



THE NO-GIMMICK GUIDE TO

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# RAISING FIT KIDS

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*The No-Gimmick Guide to Raising Fit Kids*

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After four years in Phoenix, he returned to his native Chicago to practice at the Elmhurst Clinic, a multi-specialty group in Elmhurst, Illinois, where he has practiced ever since. His grandfather, pediatrician Ernest Watson, was a founder of the clinic.

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## NOTE

**T**his book is intended as an aid for parents attempting to help a child struggling with obesity, and a preventative guide to help parents avoid the problem of obesity. The facts herein have been carefully researched, drawn from the latest medical and nutritional literature. They are not intended, however, to be a substitute for the care and personal advice of your physician.

Examples cited in the book are based on actual patients. Names and other details have been altered to ensure their privacy.

The author has no financial ties to any product or franchise mentioned in this book, and has not received remuneration from any company or product mentioned.

## A CAUTION FOR PARENTS

**E**xcessive weight is jeopardizing the well-being of many of our children. We need to squarely face the problem of obesity and poor nutrition in our society.

But we must never forget—nor allow our children to forget—that what really counts in life is character. What we are on the inside is far more important than our outward appearance.

Character has been defined as what we do when no one is looking. Our actions reflect the thoughts of our minds, what the Bible calls our “heart.” God is concerned with our hearts, the seats of our true identities. First Samuel 16:7 says, “For the LORD does not see as man sees; for man looks at the outward appearance, but the LORD looks at the heart.” Proverbs 4:23 adds, “Keep your heart with all diligence, for out of it spring the issues of life.”

The world glorifies appearances and possessions; God values character. Many people appear fulfilled and beautiful on the outside, but are lonely and unattractive on the inside. The converse can be equally true.

Both adults and children are easily pulled into the deception that outward appearances are all-important. As we discuss the problem of obesity, let’s remember that we’re concerned with the negative *health* implications of being overweight. God infinitely loves both us and the children we’re trying to help; they need to know that fact more than any other.

While we strive to optimize our children’s physical health, let’s not forget to work toward making certain that their hearts are fit, too. Only then will they truly be ready to serve God optimally in whatever they do—thus living life to the fullest.

# INTRODUCTION

**W**hen I was growing up, overweight children were a rarity. Like “Fat Albert,” the famous *Cosby* Kids character, they stood out in a crowd.

Not anymore. We’re in the midst of a staggering surge of obesity among the most precious of our society. If the trend isn’t reversed, the consequences will be dire.

How do we know this? The Centers for Disease Control and Prevention, part of the U.S. government’s Department of Health and Human Services, has a research arm called the National Center for Health Statistics. Since 1971 it’s tracked obesity rates in the U.S., and is the source of much of our knowledge on the subject.

The most recent survey was taken in 1999-2000. It showed a dramatic increase in the prevalence of childhood obesity during the last 20 years. In 1980, about 5 percent of American children and adolescents were obese. In 2000 the rate was approximately 10 percent for children ages 2-5, and about 15 percent for those ages 6-19. Rates are much higher in certain ethnic populations; African-American, Latino, and Native American children suffer obesity rates as high as 35 percent.

Increases like these in such a short time are unprecedented. Obesity rates in kids have almost tripled in the last 20 years! Adults fare no better—and serve as poor role models for their offspring.

Not only are we seeing more bodily obesity, but in my opinion we’re also witnessing a decline in our kids’ fitness of mind. Just as video games, computers, and TV have led to less physical exercise, the mass media have lulled some of our kids into an intellectual and spiritual lassitude. Is there a connection?

Despite the strides our society has made toward accepting adults



and children as they are, the stigma of obesity continues to carry negative psychosocial consequences. I've seen looks of despair on children's faces, and heard their stories of rejection. Along with sadness, it angers me to see how some of these kids are treated.

The physical ramifications of obesity are no less daunting. Many of these children will face a lifetime of obesity-related problems—and a significantly shortened lifespan. As they grow older, we'll see increased rates of diabetes, heart disease, cancer, and joint disease. Obesity in all age groups, and particularly in children, poses a public health crisis that will seriously affect the well-being of the world. It's possible that this generation of children may be the first to live shorter lives than their parents, due to the complications of obesity.

