls strength trained twice a week for 20 minutes and improved their body composition almost twice as much as their nontrained peers¹. In a similar study using 11th grade ice skaters, almost the exact same results were achieved.² In another study conducted over one year with nine-year-old girls, the results of strength training showed a 6 percent greater increase in bone density than those girls who did not strength train.³ And while in this study a so-called

high-impact strength training protocol was used, no injuries were reported. It is also important to note that the researchers in this study, after scrutinizing the data, determined that increases in muscle (lean) mass was the primary reason why bone density and all of the other positive outcomes were achieved.

DOES STRENGTH TRAINING DAMAGE GROWTH PLATES?

As mentioned earlier, one safety concern regarding weight lifting or strength training in children involves growth plates. The growth plate, also known as the *epiphyseal plate*, is the growing tissue near the end of the long bones in pre-adults. Every long bone has two or more growth plates at each end. The growth plate determines the ultimate length and shape of the adult bone. When growth is completed, which occurs at some point during adolescence, the growth plates close and are replaced by solid bone.

A common misconception is that strength training can somehow injure a child's growth plates. When and how this myth got started is a mystery. It is simply not true. Perhaps the myth was conjured up by the misconception of what strength training is. According to an article by the National Institutes of Health (NIH), the cause of most growth plate injuries is acute trauma such as a bad fall (gymnastics), a strong blow to a limb (football), or overuse (long-distance runners).

If you look at how most people lift weights, you see a violent and high-impact scene. It could be that experts or doctors knowing that growth plate injuries are caused by violent acts warned people off weight lifting for kids assuming that they could get hurt doing so. (Not bad advice if you ask me.) But weight lifting doesn't have to be such a violent affair.