

PAUL C. REISSER, M.D.





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7 Steps to Healthy Eating

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FOREWORD BY DR. JAMES DOBSON

August 15, 1990, began much like any other day for me. I awoke early in the morning and headed to the gym for a game of basketball with a group of friends and colleagues—some of whom were as much as twenty or thirty years younger than I! Because I frequently hit the court with these "youngsters," and because I had reached middle age with the lanky build that allowed me to still move easily, I assumed that I was in the prime of physical health.

A sharp pain in my chest on that late summer morning told me otherwise. I excused myself from the game and drove alone to the hospital (something I do *not* recommend to anyone who suspects he or she is experiencing a serious medical problem!). Hoping and praying that I was merely battling fatigue, I knew deep down that there was something else terribly wrong. It didn't take the doctors long to confirm that, sure enough, this "healthy" basketball enthusiast had transformed, in the blink of an eye, into a heart attack victim.

As I lay in the hospital in the days following that ordeal, I realized that, early-morning basketball games notwithstanding, my predicament was directly related to

my lifestyle choices and, in particular, the fatty foods I was allowing in my diet. I asked the Lord to give me another chance, resolving to use every resource at my disposal to safeguard my heart and my health through a combination of healthy diet and exercise. Despite some setbacks (I suffered a stroke in 1998 but recovered from it almost immediately), I have endeavored to keep that commitment, and, today, I am feeling better than ever.

Like so many Americans, prior to my heart attack, I was extremely busy—but not necessarily *active* in a way that would ensure optimal physical health. Indeed, statistics show that, despite our frantic pace of living and continued advances in the medical field, Americans suffer from an alarming number of health problems, many of which could be prevented or at least decreased by changing bad habits.

Research confirms just how serious the situation has become. The latest figures from the American Heart Association show that 13 million Americans have coronary heart disease; 5.4 million have suffered a stroke; and 65 million have been diagnosed with high blood pressure. Unfortunately, a large number of these cases are related, at least in part, to lifestyle choices. The AHA also reports that 48.5 million American adults (nearly 23 percent) are smokers. From 1995 to 1999, an average of 442,398 Americans died annually of smoking-related illnesses (32.2 percent of these deaths were cardiovascular related). The American Cancer

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Society estimates that 180,000 of the cancer deaths in 2004 could be attributed to smoking. Further, one-third of cancer deaths in 2004 were related to nutrition, physical inactivity, being overweight or obese, and other lifestyle issues. In other words, many of them were *preventable*!

As I suggested earlier, perhaps the biggest factors in maintaining proper physical health are diet and exercise. Unfortunately, a recent study revealed that a full 25 percent of Americans reported participating in no physical activity during their leisure time. Perhaps that is why more than 65 percent of adults in the United States are overweight, including 30 percent who are clinically obese. Between 1971 and 2000, the average daily caloric intake for men grew by about 7 percent, which translates into seventeen pounds of additional body fat per year. Obesity dramatically affects life span, as well. The life expectancy of a twenty-year-old white male who is clinically obese decreases by an estimated thirteen years, and for black males, an astonishing average of twenty years are lost due to obesity. One recent study revealed that the number of annual deaths attributable to obesity among adults in the United States is about 300,000. And perhaps most telling of all, airlines are telling us that they now have to carry additional fuel in order to transport more overweight customers.

This situation is sobering, but I am living proof that a dramatic change in eating habits, combined with a

focused regimen of heart-strengthening exercise, can significantly improve one's overall health. I'll admit that the prospect of making such radical lifestyle changes can be daunting, but let me assure you that it is worth the investment. Choosing a healthy lifestyle now, while you still can, is infinitely preferable to being sidelined by a stroke, heart attack, cancer, or some other health crisis in the future.