The financial impact is ominous as well. A 2004 study published in the journal *Obesity Research*<sup>1</sup> estimated that in 2003, obesity-related health care costs in the U.S. reached \$75 *billion*, with taxpayers on the hook for about \$38 billion of that total (Medicare and Medicaid's share). This annually increasing amount of money will have to come from somewhere, and taxpayers can pony up only so much before significantly slowing the economy. As more and more money goes to rising health costs, less will be available for other worthy causes.

Obesity rates aren't just a problem in the U.S., either. In the U.K., as of 2001, estimates were that about 8.5 percent of 6-year-olds and about 15 percent of 15-year-olds were obese.<sup>2</sup> In 2000, the World Health Organization gave obesity epidemic status.

There's no evidence that this epidemic has slowed in the ensuing years. On the contrary, my eyes tell me it's only picking up speed. If the U.S. can find ways to gain control of its obesity epidemic, this information will be very helpful to the rest of the world.

For a pediatrician, there may be no more frustrating problem than obesity. The issue is so multifaceted—shaped by physical, social,

societal, family, psychological, spiritual, nutritional, and other factors—even the most experienced practitioner can be quickly overwhelmed.

Our window of opportunity to render assistance as physicians is narrow. If a child is still overweight in the teen years, the rate of successful long-term weight loss is low. Often we simply lack the time or resources to deal effectively with obesity. And so many others—parents, other relatives, schools, friends—must be involved in the effort that victory over the problem is uncommon.

One mom recently told me that she and her daughter had made substantial changes at home to begin slimming down. But her ex-husband and in-laws were telling the child that there was no problem—she could eat what she wanted as long as she exercised. Needless to say, this seven-year-old was confused. Yet this is not an unusual scenario.

Things must change. That's why, after 18 years of pediatric practice in the trenches, caring for many overweight children, I saw the need for a simple guide for parents who want to help their children conquer obesity and grow up to be fit and healthy. No responsible parent wants less for his or her child, and no physician should settle for any other outcome.

Since the best “cure” is prevention, I've also designed this book to help parents of young children avoid the mistakes leading to obesity. The goal is to keep your children from becoming overweight, and to teach them healthy eating habits and activity levels from a young age.

Though I'll touch briefly on disease conditions that cause obesity, this book deals mainly with “common”—or what we in the medical field call “exogenous”—obesity. A few obese children may suffer from as-yet-undefined genetic mutations of appetite control mechanisms, but most are simply eating too much.

What about hopes for “wonder drugs” that could control appetite or render calories powerless? There are some interesting developments

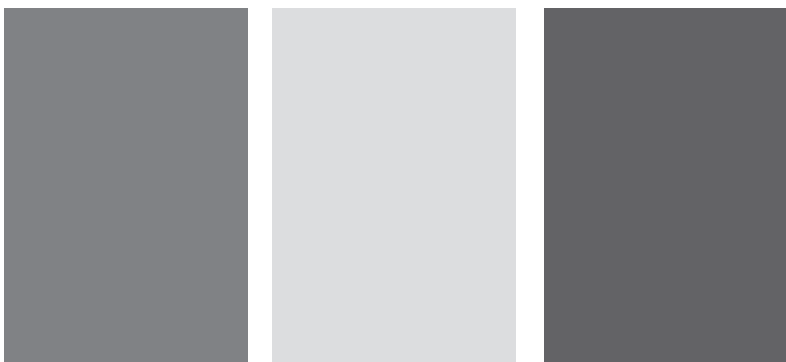
in the study of obesity, ones that may lead to some pharmacologic therapies in the future. But these are likely a good many years off, and we need to act now. Besides, what parent wants his child to have to take medication for obesity if that child can be helped by lifestyle changes—or can avoid the problem altogether with healthy teaching?

If you're looking for a quick fix, you won't find it here. No such thing exists. I offer no gimmicks—no pills for instant weight loss, no “lose weight and get into shape while you sleep” regimens. But you will find straightforward, factual information you can use to help your child.

I've employed these techniques to help effect weight loss in my patients over the years. But I'll be the first to warn you: It will not be easy, and the stakes are high. We must take the attitude of former NASA Flight Director Gene Kranz during the Apollo 13 crisis when he said, “Failure is not an option!”

Each of us is given only one body, and it is a miraculous piece of work. There is quite possibly no more wondrous evidence of God's creative handiwork than the workings of the human body. While we should not worship it, we need to reverence this vehicle for our souls—and those of our children.

—*Robert S. Andersen, M.D., F.A.A.P., F.C.P.*



PART ONE

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# **THE PROBLEM OF CHILDHOOD OBESITY**





## CHAPTER ONE

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# A DISTANT THUNDER

In 1857, Mount St. Helens—in what would later become the state of Washington—settled down after several years of eruptions. For the next 123 years, not a peep was heard from one of the largest volcanoes in the world.

It began to reawaken in March 1980 with daily earthquakes and steam plumes, indicating that a dangerous eruption was possible. Over the next two months, the mountain began to deform, a massive bulge forming on its north face. Scientists suspected a catastrophic explosion was imminent. Local residents were lulled into a false sense of security when the mountain quieted a bit in early May.

On the morning of May 18, Mount St. Helens erupted violently. Pressure blew off the top 1,000 feet of the volcano, with deadly results. Fifty-seven people died that day, most because they failed to heed the warnings of forestry officials.

There was no need for anyone to have been hurt. Some victims had thought officials were being overcautious. Some, like famous area resident Harry Truman, simply refused to leave.

Today, many nations are feeling tremors and seeing steam plumes

as the “obesity volcano” rumbles. While the Mount St. Helens blast was unpreventable, we may be able to avoid a worse disaster—an explosion of obesity-related disease.

Many a doctor has noticed increasing numbers of obese children and adults walking through the office door. What physicians have been observing anecdotally for years has now been proven statistically: Obesity rates are steadily rising. Ultimately, this epidemic is likely to contribute to thousands—if not millions—of premature deaths.

How did this happen? Here are some of the reasons. Taken together, they weave quite a tapestry.

### **REASON #1: LESS EXERCISE**

If you're over 35, you may recall childhood summers when you left the house after breakfast and were outside all day, stopping only briefly to use the bathroom and eat a quick lunch. Maybe you'd ride all over town on your bike, play ball with a few friends for hours on end, go to the pool, or collect crayfish at the local stream.

In those days, unorganized neighborhood games of baseball, basketball, street football, kickball, or Capture the Flag took place daily. According to my mom, as a young child I frequently fell asleep at the dinner table—sometimes with my head literally landing in my food—after running around outside all day long. Free of constant parental oversight and organization, kids improvised and played for the fun of it, without pressure.

Today, too many “organized” sports and other activities, especially for younger children, may be robbing kids of the joy of spontaneous games and competition and playing alone. In some places, unsupervised play is simply no longer possible. Legitimate fears of abduction and crime have curtailed much of the freedom children used to have.

In certain urban *and* suburban locations, dangers posed by street gangs force parents to keep their kids inside.

Many parents drive their children everywhere, since it's too far or too dangerous for them to ride their bikes or walk. Fear of litigation has caused many schools and municipalities to remove playground equipment. The bottom line: Children are moving less these days, thus burning fewer calories.

### **REASON #2: EATING TOO MUCH**

"Super-Size it, please!" is the command from the "drive-thru" customer to the fast food employee. What's next, Super-Duper Size? Mega-Super-Duper Size (labeled "Best Value," of course)?

In our culture, we like to feel we're getting our money's worth, and expect things big—especially meal portions. Where else can you get a steak that could feed a small town or a restaurant dessert roughly the size of a toaster?

In France, where people tend to eat a relatively high-fat diet and are avid wine drinkers, the obesity rate is lower—partly because they eat smaller portions at mealtime and do so at a leisurely speed. While I don't advocate the secularist French way of life, the pace and enjoyment of eating there is commendable. Our society's "Texas-size" eating mentality is no doubt affecting many of our children—and not for the better.

We're reaping what we've sown—God's timeless principle. If we can return to modest portion sizes and slower eating, we can begin to have a positive effect on our children's dietary habits. The result: less obesity.