This pocket guide and its parent book, the Complete Guide to Family Health, Nutrition, and Fitness, are excellent resources designed to answer many of the questions that may arise as you endeavor to put yourself and your loved ones on the road to a healthier life. You'll find information on preventing the three most common health problems—cardiovascular disease, cancer, and diabetes—as well as practical advice on those critical disciplines that I have mentioned several times already: diet and exercise. These books can help you discover answers to specific health-related questions for family members of all ages; foster emotional and spiritual health in addition to physical fitness; and so much more. The information presented here is based on the most up-to-date medical research as well as the firsthand experiences of members of Focus on the Family's Physicians Resource Council.

Perhaps you consider yourself generally healthy and are simply looking for a plan to help you stay that way. Or maybe you or someone you love is dangerously

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overweight or suffering from a serious health problem related to poor lifestyle choices in the past. Either way, this book will provide you with the tools you need—as a complement to the advice of your personal physician, of course—to live smarter and healthier. Change is never easy, but it is possible, and I pray that God will bless you as you endeavor to be a good steward of the body He has given you.

James C. Dobson, Ph.D.

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SOME FOOD FOR THOUGHT ON FOOD

Have you ever asked yourself any of the following questions?

For years I've been hearing that fats are bad, and that I should gravitate toward foods that say "low fat" or "nonfat" on the label. Now I'm hearing that carbohydrates are bad and that I should avoid eating them. What gives?

Do I get enough vitamins and minerals from my food, or should I take a supplement?

Every weekend on my local radio station, I hear infomercials for nutritional products that sound too good to be true. Are they?

Sure, I'd like my family to eat healthier foods, but what exactly does that mean, and how do we break some of our bad habits?

It seems like every other month someone comes out with a new surefire way to lose weight. I've tried most of them, and nothing seems to work for long. What am I doing wrong?

I feel tired and irritable most of the time. Should I change something in my diet?

Because we live in a nation blessed with a richer bounty and variety of foods than at any other time or place in history, one would think that deciding what to eat would be a straightforward task. But too many of us don't feel well, or aren't as healthy as we would like, or are overweight. At the same time, we are bombarded every day with advice (half of which seems to contradict the other half) about what we should or shouldn't eat, drink, and take as supplements, accompanied by promises of boundless energy and the Body Beautiful if we will only follow that advice. No wonder we have so many questions!

This book will not set forth imaginative nutritional theories, lists of miracle supplements for you to buy, magic formulas for choosing what you eat, or recommendations that you orient your diet around exotic foods that you may have a hard time swallowing (let alone finding). It will, however, attempt to give you a straightforward, reality-based orientation to the subject of healthy eating, and a handle on some words and catchphrases that you've probably heard but may not understand the significance of. (What exactly are saturated fats? Why should I avoid trans-fats?) Hopefully this will help you make better-informed decisions about the foods you buy and prepare for yourself and your family.

INTRODUCTION

You'll be happy to know that steering your family toward healthier eating habits doesn't require that you adopt the motto, "If it tastes good, spit it out!" Furthermore, if you're well aware that the foods you've been choosing aren't exactly the best body fuel—or even if you're a certified junk food addict—you should understand that the seven steps set forth in this book are meant to be just that: seven steps, not a hundred flying leaps. By making gradual adjustments rather than radical changes to your family's diet, your healthy *choices* are more likely to be healthy *habits* that will last for a lifetime. (And, you'll avoid the uproar that is likely to occur if you insist that your family members immediately give up all of their favorite foods.)

A note of explanation before we begin: In this book you'll find a number of references to dietary recommendations published by the Institute of Medicine (or IOM). The IOM is one of four components of the National Academies, a private, nonprofit, nongovernment organization whose mission is to provide reliable health information to citizens, professionals, corporations, and the government. The IOM's reports and recommendations are built upon the best available research and on expert opinion, and they represent an important source of nutritional advice in the United States.

Now, let's take some steps toward healthy eating.