### **REASON #3: LESS EMPHASIS ON PHYSICAL EDUCATION**

As school administrators try to maximize children's academic performance and squeeze precious minutes out of each day, time spent in

physical education courses is often reduced. This may not matter for children living in active families, but the rest are missing out on a way to learn how to be physically fit.

Fortunately, some schools are now increasing time spent in P.E.—an encouraging development.

#### **REASON #4: TOO MUCH SCREEN TIME**

I admit it: I love my Macintosh laptop computer. I also love watching sports on television. Though I'm not into video games, I've observed patients in my office playing them—and it takes considerable effort to get their attention away from those little electronic marvels.

We live in a digital age, and new avenues of entertainment are only going to proliferate. It's clear, however, that the amount of time spent daily in these pursuits can be directly correlated with childhood obesity rates. Why? Because of inactivity and the powerful effects of food product advertising on TV.

Children's shows are especially laden with food commercials, and I'm not talking about fruits and vegetables. Our marketing gurus are no slouches; they know that a slick ad can seduce us into getting up for a snack halfway through a football game, TV movie, or cartoon. Couple this with the fact that many of the advertised foods and beverages are high in unhealthy fat and sugar (see Chapters 5 and 6) and you've just added another brick to the wall of our epidemic.

Many pediatricians recommend an upper limit of about two hours of TV/video/computer time per day, but a lot of our children greatly exceed that limit. Kids would be much better off with little or no time on the TV, video game system, and computer—and TV is by far the worst of the three because of food advertising. In fact, allowing children to have televisions in their bedrooms is directly tied to increased TV watching and obesity.



**REASON #5: LESS EATING AT HOME AS FAMILIES**

I can sense the uneasiness as you shift nervously in your seat, preparing for a soapbox lecture. Not to worry. I simply want you to know the facts, and the evidence is clear that families who sit and eat together on a regular basis have lower obesity rates.

This makes perfect sense. More conversation, eating more slowly, consuming fewer meals at fast food establishments, serving normal portion sizes—all would contribute to a smaller total calorie consumption at mealtime. Interestingly, this benefit seems to lessen considerably if the family watches television during the meal.

**REASON #6: SUBURBANIZATION**

Years ago, people walked to the market daily and bought the food they needed. There was less food around the house; more fresh fruits, vegetables, and whole grains were consumed. An elderly gentleman once told me, “We Americans need to mimic classic Europeans in one thing—we should shop at the market daily and watch TV weekly, instead of the other way around.” Sound advice, indeed.

Suburbanization has made this largely impractical. Our kids are walking much less than previous generations. Cars have replaced feet and bicycles as the primary means of transportation.

Are residents of cities and those who live near a town center leaner? The answer isn't simple. When I traveled to London a few years ago, I was taken aback by the apparent lack of obesity. The streets are so crowded that Londoners have to be crazy to drive anywhere, and the “tube” system of underground trains can whisk you anywhere in minutes. Thus, residents walk quite a bit and rely less on automobiles.

While this may account for the seeming lack of obesity in London,

it doesn't provide easy answers for everyone. Recent information in the U.S., for example, suggests that obesity rates there may be tied to the affluence of certain areas. The more affluent the area, the less obesity.

This also makes sense. It's more expensive to eat properly; fresh fruits, vegetables, and fish are more costly than canned and processed foods. People with more wealth also tend to be more educated about nutrition and exercise and have easier access to health clubs.

In times past, it was a sign of wealth to be overweight and a mark of poverty to be lean. Today the reverse is true. Poor children are at greatest risk of obesity, and we need to address this fact. Combine that with the trend toward more mechanized transportation and less walking, and you have a direction that needs to be reversed.

### **REASON #7: FAMILY DISRUPTION**

I've observed—though only anecdotally—that obesity seems more common in children of divorced parents than in those whose parents have stayed together. And more children are growing up in families affected by divorce than in the past. This is consistent with the finding that poorer children are more prone to obesity, as divorce places severe financial strains on a family.

It's easy to underestimate the effect of divorce on a child. But the loneliness, depression, and other psychosocial factors that often come with divorce can lead to abnormal eating patterns. Many adults and children eat as a way of soothing themselves; food becomes the one comfort they have in life. Stress may also cause an increase in certain hormones, which can lead to cravings.