1

GO EASY ON THE ADDED SUGARS

Contrary to the opinions found in a number of popular books over the past few decades, sugars aren't the cause of all disease, the root of all evil, or an imminent threat to world peace. But they are definitely a poor quality of fuel for our body, and the dramatic increase in their consumption in the United States and other developed countries has been a major step in the wrong direction. To put it bluntly, most of us could stand to cut back, and some of us need a major overhaul of our taste buds.

ABOUT SUGAR

Carbohydrates—important nutrients that serve primarily as sources of energy in the body—fall into two basic categories: simple (commonly called sugars) and complex. Three very important sugars are glucose, fructose, and sucrose.

• Glucose (also called blood sugar) is the most important simple carbohydrate, because it is the primary energy source for almost every cell in the body. Our biochemical

machinery is programmed to break down more complex carbohydrates into glucose or to convert the other simple sugars into it.

- Fructose (also called fruit sugar) is the sweetest of the sugars. It is abundant in fruits and honey and is readily converted to glucose.
- Sucrose, which consists of one glucose and one fructose molecule joined together, is the compound that we're usually talking about when we mention dietary sugar.

The complex carbohydrates include important structures that store energy in plants and animals. Starch, which we will discuss in the next chapter, is the general term for a long chain of hundreds or even thousands of glucose molecules linked together and packed into certain parts of plants.

Sugars occur naturally in many foods, but they are also added to many products to enhance sweetness—often with less than desirable results.

Where to find sugar on an ingredient label

Many foods we buy include significant amounts of one or more types of added sugars under a variety of aliases. You might notice some of the following listed among the ingredients of the foods on your shelves.

- Sucrose is also known as white sugar, table sugar, refined sugar, granulated sugar, cane sugar, and beet sugar. A teaspoon of sugar contains about sixteen calories.
- Powdered sugar, also known as confectioners' sugar, is basically white sugar pulverized to a fine consistency, with a little cornstarch added to prevent lumps from forming.

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- Raw sugar, or partially refined sugar, is brown and coarser than white sugar. True raw sugar is banned in the United States because it may contain unsavory ingredients such as bacteria and insect parts, but the products sold here (such as Sugar In The Raw or turbinado) have had impurities removed.
- Molasses is the thick, brown syrup produced during the extraction and refining of sugar from cane.
- Brown sugar is white sugar to which molasses has been added
- Dextrose is another name for glucose.
- Levulose is another name for fructose.
- Invert sugar, a mix of glucose and fructose, occurs naturally (as in honey) or by chemical action on cane sugar.
- Corn syrup is a liquid derived from cornstarch.
- High-fructose corn syrup, a form of corn syrup that was introduced in the mid-1960s, is sweeter than corn syrup, cheaper than sugar obtained from sugar cane (but equally sweet), and not prone to crystallize, making it a popular sweetener that has been added to an enormous number of products. Between 1966 and 2001, high-fructose corn syrup consumption in the United States rose from zero to over sixty pounds per person annually.¹
- Most forms of honey are sweeter than white sugar. About 220 million pounds (including more than three hundred unique flavors) of honey are produced every year in the United States by more than 2.5 million colonies of honeybees. Each pound of honey represents about 2 million visits to flowers by bees and about fifty thousand flight miles. A tablespoon of honey contains about sixty-four calories (compared to about forty-eight calories in a tablespoon of sugar).

THE TROUBLE WITH SUGAR

A widely quoted report released in 2000 by the United States Department of Agriculture (USDA) raised national eyebrows when it reported that annual sugar consumption in America had reached 158 pounds per person—a whopping fifty teaspoons per day—in 1999, up 30 percent from 1983.

Actually these numbers were based on the amount of sugar available in the wholesale market. Estimates based on surveys of people's eating habits (also conducted by the USDA) revealed somewhat lower (but still impressive) numbers: 109 pounds per year for a typical teenage boy and 64 pounds for the average American citizen.²

Why so much? Obviously, we all like one or more sweet foods, and for some of us many of them seem to be addicting. In addition, many foods that are not particularly sweet, such as ketchup, contain a surprising amount of sugar in one of the many forms listed above.