It's also logistically much harder for divorced parents to coordinate a healthy eating plan if they have dual custody of a child. The parent who sees a child only on weekends may inadvertently spoil that child by going out regularly to eat more "fun" foods. Many divorced

dads lack the knowledge or desire to cook proper meals, and it's often easier to buy fast food.

This is not to say that children of divorce can't overcome weight problems. But it's going to be tougher than usual and requires a high degree of cooperation between parents. With all the challenges facing fractured families, implementing the changes necessary for a child to conquer weight problems can be one very difficult proposition.

### **REASON #8: FEAR OF EATING DISORDERS**

I've seen this often in my practice. Broaching the topic of obesity, however gingerly, elicits looks of fear on some parents' faces. Several have let me know that they're afraid their children might swing back the other way toward anorexia nervosa. This happens mainly in parents of overweight or mildly obese girls.

Gradual reduction toward a normal weight is not a risk factor for anorexia. Though anorexia is possible, the risk is very small. Don't let this concern stop you from helping your child lose weight. If you feel body image distortions are developing, contact your doctor immediately.

### **REASON #9: FAMILY EXPECTATIONS**

Many families have aunts, uncles, grandpas, grandmas, and nannies watch the children while parents work. These caretakers' opinions about a child's weight may differ from the parents' view. "Doctor, he is so skinny!" is a phrase I often hear from grandmothers, despite evidence that the child is growing normally or is even a bit heavy.

I remember a particularly insistent grandmother who, when I said it was normal to see the outline of her six-year-old grandson's ribs, looked at me incredulously. "You can't be serious!" she retorted,

obviously wondering if her grandson was under the care of a quack. I was able to dissuade her of that sentiment, but the encounter illustrates a problem doctors often face.

Cultural factors also play a role, causing varied expectations about a child's appearance and food consumption. This can be tough to overcome, and requires a physician to earn the family's complete trust. Clear communication is crucial, too, and any hint of a dictatorial attitude by the doctor may sabotage the process—convincing parents not to comply with recommendations.

### **REASON #10: MOMENTUM**

Children growing up in a home with one or two obese parents are at higher risk for obesity. With more and more parents overweight, more and more children are being raised in these households and imitating parental behavior.

Overweight parents may find it difficult to discuss weight problems with a child, fearing they'll look hypocritical. As with smoking parents who counsel their kids not to take that first puff, this can be tricky.

If you're in this situation, acknowledge that both you and your child have slipped into bad habits—and then correct them together. At the very least, explain the dangers of excess pounds and fully support your child's efforts to lose them.

Are genetics a contributing factor when parent and child are overweight? They can be, but that effect may be overblown. Genes are unlikely to account for the steep increases in obesity rates. Most obese families are the direct result of poor eating and exercise habits developed and passed down through the years. At present we can only control diet and exercise, so it's not helpful to dwell on heredity.

This doesn't mean that genetics have no influence on weight.

Recent studies have described the effect of genetic mutations on appetite control.<sup>1</sup> One example involves an appetite suppression gene. The Melanocortin 4 Receptor (MC4R) works in the hypothalamus of the brain to suppress appetite. The most common mutation, a deficiency of this MC4R gene, occurs in about 6 percent of severely obese children. They have less MC4R, leading to poor appetite control. All these children have markedly increased insulin levels in their blood, which can aid in distinguishing them from other obese children without the mutation.

Future research may identify ways to help these children with medication or gene therapy. (Note: The test for this mutation is not presently available commercially.)

### **REASON #11: THE ORIGINAL FOOD PYRAMID**

Published in 1992 by the U.S. Department of Agriculture, the original Food Pyramid was merely an extension of dietary teaching that began in the 1960s. The premise *seemed* correct: Limit fats and increase grains and vegetables. The problem was that no distinction was made between “good” and “bad” carbohydrates and “good” and “bad” fats.

The lower part of the pyramid consisted of bread, cereal, rice, and pasta; six to eleven servings a day were recommended. As we’ll see later in this book, someone could follow this guideline perfectly and be eating poorly. A diet of low-fiber bread, breakfast cereals, rice, and pasta may conform to the pyramid but contains way too many simple, processed carbohydrates. Eating this way can lead to excess weight gain, and it will be of little consolation that the child is eating a “low fat” diet. We need to get back to eating unprocessed grains, high fiber cereals, and whole grain pasta.