If all the various forms of sugar are so pleasing to the taste buds, how might they cause us trouble? Several noteworthy concerns have been raised about our love affair with sugar.

Sugar and obesity

The number of Americans, young and old, who are overweight or obese has increased dramatically over the past two decades, as has our national consumption of added

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sugars. Currently Americans on average consume 16 percent of their calories from added sugars. Among children ages six to eleven, the number is 18 percent, while teenagers derive 20 percent of their calories from added sugars. Among the young, soft drinks—what some critics call liquid candy—are a major source of these calories. A typical twelve-ounce canned soft drink contains the equivalent of about ten teaspoons of sugar, yielding 140 calories. This by itself represents the maximum daily intake of added sugars recommended by the USDA. But fast-food restaurants, convenience stores, and movie theaters sell soft drinks in colossal serving sizes ranging from thirty-two to fifty-two ounces, often with free refills. A forty-two-ounce fast-food "supersize" nondiet soft drink packs more than four hundred calories.

The contribution of sweets to obesity may involve more than calorie counts. In many people the metabolic response to surges of blood glucose from products containing a lot of simple sugars appears to promote fat storage. Unfortunately, the same may be happening with many starches and other mainstays of the low-fat approach to eating that has been encouraged by government and health professionals for the past three decades. We will look at this in more detail in the next chapter.

Empty calories

One of the strongest arguments against the wholesale consumption of sugar is that it is basically a raw energy

source without any additional nutritive value. No vitamins, minerals, fiber, or other useful compounds are present in a typical can of soda. Enjoy a mediumsized orange and you get a total of eighty calories, of which about fifty-six come from sugars. But the orange also contains 7 grams of fiber, a gram of protein, a generous dose of vitamin C, and some vitamin A, iron, and calcium. Polish off a mere five ounces of a typical orange soda—less than half of a twelve-ounce can and you get the same number of calories, all from sugar in one form or another, plus a little caffeine to jangle your nerves and—that's all, folks! Drink the entire can, and you'll consume twice as many calories as the orange contains. Of course, using artificial sweeteners is one way to indulge your sweet tooth without consuming empty calories, but some have questioned their safety.

Sugar vs. the teeth

Actually, this isn't just a shortcoming of sugar. Carbohydrates in any form serve as a food supply for bacteria within the mouth that produce enamel-eroding acid. What makes a carbohydrate bad for the teeth isn't necessarily how sweet it is—the bacteria can be as happy with raisins as with candy—but how long it hangs around inside the mouth. Sticky, sugary foods are thus likely to be troublemakers, especially for those who don't brush after every meal. In general, the greater the

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percentage of one's daily calories that comes in the form of sugars, the greater the risk of dental caries (tooth decay).

Sugar and hyperactivity

The popular notion that hyperactivity or aggressive behavior in children is provoked by eating sugar has persisted for decades, despite a lack of any consistent support from scientific research. Numerous studies evaluating behavior and learning among children given variable amounts of sugar and artificial sweeteners have shown minimal, if any, objective impact. If Johnny seems "amped up" after a few rounds of soft drinks, cake, and ice cream at a friend's birthday party, the sugar he gobbled up might seem like a prime suspect. But the general excitement, games, presents, and perhaps the caffeine lurking in the sodas are more likely to blame. Nevertheless, if parents notice that a child's behavior seems to take a turn for the worse whenever sugary foods cross his lips, it certainly wouldn't hurt him to stay away from them.

HOW MUCH IS TOO MUCH?

Current recommendations from the U.S. Department of Agriculture call for limiting the day's amount of added sugars to less than 10 percent of your total daily calories. This translates to a daily intake of 24 grams (the equivalent of six teaspoons of table sugar) for 1,600

calories, 40 grams (ten teaspoons, the amount in one twelve-ounce soft drink) for 2,000 calories, and 56 grams (fourteen teaspoons) for 2,400 calories. Remember that these amounts don't apply to the sugars that occur naturally in foods such as fruit and milk.

You can tally the number of grams of sugar in any packaged product at the store by checking the Nutrition Facts label. Unfortunately, this does not distinguish between naturally occurring and added sugars. Often the nature of the product leaves little doubt: In a soft drink, you can be certain that all 40 or so grams of the sugar were added, while in an orange all of the 12 or more grams of sugar were there to start with. On the other hand, a cup of raw blueberries contains 14 grams of natural sugar, while a cup of frozen sweetened blueberries contains 45 grams of sugar. The Nutrition Facts label wouldn't tell you that 31 grams were added.

HOW DO I CONTROL THE SUGAR FLOW?

If your family includes one or more members who are big fans of sweets, declaring a sudden moratorium in the name of good health may lead to a minor revolt. All of the following approaches are helpful, but they may be more successful if phased in over time.

1. On packaged foods, check the ingredient list for added sugar, whether named directly or under one of its many aliases. Try to avoid foods in which some

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- form of added sugar is the first or second ingredient on the list.
- 2. Some major sources of sugar (and calories) are those perennial favorites: cakes, pies, cookies, pastries, and candies. They won't kill anyone if eaten once in a while, but daily dosing should be avoided. Fruit is a better option for dessert.
- 3. Watch the sugar content of breakfast cereals, and choose brands that contain less than 8 grams per serving. (The Nutrition Facts label comes in handy here. See chapter 7 for more on how to read the Nutrition Facts.)
- 4. You have a much easier time shaping the taste preferences of a baby who is just beginning to explore the world of foods beyond milk, compared with a ten-year-old who is already a confirmed lover of candy and soft drinks. Steer the growing toddler and preschooler toward fruit as a dessert, rather than cake and ice cream, and toward unsweetened cereal rather than Chocolate Frosted Sugar Wads.
- 5. A soft drink may be hard to resist at a ball game or the movies, but otherwise you should limit the number of soft drinks you—and especially your kids consume every week. Of particular concern among children and teenagers is the replacement of other nutrients with the empty calories in soft drinks. Among teenagers, carbonated soft drinks supply 9 percent of daily calories among boys and 8 percent

- in girls' diets. One study of the eating habits of children found that those who drank the most soft drinks also ate the least amount of fruits and vegetables. For children, milk is a better option (unless they are lactose intolerant).
- 6. While various fruit-flavored beverages may seem like a healthier alternative to soft drinks, most of these contain a small percentage of actual fruit juice (if any) and a lot of sugar. (Think soft drinks without the fizz.) If you're not sure, check the label for the amount of juice—and the amount of sugar.
- 7. Surprisingly, even pure fruit juice usually provides little more than the sugars found in the fruit, some vitamin *C*, and perhaps a little calcium if it's fortified. In babies and young children, fruit juice is not an appropriate substitute for breast milk, formula, or (after the first birthday) cow's milk. Those who come to favor juice over better sources of nutrition can develop diarrhea and gas, and may become malnourished. The following guidelines will allow children to enjoy fruit juice without becoming "juicaholics" or damaging their teeth:
 - Infants younger than six months of age should not be given fruit juices at all. Indeed, you would be wise to avoid feeding juice to any infant or toddler from a bottle; wait until he can take it from a cup.
 - Limit juice intake to four to six ounces per day for children six and younger. Starting at age seven, you can set the limit at eight to twelve ounces per day. If he

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- wants more than the daily limit, dilute juice with an equal amount of water.
- Don't allow an infant or child to go to sleep sucking on a bottle containing juice, milk, or any other liquid that contains sugar. This not only promotes tooth decay but can also increase the risk for developing an ear infection.
- Encourage children to eat whole fruit, which contains fewer calories and more fiber per serving than juice.
- Since citrus fruits may provoke allergic responses during the first year, consider withholding orange juice until after the first birthday. (Check with your baby's doctor.)