Contrary to the impression given by the pyramid, not all foods

with higher fat content are bad. Nuts and vegetable oils are perched at the top of the diagram, with no distinction made between very healthy nuts and oils, high in monounsaturated fats, and saturated fats that are unhealthy. The implication is that nuts and oils aren't good for you because they're high in fat. This is simply not true. While they're calorie dense, nuts and certain oils (especially olive oil) should be a significant part of everyone's diet. They're packed with heart-healthy fat—no, that's not a misprint—plus nutrients and calories for energy. They help you feel satisfied and can squelch hunger pangs and cravings, aiding a decrease in snacking.

The pyramid also places legumes (like beans) and fish in the same category as red meats. This is also just plain wrong. Legumes are a fantastic source of protein and fiber without the saturated fat of meat. Certain types of fish, high in omega-3 fatty acids, are very wholesome and should be afforded higher priority than red meat.

As you can see, good intentions often don't accomplish their goals—and may be counterproductive. Recently changes were made to the original pyramid—but the result, in my opinion, is even more confusing than before. I'll have more to say about carbohydrates, fats, and the basics of nutrition later in this book.

These are the main reasons why our kids are becoming heavier and heavier. You may be able to think of a few more.

### **WHOSE FAULT IS IT, ANYWAY?**

Who's responsible for this fix? There's plenty of blame to go around. Government has promoted the misleading Food Pyramid and taken on tasks that belong to parents (feeding their kids, for instance). Physicians have long been lackadaisical in addressing the problem of obesity. Schools have done a poor job by offering less-than-healthy

cafeteria fare and allowing soda pop and snack machines on campus. Corporations market junk food to make a buck, supplying products to meet a demand—even if the demand is unhealthy.

Parents bear primary culpability, for they are ultimately accountable for their children's health. In Ephesians 6:4, God does *not* say, "You villages, governments, and schools, bring your children up in the training and admonition of the Lord." No, He addresses fathers.

Eventually children will have to assume care of themselves, but until that time arrives, parents need to be role models, teachers, disciplinarians, and loving advocates. Once kids reach age 12 or so, they may unwisely reject your recommendations or make things extremely frustrating for you. At some point they must sink or swim on their own. This is why it's so crucial to instill good habits at an early age. Children imitate their parents and learn from them. What example are you setting?

While there may be genetic factors involved in appetite and body type, obesity is ultimately an issue of individual responsibility once a person is over age 12 or so. Remember, we're talking about *obese* children and adults, not simply *bigger* people with a tendency to be heavy. Some folks may have a genetic tendency toward other types of addictions; they must take control of their own destiny to conquer the problem. The same is true of those who are obese.

There's no question that the process is made easier when a parent, friend, or organization supports and provides information to and encourages the person. But the buck stops with the individual.

If obese adults wish to lose weight and get into shape, they have to be the ones to follow through. Deciding what percentage of the problem can be traced to genetics is academic. Many obese people have said to themselves, "Enough is enough," and transformed their lives. They may have languished for years, mired in a terrible diet and

inactivity, only to turn things around with knowledge and resolve. They didn't simply "diet," but instituted wholesale lifestyle changes. I know they'd tell you it was well worth the effort.

Children are unable to take on many of these responsibilities, being dependent on their parents. They need you to engage them in these lifestyle changes.

Talk of obesity as a disease is, in my opinion, misguided. In many cases this designation shifts the focus from the responsibility of parents and kids, implying an intrinsic abnormality. But we're talking about exogenous or common obesity, not a hormonal imbalance.

Obesity is really a *symptom* of a larger problem—compulsive overeating, lack of exercise, depression, etc. Like cigarette smoking or excessive drinking, obesity can *cause* disease, but is not a disease in itself. Individuals must be willing to do what it takes to regain their proper shape.

It's human nature to look for someone else to blame when things go awry. Recently, threats of litigation have been aimed at the fast food industry for "causing" obesity. Most of us realize that fast food menus are full of awful things, and wouldn't serve them at home, let alone sell them to others. I believe most ordinary, rational people view these lawsuits as ludicrous, and understand that financial motives may be partially driving those voicing the threats.