THE IMPORTANCE OF BREAKING BREAD TOGETHER

Before we conclude our look at healthy eating habits, we need a reminder about the importance of the *context* of our nourishment. We are not animals that graze in a field or gather at a trough. We are meant to be nourished at the table in more ways than merely transporting food from plate to stomach. Meals are a time for socializing, conversing, sharing, and celebrating.

Family meals can be particularly powerful events in the lives of both children and adults. They can and should be the occasion to share the day's events, decompress, commiserate, encourage one another, laugh, learn how to speak and listen politely, instill values, establish each person's identity as a member of a family, welcome guests, and acknowledge God's provision on a daily basis. They are, unfortunately, an endangered species, threatened by overcommitment, crowded calendars, and electronic distractions such as

TVs and phones. If you take away nothing else from this book, make a decision that shared family meals will become a priority in your home. As part of that process, consider the following:

- Set aside three, if not more, occasions per week for family meals. The expectation is that all hands will be on deck, even young children, unless prior notice is given.
- Table manners (including such niceties as pulling out chairs for the ladies and waiting until everyone is seated and grace has been said to start eating) can and should be encouraged.
- Televisions should be turned off and phones unanswered, taken off the hook, or (in the case of cell phones) turned off. This is a time to talk to one another, unhindered by a yammering TV or the intrusion of whoever decides to dial your number.
- Speaking of talking, the family table should be a place of warmth, respect, safety, genuine interest in what everyone has to say, and mutual support. If mealtimes are a hotbed of bickering and animosity, no one is going to want to show up. If the kids are having a little trouble with this, some role modeling of respectful conversation from Mom and Dad will speak volumes. And, if no one seems to have much to say, ask a few open-ended questions such as, "What was the high (or low) point of your day?"
- Finally, mealtimes can provide opportunities to talk with your children about the foods they (and you) eat and why some are definitely better than others. Obviously, teaching by example at the table—serving the foods you're discussing—also speaks volumes and helps set patterns that will continue long after children have left home to live on their own.

Endnotes

- ¹ Sally Squires, "Sweet But Not So Innocent? High-Fructose Corn Syrup, Ubiquitous in the American Diet, May Act More Like Fat Than Sugar in the Body," *Washington Post*, March 11, 2003.
- ² Center for Science in the Public Interest, "Sugar Intake Hit All-Time High in 1999," news release, May 18, 2000. See http://www.cspinet.org/new/sugar limit.html.
- ³ Findings from the ongoing Nurses' Health Study and the Health Professionals Follow-up Study, summarized in Walter Willett, *Eat, Drink and Be Healthy: The Harvard Medical School Guide to Healthy Eating* (New York: Fireside, 2001).
- ⁴ C. S. Fuchs et al., "Dietary Fiber and the Risk of Colorectal Cancer and Adenoma in Women," *New England Journal of Medicine* 340 (1999): 169–176.
- ⁵ Institute of Medicine, Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fatt, Fatty Acids, Cholesterol, Protein, and Amino Acids (Macronutrients). See http://www.iom.edu/report.asp?id=4340.
- ⁶ American Cancer Society, "Common Questions about Diet and Cancer." See http://www.cancer.org/docroot/ped/content/ped_3_2x_common_questions_about_diet_and_cancer.asp. (last accessed October 8, 2005).
- ⁷ Harvard School of Public Health, "Fruits and Vegetables May Reduce Risk of Stroke: Findings Support Recommended 5 Servings a Day," news release, October 5, 1999. See http://www.hsph.harvard. edu/press/releases/press10051999.html.
- ⁸ Harvard School of Public Health, "Fruits & Vegetables." See http://www.hsph.harvard.edu/nutritionsource/fruits.html (last accessed October 8, 2005).

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