Distancing ourselves from the never-ending blame game aids us in squarely facing the problem of obesity. God wants us to take responsibility for ourselves and quit passing the buck. Parents must be accountable for their children just as adults are accountable for themselves.

There are many reasons why obesity rates have risen sharply in the last two decades. Each of the factors listed in this chapter must be evaluated and dealt with if there's to be success in curbing abnormal weight gain.

Parents need to patiently take charge of their children's nutrition



and exercise routines. It won't be easy, and you may have failed in the past. But be persistent and get help from your friends, family, pastor, and doctor.

In a later section, I'll outline a program for helping your child stay slim and fit—or to begin overcoming obesity and unfitness. In the meantime, let's find out why your efforts to raise fit kids could be a matter of life and death.



## EPILOGUE

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# IF I CAN DO IT, YOU CAN, TOO

**T**hroughout this book I've included real-life examples of kids and parents who've gained control of weight problems. What about me?

Well, let me give you a few more words of encouragement. At the time of this writing I consider myself to be in pretty good shape for a 46-year-old. My height is 5 feet 11 inches, my weight 165 pounds; my body mass index is a comfortable 23. But it hasn't always been easy. I've had to work hard to stay fit.

Several years ago, after a long history of playing basketball and golf, I was diagnosed with osteoarthritis of my right hip. The pain was debilitating. It came as a bit of a shock to be diagnosed with an "old person's" disease at 39.

My hip arthritis was likely the result of several factors—including a congenital abnormality of my right foot and cartilage breakdown in my right knee. This was all part of a chain reaction of abnormal stress that had moved up my right leg and worn down my hip cartilage. By 2003 I'd reached the end of my "pain rope."

In January 2004 I had a total hip replacement using a minimally

invasive approach. I was back at work within three and a half weeks, but complete recovery was slow going. I've now returned to a regular workout routine and am playing golf pain-free.

Despite these difficulties—and mine are minor compared to the burdens some bear—I've been able to stay in shape by working out regularly. Little things—mowing the grass with a non-propelled mower, not using a cart when I play golf, walking constantly at work—help me to stay fit.

The recommendations in this book are ones I follow myself. Do I indulge at times? Of course! But as I see my birthdays fly by, I've had to decrease my intake of food. This is necessary for all of us as we age; if we don't eat less or work out harder, the evidence will soon accumulate.

Lest you think I'm genetically blessed, allow me to fill you in on my family background. My mom has struggled with her weight for years; my dad is in good shape but has a little extra “jiggle” around the middle. Except for my late grandfather, my dad's side of the family has no shortage of weight problems, due mostly to patterns of eating and inactivity.

Let this be an encouragement to you and your children. Heredity and habits don't have to lock you in the obesity trap. I know how hard it can be to overcome both, but I've also seen the rewards in the lives of my patients as well as in my own life. May God bless your efforts, too, as you partner with Him to raise fit kids.



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## APPENDIX A

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# GLYCEMIC INDEX AND GLYCEMIC LOAD

**H**ere are glycemic index (GI) and glycemic load (GL) values of some common foods, listed in alphabetical order by food type.<sup>1</sup>

The GL isn't available for many foods, but can be calculated by multiplying the total carbohydrate amount in a serving by the GI (example: GI 44 = 44 percent =  $0.44 \times 20$  total carbs = GL of 8.8). GI and GL values vary according to source, probably due to variations in the food tested and methods of preparation; these differences generally are not significant.

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**TABLE 4**

	Glycemic Index	Glycemic Load
Low	Up to 55	Up to 10
Medium	56-70	11-19
High	Over 70	Over 19

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FOOD	GI	GL	FOOD	GI	GL
<i>Baked Goods</i>			Healthy Choice Hearty		
Apple muffin	44	10.8	Seven Grain Bread	55	
Blueberry muffin	59	16.3	Kaiser roll	73	
Crumpet	69		Melba toast	70	
Doughnut, cake style	69		Oat bran	50	
Pastry	59		Pita	57	
Scones	92		Ploughman's Whole		
<i>Cakes</i>			Grain Original	47	5.4
Angel Food	67	18.4	Pumpernickel, whole grain	46	6.2
Chocolate with frosting	38	22	Sourdough	54	
Pound	54	13.4	Rye	64	
Sponge	46	16.8	White	70	
Vanilla with frosting	42	26.2	Whole-grain wheat	64	
<i>Cookies</i>			<i>Breakfast Cereals</i>		
Butter	47		All-Bran	38	9
Chocolate	44		Bran flakes	74	13
Oatmeal	55		Cheerios	74	15
Peanut Butter	32		Corn Chex	83	21
Shortbread	64		Cornflakes	92	24
Vanilla Wafer	77		Cream of Wheat	74	22
<i>Breads</i>			Crispix	87	22
Bagel, plain	72		Froot Loops	69	18
Bagel, pumpernickel	51		Frosted Flakes	55	15
Bagel, stone-ground			Golden Grahams	71	18
whole wheat	53		Grape Nuts	71	15
Baguette	95		Life	66	16
Croissant	67		Muesli, natural	49	10
Dark rye	76		Oat bran, raw	50	2
English muffin	77	8.4	Oatmeal (non-instant)	48	11
Hamburger bun, white	61		Puffed rice	87	22



APPENDIX B

FIBER VALUES OF  
COMMON FOODS<sup>2</sup>

Fiber figures differ according to the source, but this will give you a good base of knowledge. Assume we’re dealing with average-sized pieces of fruit.

FOOD	FIBER (grams)	FOOD	FIBER (grams)
<i>Cereal/Grains</i>		Cereal, Cracklin’	
Bran, miller’s	11 per 1/2 cup	Oat Bran	12 per cup
Bread, white	1 per 2 slices	Cereal, Fruit ’n Fiber	8.5 per cup
Bread, pumpernickel	2.6 per 2 slices	Cereal, Multigrain	
Bread, seven-grain	6.5 per 2 slices	Cheerios	3 per cup
Bread, whole-grain	3-6 per 2 slices	Cereal, Post Fruit and	
Buckwheat	4.8 per 1/2 cup	Bran, Peaches, Raisins,	
Cereal, All-Bran	10 per 1/2 cup	and Almonds	6 per cup
Cereal, Atkins Brand		Cereal, Post Raisin Bran	8 per cup
Blueberry Bounty		Cereal, Post Spoon-	
with Almonds	9 per cup	Sized Shredded	
Cereal, Cheerios	3 per cup	Wheat ’n Bran	6.4 per cup



## APPENDIX C

# CALORIES BURNED BY COMMON ACTIVITIES

**H**ere are calories burned in a 125-pound person per 1/2 hour of the activities listed.<sup>3</sup>

ACTIVITY	CALORIES BURNED PER 1/2 HOUR	ACTIVITY	CALORIES BURNED PER 1/2 HOUR
Aerobics	165	Rollerblading	210
Basketball	240	Running, medium pace, 12-minute mile	240
Bicycling, 12-14 miles per hour	240	Stairstep machine	180
Cross-country skiing	240	Swimming	210
Golf; walking, carrying clubs	165	Tennis	210
Jumping rope	300	Walking, brisk, 17-minute mile	120
Lawn mowing	135		

### *Note:*

- A 1-ounce bag of potato chips and a 12-ounce can of pop each contain about 150 calories. You'd need to jump rope continuously for half an hour just to burn those calories!
- These values vary depending on the person's size and gender, and the intensity of the activity. These are averages for an adolescent boy or girl at about 125 pounds.



## APPENDIX D

# CALORIC REQUIREMENTS FOR CHILDREN

**H**ere are daily caloric requirements for children of various ages, based on the National Academy of Sciences Food and Nutrition Board.<sup>4</sup>

	0-6 month old	7-12 month old	12-24 month old	3-8 year old	9-13 year old	14-18 year old
<b>Male</b>	570	743	1046	1742	2279	3152
<b>Female</b>	520	676	992	1642	2071	2368

### *Note:*

These are average caloric needs for an average child with average activity levels. Depending on your child's size, muscle mass, and activity levels, the above may vary considerably.



# NOTES

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